### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

### Form 20-F

(Mark One)

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REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the fiscal year ended December 31, 2022

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from to

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 Date of event requiring this shell company report

Commission File Number: 001-31798

### Shinhan Financial Group Co., Ltd.

(Exact name of registrant as specified in its charter)

N/A

(Translation of registrant's name into English)

The Republic of Korea (Jurisdiction of incorporation or organization)

20, Sejong-daero 9-gil, Jung-gu Seoul 04513, Korea

(Address of principal executive offices)

Park Cheolwoo, +822 6360 3129 (T), cheol.park@shinhan.com, +822 6360 3098 (F), 20, Sejong-daero 9-gil, Jung-gu, Seoul 04513, Korea (Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of Each Class:	Trading Symbol(s)	Name of Each Exchange on Which Registered:
mmon stock, par value Won 5,000 per share	SHG	New York Stock Exchange*
American depositary shares	SHG	New York Stock Exchange

\* Not for trading, but only in connection with the listing of American depositary shares on the New York Stock Exchange, pursuant to the requirements of the Securities and Exchange Commission.

Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

None

Indicate the number of outstanding shares of each of Shinhan Financial Group's classes of capital or common stock as of the close of the last full fiscal year covered by this Annual Report: 508,784,869 shares of common stock, par value of Won 5,000 per share.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act: Yes 🖂 No 🗌

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934: Yes No 🗵

Note—Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes 🖄 No

Indicate by check mark whether the registrant has submitted electronically, if any, every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes 🖄 No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

f an emerging growth company that prepares its financial statements i	n accordance w	vith U.S. GAAP, indicate by check mark if the registrant h
Non-accelerated filer		Emerging growth company
Large accelerated filer	$\times$	Accelerated filer

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards<sup>†</sup> provided pursuant to Section 13(a) of the Exchange Act. <sup>†</sup> The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. Yes 🛛 No 🗌

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. Yes 🗌 No 🗵

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). Yes  $\Box$  No  $\boxtimes$ 

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing: U.S. GAAP

International Financial Reporting Standards as issued by the International Accounting Standards Board Other 🗌

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow: Item 17 🗌 Item 18 🗌

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act): Yes No X (APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS) Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Section 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court: Yes No

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#### CERTAIN DEFINED TERMS, CONVENTIONS AND CURRENCY OF PRESENTATION

Unless otherwise specified or the context otherwise requires:

- the terms "we," "us," "our," "Shinhan Financial Group," "SFG" and the "Group" mean Shinhan Financial Group Co., Ltd. and its consolidated subsidiaries;
- the terms "Shinhan Financial Group Co., Ltd.," "our company" and "our holding company" mean Shinhan Financial Group Co., Ltd.; and
- "Shinhan Card" refers to Shinhan Card Co., Ltd., "Shinhan Life Insurance" refers to Shinhan Life Insurance Co., Ltd., "Shinhan Securities" refers to Shinhan Securities Co., Ltd. and "Orange Life Insurance" refers to Orange Life Insurance, Ltd.

All references to "Korea" or the "Republic" contained in this annual report are to the Republic of Korea. All references to the "Government" are to the government of the Republic of Korea. References to the "Financial Services Commission" are to the Financial Services Commission of Korea, and references to the "Financial Supervisory Service" are to the Financial Supervisory Service of Korea, the executive body of the Financial Services Commission.

The fiscal year for us and our subsidiaries ends on December 31 of each year. Unless otherwise specified or the context otherwise requires, all references to a particular year are to the year ended December 31 of that year.

The currency of the primary economic environment in which we operate is Korean Won.

In this annual report, unless otherwise indicated, all references to "Korean Won", "Won" or " $\Psi$ " are to the currency of the Republic of Korea, and all references to "U.S. Dollars," "Dollars," "\$" or "US\$" are to the currency of the United States of America. Unless otherwise indicated, all translations from Won to Dollars were made at  $\Psi$ 1,260.2 to US\$1.00, which was the noon buying rate in the City of New York on December 30, 2022 for cable transfers according to the H.10 statistical release of the Federal Reserve Board (the "Noon Buying Rate"). On April 14, 2023, the Noon Buying Rate was  $\Psi$ 1,299.1 to US\$1.00. The Noon Buying Rate has been volatile recently and the U.S. Dollar amounts referred to in this report should not be relied upon as an accurate reflection of our results of operations. We expect this volatility to continue in the near future. No representation is made that the Won or U.S. Dollar amounts referred to in this report could have been or could be converted into Dollars or Won, as the case may be, at any particular rate or at all.

Unless otherwise indicated, the financial information presented in this annual report has been prepared on a consolidated basis in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB").

Any discrepancies in the tables included herein between totals and sums of the amounts listed are due to rounding.

#### FORWARD LOOKING STATEMENTS

This annual report includes "forward-looking statements," as defined in Section 27A of the U.S. Securities Act, as amended, and Section 21E of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), including statements regarding our expectations and projections for future operating performance and business prospects. The words "believe," "expect," "anticipate," "estimate," "project" and similar words used in connection with any discussion of our future operating or financial performance identify forward-looking statements. In addition, all statements other than statements of historical facts included in this annual report are forward-looking statements.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. All forward-looking statements are management's present expectations of future events and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. This annual report discloses, under the caption "Item 3.D. Risk Factors" and elsewhere, important factors that could cause actual results to differ materially from our expectations ("Cautionary Statements"). Included among the factors discussed under the caption "Item 3.D. Risk Factors" are the followings risks related to our business, which could cause actual results to differ materially from those described in the forward-looking statements: the risk of adverse impacts from an economic downturn; increased competition; market volatility in securities and derivatives markets, interest or foreign exchange rates or indices; other factors impacting our operational plans; or legislative and/or regulatory developments. We caution you not to place undue reliance on the forward-looking statements and derivard-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the Cautionary Statements.

#### ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

#### ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

#### ITEM 3. KEY INFORMATION

#### ITEM 3.A. [Reserved]

#### **ITEM 3.B.** Capitalization and Indebtedness

Not applicable.

#### ITEM 3.C. Reasons for the Offer and Use of Proceeds

Not applicable.

#### **ITEM 3.D. Risk Factors**

An investment in the American depositary shares representing our common shares involves a number of risks. You should carefully consider the following information about the risks we face, together with the other information contained in this annual report, in evaluating us and our business.

#### Summary

The following summarizes some, but not all, of the risks provided below. Please carefully consider all of the information discussed in this Item 3.D. "Risk Factors" in this annual report for a more thorough description of these and other risks:

#### Risks Relating to Our Overall Business

- Difficult conditions and turbulence in the Korean and global economy and financial markets may adversely affect our business, asset quality, capital adequacy and earnings.
- Competition in the Korean financial services industry is intense, and may further intensify.
- The extent to which the COVID-19 pandemic impacts our business, results of operations and financial condition will depend on future developments, which are highly uncertain and difficult to predict.
- We and our subsidiaries need to maintain our capital ratios above minimum required levels, and the failure to so maintain could result in the suspension of some or all of our operations.
- Liquidity, funding management and credit ratings are critical to our ongoing performance.
- Changes in interest rates, foreign exchange rates, bond and equity prices, and other market factors have affected and will continue to affect our business, results of operations and financial condition.
- Reforms of London Interbank Offered Rate and other interest rate benchmarks could adversely affect our business, financial condition and results of operations.
- We may incur losses associated with our counterparty exposures.

#### Risks Relating to Our Banking Business

- We have significant exposure to small- and medium-sized enterprises, and financial difficulties experienced by such enterprises may result in a deterioration of our asset quality.
- A decline in the value of the collateral securing our loans or our inability to fully realize the collateral value may adversely affect our credit portfolio.
- Guarantees received in connection with our real estate financing may not provide sufficient coverage.
- A limited portion of our credit exposure is concentrated in a relatively small number of large corporate borrowers, and future financial difficulties experienced by them may have an adverse impact on us.
- The asset quality of our retail loan portfolio may deteriorate.
- Any deterioration in the asset quality of our guarantees and acceptances will likely have a material adverse effect on our financial condition and results of operations.

#### Risks Relating to Our Credit Card Business

• Future changes in market conditions as well as other factors, such as stricter regulation, may lead to reduced revenues and deterioration in the asset quality of credit card receivables.

#### Risks Relating to Our Other Businesses

- We may experience significant losses from our investments and, to a lesser extent, trading activities due to market fluctuations.
- We may generate losses from our brokerage and other commission- and fee-based business.
- Prolonged periods of declining or low interest rates or changes in related accounting standards may reduce or turn negative our investment margin on savings insurance products and result in an increase in the valuation of our liabilities associated with these products.
- We may fail to realize the anticipated benefits of and encounter significant risks in connection with mergers and acquisitions.
- We may suffer losses or record provisions for credit loss allowance for expected losses in connection with financial products sold by us or our subsidiaries, including Shinhan Securities and Shinhan Bank, which may have a negative impact on us, including our reputation.
- Other Risks Relating to Us as the Holding Company
  - Our ability to continue to pay dividends and service debt will depend on the level of profits and cash flows of our subsidiaries.
  - Damage to our reputation could harm our business.
  - Our risk management policies and procedures may not be fully effective at all times.
  - We may experience disruptions, delays and other difficulties relating to our information technology systems.
  - Our activities are subject to cyber security risk.
  - Our customers may become victims to "voice phishing" or other financial scams, for which we may be required to make monetary compensation and suffer damage to our business and reputation.
  - Legal claims and regulatory risks arise in the conduct of our business.

#### • Risks Relating to Law, Regulation and Government Policy

- We are a heavily regulated entity and operate in a legal and regulatory environment that is subject to change, and violations could result in penalties and other regulatory actions.
- The Government may encourage targeted lending to certain sectors in furtherance of policy objectives, and we may take this factor into account.
- The Government may also encourage investments in certain institutions in furtherance of policy objectives, and we may not recoup our investments therein in a timely or otherwise commercially reasonable manner.
- The level and scope of government oversight of our retail lending business, particularly regarding mortgage and home equity loans, may change depending on the economic or political climate.
- We engage in limited settlement transactions involving Iran and also in limited business in and related to Russia which may subject us to legal or reputational risks.

#### Risks Relating to Korea

- Unfavorable financial and economic conditions in Korea and globally may have a material adverse impact on our asset quality, liquidity and financial performance.
- Tensions with North Korea could have an adverse effect on us, the price of our common shares and our American depositary shares.
- Risks Relating to Our American Depositary Shares
  - There are restrictions on withdrawal and deposit of common shares under the depositary facility.
  - Ownership of our shares is restricted under Korean law.
  - Holders of our ADSs will not have preemptive rights in certain circumstances.
  - Holders of our ADSs will not be able to exercise dissent and appraisal rights unless they have withdrawn the underlying shares of our common stock and become our direct stockholders.
  - The market value of your investment in our ADSs may fluctuate due to the volatility of the Korean securities market.
  - Your dividend payments and the amount you may realize upon a sale of your ADSs will be affected by fluctuations in the exchange rate between the U.S. Dollar and the Won.
  - If the Government deems that certain emergency circumstances are likely to occur, it may restrict the depositary bank from converting and remitting dividends in Dollars.

#### • Other Risks

- We are generally subject to Korean corporate governance and disclosure standards, which differ in significant respects from those in other countries.
- You may not be able to enforce a judgment of a foreign court against us.
- We may become a passive foreign investment company ("PFIC"), which could result in adverse U.S. tax consequences to U.S. investors.

#### **Risks Relating to Our Overall Business**

## Difficult conditions and turbulence in the Korean and global economy and financial markets may adversely affect our business, asset quality, capital adequacy and earnings.

Most of our assets are located in, and we generate most of our income from, Korea. Accordingly, our business and profitability are largely dependent on the general economic and social conditions in Korea, including interest rates, inflation, exports, personal expenditures and consumption, unemployment, demand for

business products and services, debt service burden of households and businesses, the general availability of credit, the asset value of real estate and securities and other factors affecting the financial well-being of our corporate and retail customers.

The Korean economy is closely integrated with, and is significantly affected by, developments in the global economy. In light of the periodic re-proliferation of COVID-19, global inflation caused by rising energy prices and global supply chain disruptions, the Russia-Ukraine conflict and the subsequent economic slowdown, rapidly changing monetary policies (including higher interest rates and quantitative tightening) led by developed countries in reaction to such inflation, instability in the financial industries (including potential for bank runs) and capital flight risks in emerging economies caused by such changes in monetary policy, credit risks of Chinese real estate developers, ongoing US-China trade conflicts, signs of economic slowdown in China and continuing geopolitical and social instability in various parts of the Middle East, including Iraq, Syria and Yemen, among others, significant uncertainty remains as to the global economic prospects in general and has adversely affected, and may continue to adversely affect, the Korean economy. In addition, as the Korean economy matures, it is increasingly exposed to the risk of a "scissor effect," namely being pursued by competitors in less advanced economies while not having fully caught up with competitors in advanced economies, which risk is amplified by the fact that Korean economy is heavily dependent on exports. The Korean economy also continues to face other difficulties, including sluggishness in domestic consumption and investment, risk of corporate debt liquidity issues, volatility in the real estate market, rising household debt, potential declines in productivity due to aging demographics and low birth rates, and a rise in youth unemployment. Any future deterioration of the global and Korean economies could adversely affect our business, financial condition and results of operations.

In particular, difficulties in financial and economic conditions could result in significant deterioration in the quality of our assets and accumulation of higher provisioning, allowance for credit losses on loans and chargeoffs as an increasing number of our corporate and retail customers declare bankruptcy or insolvency or otherwise face increasing difficulties in meeting their debt obligations. For example, in 2011 and 2012, the continuing slump in the real estate market and the shipbuilding industry led to increased delinquency among our corporate borrowers, including some Korean commercial conglomerates knowns as "chaebols," in such industries, and in certain cases, even insolvency, workouts, recovery proceedings and/or voluntary arrangements with creditors. During the same period, the sustained slump in the real estate market also led to increased delinquency among our retail borrowers, and in particular, borrowers with collective loans for pre-sale of newly constructed apartment units. Recently, various Government-led financial support programs have been introduced in response to the COVID-19 pandemic, rising inflation and economic slowdown, such as loan rescheduling and principal and interest payment deferral programs, have helped financial institutions, including Shinhan Bank, manage their asset quality at a stable level. Such financial support programs have been introduced since April 1, 2020 and are available to small- and medium-sized enterprises and "small office, home office" ("SOHO") that meet certain criteria, such as that they have not been delinquent on their prior loans and are not subject to liquidation or bankruptcy proceedings. Such financial support programs expired on September 30, 2022. However, the Government has decided, based on discussions with financial institutions, to provide further financial support to the debtors using the financial support programs as of the expiration date of such financial support programs in the forms of (i) the extension of loan maturity dates up to three years, (ii) the postponement of repaying loans up to one year until September 2023, or (iii) the rescheduling of loans under the New Start Fund set up by the Government on October 4, 2022 or loan rescheduling programs led by the financial institutions. Accordingly, Shinhan Bank's delinquency ratio was 0.24% as of December 31, 2020, 0.19% as of December 31, 2021 and 0.21% as of December 31, 2022. However, despite such financial support programs, there is no assurance that Shinhan Bank will not experience increased level of credit losses on loans from borrowers, particularly those in troubled industries, since the quality of loans to such borrowers may further deteriorate due to a continued slump in volatile industries amid sluggish economic situation or for other reasons. In addition, the COVID-19 outbreak continues to have certain level of impact on global and domestic consumption, most notably in the transportation, tourism, retail, lodging, catering, industrial production and construction industries and any unexpected deterioration of the outbreak may lead to an increase in delinquency and adversely affect Shinhan Bank's asset

quality. Further, Government-led financial support programs or other countermeasures may not achieve their intended results and could also result in unintended consequences or otherwise adversely affect our business, financial condition and results of operations.

Moreover, as was the case during the global financial crisis of 2008-2009, depending on the nature of the difficulties in the financial markets and general economy, we may be forced to scale back certain of our core lending activities and other operations and/or borrow money at a higher funding cost or face a tightening in the net interest spread, any of which may have a negative impact on our earnings and profitability. Furthermore, while we and our principal subsidiaries currently maintain a capital adequacy ratio at a level higher than the required regulatory minimum, there is no guarantee that an even higher capital requirement will not be imposed by the Government in case of a renewed economic crisis.

In addition, given the highly integrated nature of financial systems and economic relationships worldwide, there may be other unanticipated systemic or other risks that may not be presently predictable. Any of these risks, if materialized, may have a material adverse effect on our business, liquidity, financial condition and results of operations.

#### Competition in the Korean financial services industry is intense, and may further intensify.

Competition in the Korean financial services industry is, and is likely to remain, intense, including as a result of the sustained low interest rate environment (which narrows opportunities to make profit based on the spread between lending rates and funding rates), the continuing sluggishness in the general economy, the growing maturation and saturation of the industry as a whole, the entry of new market participants and deregulation, among others.

In the banking sector, Shinhan Bank competes principally with other national commercial banks in Korea, but also faces competition from a number of additional banking institutions, including branches and subsidiaries of foreign banks operating in Korea, regional banks, Internet-only banks, government-owned development banks and Korea's specialized banks, such as Korea Development Bank, the Industrial Bank of Korea and the National Federation of Fisheries Cooperatives, as well as various other types of financial service providers, including savings institutions (such as mutual savings and finance companies, credit unions and credit cooperatives), investment companies (such as securities brokerage firms, merchant banking corporations and asset management companies) and life insurance companies. As of December 31, 2022, Korea had six major nationwide domestic commercial banks (including Citibank Korea Inc. and Standard Chartered Bank Korea Limited, both of which are domestic commercial banks acquired by global financial institutions), six regional commercial banks, three Internet-only banks and thirty-five branches and subsidiaries of foreign banks. Foreign financial institutions, many of which have greater experiences and resources than we do, may continue to enter the Korean market and compete with us in providing financial products and services either by themselves or in partnership with existing Korean financial institutions.

In the small- and medium-sized enterprise and retail banking segments, which have been Shinhan Bank's traditional core businesses, competition is expected to increase further. In recent years, Korean banks, including Shinhan Bank, have increasingly focused on stable asset growth based on quality credit, such as corporate borrowers with high credit ratings, loans to SOHO with high levels of collateralization, and mortgage and home equity loans within the limits of the prescribed loan-to-value ratios and debt-to-income ratios. This common shift in focus toward stable growth based on less risky assets has intensified competition as banks compete for the same limited pool of quality credit by engaging in price competition or by other means although Shinhan Bank has traditionally focused, and will continue to focus, on enhancing profitability rather than increasing asset size or market share, and has avoided, to the extent practicable, engaging in price competition by way of lowering lending rates. In addition, such competition may result in lower net interest margin and reduced overall profitability, especially if the low interest rate environment were to continue for a significant period of time. Shinhan Bank's net interest margin (on a separate basis) increased to 1.85% in 2022 from 1.62% in 2021 due to,

at least partly, increases in base interest rate by the Bank of Korea from 1.00% to 1.25% in January 2022, from 1.25% to 1.50% in April 2022, from 1.50% to 1.75% in May 2022, from 1.75% to 2.25% in July 2022, from 2.25% to 2.50% in August 2022, from 2.50% to 3.00% in October 2022 and from 3.00% to 3.25% in November 2022. The Bank of Korea further raised the base interest rate from 3.25% to 3.50% in January 2023, which may be further increased during 2023. Even if interest rates were to increase, the effect on Shinhan Bank's results of operations may not be as beneficial as expected, or at all, due to factors such as increased volatility of market interest rates and tighter regulations regarding SOHO loans, including the implementation of additional credit review guidelines for individual businesses. Further, if competing financial institutions seek to expand market share by lowering their lending rates, Shinhan Bank may suffer customer loss, especially among customers who select their lenders principally on the basis of lending rates. In response thereto or for other strategic reasons, Shinhan Bank may subsequently lower its lending rates to stay competitive, which could lead to a further decrease in its net interest rates. Any future decline in Shinhan Bank's customer base or its net interest margin from a general rise in market interest rates. Any future decline in Shinhan Bank's customer base or its net interest margin from a margins could have an adverse effect on our results of operations and financial condition.

In the credit card sector, Shinhan Card competes principally with existing "monoline" credit card companies, credit card divisions of commercial banks, consumer finance companies, other financial institutions and, recently, credit card service providers allied with mobile telecommunications service providers in Korea. Competition has been historically intense in this sector and the market has shown signs of saturation as existing and new credit card service providers make significant investments and engage in aggressive marketing campaigns and promotions to acquire new customers and target customers with high credit quality. While competition has subsided somewhat recently due to stricter government regulations, such as curbs on excessive marketing expenses, competition remains intense and credit card issuers may continue to compete with Shinhan Card for customers by offering lower interest rates and fees, higher credit limits, more attractive promotions and incentives and alternative products such as credit card reward points, gift cards and low-interest consumer loan products. As a result, Shinhan Card may lose customers or service opportunities to competing credit card issuers and/or incur higher marketing expenses. Also, over the years, the Government has implemented regulations lowering certain merchant fees chargeable by credit card companies. In 2012, the Government adopted regulations mandating lower merchant fees chargeable to small- and medium-sized enterprises, and beginning January 31, 2016, a further reduction in the merchant fees chargeable to small- and medium-sized enterprises went into effect. The Enforcement Decree of the Specialized Credit Finance Business Act was amended in July 2017 and January 2019 to further expand the range of small- and medium-sized enterprises subject to lower merchant fees. Pursuant to the Specialized Credit Financial Business Act, the rates of fees chargeable to merchants are subject to review and revision every three years, and beginning January 2022, the fees chargeable to small- and medium-sized enterprises with respect to credit cards were further reduced as a result of this periodic review and revision. Additional amendments to regulations requiring further downward adjustments to merchant fees may come into force in the future. For further details on the Government's regulations on merchant fees chargeable by credit card companies, See "- Risks Relating to Our Credit Card Business -Future changes in market conditions as well as other factors, such as stricter regulation, may lead to reduced revenues and deterioration in the asset quality of credit card receivables." In March 2023, the Financial Services Commission set up a task force consisting of members of the Financial Services Commission, the Financial Supervisory Service, credit card companies, and consumer groups, to discuss how to improve the merchant commission rate adjustment system in order to address disagreements among the stakeholders involved in the periodic review of the rates of fees charged to merchants.

In addition, since the implementation of the Improper Solicitation and Graft Act in September 2016, revenue growth for corporate cards and service related industries such as dining, floral and entertainment have shown signs of decline, and additional regulations on loans reducing maximum interest rates chargeable from 24% to 20% came into effect in July 2021. These developments have put further downward pressure on the results of operations for credit card companies, including Shinhan Card. Furthermore, the Government's recent guidelines to bolster consumer protection and protect customers' personal data in the aftermath of data leaks at certain credit companies (not including Shinhan Card) may result in additional compliance costs for Shinhan

Card. Customer attrition, together with any further lowering of fees or reduction in base and market interest rates and/or additional expenses from more extensive marketing and promotional campaigns that Shinhan Card might implement to acquire and retain customers, could reduce its revenues and earnings. Furthermore, the average credit quality of Shinhan Card's customers may deteriorate if customers with higher credit quality borrow from our competitors rather than Shinhan Card and it may become more difficult for Shinhan Card to attract and maintain quality customers. In general, the growth, market share and profitability of Shinhan Card's operations may decline or become negative as a result of market saturation in this sector, interest rate competition, pressure to lower fee rates and incur higher marketing expenses, as well as Government regulation and social and economic developments in Korea that are beyond our control, such as changes in consumer confidence levels, spending patterns or public perception of credit card usage and consumer debt. If Shinhan Card fails to maintain or attract new cardholders or increase the card usage by existing customers or experiences deterioration in its asset quality and a rise in delinquency, our business, financial condition and results of operations may be adversely affected. In other financial services sectors, our other subsidiaries also compete in a highly fragmented market. Some of our competitors, particularly major global financial institutions, have greater experience and resources than we do.

Consolidation among our rival institutions and the Government's privatization efforts may also add competition in the markets in which we and our subsidiaries conduct business. A number of significant mergers and acquisitions in the industry have taken place in Korea recently. In January 2019, Woori Financial Group was established pursuant to a comprehensive stock transfer under the Korean Commercial Code whereby holders of the common stock of Woori Bank and certain of its subsidiaries transferred all of their shares to Woori Financial Group (the new financial holding company) and in return received shares of Woori Financial Group. As a result, Woori Bank and certain of its former wholly-owned subsidiaries became direct and wholly-owned subsidiaries of Woori Financial Group. The Korea Deposit Insurance Corp., which as of April 9, 2021 owned 17.25% of the outstanding common stock of Woori Financial Group, has sold 13.63% of the outstanding common stock of Woori Financial Group in multiple transactions in accordance with its plan that was approved by the Financial Services Commission in June 2019. The Korea Deposit Insurance Corp. sold additional 2.33% of the outstanding common stock of Woori Financial Group in May 2022 and currently owns only 1.29% of the outstanding common stock of Woori Financial Group. In the asset management business sector, Woori Financial Group acquired two asset management companies, Tongyang Asset Management and ABL Global Asset Management (former Allianz Global Investors). In August 2021, KB Financial Group completed the acquisition of Prudential Life Insurance, the former Korean unit of Prudential Financial Inc. Any of these developments may place us at a competitive disadvantage and outweigh any potential benefit to us in the form of opportunities to acquire new customers who are displeased with the level of services at the newly reorganized entities or to provide credit facilities to corporate customers who wish to maintain relationships with a wide range of banks in order to diversify their sources of funding.

On February 1, 2019, we acquired a 59.15% interest in Orange Life Insurance, the former Korean unit of ING Life Insurance, as part of our efforts to diversify and enhance our non-banking businesses. On January 28, 2020, we acquired the remaining interests in Orange Life Insurance by effecting a comprehensive stock exchange under Articles 360-2 of the Korean Commercial Code whereby holders (other than us) of Orange Life Insurance's common stock transferred all of their shares to us and in return receive shares of our common stock, and hence Orange Life Insurance became our wholly owned subsidiary as of such date. In May 2021, the Financial Services Commission approved the merger of Shinhan Life Insurance and Orange Life Insurance, with Shinhan Life Insurance being the surviving entity upon completion of the merger. Orange Life Insurance was subsequently merged with and into Shinhan Life Insurance in July 2021. On September 29, 2020, we acquired a 96.8% interest in Neoplux Co., Ltd. ("Neoplux"), a venture capital company formerly under the Doosan Group. On December 30, 2020, we acquired the remaining interest in Neoplux by effecting a small-scale stock exchange under Article 360-10 of the Korean Commercial Code, and hence Neoplux has become our wholly owned subsidiary as of such date. On January 11, 2021, Neoplux changed its legal name to Shinhan Venture Investment. In addition, on January 15, 2021, we acquired the remaining 35% interest in Shinhan BNP Paribas Asset

Asset Management, and hence Shinhan Asset Management has become our wholly-owned subsidiary as of such date. On June 30, 2022 we acquired 94.54% interest in BNP Paribas Cardif General Insurance, which then changed its name to Shinhan EZ General Insurance, Ltd. Subsequently in November 2022, Shinhan EZ General Insurance, Ltd. conducted a paid-in capital increase and our shares decreased to 85.1%. We expect that such consolidation and other structural changes in the financial industry will continue. Other financial institutions may seek to acquire or merge with other entities, and the financial institutions resulting from such consolidation may, by virtue of their increased size and business scope, provide greater competition for us. Increased competition and continuing consolidation may lead to decreased margins, resulting in a material adverse impact on our future profitability.

Regulatory reforms and the general modernization of business practices in Korea have also led to increased competition among financial institutions in Korea. In December 2017, the Financial Services Commission introduced the "my account at a glance" system, which enables consumers to view their key financial account information online, including information on banks, insurances, mutual finance, loan and card issuances on one page. The "my account at a glance" system became available on mobile channels in February 2016 and expanded its scope of services to include savings banks and securities companies. Since their introduction, the integrated automatic payment transfers management service, integrated account management service and "my account at a glance" system have gained widespread acceptance. As the reform of the financial sector continues, competition may become more intense among existing banks, insurance companies, securities companies and other financial organizations, and may lead to significant changes in the current Korean financial market. Moreover, since January 1, 2020, in calculating loan to deposit ratio, retail loans and corporate loans are weighed differently, with retail loans subject to a multiple of 115% and corporate loans (excluding loans to SOHOs) subject to a multiple of 85%, thereby increasing the impact of retail loans and reducing the impact of corporate loans in calculating such ratio. This may further intensify competition for corporate loans and deposits among commercial banks and, as a result, Shinhan Bank may face difficulties in increasing or retaining its corporate loans and deposits, which in turn may result in an increase in its cost of funding.

Furthermore, as the Korean economy further develops and new business opportunities arise, more competitors may enter the financial services industry. For example, as online service providers and technology companies with large-scale user networks, such as Kakao Corp., NAVER and Samsung Electronics, recently make significant inroads in providing virtual payment services through a system based on a growing convergence of financial services and technology commonly referred to as "fintech," competition for online customers is growing not just among commercial banks, but also from online and mobile payment service providers. In 2015, the Government announced its plans to allow Internet-only banks to operate in Korea. KT consortium's K-Bank, Kakao consortium's Kakao Bank and Viva Republica consortium's Toss Bank commenced operations in April 2017, July 2017 and October 2021, respectively. Internet-only banks may have advantages over traditional banks as the former can pass savings in labor and overhead costs to their customers by offering higher interest rates on deposit accounts, lower loan costs and reduced service fees. Accordingly, commercial banks will likely face increasing pressure to upgrade their service platforms to attract and maintain online users, which represents a growing customer base compared to traditional customers who have primarily conducted banking in-person at physical banking branches.

As part of the Government's financial policies to promote innovative digital finance, 10 commercial banks, including Shinhan Bank, began offering a preliminary open banking service in October 2019. More local banks and fintech companies joined in December 2019, when the open banking service was fully and officially launched. Open banking service allows each fintech company and bank to provide banking services, such as checking balances and making withdrawals and transfers, with regards to customers' accounts at other banks. Using open banking service, customers can easily access accounts, products and services across multiple banks, instead of being limited to the accounts, products and services available at the particular bank that they deal with. In addition, on January 9, 2020, the Korean National Assembly passed amendments to three major data privacy laws (the Personal Information Protection Act, the Act on the Promotion of Information and Communications Network Utilization and Information Protection and the Act on the Use and Protection of Credit Information).

These amendments introduced the MyData service, allowing and requiring (upon the customer's request and subject to compliance requirements) financial institutions that have been approved by the Financial Service Commission as a MyData service provider access and sharing of customers' personal information, credit information and transaction data. On January 27, 2021, Shinhan Bank and Shinhan Card each obtained a license from the Financial Services Commission as a MyData service provider. On January 5, 2023, Shinhan Bank launched the MyData business and Shinhan Card is planning to provide advanced wealth management and various financial services. Until October 13, 2021, the Financial Services Commission granted MyData licenses to 58 companies (46 companies receiving main licenses and 12 companies receiving preliminary licenses), 22 of which were fintech firms (19 companies receiving main licenses and three companies receiving preliminary licenses), and competition between traditional financial institutions like us and fintech firms is expected to intensify, particularly with respect to asset management services. On January 5, 2022, the API-based MyData service was fully implemented and 33 companies (including ten fintech firms) are providing services. As of December 31, 2022, the Financial Services Commission had granted licenses to 64 companies to operate as MyData service providers, 24 of which were fintech or IT firms. If more fintech companies receive authorization as MyData service providers, we expect competition for customers among banks and fintech firms to intensify. In addition, the Financial Services Commission also led discussions in July 2022 about the creation of a government-led platform where consumers can compare loan products from various financial institutions and apply for debt consolidation on a single platform. The platform is expected to launch in May 2023.

Recently, following the global financial crisis, the Government has subjected Korean financial institutions to stricter regulatory requirements and guidelines in areas of asset quality, capital adequacy, liquidity and residential and other lending practices (including a requirement to maintain a certain ratio of core capital to total risk exposure, which was introduced in January 2018 in order to control excessive leverage), which has had a dampening effect on competition. The Financial Services Commission implemented the capital requirements of Basel III, whose minimum requirements were phased in sequentially from December 1, 2013 through full implementation by January 1, 2015, based on the guidelines set forth in the amended Regulation on the Supervision of the Banking Business and the Detailed Regulation on the Supervision of the Banking Business. In addition, the Financial Services Commission has implemented the Basel III requirements relating to liquidity coverage ratio and capital conservation buffer, each of which have been fully phased in as of January 1, 2019. As of January 1, 2016, the Financial Services Commission implemented Basel III requirements relating to accumulation of additional capital for systemically important banks and bank holding companies and countercyclical capital buffer requirements. Each year, the Financial Services Commission may designate banks with significant influence (based on size and connectivity with other financial institutions) on the domestic financial system as a domestic systemically important bank and require the accumulation of additional capital in accordance with the highest of: (i) ratio of common equity capital to risk-weighted assets, ranging from 0.0% to 2.0%, depending on the systematic importance evaluation score, (ii) if the bank's holding company is a domestic systemically important bank holding company, the capital ratio corresponding to the additional capital required for the bank holding company under the Financial Holding Company Supervision Regulations, or (iii) if the bank is also a global systemically important bank, as defined by the Basel Committee on Banking Supervision (the "Basel Committee"), the capital ratio as required by the Basel Committee. According to the instructions of the Financial Services Commission, domestic systemically important banks, including Shinhan Bank, have been required to maintain an additional capital buffer of 0.25% since January 1, 2016, with such buffer increased by 0.25% annually to reach 1.00% as of January 1, 2019. The Financial Services Commission may also, upon quarterly review, determine and require banks to accumulate a required level of countercyclical capital buffer within the range of 0% to 2.5% of risk-weighted assets, taking into account factors such as the degree of increase in credit relative to the gross domestic product. In July 2021, Shinhan Financial Group, Hana Financial Group, KB Financial Group, NongHyup Financial Group and Woori Financial Group were designated by the Financial Services Commission as domestic systemically important bank holding companies, and Shinhan Bank, Hana Bank, Kookmin Bank, NongHyup Bank and Woori Bank were designated by the Financial Services Commission as domestic systemically important banks. In addition, in July 2021, the Financial Services Commission identified domestic systemically important bank holding companies and domestic systemically important banks as domestic systemically important financial institutions under the Act on the Structural Improvement of the

Financial Industry. Domestic systemically important financial institutions are required to prepare and submit their own recovery plans to the Financial Supervisory Service within three months from the date of notification of designation pursuant to the Act on the Structural Improvement of the Financial Industry. However, there is no assurance that these measures will have the effect of curbing competition or that the Government will not reverse or reduce such measures or introduce other deregulatory measures, which may further intensify competition in the Korean financial services industry. For further details on the capital requirements applicable to us, see "Item 4.B. Business Overview — Supervision and Regulation — Principal Regulations Applicable to Financial Holding Companies — Capital Adequacy."

If, despite our efforts to adapt to the changing macroeconomic environment and comply with new regulations, we are unable to compete effectively in the changing business and regulatory environment, our profit margin and market share may erode and our future growth opportunities may become limited, which could adversely affect our business, financial condition and results of operations.

## The extent to which the COVID-19 pandemic impacts our business, results of operations and financial condition will depend on future developments, which are highly uncertain and difficult to predict.

The rapid spread of COVID-19 and global health concerns relating to this outbreak, which was declared a "pandemic" by the World Health Organization in March 2020, have had severe negative impact on, among other things, financial markets, liquidity, economic conditions and trade and could continue to do so or could worsen for an unknown period of time, which could in turn have a material adverse impact on the our business, results of operations and financial condition, including liquidity, asset quality and growth. Risks associated with a prolonged outbreak of COVID-19 may include:

- an increase in defaults on loan payments from our customers who may not be able to meet payment obligations, which may lead to an increase in delinquency;
- depreciation of the Won against major foreign currencies, which may increase our costs in servicing foreign currency-denominated debt and result in foreign exchange losses (see "Changes in interest rates, foreign exchange rates, bond and equity prices, and other market factors have affected and will continue to affect our business, results of operations and financial condition.");
- impairments in the fair value of our investments in companies that may be adversely affected by COVID-19; and
- increased cyberattacks and financial crimes under the new working arrangements such as expanded telework for employees.

The extent to which the COVID-19 pandemic will continue to impact our business, results of operations and financial condition will depend on future developments, including the timeliness and effectiveness of actions taken or not taken to contain and mitigate the effects of COVID-19 both in Korea and internationally by governments, central banks, healthcare providers, health system participants, other businesses and individuals, which are highly uncertain and difficult to predict. Therefore, the Korean and global economy may remain volatile or continue to deteriorate, which may also have the effect of increasing the likelihood and magnitude of the other risks described in this annual report.

We are continuously assessing forward looking information to reasonably estimate the adverse impact of COVID-19 on our asset portfolio. We accumulated  $\mathbb{W}1,105$  billion in COVID-19-related provisions since 2020 by reflecting forward looking criteria amid the COVID-19 pandemic, based on discounted cash flow assessment and reclassification of loss allowance stages depending on the extent of credit risk for certain loan assets. It is difficult to estimate the amount, if any, of additional special provisions for credit losses that will be incurred going forward as a result of COVID-19, and there is no guarantee that any such special provisions for credit losses will not be significant during first half of 2023 and beyond, and accordingly, the impact of COVID-19, including any special provisions for credit losses due to COVID-19, may have a material adverse effect on our

business, liquidity, financial condition and results of operations. See "Item 5.A. Operating Results — Results of Operations."

### We and our subsidiaries need to maintain our capital ratios above minimum required levels, and the failure to so maintain could result in the suspension of some or all of our operations.

We and our subsidiaries in Korea are required to maintain specified capital adequacy ratios. For example, since January 1, 2015, we and our banking subsidiaries in Korea are required to maintain a minimum common equity Tier I capital adequacy ratio of 4.5%, a Tier I capital adequacy ratio of 6.0% and a total capital (BIS) ratio of 8.0%. These ratios measure the respective regulatory capital as a percentage of risk-weighted assets on a consolidated basis and are determined based on guidelines of the Financial Services Commission. In addition, as further described below, Shinhan Bank is also required to maintain a capital conservation buffer and additional capital as a domestic systemically important bank and may be required to maintain a countercyclical capital buffer. Also, our subsidiaries Shinhan Card, Shinhan Life Insurance and Shinhan Securities are each required to maintain a consolidated adjusted equity capital ratio of 8.0%, a solvency ratio of 100% and a net capital ratio of 100%, respectively.

While we and our subsidiaries currently maintain capital adequacy ratios in excess of the respective required regulatory minimum levels, we or our subsidiaries may not be able to continue to satisfy the capital adequacy requirements for a number of reasons, including an increase in risky assets and provisioning expenses, substitution costs related to the disposal of problem loans, declines in the value of securities portfolios, adverse changes in foreign currency exchange rates, changes in the capital ratio requirements, the guidelines regarding the computation of capital ratios, or the framework set by the Basel Committee upon which the guidelines of the Financial Services Commission are based, or other adverse developments affecting our asset quality or equity capital.

In December 2010, the Basel Committee issued final rules in respect of (i) a global regulatory framework for more resilient banks and banking systems and (ii) an international framework for liquidity risk measurement, standards and monitoring, which together are commonly referred to as "Basel III." Under Basel III, Tier I capital is defined to include common equity Tier I and additional Tier I capital. Common equity Tier I capital is a new category of capital primarily consisting of common stock, capital surplus, retained earnings and other comprehensive income (progressively phased into the capital ratio calculation over several years). The new minimum capital requirements, including the minimum common equity Tier I requirement of 4.5% and additional mandatory capital conservation buffer requirement of 2.5%, have been fully implemented as of January 1, 2019. Additional discretionary countercyclical capital buffer requirements are also expected to be phased in, which will range at the discretion of national regulators between 0% and 2.5% of risk-weighted assets. Basel III also introduces a minimum leverage ratio requirement. On December 7, 2017, the Basel Committee finalized several key methodologies for measuring risk-weighted assets. The revisions include a standardized approach for credit risk, a standardized approach for operational risk, revisions to the credit valuation adjustment (CVA) risk framework and constraints on the use of internal models. The Basel Committee had also previously finalized a revised standardized model for counterparty credit risk, revisions to the securitization framework and its fundamental review of the trading book, which updates both modeled and standardized approaches for market risk measurement. The revisions also include an output floor set at 72.5% of total risk-weighted assets based on the revised standardized approaches to limit the extent to which banks can reduce risk-weighted asset levels through the use of internal models. In order to provide additional operational capacity for banks and supervisors to respond to the impact of COVID-19 on the global banking system, the Basel Committee has announced deferral of the implementation date of the final Basel III standards by one year, to January 2023, including the revised standardized approach for credit and operational risk, revised CVA framework, and revised market risk framework. The 72.5% output floor is subject to a six-year phase-in period, beginning at 60% in January 2020 and increasing to 72.5% by January 2028. Upon implementation, banks in jurisdictions that permit reference to external credit ratings will be able to take into account external credit ratings in determining the risk weights for certain exposure classes, and different mortgage risk weights will apply depending on the loan-to-value ratio of

the mortgage. In addition, the 2017 reforms remove the option to use internal ratings-based approaches for measurement of equity exposures, thus requiring use of the standardized approach. Banks will also need to reflect internal loss data in evaluating operational risk and comply with the principles for sound management of operational risk.

In order to implement the capital requirements under Basel III in Korea, the Regulation on the Supervision of the Banking Business was amended, effective December 1, 2013. Under the amended Regulation on the Supervision of the Banking Business, effective from January 1, 2015, commercial banks in Korea are required to maintain a minimum common equity Tier I ratio of 4.5%, a minimum Tier I capital ratio of 6.0% and a minimum total capital (BIS) ratio of 8.0%. The Regulation on the Supervision of the Banking Business was further amended on December 26, 2014, to implement the liquidity coverage ratio requirements under Basel III in increments of 5% annually, from 80% as of January 1, 2015 to 100% as of January 1, 2019. In April 2020, in response to the COVID-19 pandemic, the Financial Services Commission temporarily lowered the liquidity coverage ratio requirement from 100% to 85%. The Financial Services Commission subsequently decided to gradually restore this ratio on a quarterly basis from the third quarter of 2022, to a ratio of 90% in the third quarter of 2022, 92.5% in the fourth quarter of 2022, 95% in the first quarter of 2023, 97.5% in the second quarter of 2023 and 100% from the third quarter of 2023. However, in October 2022, the Financial Services Commission decided to apply the 92.5% ratio until the end of June 2023 in response to the increasing volatility and uncertainty in the short-term money market, as determined through a financial market inspection meeting. Capital conservation buffer requirements have also been phased in from January 1, 2016 in increments of 0.625% annually, to the effect that commercial banks in Korea are required to maintain a capital conservation buffer of 2.5% as of January 1, 2019. If a commercial bank fails to maintain such capital conservation buffer requirements, such bank will be subject to certain restrictions relating to its use of income, such as distributing dividends and purchasing treasury stock. As of January 1, 2016, the Financial Services Commission implemented Basel III requirements relating to accumulation of additional capital for systemically important banks and bank holding companies and countercyclical capital buffer requirements. Each year, the Financial Services Commission may designate banks with significant influence (based on size and connectivity with other financial institutions) on the domestic financial system as a domestic systemically important bank and require the accumulation of additional capital in accordance with the highest of: (i) ratio of common equity capital to risk-weighted assets, ranging from 0.0% to 2.0%, depending on the systematic importance evaluation score, (ii) if the bank's holding company is a domestic systemically important bank holding company, the capital ratio corresponding to the additional capital required for the bank holding company under the Financial Holding Company Supervision Regulations, or (iii) if the bank is also a global systemically important bank, as defined by the Basel Committee, the capital ratio as required by the Basel Committee. Shinhan Financial Group and Shinhan Bank were selected as a domestic systemically important bank holding company and domestic systemically important bank, respectively, from 2016 through 2022. According to the instructions of the Financial Services Commission, domestic systemically important banks, including Shinhan Bank, have been required to maintain an additional capital buffer of 0.25% since January 1, 2016, with such buffer increased by 0.25% annually to reach 1.00% as of January 1, 2019. The Financial Services Commission may also, upon quarterly review, determine and require banks to accumulate a required level of countercyclical capital buffer within the range of 0% to 2.5% of risk-weighted assets, taking into account factors such as the degree of increase in credit relative to the gross domestic product. Since March 2016, the Financial Services Commission has maintained countercyclical capital buffer requirements at 0%.

We and our banking subsidiaries are currently, and have been, in full compliance with Basel III requirements as implemented in Korea since its introduction in December 2013. However, there is no assurance that we will continue to be able to be in compliance with Basel III requirements. New requirements under Basel III may require an increase in the credit risk capital requirements in the future, which may require us or our subsidiaries to either improve asset quality or raise additional capital. In addition, if the capital adequacy ratios of us or our subsidiaries were to fall below the required levels, the Financial Services Commission might impose penalties ranging from a warning to suspension or revocation of our or our subsidiaries may be required to raise additional capital through equity financing, but there is no assurance that we or our subsidiaries will be able

to do so on commercially favorable terms or at all and, even if successful, any such capital raising may have a dilutive effect on our shareholders with respect to their interest in us or on us with respect to our interest in our subsidiaries.

#### Liquidity, funding management and credit ratings are critical to our ongoing performance.

Liquidity is essential to our business as a financial intermediary, and we may seek additional funding in the near future to satisfy liquidity needs, meet regulatory requirements, enhance our capital levels or fund the growth of our operations as opportunities arise.

For example, Basel III includes an international framework for liquidity risk measurement, standards and monitoring, as noted above, including a new minimum liquidity standard, known as the liquidity coverage ratio, which is designed to ensure that banks have an adequate stock of unencumbered high quality liquid assets ("HQLA") that can be easily and speedily converted into cash in the private marketplace to survive a significant stress scenario lasting 30 calendar days. The liquidity coverage ratio is computed as (a) the value of a banking organization's HQLA, divided by (b) its total expected net cash outflows over the next 30 calendar days under stress scenarios. The minimum liquidity coverage ratio is 100%. In January 2013, the Basel Committee released a revised formulation of the liquidity coverage ratio, one of two quantitative liquidity measures approved in December 2010 as part of Basel III. The Basel Committee extended the timetable for full phase-in of the liquidity coverage ratio to the effect that the minimum liquidity coverage ratio was set at 60% as of January 1, 2015 and thereafter was increased in annual increments of 10% so that the minimum liquidity coverage ratio reached 100% as of January 1, 2019. In December 2014, the Financial Services Commission promulgated regulations to implement the liquidity requirements of Basel III, including raising the minimum liquidity coverage ratio to 80% as of January 1, 2015 and thereafter by annual increments of 5% so that the minimum liquidity coverage ratio for commercial banks in Korea is 100% since January 1, 2019. In April 2020, in response to the COVID-19 pandemic, the Financial Services Commission temporarily lowered the liquidity coverage ratio requirement from 100% to 85%. The Financial Services Commission subsequently decided to gradually restore this ratio on a quarterly basis from the third quarter of 2022, to a ratio of 90% in the third quarter of 2022, 92.5% in the fourth quarter of 2022, 95% in the first quarter of 2023, 97.5% in the second quarter of 2023 and 100% from the third quarter of 2023. However, in October 2022, the Financial Services Commission decided to apply the 92.5% ratio until the end of June 2023 in response to the increasing volatility and uncertainty in the short-term money market, as determined through a financial market inspection meeting.

A substantial part of the liquidity and funding requirements for our banking subsidiaries is met through short-term customer deposits, which typically roll over upon maturity. While the volume of our customer deposits has generally been stable over time, customer deposits have from time to time declined substantially due to the popularity of other, higher-yielding investment opportunities, namely stocks and mutual funds, for example, during times of bullish stock markets. During such times, our banking subsidiaries were required to obtain alternative funding at higher costs. There is no assurance that a similar development will not occur in the future. In addition, in recent years, we have faced increasing pricing competition from our competitors with respect to our deposit products. If we do not continue to offer competitive interest rates to our deposit customers, we may lose their business, which has traditionally provided a stable and low-cost source of funding. In addition, even if we are able to match our competitors' pricing, doing so may result in an increase in our funding costs, which may have an adverse impact on our results of operations.

We and our subsidiaries also raise funds in capital markets and borrow from other financial institutions, the cost of which depends on market rates and the general availability of credit and the terms of which may limit our ability to pay dividends, make acquisitions or subject us to other restrictive covenants. While we and our subsidiaries are not currently facing liquidity difficulties in any material respect, if we or our subsidiaries are unable to obtain the funding we need on terms commercially acceptable to us for an extended period of time for whatever reason, we may not be able to ensure our financial viability, meet regulatory requirements, implement our strategies or compete effectively.

Credit ratings affect the cost and other terms upon which we and our subsidiaries are able to obtain funding. Domestic and international rating agencies regularly evaluate us and our subsidiaries, and their ratings of our and our subsidiaries' long-term debt are based on a number of factors, including our financial strength as well as conditions affecting the financial services industry and the Korean economy in general. There can be no assurance that the rating agencies will maintain our current ratings or outlooks. There is no assurance that Shinhan Card, any of our other major subsidiaries or our holding company will not experience a downgrade in their respective credit ratings and outlooks for reasons related to the general Korean economy or reasons specific to such entity. Any downgrades in the credit ratings and outlooks of us and our subsidiaries will likely increase our cost of funding, limit our access to capital markets and other borrowings, or require us to provide additional credit enhancement in financial transactions, any of which could adversely affect our liquidity, net interest margins and profitability, and in turn, our business, financial condition and results of operations.

### Changes in interest rates, foreign exchange rates, bond and equity prices, and other market factors have affected and will continue to affect our business, results of operations and financial condition.

The most significant market risks we face are interest rate, foreign exchange and bond and equity price risks. Changes in interest rate levels, yield curves and spreads may affect the interest rate margin realized between lending and borrowing costs. Changes in foreign currency exchange rates, particularly in the Korean Won to U.S. Dollar exchange rates, affect the value of our assets and liabilities denominated in foreign currencies, the reported earnings of our non-Korean subsidiaries and income from foreign exchange dealings, and substantial and rapid fluctuations in exchange rates may cause difficulty in obtaining foreign currency-denominated financing in the international financial markets on commercial terms acceptable to us or at all. The performance of financial markets may affect bond and equity prices and, therefore, cause changes in the value of our investment and trading portfolios. While we have implemented risk management systems and risk thresholds to mitigate and control these and other market risks to which we are exposed, it is difficult to predict with accuracy changes in economic or market conditions and to anticipate the effects that such changes could have on our business, financial condition and results of operations.

Historically, Korea, like many other countries, has experienced interest rate fluctuations, in part due to the Government's policy to stabilize the economy through active rate-controlling measures. In November 2017, the Bank of Korea raised the base interest rate to 1.50%, marking the first time it has increased the base interest rate since 2011, and further raised such rate to 1.75% in November 2018. The Bank of Korea reduced the base interest rate from 1.75% to 1.50% in July 2019, from 1.50% to 1.25% in October 2019, from 1.25% to 0.75% in March 2020 and from 0.75% to 0.50% in May 2020. The Bank of Korea raised the base interest rate from 0.50% to 0.75% in August 2021, from 0.75% to 1.00% in November 2021, from 1.00% to 1.25% in January 2022, from 1.25% to 1.50% in April 2022, from 1.50% to 1.75% in May 2022, from 1.75% to 2.25% in July 2022, from 2.25% to 2.50% in August 2022, from 2.50% to 3.00% in October 2022 and from 3.00% to 3.25% in November 2022. The Bank of Korea further raised the base interest rate from 3.25% to 3.50% in January 2023. Interest rate movements, in terms of magnitude and timing as well as their relative impact on our assets and liabilities, have a significant impact on our net interest margin and profitability, particularly with respect to our financial products that are sensitive to such movements. For example, if the interest rates applicable to our loans (which are recorded as assets) increase at a slower pace or by a thinner margin than the interest rates applicable to our deposits (which are recorded as liabilities), our net interest margin will shrink and our profitability will be negatively affected. In addition, the relative size and composition of our variable rate loans and deposits (as compared to our fixed rate loans and deposits) may also impact our net interest margin. Furthermore, the difference in the average repricing frequency of our interest-earning assets (primarily loans) compared to our interest-bearing liabilities (primarily deposits) may also impact our net interest margin. For example, since our deposits tend to have longer terms, on average, than those of our loans, our deposits are on average less sensitive to movements in the base interest rates on which our deposits and loans tend to be pegged, and therefore, a decrease in the base interest rates tends to decrease our net interest margin while an increase in the base interest rates tends to have the opposite effect. While we continually manage our assets and liabilities to minimize our exposure to interest rate volatility, such efforts by us may not mitigate the impact of interest rate volatility in a

timely or effective manner, and our net interest margin, and in turn our financial condition and results of operations, could suffer significantly.

The following table sets forth, for the periods and dates indicated, certain information concerning the Noon Buying Rate in Won per US\$1.00.

Year Ended December 31,	At End of Period	Average <sup>(1)</sup>	High	Low
		(Won per US\$1.00)		
2018	1,112.9	1,099.3	1,141.7	1,054.6
2019	1,155.5	1,165.8	1,220.7	1,111.8
2020	1,086.1	1,180.6	1,267.3	1,081.9
2021	1,188.6	1,144.9	1,198.7	1,081.6
2022	1,260.2	1,291.8	1,440.5	1,187.0
October	1,424.6	1,426.1	1,440.3	1,402.3
November	1,316.8	1,361.8	1,424.0	1,316.8
December	1,260.2	1,293.6	1,322.2	1,260.2
2023 (through April 14)	1,299.1	1,281.8	1,325.3	1,220.3
January	1,232.0	1,243.1	1,272.2	1,227.3
February	1,323.5	1,275.4	1,323.5	1,220.3
March	1,303.8	1,306.0	1,324.5	1,278.9
April (through April 14)	1,299.1	1,315.6	1,325.3	1,299.1

Source: Federal Reserve Board Note:

(1) The average rate for annual and interim periods were calculated by taking the simple average of the Noon Buying Rates on the last day of each month during the relevant period. The average rates for the monthly periods (or portion thereof) were calculated by taking the simple average of the daily Noon Buying Rates during the relevant month (or portion thereof).

We have translated certain amounts in Korean Won, which appear in this annual report, into U.S. Dollars for convenience. This does not mean that the Won amounts referred to could have been, or could be, converted into U.S. Dollars at any particular rate, the rates stated above, or at all. Unless otherwise stated, translations of Won amounts to U.S. Dollars are based on the Noon Buying Rate in effect on December 30, 2022, which was \$1,260.2 to US\$1.00. On April 14, 2023, the Noon Buying Rate in effect was \$1,299.1 to US\$1.00.

We cannot assure you when and to what extent the Bank of Korea will in the future adjust the base interest rate, to which the market interest rate correlates. A decision to adjust the base interest rate is subject to many policy considerations as well as market factors, including the general economic cycle, inflationary levels, interest rates in other economies and foreign currency exchange rates, among others. In general, a decrease in interest rates adversely affects our interest income due to the different maturity structure for our assets and liabilities as discussed above. In contrast, if there were to be a significant or sustained increase in interest rates, all else being equal, such movement would lead to a decline in the value of traded debt securities and could also raise our funding costs, while reducing loan demand, especially among retail customers. Rising interest rates may therefore require us to re-balance our assets and liabilities in order to minimize the risk of potential mismatches in our asset liability management and to maintain our profitability. In addition, rising interest rates may adversely affect the Korean economy and the financial condition of our corporate and retail borrowers, including holders of our credit cards, which in turn may lead to deterioration of asset quality for our credit portfolio. Since most of our retail and corporate loans bear interest at rates that adjust periodically based on prevailing market rates, a sustained increase in interest rates will increase the funding costs of our borrowers and may adversely affect their ability to make payments on their outstanding loans. See "Item 5.A. Operating Results — Interest Rates."

### Replacement of London Interbank Offered Rate and reforms of other interest rate benchmarks could adversely affect our business, financial condition and results of operations.

Many of our products and services have referred to benchmark interest rates such as the London Interbank Offered Rate ("LIBOR") in many currencies, including the U.S. Dollar. We have also utilized such benchmark interest rates for our own evaluation of financial instruments and various other internal management purposes. In March 2021, the U.K. Financial Conduct Authority (the "FCA"), which has regulatory authority with respect to LIBOR, announced that all LIBOR settings will either cease to be provided by any administrator or no longer be representative (i) after December 31, 2021 in the case of all Sterling, Euro, Swiss franc and Japanese yen settings and the one-week and two month U.S. dollar settings and (ii) after June 30, 2023 in the case of the remaining U.S. dollar settings. While the ICE Benchmark Administration, the administrator of LIBOR, may publish certain LIBOR settings on the basis of a synthetic methodology for "tough legacy" contracts, there is no guarantee that such rates will be determined and published after the announced deadlines nor confirmed to be representative by the FCA.

In light of the transition away from LIBOR, the Secured Overnight Financing Rate ("SOFR") has been identified by the Alternative Reference Rates Committee convened by the Board of Governors of the U.S. Federal Reserve System and the Federal Reserve Bank of New York as the preferred alternative benchmark reference rate for LIBOR and differs from LIBOR in many respects, including its basis on actual observed transactions in the U.S. treasury market as opposed to LIBOR's usage of estimations of borrowing rates. While there are a number of international working groups focused on transition plans and the provision of fallback contract language that seek to minimize market disruption, replacement of LIBOR or any other benchmark with a new benchmark rate, such as SOFR, could adversely impact the value of and return on financial instruments and contracts. Moreover, replacement of LIBOR or other benchmark rates could result in market dislocations and have other adverse consequences for market participants, including the potential for increased costs, and litigation risks, including the potential for disputes with counterparties regarding the interpretation and enforceability of fallback contract language in LIBOR-based financial instruments and contracts. In particular, such transition may, among other things:

- adversely affect the price, liquidity, profitability, and tradability of a wide range of financial instruments, such as loans and derivatives, included in our financial assets and liabilities that reference LIBOR and other interest rate benchmarks;
- require negotiations with our counterparties to modify contracts to replace the reference rate for existing contracts based on or linked to LIBOR and other interest rate benchmarks with an alternative interest rate;
- result in disputes with customers and counterparties concerning the interpretation of affected contracts or economic adjustments to the alternative interest rate adopted in connection with the replacement of LIBOR and other interest rates and the transition to alternative interest rates, or disputes concerning inappropriate trade practices or abuse of a dominant bargaining position in transactions with customers;
- require us to respond to regulatory authorities in connection with the replacement of LIBOR and other interest rates benchmarks and the transition to an alternative interest rate;
- require us to develop risk management and other operational systems and processes (including information technology systems) necessary to effectively deal with the replacement of LIBOR and other interest rates and the transition to an alternative interest rate, which may prove challenging or impossible, or incur significant investment and other costs in connection with such replacement and transition; or
- result in accounting or other issues, such as by causing hedging accounting items to be derecognized.

There can be no assurance that a change in the benchmark interest rate and related valuation methods will not have a material adverse effect on our business, results of operations and financial condition.

#### We may incur losses associated with our counterparty exposures.

We face the risk that counterparties will be unable to honor contractual obligations to us or our subsidiaries. These parties may default on their obligations to us or our subsidiaries due to bankruptcy, lack of liquidity, operational failure or other reasons. This risk may arise, for example, from entering into swaps or other derivative contracts under which counterparties have obligations to make payments to us or our subsidiaries or in executing currency or other trades that fail to settle at the required time due to non-delivery by the counterparty or systems failure by clearing agents, exchanges, clearing houses or other financial intermediaries. Any realization of counterparty risk may adversely affect our business, operations and financial condition.

#### **Risks Relating to Our Banking Business**

## We have significant exposure to small- and medium-sized enterprises, and financial difficulties experienced by such enterprises may result in a deterioration of our asset quality.

Our banking activities are conducted primarily through our wholly-owned subsidiary, Shinhan Bank. One of our core banking businesses has historically been and continues to be lending to small- and medium-sized enterprises (as defined in "Item 4.B. Business Overview — Our Principal Activities — Corporate Banking Services — Small- and Medium-sized Enterprises Banking"). Shinhan Bank's loans (before allowance for loan losses and deferred loan origination costs and fees) to such enterprises amounted to ₩108,016 billion as of December 31, 2020, ₩121,961 billion as of December 31, 2021 and ₩131,304 billion as of December 31, 2022, representing 29.9%, 31.0% and 31.4%, respectively, of our total loan portfolio as of such dates.

Compared to loans to large corporations, which tend to be better capitalized and better able to weather business downturns, or loans to individuals and households, which tend to be secured with homes and with respect to which the borrowers are therefore less willing to default, loans to small- and medium-sized enterprises have historically had a relatively higher delinquency ratio. Many small- and medium-sized enterprises represent sole proprietorships or small businesses dependent on a relatively limited number of suppliers or customers and tend to be affected to a greater extent than large corporate borrowers by fluctuations in the Korean and global economy. In addition, small- and medium-sized enterprises often maintain less sophisticated financial records than large corporate borrowers. Therefore, it is generally more difficult for banks to judge the level of risk inherent in lending to such enterprises, as compared to large corporations. In addition, many small- and medium-sized enterprises are dependent on business relationships with large corporations in Korea, primarily as suppliers. Any difficulties encountered by those large corporations would likely hurt the liquidity and financial condition of related small- and medium-sized enterprises, including those to which we have exposure, also resulting in an impairment of their ability to repay loans. As large Korean corporations continue to expand into China, Southeast Asia and other countries with lower labor costs and other expenses by relocating their production plants and facilities to such countries, such development may have a material adverse impact on such small- and medium-sized enterprises.

Financial difficulties experienced by small- and medium-sized enterprises as a result of, among other things, recent economic difficulties in Korea and globally and aggressive marketing and intense competition among banks to lend to this segment in recent years, coupled with our efforts to counter asset quality deterioration through conservative lending policy, have led to a fluctuation in the asset quality of our loans to this segment. As of December 31, 2020, 2021 and 2022, Shinhan Bank's delinquent loans to small- and medium-sized enterprises were \$372 billion, \$363 billion and \$385 billion, respectively, representing delinquency ratios (net of charge-offs and loan sales) of 0.34%, 0.30% and 0.29%, respectively. If the ongoing difficulties in the Korean or global economy were to continue or aggravate, the delinquency ratio for our loans to small- and medium-sized enterprises may rise.

Of particular concern is our exposure to enterprises in the real estate and leasing and construction industries. As of December 31, 2022, Shinhan Bank had outstanding loans (before allowance for credit losses on loans and deferred loan origination costs and fees) to enterprises in the real estate and leasing and construction industries

(many of which are small- and medium-sized enterprises) of  $\Psi$ 41,991 billion and  $\Psi$ 4,024 billion, respectively, representing 12.1% and 1.2%, respectively, of its total loan portfolio as of such date. We also have other exposure to borrowers in these sectors of the Korean economy, including extending guarantees for the benefit of such companies and holding debt and equity securities issued by such companies. In addition, Shinhan Bank has exposure to borrowers in the shipbuilding and shipping industries, which have yet to stage a meaningful turnaround.

The enterprises in the real estate development and construction industries in Korea, which are heavily concentrated in the housing market, have recently seen modest growth backed by the housing market which has remained strong over the recent few years. However, the Government's policy measures to stabilize the real estate market, oversupply of residential property, ongoing economic sluggishness in Korea and globally and demographic changes in the Korean population may result in difficulties to the housing market in general as well as these enterprises. We also have limited exposure to real estate project financing, particularly by construction companies that have built residential units in provinces outside the metropolitan Seoul area, which have experienced a relatively low rate of pre-sales, the proceeds from which the construction companies primarily rely on as a key source for liquidity and cash flow.

Any of the foregoing developments may result in deterioration in the asset quality of our banking subsidiaries. See "Item 4.B. Business Overview — Description of Assets and Liabilities — Credit Exposures to Companies in Workout and Recovery Proceedings." We have been taking active steps to curtail delinquency among our small- and medium-sized enterprise customers, including by way of strengthening loan application review processes and closely monitoring borrowers in troubled sectors. Despite such efforts, there is no assurance that the delinquency ratio for our loans to small- and medium-sized enterprises will not rise in the future, especially if the Korean economy were to face renewed difficulties and, as a result, the liquidity and cash flow of these borrowers deteriorate. A significant rise in the delinquency ratios among these borrowers would lead to increased charge-offs and higher provisioning and reduced interest and fee income, which would have a material adverse effect on our business, financial condition and results of operations.

## A decline in the value of the collateral securing our loans or our inability to fully realize the collateral value may adversely affect our credit portfolio.

Most of our mortgage and home equity loans are secured by borrowers' homes, other real estate, other securities and guarantees (which are principally provided by the Government and other financial institutions), and a substantial portion of our corporate loans are also secured, including by real estate. As of December 31, 2022, the secured portion were collateralized or guaranteed of Shinhan Bank's loans amounted to ₩216,801 billion, representing 62.5% of its total loans. No assurance can be given that the collateral value will not materially decline in the future. Shinhan Bank's general policy for mortgage and home equity loans is to lend up to 40% to 85% of the appraised value of the collateral, but subject to the maximum loan-to-value ratio, debt-to-income ratio and debt service ratio requirements for mortgage loans implemented by the Government, and to periodically re-appraise such collateral. In order to mitigate our loss in the event of a decrease in the value of collateral, we have made effort to increase the proportion of installment principal repayment-based loans and manage the loan-to-value ratio of loans. As of December 31, 2022, installment principal repayment-based housing loans accounted for 53.4% of the housing loans extended by Shinhan Bank, and the loan-to-value ratio of mortgage and home equity loans of Shinhan Bank was 41.7%. Despite these efforts however, if the real estate market in Korea experiences a downturn, the value of the collateral may fall below the outstanding principal balance of the underlying mortgage loans. Borrowers of such under-collateralized mortgages or loans may be forced to pay back all or a portion of such mortgage loans or, if unable to meet the collateral requirement through such repayment, sell the underlying collateral, which sales may lead to a further decline in the price of real estate in general and set off a chain reaction for other borrowers due to the further decline in the value of collateral. Declines in real estate prices reduce the value of the collateral securing our mortgage and home equity loans, and such reduction in the value of collateral may result in our inability to cover the uncollectible portion of our secured loans. A decline in the value of the real estate or other collateral securing our loans, or our inability to

obtain additional collateral in the event of such decline, may result in the deterioration of our asset quality and require us to make additional loan loss provisions. In Korea, foreclosure on collateral generally requires a written petition to a Korean court. Foreclosure procedures in Korea generally take 7 to 12 months from initiation to collection depending on the nature of the collateral, and foreclosure applications may be subject to delays and administrative requirements, which may result in a decrease in the recovery value of such collateral. No assurance can be given that we will be able to realize the full value of collateral as a result of, among others, delays in foreclosure proceedings, defects in the perfection of collateral and general declines in collateral value. Our failure to recover the expected value of collateral could expose us to significant losses.

#### Guarantees received in connection with our real estate financing may not provide sufficient coverage.

Primarily through Shinhan Bank, we, alone or together with other financial institutions, provide financing to real estate development projects, which are concentrated largely in the construction of residential complexes. Developers in Korea commonly use project financing to acquire land and pay for related project development costs. As a market practice, lenders in project financing, including Shinhan Bank, generally receive from general contractors a performance guarantee for the completion of projects by the developers as well as a payment guarantee for the loans raised by a special purpose financing vehicle established by the developers in order to procure the construction orders, as the developers tend to be small and highly leveraged. Shinhan Bank has actively managed and reduced its real estate project financing-related exposure, particularly during sustained downturns in the Korean real estate market. As of December 31, 2022, the total outstanding amount of Shinhan Bank's real estate project financing-related exposure, if defaults were to significantly increase under our existing loans to real estate development projects and the general contractors fail to pay the guaranteed amount necessary to cover the amount of our financings, this may have an adverse effect on our business, financial condition and results of operations.

## A limited portion of our credit exposure is concentrated in a relatively small number of large corporate borrowers, and future financial difficulties experienced by them may have an adverse impact on us.

Of Shinhan Bank's 10 largest corporate exposures as of December 31, 2022, two were companies for which Shinhan Bank was a main creditor bank. All of the 10 companies are or were members of the main debtor groups as identified by the Governor of the Financial Supervisory Service, which are largely comprised of the largest Korean commercial conglomerates known as "chaebols." As of such date, the total amount of Shinhan Bank's exposures to the 10 companies was \\$28,940 billion, or 8.6%, of its total exposures. As of that date, Shinhan Bank's single largest outstanding exposure to a main debtor group amounted to \$5,279 billion, or 1.6%, of its total exposures. Largely due to the continued stagnation in the shipbuilding industry, current and former member companies of the STX Group, one of the leading conglomerates in Korea, entered into voluntary arrangements in 2013 with their creditors (including Shinhan Bank) to improve their credit situation, and STX Offshore & Shipbuilding and STX Heavy Industries, two of the STX Group's member companies, recently filed for court receivership in May 2016 and July 2016, respectively. Due to stagnation in the construction industry, Keangnam Enterprises Co., Ltd., a large construction company in Korea, also entered into workout proceedings in 2013 and subsequently filed for recovery proceedings in March 2015. Dongbu Steel Co., Ltd. and Sambu Construction Co., Ltd. also experienced significant hardship and entered into workout or recovery proceedings in 2015. Additionally, in October 2015, creditors of Daewoo Shipbuilding & Marine Engineering Co., Ltd., led by Korea Development Bank, announced a restructuring plan that included cash injection and additional loans totaling ₩4.2 trillion and extensive streamlining measures, and in November 2016, Korea Development Bank agreed to swap \U20141.8 trillion of debt to equity and the Export-Import Bank of Korea agreed to issue \U20141 trillion of perpetual bonds. Amid continued deterioration of Daewoo Shipbuilding & Marine Engineering Co., Ltd.'s financial conditions, in March 2017, Korea Development Bank and the Export-Import Bank of Korea further agreed to provide an additional  $\Psi$ 2.9 trillion in loans and swap  $\Psi$ 1.6 trillion of debt to equity, provided that other creditors and bondholders agree to certain debt-to-equity swaps and extension of maturities. In January 2016, Hanjin Heavy Industries & Construction Co., Ltd. entered into voluntary restructuring agreements with its creditors due to liquidity shortage in the wake of prolonged industry slowdown. Partly as a result of its active

past efforts to reduce exposure to the shipbuilding and construction sectors, Shinhan Bank currently has limited exposure to the aforementioned troubled companies. However, if the credit quality of Shinhan Bank's exposure to large corporations, including those in the main debtor groups, declines, Shinhan Bank may be required to record additional loan loss provisions in respect of loans and impairment losses in respect of securities, which would adversely affect its financial condition, results of operations and capital adequacy. No assurance can be given that the allowances it has established against these exposures will be sufficient to cover all future losses arising from such exposures, especially in the case of a prolonged or renewed economic downturn.

A limited number of the main debtor groups to which Shinhan Bank has credit exposure are subject to restructuring programs or are otherwise making significant efforts to improve their financial conditions, such as by obtaining intragroup loans and entering into agreements to further improve their capital structures. No assurance can be given that there will not be future restructuring with Shinhan Bank's major corporate customers or that such restructuring will not result in significant losses to Shinhan Bank with less than full recovery. In addition, if the Government decides to pursue an aggressive restructuring policy with respect to distressed companies, Korean commercial banks, including Shinhan Bank, may face a temporary rise in delinquencies and intensified pressure for additional provisioning. Furthermore, bankruptcies or financial difficulties of large corporations, including *chaebol* groups, may have an adverse ripple effect of triggering delinquencies and impairment of Shinhan Bank's loans to small- and medium-sized enterprises that supply parts or labor to such corporations. If Shinhan Bank experiences future losses from its exposure to large corporations, including *chaebol* groups, it may have a material adverse effect on Shinhan Bank's business, financial condition and results of operations. See "Item 4.B. Business Overview — Description of Assets and Liabilities — Loans — Loan Portfolio — Exposure to Main Debtor Groups."

#### The asset quality of our retail loan portfolio may deteriorate.

In recent years, consumer debt, including lending to households and small unincorporated businesses, has continued to increase in Korea. Shinhan Bank's portfolio of retail loans is comprised of two principal product types, namely secured retail loans (which are primarily comprised of mortgage and home equity loans secured by real estate) and general purpose loans (which are unsecured loans and tend to carry a higher credit risk). As of December 31, 2022, Shinhan Bank's retail loan portfolio (before allowance for loan losses and deferred loan origination costs and fees and excluding credit card loans) was \$141,550 billion, representing 40.8% of its total loans outstanding. As of December 31, 2020, 2021 and 2022, Shinhan Bank's non-performing retail loans (excluding credit card loans) were \$281 billion, \$261 billion and \$289 billion, respectively, representing non-performing loan ratios (net of charge-offs and loan sales) of 0.21%, 0.18% and 0.20%, respectively.

Our large exposure to consumer debt means that we are exposed to changes in economic conditions affecting Korean consumers. For example, a rise in unemployment, an increase in interest rates or a decline in housing prices in Korea could adversely affect the ability of consumers to make payments and increase the likelihood of potential defaults. Economic difficulties in Korea that hurt consumers could result in increasing delinquencies and a decline in the asset quality of our household loan portfolio, which may in turn require us to record higher provisions for credit loss and charge-offs and may materially and adversely affect our financial condition and results of operations.

### Any deterioration in the asset quality of our guarantees and acceptances will likely have a material adverse effect on our financial condition and results of operations.

In the normal course of banking activities, we make various commitments and incur certain contingent liabilities in the form of guarantees and acceptances. Financial guarantees, which are contracts that require us to make specified payments to reimburse the beneficiary of the guarantee for a loss such beneficiary incurs because the debtor in respect of which the guarantee is given fails to make payments when due in accordance with the terms of the relevant debt instrument, are recognized initially at fair value, and such initial fair value is amortized over the life of the financial guarantee. Other guarantees are recorded as off-balance sheet items in the notes to

our financial statements and those guarantees that we have confirmed to make payments are recorded on the statements of financial position. As of December 31, 2022, Shinhan Bank had aggregate guarantees and acceptances of  $\Psi$ 17,996 billion, for which it provided allowances for losses of  $\Psi$ 76.9 billion. If there is significant deterioration in the quality of assets underlying our guarantees and acceptances, our allowances may be insufficient to cover actual losses resulting in respect of these liabilities.

#### **Risks Relating to Our Credit Card Business**

### Future changes in market conditions as well as other factors, such as stricter regulation, may lead to reduced revenues and deterioration in the asset quality of credit card receivables.

As of December 31, 2020, 2021 and 2022, Shinhan Card's interest-earning credit card assets amounted to \$30,977 billion, \$34,437 billion and \$39,034 billion, respectively. Our large exposure to credit card and other consumer debt means that we are exposed to changes in economic conditions affecting Korean consumers in general. For example, a rise in unemployment, an increase in interest rates, a downturn in the real estate market, or a general contraction or other difficulties affecting the Korean economy may lead Korean consumers to reduce spending (a substantial portion of which is conducted through credit card transactions), which in turn leads to reduced earnings for our credit card business, as well as to higher default rates on credit card loans, deterioration in the quality of our credit card assets and increased difficulties in recovering written-off assets from which a significant portion of Shinhan Card's revenues is derived. Any of these developments could have a material adverse effect on our business, financial condition and results of operations.

Increasing consumer and corporate spending and borrowing on our card products and growth in card lending balances depend in part on Shinhan Card's ability to develop and issue new or enhanced card and prepaid products and increase revenue from such products and services, as well as the level of discretionary income among our cardholders, which is largely affected by macroeconomic factors beyond our control. In addition, credit card companies in Korea, including Shinhan Card, may not be able to enjoy any rapid growth in revenue over the long term due to the maturing nature of the credit card industry, in part due to oversaturation of credit card service providers. Shinhan Card's future earnings and profitability also depend on its ability to attract new cardholders, reduce cardholder attrition, increase merchant coverage and capture a greater share of customers' total credit card spending in Korea and overseas. Shinhan Card may not be able to manage and expand cardholder benefits in a cost-effective manner or contain the growth of marketing, promotion and reward expenses to a commercially reasonable level. If Shinhan Card is not successful in increasing customer spending, maintaining or expanding its market position and asset growth, or containing costs or cardholder benefits, its financial condition, results of operations and cash flow could be negatively affected.

Non-financial companies, such as e-commerce and retail business, as well as fintech companies have become major competitors in various business areas. Fast-growing online service providers and tech companies joined the financial payment service market, changing the landscape of the payment service industry. Convenient payment service providers such as Kakao Pay, Naver Pay, and Coupang Pay are competing against the payment services of Shinhan Card. As a response to such market changes, Shinhan Card developed the "Shinhan pLay", which is a platform for mobile application-credit card payment model that can be used for both online and offline payments. Shinhan Card pioneered "touch payment" using magnetic secure transmission technology and commercialized biometric "Face Pay," which allows for payment without the need for card plates or digital devices. Competition is expected to intensify as MyData services are launched and the sharing of customer personal information, credit information, and transaction data across a variety of digital platforms is expanded.

In addition, Government policies and regulations aimed at protecting small- and medium-sized enterprises, such as the reduction of fees chargeable to small- and medium-sized merchants, may have a material adverse effect on our revenues from Shinhan Card. In January 2012, the Government expanded the definition of a small- and medium-sized merchant to include those with annual sales of up to  $\Psi$ 200 million and, effective September 2012, lowered fees chargeable to such merchants from 1.8% to 1.5% with respect to credit cards. In January

2015, the Government further expanded the definition of a small- and medium-sized merchant to include those with annual sales of more than W200 million and up to W300 million, and imposed a cap on fees chargeable to such merchants at 2.0% with respect to credit cards. In November 2015, the Government announced a further reduction in the merchant fees chargeable to small- and medium-sized enterprises with respect to credit cards, effective January 31, 2016, from 2.0% to 1.3% for merchants with annual sales of more than \200 million and up to ₩300 million, and from 1.5% to 0.8% for merchants with annual sales of up to ₩200 million. In July 2017, the Enforcement Decree of the Specialized Credit Finance Business Act was amended to expand the range of small- and medium-sized enterprises subject to lower merchant fees. Upon the amendment, merchants with annual sales of more than \\$300 million and up to \\$500 million are subject to merchant fees chargeable with respect to credit cards of 1.3%, and merchants with annual sales of up to \$300 million are subject to merchant fees chargeable with respect to credit cards of 0.8%. In January 2019, the government further expanded the definition of a small- and medium-sized merchant to include those with annual sales of more than \\$500 million and up to \$3 billion. Upon the amendment, merchants with annual sales of less than \$500 million are subject to merchant fees chargeable with respect to credit cards of 0.8%, merchants with annual sales of more than \$500 million and up to \$1 billion are subject to merchant fees chargeable with respect to credit cards of 1.4%, and merchants with annual sales of more than  $\mathbb{W}1$  billion and up to  $\mathbb{W}3$  billion are subject to merchant fees chargeable with respect to credit cards of 1.6%. Effective January 2022, the fees chargeable to small- and medium-sized enterprises with respect to credit cards were further reduced. Upon the amendment, merchants with annual sales of less than \\$300 million are subject to merchant fees chargeable with respect to credit cards of 0.5%, merchants with annual sales of more than \$300 million and up to \$500 million are subject to merchant fees chargeable with respect to credit cards of 1.1%, merchants with annual sales of more than \$500 million and up to \$1 billion are subject to merchant fees chargeable with respect to credit cards of 1.25%, and merchants with annual sales of more than W1 billion and up to W3 billion are subject to merchant fees chargeable with respect to credit cards of 1.5%. Pursuant to the Specialized Credit Financial Business Act, the rates of fees chargeable to merchants are subject to review and revision every three years, starting from 2012, and the rates of fees chargeable may be further adjusted due to changes in relevant regulations or Government policy. A task force comprised of representatives from the credit card industry, consumers, merchants and the Financial Services Commission is expected to convene during 2022 to discuss improvements to the current system of adjustments to merchant commission rates. Additionally, during 2018, the Seoul metropolitan and other regional governments have launched "Zero Pay", a government sponsored QR code-based mobile payment platform charging little to no transaction fees (up to 0.5% depending on volume of sales) and aimed at reducing transaction fees small businesses pay to credit card companies. The Financial Services Commission also announced its plans to establish an open banking system that would provide fintech firms access to banks' payment systems at lower costs. Additional amendments to regulations requiring further downward adjustments to merchant fees or Government policies aimed at reducing transaction fees paid to credit card companies may be implemented in the future, placing further downward pressure on the results of operations for credit card companies, including Shinhan Card.

In 2013, the Government also implemented measures regulating marketing costs in order to control excessive marketing campaigns and curtail undue marketing expenses, which had the effect of impeding revenue growth for credit card companies but also reduced or slowed the growth in their marketing expenses. Effective December 2013, the Government also introduced guidelines to curb the interest rates that credit card companies, including Shinhan Card, may charge on card loans and cash advances. Furthermore, the Government also provides tax incentives, among others, for the use of check cards (where the amounts paid with check cards are instantly debited from the customer's bank accounts) to encourage the use of check cards in lieu of credit cards are widely used in lieu of credit cards, this would reduce interest income from credit cards, which generally have a longer repayment period than that of check cards, and may have an adverse impact on Shinhan Card's revenues and results of operations. On November 26, 2018, the Financial Services Commission introduced additional guidelines aimed at curtailing excessive marketing expenses for credit card companies, for example by limiting the benefits credit card companies may offer to large corporate credit card clients or merchants as well as requiring a reasonable level of annual service fees for credit card holders. Although these and similar

Government initiatives and measures may result in a reduction in marketing expenses, which in turn may help reduce the overall expenses of our credit card business, there is no assurance that Government measures will achieve their intended results, and such measures may result in a decline in the volume of credit card transactions or otherwise adversely affect our business, financial condition and results of operations.

#### **Risks Relating to Our Other Businesses**

### We may experience significant losses from our investments and, to a lesser extent, trading activities due to market fluctuations.

We enter into and maintain large investment positions in fixed income products, primarily through our treasury and investment operations. These activities are described in "Item 4.B. Business Overview — Our Principal Activities — Other Banking Services." We also maintain smaller trading positions, including equity and equity-linked securities and derivative financial instruments as part of our operations. Taking these positions entails making assessments about financial market conditions and trends. The revenues and profits we derive from many of these positions and related transactions are dependent on market prices, which are beyond our control. When we own assets such as debt or equity securities, a decline in market prices, for example, as a result of fluctuating market interest rates or stock market indices, can expose us to trading and valuation losses. If market prices move in a way that we have not anticipated, we may experience losses. In addition, when markets are volatile and subject to rapid changes in price directions, actual market prices may be contrary to our assessments and lead to lower than anticipated revenues or profits, or even result in losses, with respect to the related transactions and positions.

#### We may generate losses from our brokerage and other commission- and fee-based business.

We, through our investment and other subsidiaries, currently provide, and seek to expand the offerings of, brokerage and other commission- and fee-based services. Downturns in stock markets typically lead to a decline in the volume of transactions that we execute for our customers and, therefore, a decline in our non-interest revenues. In addition, because the fees that we charge for managing our clients' portfolios are often based on the size of the assets under management, a downturn in the stock market, which has the effect of reducing the value of our clients' portfolios or increasing the amount of withdrawals, also generally reduces the fees we receive from our securities brokerage, trust account management and other asset management services. Even in the absence of a market downturn, below-market performance by our securities, trust account or asset management subsidiaries may result in increased withdrawals and reduced cash inflows, which would reduce the revenue we receive from these businesses. In addition, protracted declines in asset prices can reduce liquidity for assets held by us and lead to material losses if we cannot close out or otherwise dispose of deteriorating positions in a timely way or at commercially reasonable prices. In July 2019, we made a capital contribution of <del>W</del>660 billion by subscribing for new shares of common stock of Shinhan Securities, enabling Shinhan Securities to satisfy the  $\mathbb{W}4$ trillion capitalization requirement required to apply to the Financial Services Commission for designation as a mega-investment bank ("mega-IB"). Upon designation as a mega-IB, Shinhan Securities will be able to issue debt securities up to 200% of its capitalization amount and would be able to utilize such proceeds for corporate lending and other businesses. This capital contribution was made in line with our strategic initiative to strengthen our non-banking businesses and capital market activities. However, we cannot assure you that this capital contribution, any designation of Shinhan Securities as a mega-IB or any resulting developments will not have a negative effect on our business, financial condition and results of operations that outweigh any potential benefits, and we may not be successful in furthering our strategic initiative.

# Prolonged periods of declining or low interest rates or changes in related accounting standards may reduce or turn negative our investment margin on savings insurance products and result in an increase in the valuation of our liabilities associated with these products.

We, principally through Shinhan Life Insurance, offer fixed rate insurance policies such as savings insurance products that include guaranteed benefits. These products expose us to the risk that changes in interest

rates will reduce our investment margin, which is the difference between the amounts that we are required to pay under the contracts and the rate of return we earn on investments intended to support obligations under such contracts. During periods of declining or low interest rates, we may have to invest insurance cash flows and reinvest the cash flows we received as interest or return of principal on our investments in lower yielding instruments. In addition, during periods of declining or low interest rates, fixed rate policies may become relatively more attractive investments to consumers. This could result in an increase in payments we are required to pay on such products and higher percentage of such products remaining in-force from year to year, during a period when our new investments carry lower returns. During periods of sustained lower interest rates, our reserves for policy liabilities may not be sufficient to meet future policy obligations and may need to be strengthened.

Significantly lower or negative investment margins may cause us to accelerate amortization, thereby reducing net income in the affected reporting period and potentially negatively affecting our credit instrument covenants or rating agency assessment of our financial condition. In addition, under IFRS 17, which became effective beginning 2023, insurance contract liabilities will be calculated in terms of market value (as the present value of future insurance cash flows with a provision for risk) instead of book value. As the discount rate will reflect current interest rates rather than book yields, we may have a significantly higher debt balance under IFRS 17 due to higher insurance liabilities, thereby resulting in a decrease in our risk-based capital.

## We may fail to realize the anticipated benefits of and encounter significant risks in connection with mergers and acquisitions.

We continue to seek and evaluate opportunities for diversification and growth of our business, including through strategic acquisitions, and have experienced substantial growth through several mergers and acquisitions. On February 1, 2019, we acquired a 59.15% interest in Orange Life Insurance, the former Korean unit of ING Life Insurance, as part of our efforts to diversify and enhance our non-banking businesses. On January 28, 2020, we acquired the remaining interests in Orange Life Insurance by effecting a comprehensive stock exchange under Articles 360-2 of the Korean Commercial Code whereby holders (other than us) of Orange Life Insurance's common stock transferred all of their shares to us and in return receive shares of our common stock, and hence Orange Life Insurance became our wholly owned subsidiary as of such date. Orange Life Insurance was subsequently merged with and into Shinhan Life Insurance in July 2021. On October 31, 2018, we agreed to acquire Asia Trust Co., Ltd. in order to expand our real estate business capacity and have also acquired certain small-sized overseas financial service companies and asset management companies. On September 29, 2020, we acquired a 96.8% interest in Neoplux, a venture capital company formerly under the Doosan Group. On December 30, 2020, we acquired the remaining interest in Neoplux by effecting a small-scale stock exchange under Article 360-10 of the Korean Commercial Code, and hence Neoplux has become our wholly owned subsidiary as of such date. On January 11, 2021, Neoplux changed its legal name to Shinhan Venture Investment. In addition, on January 15, 2021, we acquired the remaining 35% interest in Shinhan BNP Paribas Asset Management and changed its legal name to Shinhan Asset Management, and hence Shinhan Asset Management has become our wholly-owned subsidiary as of such date. On June 30, 2022 we acquired 94.54% interest in BNP Paribas Cardif General Insurance, which then changed its name to Shinhan EZ General Insurance, Ltd. Subsequently in November 2022, Shinhan EZ General Insurance, Ltd. conducted a paid-in capital increase and our shares decreased to 85.1%. We expect to integrate these and any future acquisitions with our existing businesses and generate synergies and expand our business capabilities. However, we may encounter significant risks, including difficulty in successfully integrating acquired businesses, increased expenses such as working capital requirements or capital expenditures, regulatory risks and financial risks such as potential liabilities of the businesses we acquire. In addition, evaluating potential acquisitions may require us to incur significant expenses or divert management's attention away from other business issues. As such, no assurance can be given that any completed or contemplated acquisitions will not have a negative effect on our business, financial condition and results of operations that outweigh any potential benefits.

# We may suffer losses or record provisions for credit loss allowance for expected losses in connection with financial products sold by us or our subsidiaries, including Shinhan Securities and Shinhan Bank, which may have a negative impact on us, including our reputation.

We are subject to lawsuits and other claims in the ordinary course of our business, including with respect to financial products sold by us or our subsidiaries, including Shinhan Securities and Shinhan Bank. We may suffer losses or record provisions for credit loss allowance for expected losses in connection with the sales of such financial products and related legal or other proceedings related to such matters, which may have a negative impact on us, including our reputation.

In August 2019, the Financial Supervisory Service launched an investigation into Lime Asset Management Co., Ltd. ("Lime Asset"), Korea's largest hedge fund managing approximately ¥4.1 trillion in assets as of December 31, 2020, including with regards to allegations that Lime Asset had concealed the fact that it had changed the multi-manager trade finance fund's investment method and concealed losses in their trade finance funds. Beginning in October 2019, Lime Asset suspended withdrawals from certain of its funds, freezing approximately ¥1.7 trillion in total as of the end of 2019, according to the Financial Supervisory Service. According to Financial Supervisory Service investigations, Lime Asset's ¥211 billion trade finance fund was found to have been associated with a debacle involving the International Investment Group LLC ("IIG"), a New York-based investment adviser charged with securities fraud and running a Ponzi scheme. On November 26, 2019, the SEC revoked the registration of IIG for allegedly overvaluing defaulted loans in the fund's portfolio to conceal losses in its flagship hedge fund and selling at least \$60 million in fake loan assets to clients. According to the Financial Supervisory Service, Lime Asset signed a contract with a Singaporean commodity trader, which took over Lime Asset's ownership stake in an IIG fund in June 2019, with the Singaporean entity issuing promissory notes to Lime Asset, and Lime Asset did not properly disclose to its investors such change in the fund's investment target from the IIG fund to promissory notes.

Certain investors in funds of Lime Asset have filed dispute mediation claims to the Financial Supervisory Service and criminal and civil claims against Lime Asset, as well as against financial institutions that have sold such products, claiming they learned of the change in the trade finance fund's investment method and losses only in October 2019 and that they were also misguided and not fully informed of the risks associated with these funds when investing in such products. The Financial Supervisory Service conducted a comprehensive audit in November and December 2019. In February 2020, the Prosecutors' Office of Korea announced that they had launched an investigation into Lime Asset as well as Shinhan Securities and also searched Shinhan Bank's headquarters on July 1, 2020 in connection with this matter. In November 2020, the Financial Supervisory Service imposed a partial business suspension on Shinhan Securities and suspension from duties and a cautionary warning to its two former CEOs. On December 5, 2021, the Supreme Court concluded that a former employee of Shinhan Securities was partially guilty on charges of conspiring to conceal from investors Lime Asset's losses and change in investment target and imposed a sentence of eight years' imprisonment and a \\$300 million fine. On December 10, 2021, the Financial Supervisory Service imposed a partial business suspension and a fine of ₩4 billion on Shinhan Securities, and a cautionary warning on two former employees of Shinhan Securities in connection with alleged violations of the Capital Markets Act and the Act on Real Name Financial Transactions and Confidentiality. On February 14, 2023, a fine of \U00e71.8 billion on Shinhan Securities was confirmed. On March 15, 2023, Seoul Southern District Court imposed a fine of \$50 million on Shinhan Securities for violation of the Financial Investment Services and Capital Markets Act of Korea in failing to properly monitor its employees involved in the sale of Lime Asset products. On April 22, 2021, the sanctions committee of the Financial Supervisory Service recommended a partial business suspension and fine of \\$8.7 billion on Shinhan Bank, a cautionary warning to the CEO of Shinhan Bank, an institutional caution and fine of **W**50 million on Shinhan Financial Group and a caution to the CEO of Shinhan Financial Group in connection with Shinhan Bank's alleged improper solicitation of troubled Lime Asset funds and management's oversight in risk management. On July 11, 2022, the partial business suspension and the fine of \\$5.7 billion on Shinhan Bank and a cautionary warning to the CEO of Shinhan Bank were confirmed. The fine on Shinhan Financial Group recommended by the sanctions committee will be deliberated at the Securities and Futures Commission of the

Financial Services Commission and will be confirmed if approved at a regular meeting of the Financial Services Commission.

In May 2020, Shinhan Securities announced that its board of directors has resolved to compensate certain investors for amounts ranging between 30% to 70% (in the case of retail investors) and 20% to 50% (in the case of institutional investors) of the amount of such investor's investment in Lime Asset products. In June 2020, Shinhan Bank announced that its board of directors has resolved to make prepayments to investors in certain Lime Asset funds that have reached maturity in an amount equal to 50% of such investor's investment in the relevant product. On June 30, 2020, the Financial Dispute Mediation Committee of the Financial Supervisory Service recommended through a non-binding ruling for brokerages, including Shinhan Securities, to return 100% of the amount of investors' investment in certain of Lime Asset products sold after November 2018 in the aggregate of approximately ¥161 billion. In August 2020, the board of directors of Shinhan Securities resolved to accept the non-binding ruling for certain Lime Asset's trade finance funds sold around November 2018. With these resolutions by the board of directors of Shinhan Securities, the total amount of compensation to investors of Lime Asset funds that Shinhan Securities has agreed to pay has reached \\42.46 billion. On April 19, 2021, the Financial Dispute Mediation Committee of the Financial Supervisory Service recommended through a non-binding ruling that Shinhan Bank compensate investors in such Lime Asset funds in amounts ranging from 40% to 80% of the losses incurred by the investors by way of making prepayments, with adjustments to be made depending on particular facts, such as the nature of the investor (e.g., whether retail or institutional investor, the age and experience level of the investor, etc.) and adequacy of documentation. In 2022, in accordance with such compensation guideline recommended by the Financial Dispute Mediation Committee, Shinhan Bank completed its voluntary settlement process with substantially all of such investors in Lime Asset funds.

In June 2020, the Financial Supervisory Service launched an investigation into Discovery Asset Management Co., Ltd. ("**Discovery Asset**"), which operated funds that invested in certain funds in the U.S. managed by Direct Lending Investment, LLC ("**DLI**"). In April 2019, the U.S. Securities and Exchange Commission obtained a preliminary injunction and order appointing a receiver to freeze DLI's funds based on the complaint that DLI fabricated values of its assets under management and reported returns. In response, Discovery Asset suspended withdrawals from funds under its management, thereby freezing approximately ₩256 billion in total of its investors' funds as of April 2019. While neither Shinhan Bank nor Shinhan Securities was involved in sale of such DLI-related funds structured by Discovery Asset, Shinhan Bank and Shinhan Securities did sell other Discovery Asset funds (affected by such suspension of withdrawal) to investors in Korea. Between 2017 and 2019, Shinhan Bank and Shinhan Securities sold approximately ₩93.6 billion and ₩50.8 billion, respectively, of such Discovery Asset products (unrelated to DLI funds), of which only Shinhan Bank has recovered approximately ₩45.1 billion from Discovery Asset. In 2022, Shinhan Bank completed its voluntary settlement process with substantially all of such investors in Discovery Asset funds, and Shinhan Securities is in discussion with the investors to settle these amounts based on mutually agreeable terms.

From May 2017 to December 2018, Shinhan Securities sold approximately ₩390.7 billion of certain German Heritage derivative-linked securities ("German Heritage DLS Products"). As of December 31, 2022, the principal amount of German Heritage DLS Products that have become eligible for payment but for which payment has been delayed is ₩379.9 billion. The German Heritage DLS Products are derivative-linked trust products where performance is based on underlying Singapore funds that invest in Germany's monument status building development projects. Since July 2019, maturity payments have been delayed on the German Heritage DLS Products as recovery on the underlying funds has been delayed. In March 2020, Shinhan Securities announced that its board of directors has resolved to make prepayments to investors who have consented to the extension of maturity in an amount equal to 50% of the amount of such investor's investments in the German Heritage DLS Products. As of December 31, 2022, Shinhan Securities recognized ₩343.8 billion in non-operating expenses as provisions for potential future compensation in connection with the sale of German Heritage DLS Products.

The prepayments made or to be made by Shinhan Bank and Shinhan Securities to investors of Lime Asset funds, Discovery Asset funds and German Heritage DLS Products, respectively, as explained above, have been or will be, as the case may be, settled at the time of recovery of the underlying funds. If the amount recovered on the underlying fund is less than the amount prepaid to investors, Shinhan Bank and Shinhan Securities may not be able to recover from investors the amount of the prepaid amount that is in excess of the recovered amount and accordingly suffer losses. Depending on the performance of such underlying funds, we may record provisions for credit loss allowance to account for expected future losses.

During the fiscal year 2022, Shinhan Bank and Shinhan Securities recorded \$54.6 billion and \$116.2 billion, respectively, for credit loss allowance to account for expected future losses associated with financial products, including Lime Asset, Discovery Asset and German Heritage DLS Products. Depending on a variety of factors, including those outside the control of Shinhan Bank or Shinhan Securities, such as the performance of the underlying funds and progression of discussions with investors, Shinhan Bank or Shinhan Securities may record additional provisions for credit loss allowance to account for expected future losses from these or other financial products, and there is no guarantee that such amounts, if any, will not be significant.

In June 2022, Shinhan Bank voluntarily reported to the Financial Supervisory Service certain overseas wire transfers made in 2020 and 2021 which Shinhan Bank had detected as unusual based on its internal monitoring system. After similar activities were also reported by another major Korean bank, the Financial Supervisory Service launched an investigation in August 2022 into wire transfers made under similar circumstances across all major banks in Korea, including Shinhan Bank. In an interim report released in September 2022, the Financial Supervisory Service reported that approximately more than US\$7.2 billion of suspicious overseas wire transfers were made through 12 banks, of which approximately US\$2.36 billion had been wired through Shinhan Bank and that at least some of these transfers were allegedly related to cryptocurrency arbitrage transactions. The Financial Supervisory Service and the Seoul Central District Prosecutor's Office are currently investigating these wire transfers and the parties involved, including in relation to any violation of certain monitoring and reporting obligations under the Foreign Exchange Transactions Act of Korea and the Act on Reporting and Use of Certain Financial Transaction Information of Korea. In December 2022, the Financial Supervisory Service made a recommendation to improve Shinhan Bank's fraud detection system, including allocating sufficient staff and establishing a computer system dedicated to identifying digital asset-related transactions and assessing risks related to digital asset management. Such investigations are ongoing, and it is difficult to predict the results of these proceedings and the potential impact they may have on us.

Any legal or administrative proceedings in connection with these matters, if brought and particularly if adversely determined, may have a negative impact on us, including our reputation. Accordingly we cannot assure you that these matters and related events will not have an adverse effect on us, including our reputation. For further details, see "Item 8.A. Consolidated Statements and Other Financial Information — Legal Proceedings." and Note 43 of the notes to our consolidated financial statements included in this annual report.

#### Other Risks Relating to Us as the Holding Company

### Our ability to continue to pay dividends and service debt will depend on the level of profits and cash flows of our subsidiaries.

We are a financial holding company with minimal operating assets other than the shares of our subsidiaries. Our primary source of funding and cash flow is dividends from, or disposition of our interests in, our subsidiaries or our cash resources, most of which are currently the result of borrowings. Since our principal assets are the outstanding capital stock of our subsidiaries, our ability to pay dividends on our common and preferred shares and service debt will mainly depend on the dividend payments from our subsidiaries.

Companies in Korea are subject to certain legal and regulatory restrictions with respect to payment of dividends. For example, under the Korean Commercial Code, dividends may only be paid out of distributable income, which is calculated by subtracting the aggregate amount of a company's paid-in capital and certain mandatory legal reserves from its net assets, in each case as of the end of the prior fiscal year. In addition,

financial companies in Korea, including banks, credit card companies, securities companies and life insurers, such as our subsidiaries, must meet minimum capital requirements and capital adequacy ratios applicable to their respective industries before dividends can be paid. For example, under the Banking Act of 1950, as amended (the "Banking Act"), a bank is required to credit at least 10% of its net profit to a legal reserve each time it pays dividends on distributable income until such time when this reserve equals the amount of its total paid-in capital, and under the Banking Act, the Specialized Credit Financial Business Act and the regulations promulgated by the Financial Services Commission, if a bank or a credit card company fails to meet its required capital adequacy ratio or is otherwise subject to the management improvement measures imposed by the Financial Services Commission, then the Financial Services Commission may restrict the declaration and payment of dividend by such a bank or credit card company. In addition, if our or our subsidiaries' capital adequacy ratios fall below the required levels, our ability to pay dividends may be restricted by the Financial Services Commission.

#### Damage to our reputation could harm our business.

We are one of the largest and most influential financial institutions in Korea by virtue of our financial track records, market share and the size of our operations and customer base. Our reputation is critical to maintaining our relationships with clients, investors, regulators and the general public. Our reputation can be damaged in numerous ways, including, among others, employee misconduct (including embezzlement), cyber or other security breaches, litigation, compliance failures, corporate governance issues, failure to properly address potential conflicts of interest, the activities of customers and counterparties over which we have limited or no control, prolonged or exacting scrutiny from regulatory authorities and customers regarding our trade practices, or uncertainty about our financial soundness and our reliability. If we are unable to prevent or properly address these concerns, we could lose our existing or prospective customers and investors, which could adversely affect our business, financial condition and results of operations. For details of the claims, disputes, legal proceedings and government investigations we are subject to, see "Item 8.A. Consolidated Statements and Other Financial Information — Legal Proceedings."

#### Our risk management policies and procedures may not be fully effective at all times.

In the course of our operations, we must manage a number of risks, such as credit risks, market risks and operational risks. We seek to monitor and manage our risk exposures through a comprehensive risk management platform, encompassing centralized risk management organization and credit evaluation systems, reporting and monitoring systems, early warning systems and other risk management infrastructure, using a variety of risk management strategies and techniques. See "Item 4.B. Business Overview - Risk Management." Although we devote significant resources to developing and improving our risk management policies and procedures and expect to continue to do so in the future, our risk management practices may not be fully effective at all times in eliminating or mitigating risk exposures in all market environments or against all types of risk, including risks that are unidentified or unanticipated. For example, in the past, a limited number of our and our subsidiaries' personnel engaged in embezzlement of substantial amounts for an extended period of time before such activities were detected by our risk management systems. In response to these incidents, we have strengthened our internal control procedures by, among others, implementing a real-time monitoring system, but there is no assurance that such measures will be sufficient to prevent similar employee misconducts in the future. Management of credit, market and operational risk requires, among others, policies and procedures to record properly and verify a large number of transactions and events, and we cannot assure you that these policies and procedures will prove to be fully effective at all times against all the risks we face.

#### We may experience disruptions, delays and other difficulties relating to our information technology systems.

We rely on our information technology systems to seamlessly provide our wide-ranging financial services as well as for our daily operations, including billing, online and offline financial transactions settlement and record keeping. We continually upgrade, and make substantial expenditures to upgrade, our group-wide information technology system, including in relation to customer data-sharing and other customer relations management systems, particularly in light of the heightened cyber security risks from advances in technology. Despite our best efforts, however, we may experience disruptions, delays, cyber or other security breaches or other difficulties relating to our information technology systems, and may not timely upgrade our systems as currently planned. Any of these developments may have an adverse effect on our business, particularly if our customers perceive us to not be providing the best-in-class cyber security systems and failing to timely and fully rectify any glitches in our information technology systems.

#### Our activities are subject to cyber security risk.

Our activities have been, and will continue to be, subject to an increasing risk of cyber-attacks, the nature of which is continually evolving. Cyber security risks include unauthorized access, through system-wide "hacking" or other means, to privileged and sensitive customer information, including passwords and account information, and illegal use thereof. Cyber security risk is generally on the rise as a growing number of our customers increasingly rely on our Internet- and mobile phone-based banking services for various types of financial transactions. While we vigilantly protect customer data through encryption and other security programs and have made substantial investments to build and upgrade our systems and defenses to address the growing threats from cyber-attacks, there is no assurance that such data will not be subject to future security breaches. In addition, there can be no assurance that we will not experience a leakage of customer information or other security breaches as a result of illegal activities by our employees, outside consultants or hackers, or otherwise.

In order to minimize the risk of security breaches related to customer and our other proprietary information, we have taken a series of group-wide preventive measures, such as the adoption and implementation of a best-in-class information security system and reinforcement of internal control measures. We are fully committed to maintaining the highest standards of cyber security and consumer protection measures and upgrading them continually. We have implemented the ISO 27001-certified security management system for us and all our subsidiaries, and we have obtained the Information Security Management System certification for most of our subsidiaries. We believe such certifications represent third-party validations that we are in compliance with best-in-class international standards on matters of information security. Our Integrated Security Control Center's security management system enables us to continuously monitor for signs of potential cyber-attacks and provides us with advance warnings that will allow us to promptly respond to such attacks. Our security management system continuously monitors for signs of potential cyber-attacks and is designed to provide early warning alerts to enable prompt action by us. In order to prevent intentional and accidental security issues by our employees, we have created a violation monitoring system, reinforcing our security measures by preemptively identifying various scenarios of threats and by collecting and analyzing different types of data that allows us to quickly identify any potential security violations. Moreover, we established a new information security lab to build a continuous security research and development system to respond to hacking and other cyber threats. Through these measures, we are developing technical capabilities necessary to respond to the latest security threats. We also provide intensive employee training to our information technology staff and other employees on cyber security and have adopted advanced security infrastructure (including through hiring a highly competent team of information security experts) for online financial services such as mandatory website certification and keyboard security functions. In addition, reviews of our system are conducted, across all of our subsidiaries, through periodic audits and simulation reviews by external experts. In addition, in compliance with applicable regulations we currently carry insurance to cover cyber security breaches up to \$10 billion in relation to our banking business and up to \\$3 billion in the aggregate and up to \\$1 billion per incident for our securities investment business and have set aside a reserve of W1 billion for our credit card business. In addition, in light of the growing use of mobile devices to access financial services, we have implemented security measures (including encryptions and service terminal monitoring) to provide a secure mobile banking service as well as to prevent illegal leakage or sharing of customer data and otherwise enhance customer privacy. We are also keenly aware of the litigation and regulatory sanctions risks that may arise from security breaches and are aggressively reinforcing a group-wide culture that stresses safety and good custodianship as among our highest priorities. Furthermore, we are actively taking steps to implement preventive and other steps recommended or required by the regulatory authorities in relation to actual and potential financial scams. Although we have not experienced

any material security breaches or any similar large scale leakage of customer information recently, given the unpredictable and continually evolving nature of cyber security threats due to advances in technology or other reasons, there is no assurance that, notwithstanding our best efforts at maintaining the best-in-class cyber security systems, we will not be vulnerable to major cyber security attacks in the future.

The public is developing heightened awareness about the importance of keeping their personal data private, and the financial regulators are placing greater emphasis on data protection by financial service providers. For example, under the Personal Information Protection Act, as last amended in August 2020, financial institutions, as personal information manager, may not collect, store, maintain, utilize or provide resident registration numbers of their customers, unless other laws or regulations specifically request or permit the management of resident registration numbers. Further, under the Use and Protection of Credit Information Act, as last amended in December 2021, a financial institution has a higher duty to protect credit information, meaning information necessary to assess the creditworthiness of the counterparty to financial transactions and other commercial transactions. Such regulations have considerably restricted a financial institution's ability to transfer or provide the information to its affiliate or holding company, and quintuple damages can be imposed on a financial institution for a leakage of such information. In addition, under the Electronic Financial Transaction Act, as last amended in June 2020 with effect from December 2020, a financial institution is primarily responsible for compensating its customers harmed by the financial institution's cyber security breach, even if the breach is not directly attributable to the financial institution. Recently, on January 9, 2020, the Korean National Assembly passed amendments to three major data privacy laws (the Personal Information Protection Act, the Act on the Promotion of Information and Communications Network Utilization and Information Protection and the Act on the Use and Protection of Credit Information), expanding the scope of personal information that may be shared among financial institutions. With this, we expect cyber security and ensuring confidentiality of customers' information to become more important than ever for financial institutions. We maintain an integrated system that closely monitors customer information to ensure compliance with data protection laws and regulations as well as our internal policies.

If a cyber or other security breach were to happen with respect to us or any of our subsidiaries, it may result in litigation by affected customers or other third parties (including class actions), compensation for any losses suffered by victims of cyber security attacks, reputational damage, loss of customers, heightened regulatory scrutiny and related sanctions, more stringent compliance with the present and future regulatory restrictions, and other costs related to damage control, reparation and reinforcement of information security systems, any of which may have a material adverse effect on our business, results of operations and financial condition.

### Our customers may become victims to "voice phishing" or other financial scams, for which we may be required to make monetary compensation and suffer damage to our business and reputation.

In recent years, financial scams known as voice phishing have been on the rise in Korea. While voice phishing takes many forms and has evolved over time in terms of sophistication, it typically involves the scammer making a phone call to a victim under false pretenses (for example, the scammer pretending to be a member of law enforcement, an employee of a financial institution or even an abductor of the victim's child) and luring the victim to transfer money to an untraceable account controlled by the scammer. More recently, voice phishing has increasingly taken the form of the scammer "hacking" or otherwise wrongfully obtaining personal financial information of the victim (such as credit card numbers or Internet banking login information) over the telephone or other means and illegally using such information to obtain credit card loans or cash advances through automated telephone banking or Internet banking. Reportedly, a substantial number of such scammers belong to international criminal syndicates with bases overseas, such as China, with operatives in Korea.

In response to the growing incidents of voice phishing, regulatory authorities have undertaken a number of steps to protect consumers against voice phishing and other financial scams. Also in response to the heightened risk, Shinhan Card and our other subsidiaries have established certain fraud detection system that identifies any questionable transactions based on deviations from a customer's conventional transaction patterns. There is no

assurance, however, that these regulatory activities and fraud detection system will have the desired effect of substantially eradicating or even containing the incidents of voice phishing or other financial scams. Also given continual advances in technology and the increasing sophistication of the financial scammers, there is no assurance that we will be able to prevent future financial scams or that the frequency and scope of financial scams will not increase. If financial scams involving us and our subsidiaries were to continue or to become more prevalent, it may result in compensation for any losses suffered by victims thereof, reputational damage, loss of customers, heightened regulatory scrutiny and related sanctions, compliance with the present and future regulatory restrictions, and other costs related to damage control, reparation and reinforcement of our preventive measures, any of which may have a material adverse effect on our business, results of operations and financial condition.

#### Legal claims and regulatory risks arise in the conduct of our business.

In the ordinary course of our business, we are subject to regulatory oversight and potential legal and administrative liability risk. We are also subject to a variety of other claims, disputes, legal proceedings and government investigations in Korea and other jurisdictions where we are active. See "Item 8.A. Consolidated Statements and Other Financial Information — Legal Proceedings." These types of proceedings may expose us to substantial monetary and/or reputational damages and legal defense costs, injunctive relief, criminal and civil penalties and the potential for regulatory restrictions on our businesses. The outcome of these matters are highly uncertain and difficult to predict, and they could adversely affect our future business.

While we plan to rigorously defend our positions in the lawsuits or other regulatory proceedings against us, it is difficult to predict the final outcome of such cases. The total amount in dispute may increase during the course of litigation and other lawsuits may be brought against us based on similar allegations. Accordingly, these lawsuits and other proceedings may have a material adverse effect on our business, financial condition and results of operations.

#### **Risks Relating to Law, Regulation and Government Policy**

### We are a heavily regulated entity and operate in a legal and regulatory environment that is subject to change, and violations could result in penalties and other regulatory actions.

As a financial services provider, we are subject to a number of regulations that are designed to maintain the safety and soundness of Korea's financial system, to ensure our compliance with economic and other obligations and to limit our risk exposure. These regulations may limit our activities, and changes in these regulations may increase our costs of doing business. Regulatory agencies frequently review regulations relating to our business and implement new regulatory measures, including increasing the minimum required provisioning levels or capital adequacy ratios applicable to us and our subsidiaries from time to time. We expect the regulatory environment in which we operate to continue to change. Changes in regulations applicable to us, our subsidiaries and our or their business or changes in the implementation or interpretation of such regulations could affect us and our subsidiaries in unpredictable ways and could adversely affect our business, results of operations and financial condition.

Furthermore, the Financial Consumer Protection Act (the "FCPA") was enacted on March 24, 2020 and took effect beginning March 25, 2021. The FCPA unifies the systems for the protection of consumers of financial products, which had been dispersed in various laws, while tightening the existing consumer protection systems to strengthen the rights afforded to consumers of financial products. Banks under the Banking Act are financial instrument distributors subject to the FCPA, and deposit and loan products under the Banking Act are financial instruments subject to the FCPA.

Under the FCPA, a financial instrument distributor who intends to sell financial instruments shall comply with the following requirements: (i) confirmation of suitability and adequacy of financial instruments,

(ii) compliance with the duty to explain, (iii) prohibition of unfair sales activities, (iv) prohibition of undue solicitation, and (v) prohibition of false or exaggerated advertising, etc. (collectively, the "Sales Principles"). If a financial instrument distributor breaches any of the Sales Principles, consumers may request the termination of such financial instrument within a period to be prescribed by a Presidential Decree and are entitled to unilaterally terminate the contract if the financial instrument distributor fails to present a justifiable reason for not accepting the consumer's request. Consumers who purchased a loan product, in particular, shall be entitled to withdraw from the contract within 14 days from the later of (i) the date of receipt of the proceeds pursuant to the contract and (ii) the execution date of the contract (or the date of receipt of the documents necessary for execution of the contract (if required under the FCPA), regardless of whether the financial instrument distributor breached any of the Sales Principles. When a consumer files a lawsuit for damages against a financial instrument distributor for breach of the duty to explain, the financial instrument distributor (and not the consumer) shall bear the burden of proof to prove that no willful conduct or negligence was involved in such breach of the duty to explain. In the event of a dispute with a financial instrument distributor, consumers may apply for mediation to the Dispute Mediation Committee of the Financial Services Commission. If a financial instrument distributor files a lawsuit with a court while such mediation is in progress, the court may suspend the litigation proceedings. For certain small-sum cases, a financial instrument distributor may not file a lawsuit with a court until the completion of such mediation. Financial instrument distributors must accept requests from its consumers to access information for purposes of litigation or mediation. In the event the Financial Services Commission determines that there is a clear risk that a financial product may cause significant damage to the properties of customers, the Financial Services Commission may prohibit or restrict the solicitation of, and execution of a contract for, such financial product.)

We and our subsidiaries have been proactively taking actions necessary to comply with the FCPA, including the examination of our financial products and training of our officers and employees. However, no assurance can be given that the implementation of the FCPA will not adversely affect us our subsidiaries' businesses or lead to a material adverse effect on their reputation, business, results of operations or financial condition. We may also become subject to other restrictions on our operations as a result of future changes in laws and regulations, including more stringent liquidity and capital requirements under Basel III, which are being adopted in phases in Korea in consideration of, among others, the pace and scope of international adoption of such requirements. Any of these regulatory developments may have a material adverse effect on our ability to expand operations or adequately manage our risks and liabilities. For further details on the principal laws and regulations applicable to us as a holding company and our principal subsidiaries, see "Item 4.B. Business Overview — Supervision and Regulation."

In addition, violations of law and regulations could expose us to significant liabilities and sanctions. For example, the Financial Supervisory Service conducts periodic audits on us and, from time to time, we have received institutional warnings from the Financial Supervisory Service. If the Financial Supervisory Service determines as part of such audit or otherwise that our financial condition, including the financial conditions of our operating subsidiaries, is unsound or that we have violated applicable law or regulations, including Financial Services Commission orders, or if we or our operating subsidiaries fail to meet the applicable requisite capital ratio or the capital adequacy ratio, as the case may be, set forth under Korean law, the Financial Supervisory Service may ask the Financial Services Commission to order, among other things, cancellations of authorization, permission or registration of the business, suspensions of a part or all of the business, closures of branch offices, recommendations for dismissal of officers or suspensions of officers from performing their duties, or may order, among other things, institutional warnings, institutional cautions, reprimanding warnings on officers, cautionary warnings on officers or cautions on officers. From time to time, our subsidiaries, including Shinhan Bank and Shinhan Card, have been subject to investigations and/or sanctions from the Financial Supervisory Service. See "Item 8.A. Consolidated Statements and Other Financial Information — Legal Proceedings." If any such measures are imposed on us or our subsidiaries as a result of unsound financial condition or failure to comply with minimum capital adequacy requirements or for other reasons, it will have a material adverse effect on us and our subsidiaries' business, financial condition and results of operations.

# The Government may encourage targeted lending to certain sectors in furtherance of policy objectives, and we may take this factor into account.

The Government has encouraged and may in the future encourage targeted lending to certain types of enterprises and individuals in furtherance of government initiatives. The Government, through its regulatory bodies such as the Financial Services Commission, from time to time announces lending policies to encourage Korean banks and financial institutions, including us and our subsidiaries, to lend to particular industries, business groups or customer segments, and, in certain cases, has provided lower cost funding through loans made by the Bank of Korea for further lending to specific customer segments.

For example, the Government has taken and is taking various initiatives to support small- and medium-sized enterprises and low-income individuals, who were disproportionately affected by the downturn in the Korean and global economy in the late 2000s and have yet to fully recover. As part of these initiatives, the Financial Supervisory Service has recently encouraged banks in Korea to increase lending to small- and medium-sized enterprises in order to ease the financial burden on such enterprises amid sluggish economic recovery, and in February 2016, the Bank of Korea announced that it would increase support for loans to small- and medium-sized enterprises in anticipation of growing liquidity difficulties among such enterprises in light of the sustained sluggishness of the general economy and to stimulate trade exports, infrastructure investments and entrepreneurial efforts. The financial regulators have also adopted several measures designed to improve certain lending practices of the commercial banks which practices were perceived as having an unduly prohibitive effect on extending loans to small- to medium-sized enterprises. Moreover, in response to the threat posed to the economy by the COVID-19 outbreak, the Government has implemented various emergency aid initiatives involving Korean banks, including Shinhan Bank, to provide liquidity assistance to small- and medium-sized enterprises. Such initiatives include extending new loans to borrowers with low credit ratings, extending maturity dates on existing loans and deferring interest payment obligations on certain loans. Our participation in such Government initiatives may lead us to extend credit to small- and medium-sized enterprises that we would not otherwise extend, or offer terms on such credit that we would not otherwise offer, in the absence of such initiatives. There is no guarantee that the financial condition and liquidity of the small- and medium-sized enterprises benefiting from such initiatives will improve sufficiently for them to service their debt on a timely basis or at all. Accordingly, an increase in our exposure to small- and medium-sized enterprise borrowers resulting from such Government initiatives may have a material adverse effect on our financial condition and results of operations.

In addition, as a way of supporting the Government's initiative to assist promising startups, in February 2015, the financial regulators announced that they would encourage the banks in Korea to increase lending to technology companies in the small- to medium-sized enterprise segment and to enhance technology-related credit review capabilities. According to the Korea Federation of Banks, the aggregate balance of loans to technology companies in the small- to medium-sized enterprise segment reached W266.9 trillion, W316.3 trillion and W326 trillion as of December 31, 2020, 2021 and 2022, respectively. Shinhan Bank's total balance of outstanding loans to technology companies as of December 31, 2020, 2021 and 2022 was W36.6 trillion, W46.2 trillion and W44.8 trillion, respectively.

Furthermore, amid concerns about increasing household debt, the Financial Services Commission increased target proportions for fixed interest rate loans and installment principal repayment-based housing loans for 2020 to 50% and 57.5%, respectively, which remained the same for 2021. The target proportions for fixed interest rate loans and installment principal repayment-based housing loans for 2022 were increased to 52.5% and 60.0%, respectively.

In furtherance of the policy to expand the proportion of fixed rate housing loans, the Financial Services Commission implemented "Relief Debt Conversion" program from March 24 to March 27, 2015 and from March 30 to April 3, 2015, respectively, under which borrowers of eligible housing loans (namely, loans that have been in existence for one year or more since the original loan date, with no delinquency in the past six

months, with principal amounts of \$500 million or less and for houses valued at \$900 million or less that are on a floating rate basis and/or an interest payment only basis) might convert such loans to new fixed rate loans in respect of which the borrowers would be required to repay the principal and interest in installment for a term of 10, 15, 20 or 30 years without a grace period, provided that the new loans pass the maximum loan-to-value ratio of 70% (irrespective of the location of the property) and the maximum debt-to-income ratio of 60% (only in respect of apartment units located in the greater Seoul metropolitan area, subject to certain exceptions). The borrowers were allowed to convert the original loans only at the banks that extended such loans. According to the Financial Services Commission, under this program, approximately 327,000 borrowers converted loans in the aggregate amount of \$31.7 trillion to fixed rate loans, of which Shinhan Bank accounted for approximately 13.5%.

On August 26, 2019, the Financial Services Commission announced that it will implement an additional round of the program for up to \\$20 trillion. Despite tighter thresholds for eligibility, including newly adopted restrictions on annual income, and the imposition of prepayment penalties, the newly implemented program is expected to be substantively similar to the mortgage refinancing program implemented in 2015. Similar to the 2015 program, banks holding newly converted fixed rate loans will be required to sell such loans to Korea Housing Finance Corporation, which will then securitize such loans and issue mortgage-backed securities (backed by such loans) to be purchased by the banks who sold the loans in proportion to the amounts of the loans sold. The amount of loans Shinhan Bank will need to transfer to Korea Housing Finance Corporation is ₩1.7 trillion, but the amount of mortgage-backed securities Shinhan Bank will need to purchase from Korea Housing Finance Corporation has yet to be determined. Similar to the 2015 program, in the event that market interest rates increase from those applicable during this program's implementation, we may experience valuation or realization losses on the mortgage-backed securities to be held by Shinhan Bank. Further, Shinhan Bank will be required to hold mortgage-backed securities it purchases from Korea Housing Finance Corporation under the program for a period of one year, and Shinhan Bank also may not be able to sell or otherwise dispose of the mortgage backed securities in the market or otherwise in amounts or at prices commercially reasonable due to the prevailing interest rate environment and/or other market conditions. As a result of this program, we may incur additional costs from recalibrating our asset portfolio and asset-liability management policy. Any of these developments could adversely affect our results of operations and financial condition. Due in large part to such initiatives, fixed interest rate loans and installment principal repayment-based loans accounted for 44.2% and 51.0%, respectively, of the total housing loans extended by commercial banks in Korea as of June 30, 2018, according to data published by the Government in December 2018. Fixed interest rate and installment principal repayment-based housing loans accounted for 49.7% and 53.4%, respectively, of the housing loans extended by Shinhan Bank as of December 31, 2022.

We, on a voluntary basis, may factor the existence of the Government's policies and encouragements into consideration in making loans although the ultimate decision whether to make loans remains with us and is made based on our internal credit approval procedures and risk management systems independently of Government policies. In addition, in tandem with providing additional loans to small- and medium-sized enterprises and low-income individuals, Shinhan Bank takes active steps to mitigate the potential adverse impacts from making bad loans to enterprises or individuals with high risk profiles as a result of such arrangement, such as by strengthening its loan review and post-lending monitoring processes. However, we cannot assure you that such arrangement did not or will not, or similar or other government-led initiatives in the future will not, result in a suboptimal allocation of our loan portfolio from a risk-reward perspective compared to what we would have allocated based on purely commercial decisions in the absence of such initiatives. The Government may implement similar or other initiatives in the future to spur the overall economy or encourage the growth of targeted industries or relief to certain segments of the population. Specifically, the Government may introduce lending-related initiatives or enforce existing ones in a heightened fashion during times when small- and medium-sized enterprises or low-income households on average are facing an increased level of financial distress or vulnerability due to an economic downturn, which makes lending to them in the volume and the manner suggested by the Government even riskier and less commercially desirable. Accordingly, such policy-driven lending may create enhanced difficulties for us in terms of risk management, deterioration of our asset quality

and reduced earnings, compared to what would have been in the absence of such initiatives, which may have an adverse effect on our business, financial condition and results of operations.

# The Government may also encourage investments in certain institutions in furtherance of policy objectives, and we may not recoup our investments therein in a timely or otherwise commercially reasonable manner.

In addition to targeted lending, the Government may from time to time encourage or request the financial institutions in Korea, including us and our subsidiaries, to make investments in, or provide other forms of financial support to, certain institutions in furtherance of the Government's policy objectives. In response thereto, we have made and will continue to make the ultimate decision on whether, how and to what extent we will comply with such encouragements or requests based on our internal risk assessment and in accordance with our risk management systems and policies. At the same time, as a leading member of the financial service industry in Korea and as a responsible corporate citizen we will also fully give due consideration to such encouragements or requests from the Government, especially in relation to the long-term benefit arising from furthering the policy objective of maintaining a sound financial system, even if complying with such requests may involve additional short-term costs and risks to a limited extent.

For example, to deal with a growing number of non-performing loans in the wake of the global financial crisis of 2008-2009, the Government sponsored the establishment of United Asset Management Company Ltd. ("UAMCO") in October 2009 through capital contributions from six major policy and commercial banks, namely Shinhan Bank, Kookmin Bank, KEB Hana Bank, Industrial Bank of Korea, Woori Bank and Nonghyup Bank. The Government originally planned to dispose of UAMCO during 2015 and establish a new company that specializes in corporate restructuring, but the Government scrapped such plans and instead decided to reorganize UAMCO and expand its restructuring business. As part of an effort to strengthen its balance sheet, UAMCO received additional capital contributions in May 2016 from two new shareholders, Korea Development Bank and the Export-Import Bank of Korea, and two of its existing shareholders, Woori Bank and Nonghyup Bank. In July 2020, UAMCO notified its shareholders of a capital contribution in the aggregate amount of  $\Psi$ 200.0 billion (to be borne in proportion to the respective shareholding percentages of its shareholders) to improve financial soundness and secure additional investment capacity in case sales of non-performing loans increase due to the COVID-19 pandemic. Accordingly, on July 28, 2020, Shinhan Bank made a capital contribution of \\$28 billion. Shinhan Bank has committed to contribute \#140 billion of capital to UAMCO, of which \#113.1 billion has been contributed to date. As of the date hereof, Shinhan Bank holds a 14% equity interest in UAMCO, while seven other policy and commercial banks each hold interests ranging from 2% to 14%.

UAMCO seeks to achieve financial improvement of struggling companies through a wide range of restructuring programs, including debt restructuring, capital injection, asset sales, corporate reorganization, workouts and liquidation and bankruptcy proceedings and is the largest purchaser in Korea of non-performing financial assets generally. Shinhan Bank sold non-performing assets to UAMCO in the amount of W246.5 billion, W92.4 billion and W91.3 billion in 2020, 2021 and 2022, respectively. With an enlarged capital base following the recent capital contributions mentioned above, it is expected that UAMCO will play a more active role in the restructuring of the Korean corporate sector. The Government is also considering an amendment of the Financial Investment Services and Capital Markets Act of Korea to facilitate the business activities of UAMCO.

If UAMCO is successful in its expanded restructuring activities, it is anticipated that financial institutions including us will be able to further enhance their financial soundness by transferring more non-performing loans to UAMCO rather than directly engaging in the restructuring activities of the troubled borrowers. However, Shinhan Bank or other banks may be requested by the Government to make additional capital contributions or loans to UAMCO, which may entail unanticipated costs. Additionally, given the generally poor quality of our non-performing assets, there is no assurance that we will be able to sell such assets held by us to UAMCO on commercially reasonable terms and on a timely basis. Furthermore, there is no assurance that in furtherance of similar or other policy objectives, the Government may not request or otherwise encourage us or our subsidiaries

to provide similar or other investments or provide other financial support for which we are not duly compensated or otherwise take up additional risk that we would not normally have undertaken, which may have an adverse effect on our business, financial condition and results of operations.

The level and scope of government oversight of our retail lending business, particularly regarding mortgage and home equity loans, may change depending on the economic or political climate.

Real estate comprises the most significant asset for a substantial number of households in Korea, and movements of housing prices have generally had a significant impact on the domestic economy. Accordingly, regulating housing prices, either in terms of attempting to stem actual or anticipated excessive speculation during times of a suspected housing price bubble and spur the pricing and/or volume of real estate transactions during times of a depressed real estate market by way of tax subsidy, guidelines to lending institutions or otherwise, has been a key policy initiative for the Government.

The regulations on mortgage and home equity loans are susceptible to the changes of housing market cycles and have been revised from time to time. From 2017 to 2022, the Government led by President Moon Jae-in announced and implemented a series of robust polices aimed at taming speculation and deterring the rise of housing prices. However, since the second half of 2022, the Government led by President Yoon Suk Yeol has announced and implemented a series of policies to ease the demand-side regulations in the real estate market in order to prevent housing prices from crashing due to the recent hike in interest rates. For example, the Government has released most areas from "speculative areas", "overheated speculative areas" and "adjustment targeted areas" (collectively, the "**regulated areas**") where tighter loan-to-value ratios and debt-to-income ratios are applicable to mortgage or home equity loans, with only Gangnam-Gu, Seocho-Gu, Songpa-Gu and Yongsan-Gu in the greater Seoul metropolitan area currently remaining as the regulated areas, removed the application of stricter loan-to-value ratio to new loans secured by high-price houses located in the regulated areas and allowed the extension of new loans secured by houses located in the regulated areas to households that already own one or more houses.

The Government also increased the loan-to-value ratio applicable to the regulated areas (i) up to 50% of the appraised value of the houses, except that such maximum loan-to-value ratio is 70% for low-income households that (1) have a combined (in case of married couple) annual income of no more than  $\Psi90$  million, (2) do not currently own any housing and (3) are using the loan to purchase low-price housing valued at  $\Psi900$  million or less ( $\Psi800$  million or less in case of houses located in "adjustment targeted areas") and (ii) up to 80% of the appraised value of the houses, for new loans to a first-time home buyer with a maximum residential mortgage loan amount of  $\Psi600$  million or less. The regulations on the debt-to-income ratio remained largely unchanged, with the debt-to-income ratio applicable to houses being (i) 60% for those that are located in "adjustment targeted areas" and (iii) 40% for those that are located in "speculative areas" or "overheated speculative areas". However, such debt-to-income ratios for houses located in regulated areas are adjusted to 60% for (i) low-income households that (1) have a combined (in case of married couple) annual income of no more than  $\Psi90$  million, (2) do not currently own any housing and (3) are using the loan to purchase low-price housing valued at  $\Psi900$  million, (2) do not currently own any housing and (3) are using the loan to purchase low-price housing valued at  $\Psi900$  million, (2) do not currently own any housing and (3) are using the loan to purchase low-price housing valued at  $\Psi900$  million or less ( $\Psi800$  million or less in case of houses located in "adjustment targeted areas") and (ii) first-time homebuyers.

The Financial Services Commission also introduced a debt service ratio and a modified debt-to-income ratio in order to modernize credit review methods and stabilize the management of household debt. The modified debt-to-income ratio, which has been implemented beginning January 31, 2018 reflects (i) both principal and interest payments on the applicable mortgage and home equity loan and existing mortgage and home equity loans and (ii) interest payments on other loans. Previously, debt-to-income ratio had only reflected (i) both principal and interest payments on the applicable mortgage and home equity loan and (ii) interest payments on existing mortgage and home equity loan and (ii) interest payments on existing mortgage and home equity loan and (ii) interest payments on existing mortgage and home equity loan and (ii) interest payments on existing mortgage and home equity loan and (ii) interest payments on both the applicable loan and other loans and have been fully implemented since October 2018. The modified

debt-to-income ratios are used as the primary reference index in the evaluation and approval process for mortgage and home equity loans, and debt service ratios are generally used as a supplementary reference index providing additional limits on mortgage and home equity loans. For example, debt service ratios applicable to a loan applicant with a total aggregate loan amount exceeding W100 million (including the applied but not yet extended loan amount) should not exceed 40% unless otherwise specified by the applicable regulations.

In addition, the supervising authorities in Korea from time to time issue administrative instructions to Korean banks, which have the effect of regulating the access of borrowers to housing loans and, as such, demand for real estate properties. For example, the Financial Supervisory Service issued administrative instructions to financial institutions to (except in limited circumstances) verify the borrower's ability to repay based on proof of income prior to making a mortgage and home equity loan regardless of the type or value of the collateral or the location of the property, which has had the effect of practically barring the grant of any new mortgage and home equity loans to borrowers without verifiable income.

Pursuant to the Regulation on the Supervision of the Banking Business, Shinhan Bank must maintain a loan to deposit ratio of no more than 100%. Since January 1, 2020, in calculating such loan to deposit ratio, retail loans and corporate loans are weighed differently, with retail loans subject to a multiple of 115% and corporate loans (excluding loans to SOHOs) subject to a multiple of 85%, thereby increasing the impact of retail loans and reducing the impact of corporate loans in calculating such ratio. In response to the COVID-19 pandemic, on April 20, 2020, the Financial Services Commission announced a series of measures to temporarily ease the regulations on loan-to-deposit ratio. In particular, the loan-to-deposit ratio of 100% was temporarily increased to 105% and weighing of corporate loans to SOHOs extended since January 1, 2020 to December 31, 2021 also became subject to a multiple of 85% provided such loans are not real estate related. On March 30, 2022, the Financial Services Commission announced plans to cease the temporary easement of regulations relating to the loan-to-deposit ratio as of June 30, 2022 and to gradually normalize the loan-to-deposit ratio back down to 100% beginning July 1, 2022. On October 27, 2022, the Financial Services Commission further announced measures to temporarily ease the loan-to-deposit ratio requirement from 100% to 105% in consideration of the increasing demand for corporate loans due to the contraction of the corporate bond market. This temporary increase will apply through April 2023, subject to further extension depending on the market conditions at the time of expiration of such measures. Additionally, the Detailed Regulation on the Supervision of the Banking Business was amended on June 30, 2018 to provide for a weighted multiple to be applied to mortgage and home equity loans where the loan-to-value ratio exceeds 60% in determining required minimum total capital (BIS) ratio. The Detailed Regulation on the Supervision of the Banking Business was also amended on June 30, 2018 to add "concentration of risk in the retail sector" as an additional criterion when the Financial Supervisory Service evaluates the risk management systems of Korean banks.

There is no assurance that Government measures will achieve their intended results. While any Government measure that is designed to stimulate growth in the real estate sector may result in growth of, and improved profitability for, our retail lending business (particularly with respect to mortgage and home equity loans) at least for the short term, such measure could also result in unintended consequences, including potentially excessive speculation resulting in a "bubble" for the Korean real estate market and a subsequent market crash. In contrast, any Government measure changing the direction of its stimulus measures (for example, in order to preemptively curtail an actual or anticipated bubble in the real estate market) may result in a contraction of the real estate market, a decline in real estate prices and consequently, a reduction in the growth of, and profitability for, our retail and/or other lending businesses, as well as otherwise have an adverse effect on our business, financial condition and results of operations or profitability. See "— Risks Relating to Our Banking Business — A decline in the value of the collateral securing our loans or our inability to fully realize the collateral value may adversely affect our credit portfolio."

# We engage in limited settlement transactions involving Iran and also in limited business in and related to Russia which may subject us to legal or reputational risks.

The U.S. Department of the Treasury's Office of Foreign Assets Control ("OFAC") administers and enforces certain laws and regulations ("OFAC Sanctions") that impose restrictions upon dealings with or related to certain countries, governments, entities and individuals that are the subject of OFAC Sanctions, including Iran, and maintains a list of specially designated nationals (the "SDN List"), whose assets are blocked and with whom U.S. persons are generally prohibited from dealing. Some OFAC Sanctions require a U.S. nexus in order to apply ("Primary Sanctions") while other OFAC Sanctions on certain dealings with or related to Iran, North Korea, and Russia apply even in the absence of a U.S. nexus ("Secondary Sanctions"). Non-U.S. persons are subject to Secondary Sanctions and can also be held liable for violations of Primary Sanctions on various legal grounds, such as causing violations by U.S. persons by engaging in transactions completed in part in the United States. The European Union also enforces certain laws and regulations that impose restrictions upon nationals and entities of, and business conducted in, member states with respect to activities or transactions with certain countries, governments, entities and individuals that are the subject of such laws and regulations. The United Nations Security Council and other governmental entities also impose similar sanctions.

In August 2016, the Government authorized Shinhan Bank to act as a settlement bank for Euro-denominated transactions between Korean and Iranian businesses. Prior to the granting of this permission, payments for business activities were settled only in Korean Won and we did not participate in such settlements. From August 2016 through August 2017, Shinhan Bank processed ten such transactions that resulted in a minimal amount of revenue. Since August 2017, Shinhan Bank has ceased processing any such transactions and has no intention to process any such transactions in the future. We are committed to engaging only in lawful activities and in obeying all relevant OFAC Sanctions and European Union sanctions but cannot guarantee that actions taken by our employees will not violate such sanctions. On May 8, 2018, U.S. President Donald Trump announced his decision to terminate the participation of the United States in the Joint Comprehensive Plan of Action (the "JCPOA"), pursuant to which certain relief of OFAC Sanctions relating to Iran had been provided. Following two wind down periods, one that ended on August 6, 2018 and one that ended on November 4, 2018, all Iran-related Secondary Sanctions that had been waived pursuant to the JCPOA were re-imposed and non-U.S. persons now face risk of Secondary Sanctions for dealing with certain key sectors of the Iranian economy or for providing associated services related to the targeted activities. As such, any Iran-related activities may subject us to OFAC Sanctions and to potential legal or reputational risks.

Shinhan Bank engages in certain limited lending activities in or related to Russia. In response to the Russia-Ukraine conflict, the U.S., E.U., U.K., Korean and other governments have imposed economic sanctions on Russia, Belarus, and certain regions of Ukraine. Such sanctions target, among other persons, a wide range of Russian financial institutions as sanctioned parties as well as the Russian Central Bank and certain other state entities. Russia-related activities may subject us to sanctions and potential legal or reputational risk.

## **Risks Relating to Korea**

# Unfavorable financial and economic conditions in Korea and globally may have a material adverse impact on our asset quality, liquidity and financial performance.

We are incorporated in Korea, where most of our assets are located and most of our income is generated. As a result, we are subject to political, economic, legal and regulatory risks specific to Korea, and our business, results of operations and financial condition are substantially dependent on developments relating to the Korean economy. As Korea's economy is highly dependent on the health and direction of the global economy, and investors' reactions to developments in one country can have adverse effects on the securities price of companies in other countries, we are also subject to the fluctuations of the global economy and financial markets. Factors that determine economic and business cycles in the Korean or global economy are for the most part beyond our control and inherently uncertain. In addition to discussions of recent developments regarding the global economic and market uncertainties and the risks relating to us as provided elsewhere in this section, factors that could have an adverse impact on Korea's economy in the future include, among others:

- continued volatility or deterioration in Korea's credit and capital markets;
- difficulties in the financial sectors in Europe, China and elsewhere and increased sovereign default risks in select countries and the resulting adverse effects on the global financial markets, including possibility of global inflation and the spread of economic downturn to Europe as a result of geopolitical risks arising from Russia-Ukraine conflict;
- declines in consumer confidence and a slowdown in consumer spending and corporate investments;
- adverse changes or volatility in foreign currency reserve levels, commodity prices (including oil prices), exchange rates (including fluctuation of the U.S. Dollar, the Euro or the Japanese Yen exchange rates or revaluation of the Chinese Renminbi, increased exchange rate volatility as a result of COVID-19 (and recovery therefrom) and consequent government interventions, interest rates, inflation rates or stock markets;
- increasing levels of household debt;
- increasing delinquencies and credit defaults by retail and small- and medium-sized enterprise borrowers;
- continuing adverse conditions in the economies of countries and regions that are important export markets for Korea, such as the United States, Europe, Japan and China, or in emerging market economies in Asia or elsewhere;
- the economic impact of any pending or future free trade agreements;
- potential escalation of the ongoing trade war between the U.S. and China as each country introduces tariffs on goods traded with the other;
- social and labor unrest;
- significant fluctuations or decreases in the market prices of Korean real estate;
- a decrease in tax revenue and a substantial increase in the Government's expenditures for fiscal stimulus measures, unemployment compensation and other economic and social programs that, together, would lead to an increased government budget deficit;
- financial problems or lack of progress in the restructuring of Korean business groups, other large troubled companies, their suppliers or the financial sector;
- loss of investor confidence arising from corporate accounting irregularities and corporate governance issues concerning certain Korean business groups;
- increases in social expenditures to support an aging population in Korea or decreases in economic productivity due to the declining population size in Korea;
- geopolitical uncertainty and risk of further attacks by terrorist groups around the world, including the actions of the so-called "Islamic State";
- the occurrence of severe health epidemics in Korea and other parts of the world, including COVID-19, Ebola, Middle East Respiratory Syndrome (MERS) and Zika virus outbreaks;
- deterioration in economic or diplomatic relations between Korea and its trading partners or allies, including deterioration resulting from territorial or trade disputes or disagreements in foreign policy such as the recent diplomatic tension between Korea and China with respect to the deployment of the Terminal High Altitude Area Defense (THAAD) system in Korea and trade disputes between Korea and the United States with respect to the imposition of anti-dumping duties on Korean steel, washing machines, transformers and solar panels;

- political uncertainty, or increasing strife among or within political parties in Korea, and political gridlock within the government or in the legislature, which prevents or disrupts timely and effective policy making;
- hostilities or political or social tensions involving oil-producing countries in the Middle East and North Africa and any material disruption in the global supply of oil or sudden increase in the price of oil;
- political or social tensions involving Russia and any resulting adverse effects on the global supply of oil or the global financial markets;
- the occurrence of natural or man-made disasters in Korea (such as the sinking of the Sewol ferry in April 2014, which significantly dampened consumer sentiment in Korea for months) and other parts of the world, particularly in trading partners of Korea; and
- an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States.

Any future deterioration of the Korean economy could have an adverse effect on our business, financial condition and results of operations.

# Tensions with North Korea could have an adverse effect on us, the price of our common shares and our American depositary shares.

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between Korea and North Korea has fluctuated and may increase abruptly as a result of current and future events. In particular, there continues to be heightened security tension in the region stemming from North Korea's hostile military and diplomatic actions, including in respect of its nuclear weapons and long-range missile programs. Some examples from recent years include the following:

- North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and conducted six rounds of nuclear tests since October 2006, including claimed detonations of hydrogen bombs, which are more powerful than plutonium bombs, and warheads that can be mounted on ballistic missiles. Over the years, North Korea has also conducted a series of ballistic missile tests, including missiles launched from submarines and intercontinental ballistic missiles that it claims can reach the United States mainland. In response, the Government has repeatedly condemned the provocations and flagrant violations of relevant United Nations Security Council resolutions. Internationally, the United Nations Security Council has passed a series of resolutions condemning North Korea's actions and significantly expanding the scope of sanctions applicable to North Korea, most recently in November 2022 in response to North Korea's intercontinental ballistic missile test in November 2022. Over the years, the United States and the European Union have also expanded their sanctions applicable to North Korea.
- In February 2016, in retaliation of North Korea's launch of a long-range rocket, Korea announced that it would halt its operations of the Kaesong Industrial Complex, an industrial complex in the border city of Kaesong, to impede North Korea's utilization of funds from the industrial complex to finance its nuclear and missile programs. In response, North Korea announced that it would expel all Korean employees from the industrial complex and freeze all Korean assets in the complex. All 280 Korean workers present at Kaesong left hours after the announcement by North Korea, and the complex remains closed as of the date hereof.
- In March 2013, North Korea stated that it had entered "a state of war" with Korea, declaring the 1953 armistice invalid, and put its artillery at the highest level of combat readiness to protest the Korea-United States allies' military drills and additional sanctions imposed on North Korea for its missile and nuclear tests.

North Korea's economy also faces severe challenges, including severe inflation and food shortages, which may further aggravate social and political tensions within North Korea. In addition, reunification of Korea and

North Korea could occur in the future, which would entail significant economic commitment and expenditure by Korea that may outweigh any resulting economic benefits of reunification.

In April, May and September 2018, President Moon Jae-in met Kim Jong-un in a series of summit meetings to discuss, among other matters, denuclearization of the Korean peninsula. In June 2018, U.S. President Donald Trump and Kim Jong-un in turn had an official summit in Singapore, the first ever meeting between leaders of the United States and North Korea. Subsequent to the Singapore summit, they signed a joint statement, which stated, among others, new peaceful relations and the denuclearization of the Korean peninsula. A second official summit between U.S. President Donald Trump and Kim Jong-un was held in Vietnam in February 2019 but ended abruptly and without an agreement. In June 2019, U.S. President Donald Trump and Kim Jong-un had another summit at the Korean Demilitarized Zone, following which both sides announced a resumption of denuclearization talks. However, in December 2019, North Korea destroyed the joint liaison office in Kaesong, citing anti-regime propaganda allegedly disseminated using balloons across the border by Korean activists, and cut all other communication channels with Korea.

In the aftermath of these developments, there remains significant uncertainty regarding peace talks and the denuclearization of the Korean peninsula. As such, there can be no assurance that the level of tension on the Korean peninsula will not escalate in the future or that the political regime in North Korea may not suddenly collapse. Any further increase in tension or uncertainty relating to the military, political or economic stability in the Korean peninsula, including a breakdown of diplomatic negotiations over the North Korean nuclear program, occurrence of military hostilities, heightened concerns about the stability of North Korea's political leadership or its actual collapse, a leadership crisis, a breakdown of high-level contacts or accelerated reunification could have a material adverse effect on our business, financial condition and results of operations, as well as the price of our common shares and our American depositary shares.

## **Risks Relating to Our American Depositary Shares**

#### There are restrictions on withdrawal and deposit of common shares under the depositary facility.

Under the deposit agreement, holders of shares of our common stock may deposit those shares with the depositary bank's custodian in Korea and obtain American depositary shares, and holders of American depositary shares may surrender American depositary shares to the depositary bank and receive shares of our common stock. However, under current Korean laws and regulations, the depositary bank is required to obtain our prior consent for the number of shares to be deposited in any given proposed deposit which exceeds the difference between (1) the aggregate number of shares deposited by us for the issuance of American depositary shares (including deposits in connection with the initial and all subsequent offerings of American depositary shares and stock dividends or other distributions related to these American deposit. We have consented to the deposit of outstanding shares of common stock as long as the number of American depositary shares and withdraw shares of common stock, you may not be able to deposit the shares again to obtain American depositary shares.

### Ownership of our shares is restricted under Korean law.

Under the Financial Holding Companies Act, any single shareholder (together with certain persons in a special relationship with such shareholder) may acquire beneficial ownership of up to 10% of the total issued and outstanding shares with voting rights of a bank holding company controlling national banks such as us. In addition, any person, except for a "non-financial business group company" (as defined below), may acquire in excess of 10% of the total voting shares issued and outstanding of a financial holding company which controls a national bank, provided that a prior approval from the Financial Services Commission is obtained each time such person's aggregate holdings exceed 10% (or 15% in the case of a financial holding company controlling regional

banks only), 25% or 33% of the total voting shares issued and outstanding of such financial holding company. The Government and the Korea Deposit Insurance Corporation are exempt from this limit. Furthermore, certain non-financial business group companies (i.e., (i) any same shareholder group with aggregate net assets of all non-financial business companies belonging to such group of not less than 25% of the aggregate net assets of all members of such group; (ii) any same shareholder group with aggregate assets of all non-financial business companies belonging to such group of not less than W2 trillion; (iii) any mutual fund in which the same shareholder group identified in (i) or (ii) above owns more than 4% of the total shares issued and outstanding of such mutual fund; (iv) any private equity fund (a) where a person falling under any of items (i) through (ii) above is a limited partner holding not less than 10% of the total amount of contributions to the private equity fund, or (b) where a person falling under any of items (i) through (iii) above is a general partner, or (c) where the total equity of the private equity fund acquired by each affiliate belonging to several enterprise groups subject to the limitation on mutual investment is 30% or more of the total amount of contributions to the private equity fund; or (v) the investment purpose company concerned, where a private equity fund falling under item (iv) above acquires or holds stocks in excess of 4% of the shares or equity of such company or exercises de facto control over significant managerial matters of such company through appointment or dismissal of executives or in any other manner)) may not acquire beneficial ownership in us in excess of 4% of our outstanding voting shares, provided that such non-financial business group companies may acquire beneficial ownership of up to 10% of our outstanding voting shares with the approval of the Financial Services Commission under the condition that such non-financial business group companies will not exercise voting rights in respect of such shares in excess of the 4% limit. See "Item 4.B. Business Overview — Supervision and Regulation — Principal Regulations Applicable to Financial Holding Companies — Restrictions on Financial Holding Company Ownership." To the extent that the total number of shares of our common stock that you and your affiliates own together exceeds these limits, you will not be entitled to exercise the voting rights for the excess shares, and the Financial Services Commission may order you to dispose of the excess shares within a period of up to six months. Failure to comply with such an order would result in a fine of up to  $\Psi$ 100 million, plus an additional charge of up to 0.03% of the book value of such shares per day until the date of disposal.

## Holders of our ADSs will not have preemptive rights in certain circumstances.

The Korean Commercial Code and our articles of incorporation require us, with some exceptions, to offer shareholders the right to subscribe for new shares in proportion to their existing ownership percentage whenever new shares are issued. If we offer any rights to subscribe for additional shares of our common stock or any rights of any other nature, the depositary bank, after consultation with us, may make the rights available to you or use reasonable efforts to dispose of the rights on your behalf and make the net proceeds available to you. The depositary bank, however, is not required to make available to you any rights to purchase any additional shares unless it deems that doing so is lawful and feasible and:

- a registration statement filed by us under the U.S. Securities Act of 1933, as amended, is in effect with respect to those shares; or
- the offering and sale of those shares is exempt from or is not subject to the registration requirements of the U.S. Securities Act.

We are under no obligation to file any registration statement with the U.S. Securities and Exchange Commission. If a registration statement is required for you to exercise preemptive rights but is not filed by us, you will not be able to exercise your preemptive rights for additional shares and you will suffer dilution of your equity interest in us.

# Holders of our ADSs will not be able to exercise dissent and appraisal rights unless they have withdrawn the underlying shares of our common stock and become our direct stockholders.

Under Korean law, in some limited circumstances, including the transfer of the whole or any significant part of our business and the merger or consolidation of us with another company, dissenting stockholders have the right to require us to purchase their shares under Korean law. However, under our deposit agreement, holders of our American depositary shares do not have, and may not instruct the depositary as to the exercise of, any dissenter's rights provided to the holders of our common shares under Korean law. Therefore, if holders of our American depositary shares wish to exercise dissenting rights, they must withdraw the underlying common stock from the American depositary shares facility (and incur charges relating to that withdrawal) and become our direct stockholders prior to the record date of the shareholders' meeting at which the relevant transaction is to be approved, in order to exercise dissent and appraisal rights.

# The market value of your investment in our ADSs may fluctuate due to the volatility of the Korean securities market.

Our common stock is listed on the KRX KOSPI Division of the Korea Exchange, which has a smaller market capitalization and is more volatile than the securities markets in the United States and many European countries. The market value of ADSs may fluctuate in response to the fluctuation of the trading price of shares of our common stock on the Stock Market Division of the Korea Exchange. The Stock Market Division of the Korea Exchange has experienced substantial fluctuations in the prices and volumes of sales of listed securities and the Stock Market Division of the Korea Exchange has prescribed a fixed range in which share prices are permitted to move on a daily basis. Like other securities markets, including those in developed markets, the Korean securities market has experienced problems including market manipulation, insider trading and settlement failures. The recurrence of these or similar problems could have a material adverse effect on the market price and liquidity of the securities of Korean companies, including our common stock and ADSs, in both the domestic and the international markets.

The Government has the potential ability to exert substantial influence over many aspects of the private sector business community, and in the past has exerted that influence from time to time. For example, the Government has promoted mergers to reduce what it considers excess capacity in a particular industry and has also encouraged private companies to publicly offer their securities. Similar actions in the future could have the effect of depressing or boosting the Korean securities market, whether or not intended to do so. Accordingly, actions by the government, or the perception that such actions are taking place, may take place or has ceased, may cause sudden movements in the market prices of the securities of Korean companies in the future, which may affect the market price and liquidity of our common stock and ADSs.

# Your dividend payments and the amount you may realize upon a sale of your ADSs will be affected by fluctuations in the exchange rate between the U.S. Dollar and the Won.

Investors who purchase the American depositary shares will be required to pay for them in U.S. Dollars. Our outstanding shares are listed on the Korea Exchange and are quoted and traded in Won. Cash dividends, if any, in respect of the shares represented by the American depositary shares will be paid to the depositary bank in Won and then converted by the depositary bank into U.S. Dollars, subject to certain conditions. Accordingly, fluctuations in the exchange rate between the Won and the U.S. Dollar will affect, among other things, the amounts a registered holder or beneficial owner of the American depositary shares will receive from the depositary bank in respect of dividends, the U.S. Dollar value of the proceeds which a holder or owner would receive upon sale in Korea of the shares obtained upon surrender of American depositary shares and the secondary market price of the American depositary shares.

# If the Government deems that certain emergency circumstances are likely to occur, it may restrict the depositary bank from converting and remitting dividends in Dollars.

If the Government deems that certain emergency circumstances are likely to occur, it may impose restrictions such as requiring foreign investors to obtain prior Government approval for the acquisition of Korean

securities or for the repatriation of interest or dividends arising from Korean securities or sales proceeds from disposition of such securities. These emergency circumstances include any or all of the following:

- sudden fluctuations in interest rates or exchange rates;
- extreme difficulty in stabilizing the balance of payments; and
- a substantial disturbance in the Korean financial and capital markets.

The depositary bank may not be able to secure such prior approval from the government for the payment of dividends to foreign investors when the Government deems that there are emergency circumstances in the Korean financial markets.

# **Other Risks**

# We are generally subject to Korean corporate governance and disclosure standards, which differ in significant respects from those in other countries.

Companies in Korea, including us, are subject to corporate governance standards applicable to Korean public companies which differ in many respects from standards applicable in other countries, including the United States. As a reporting company registered with the Securities and Exchange Commission and listed on the New York Stock Exchange, we are, and in the future will be, subject to certain corporate governance standards as mandated by the Sarbanes-Oxley Act of 2002. However, foreign private issuers, including us, are exempt from certain corporate governance requirements under the Sarbanes-Oxley Act or under the rules of the New York Stock Exchange. For significant differences, see "Item 16G. Corporate Governance." There may also be less publicly available information about Korean companies, such as us, than is regularly made available by public or non-public companies in other countries. Such differences in corporate governance standards and less public information could result in less than satisfactory corporate governance practices or disclosure to investors in certain countries.

## You may not be able to enforce a judgment of a foreign court against us.

We are a corporation with limited liability organized under the laws of Korea. All or substantially all of our directors and officers and other persons named in this annual report reside in Korea, and all or a substantial portion of the assets of our directors and officers and other persons named in this annual report and substantially all of our assets are located in Korea. As a result, it may not be possible for holders of the American depository shares to effect service of process within the United States, or to enforce against them or us in the United States judgments obtained in United States courts based on the civil liability provisions of the federal securities laws of the United States. There is doubt as to the enforceability in Korea, either in original actions or in actions for enforcement of judgments of United States courts, of civil liabilities predicated on the United States federal securities laws.

# We may become a passive foreign investment company ("PFIC"), which could result in adverse U.S. tax consequences to U.S. investors.

Based upon the past and projected composition of our income and assets and valuation of our assets, we do not believe that we were a PFIC for 2022, and we do not expect to be a PFIC in 2023 or to become one in the foreseeable future, although there can be no assurance in this regard. If, however, we become a PFIC, such characterization could result in adverse U.S. tax consequences to you if you are a U.S. investor. For example, if we become a PFIC, our U.S. investors may become subject to increased tax liabilities under U.S. tax laws and regulations and will become subject to burdensome reporting requirements. Our PFIC status is determined on an annual basis and depends on the composition of our income and assets. Specifically, we will be classified as a PFIC for U.S. tax purposes if either: (i) 75% or more of our gross income in a taxable year is passive income, or (ii) the average percentage of our assets by value in a taxable year which produce or are held for the production

of passive income (which generally includes cash) is at least 50%. Special rules treat certain income earned by a non-U.S. corporation engaged in the active conduct of a banking business as non-passive income. See "Item 10.E. Taxation — Certain United States Federal Income Tax Consequences — Passive Foreign Investment Company Rules." We cannot assure you that we will not be a PFIC for 2023 or any future taxable year.

# ITEM 4. INFORMATION ON THE COMPANY

## ITEM 4.A. History and Development of the Company

### Introduction

We are one of the leading financial institutions in Korea in terms of total assets, revenues, profitability and capital adequacy, among others. Incorporated on September 1, 2001, we are the first privately-held financial holding company to be established in Korea. Since inception, we have developed and introduced a wide range of financial products and services in Korea and aimed to deliver comprehensive financial solutions to clients through a convenient one-portal network. According to reports by the Financial Supervisory Service, we are the second largest financial services provider in Korea (as measured by consolidated total assets as of December 31, 2022) and operate the second largest banking business (as measured by total credit purchase volume in 2022) in Korea.

We have experienced substantial growth through several mergers and acquisitions. On February 1, 2019, we acquired a 59.15% interest in Orange Life Insurance, the former Korean unit of ING Life Insurance, as part of our efforts to diversify and enhance our non-banking businesses. On January 28, 2020, we acquired the remaining interests in Orange Life Insurance by effecting a comprehensive stock exchange under Articles 360-2 of the Korean Commercial Code whereby holders (other than us) of Orange Life Insurance's common stock transferred all of their shares to us and in return receive shares of our common stock, and hence Orange Life Insurance became our wholly owned subsidiary as of such date. Orange Life Insurance was subsequently merged with and into Shinhan Life Insurance in July 2021. On June 30, 2022 we acquired 94.54% interest in BNP Paribas Cardif General Insurance, which then changed its name to Shinhan EZ General Insurance, Ltd. Subsequently in November 2022, Shinhan EZ General Insurance, Ltd. conducted a paid-in capital increase and our shares decreased to 85.1%.

As of December 31, 2022, we have 16 direct and 35 indirect subsidiaries offering a wide range of financial products and services, including commercial banking, corporate banking, private banking, credit card, asset management, brokerage and insurance services. We believe that such breadth of services will help us to meet the diversified needs of our present and potential clients. We currently serve approximately 19 million active customers, which we believe is the largest customer base in Korea, through approximately 24,527 employees at approximately 1,397 network branches group-wide. While over 80% of our revenues have been historically derived from Korea, we aim to serve the needs of our customers through a global network of 248 offices in the United States, Canada, the United Kingdom, Japan, the People's Republic of China, Germany, India, Australia, Hong Kong, Vietnam, Cambodia, Kazakhstan, Singapore, Mexico, Uzbekistan, Myanmar, Poland, Indonesia, the Philippines and the United Arab Emirates.

Our registered office and corporate headquarters are located at 20, Sejong-daero 9-gil, Jung-gu, Seoul, Korea 04513 and our telephone number is +822 6360 3000.

# **Our Strategy**

### 'Excellent Shinhan' for 2020 and beyond

The Group has implemented the '2020 SMART Project' since 2017, and we have seen this strategy result in balanced growth across the Group, such as expanding and strengthening the Group's offerings, establishing new

subsidiaries, acquisitions of domestic and foreign financial companies, upgrading digital platforms and promoting sustainable management. In 2020, we established a new mid-term group-wide strategy known as 'F.R.E.S.H. 2020s', building upon and replacing the existing 2020 SMART Project. 'F.R.E.S.H.' stands for 'Fundamental' (solid fundamentals), 'Resilience' (ability to adapt to and overcome crisis situations), 'Ecosystem' (creating an integrated digital ecosystem), 'Sustainability' (consistent Group-wide effort to achieve sustainable growth) and 'Human-talent' (talented human resources leading the Fourth Industrial Revolution). Under this 'F.R.E.S.H. 2020s' initiative, we have established seven detailed strategic directions for 2022 and beyond to allow us to achieve distinguished and sustainable growth despite uncertainties and become a leading financial group.

Under the unique growth directive summarized as 'F.R.E.S.H.', we have established seven detailed strategic directions for 2022 that comprehensively consider the management environment in 2022.

## 1. Conversion to Innovative and Open Digital Platforms

We plan to accelerate all-around digital transformation, particularly through developing innovative digital platforms, acquiring a competitive advantage in data-based businesses, fostering digital startups and creating new business models through competitive partnerships. In addition, we will continue to scale-up our group-wide digital capabilities and human resources.

## 2. Pursuit of Efficient Growth

We plan to efficiently enhance our profitability by developing existing business lines and investing in future growth areas. To strengthen the efficiency of our existing business lines, we aim to improve the quality of our core businesses, enhance our non-interest income generating businesses, strategically allocate our existing resources, promote new business opportunities and expand our business portfolio to discover future growth areas.

## 3. Global connectivity and expansion

We will look to diversify our global business model by shifting our focus from a volume-based expansion to a more advanced quality focused growth initiative for our global business, implementing our unique localization strategies and increasing cooperation and cross-selling across the Group. We will also work to increase our global product sourcing capabilities and foreign asset management capabilities.

## 4. Sustainable Performance

Our plans to foster sustainable finance consist of three strategic pillars -(1) environmentally friendly, (2) inclusive and (3) trust-based business management system. In 2020, we declared "Zero Carbon Drive", as part of our vision to go carbon-neutral by 2050. We plan to promote environmentally sustainable development through financing of projects aimed at reducing carbon and greenhouse gas emission. Moreover, in December 2019 we launched the Triple-K Project to provide promising start-ups and tech companies with systematic support in our efforts to promote inclusive and innovative growth ecosystems.

## 5. Proactive Risk Management

Due to continuously increasing uncertainty and unstable market conditions, we place particular importance on the proactive management of risk. We will continue to enhance our core risk management competencies, including by upgrading our Group-wide digital capabilities and IT infrastructure. We also intend to develop a sophisticated customer protection system with a greater emphasis on customer-oriented risk management.

## 6. Development of a Dynamic Organization System

To further efficient management on a Group-wide basis, we plan to develop a dynamic Group-wide portfolio system. In particular, we plan to efficiently streamline our portfolio across various Group subsidiaries,

while strengthening each subsidiaries' organizational efficiency and flexibility, and establish a customer-oriented organizational system.

## 7. Convergent Human Resources Management

In order to recruit and retain talent, we plan to go beyond simply improving our human resources system by establishing an innovative human resource management platform. Our specific plans include fostering a healthy working environment, creating a flexible organization and innovative culture. Moreover, we intend to increase our brand value, allowing us to target and recruit talented professionals.

We have built a balanced portfolio across the financial industry and plan to enhance market competitiveness and reduce costs by further optimizing each of our business lines. In 2021, we established a new vision of "More Friendly, More Secure, More Creative", and are promoting organizational capacity, strengthening of each subsidiaries, enhancing organizational efficiency and flexibility, and establishing a customer-oriented organizational system in accordance with such vision.

"Convergence Talent Management" serves as the foundation for other core strategic initiatives, and we will continue to build and grow a talented workforce that possesses traits and capabilities required to thrive in the digital era. In particular, we have promoted "Shinhan RE:BOOT", a major transformation of our corporate culture since 2021. We intend to accelerate the execution of strategies and changes within the Group through cultural transformation projects such as data-driven working methods, a fast and flexible organizational culture, and HR digitalization.

## **Our History and Development**

On September 1, 2001, we were formed as a financial holding company under the Financial Holding Companies Act, as a result of acquiring all of the issued shares of the following four entities from their former shareholders in exchange for shares of our common stock: (i) Shinhan Bank, a nationwide commercial bank listed on the Korea Exchange, (ii) Shinhan Securities Co., Ltd., a securities brokerage company listed on the Korea Exchange, (iii) Shinhan Capital Co., Ltd., a leasing company listed on the Korea Exchange Korean Securities Dealers Automated Quotations ("KRX KOSDAQ"), and (iv) Shinhan Investment Trust Management Co., Ltd., a privately held investment trust management company. On September 10, 2001, the common stock of our holding company was listed on what is currently the KRX KOSPI Market.

Since our inception, we have expanded our operations, in large part, through strategic acquisitions, establishing subsidiaries or formation of joint ventures. Our key acquisitions, capital contributions and joint venture formations are described as below:

Date of Acquisition	Entity	Principal Activities	Method of Establishment		
April 2002	Jeju Bank	Regional banking	Acquisition from Korea Deposit Insurance Corporation		
July 2002	Shinhan Securities Co., Ltd. <sup>(1)</sup>	Securities and investment	Acquisition from the SsangYong Group		
August 2002	Shinhan BNP Paribas Investment Trust Management Co., Ltd. <sup>(2)</sup>	Investment advisory	50:50 joint venture with BNP Paribas		
August 2003	Chohung Bank	Commercial banking	Acquisition from creditors		

Date of Acquisition	Entity	Principal Activities	Method of Establishment	
December 2005	Shinhan Life Insurance	Life insurance services	Acquisition from shareholders	
March 2007	LG Card	Credit card services	Acquisition from creditors	
January 2012	Tomato Mutual Savings Bank <sup>(3)</sup>	Savings bank	Purchase and assumption of assets and liabilities from creditors	
January 2013	Yehanbyoul Savings Bank <sup>(4)</sup>	Savings bank	Acquisition from Korea Deposit Insurance Corporation	
October 2017	Shinhan REITs Management	Real estate asset management	Newly established	
February 2019, January 2020	Orange Life Insurance <sup>(5)</sup>	Life insurance services	Acquisition from majority shareholders and subsequent comprehensive stock exchange	
May 2019	Asia Trust Co. Ltd. <sup>(6)</sup>	Real estate trust business	Acquisition from majority shareholders	
August 2019	Shinhan AI. Co., Ltd.	Investment advisory	Incorporated and joined as a wholly-owned subsidiary	
September 2020, December 2020	Shinhan Venture Investment) <sup>(7)</sup>	Venture capital	Acquisition from majority shareholders and subsequent comprehensive stock exchange	
January 2021	Shinhan Asset Management <sup>(8)</sup>	Asset management services	Acquisition of remaining interests from BNP Paribas Asset Management Holding	
June 2022	Shinhan EZ General Insurance <sup>(9)</sup>	General insurance services	Acquisition of BNP Paribas Cardif General Insurance	

Notes:

- Renamed as Shinhan Investment Corp. from Goodmorning Shinhan Securities Co., Ltd. effective August 2009 and renamed again as Shinhan Securities Co., Ltd. from Shinhan Investment Corp. effective October 2022.
- (2) In January 2009, SH Asset Management Co., Ltd. and Shinhan BNP Paribas Investment Trust Management merged to form Shinhan BNP Paribas Asset Management.
- (3) Shinhan Hope Co., Ltd. was established on December 12, 2011, to purchase and assume certain assets and liabilities of Tomato Mutual Savings Bank. On December 28, 2011, Shinhan Hope Co., Ltd. obtained a savings bank license, changed its name to Shinhan Savings Bank and became our direct subsidiary.

- (4) In January 2013, we entered into a share purchase agreement with Korea Deposit Insurance Corporation for the acquisition of Yehanbyoul Savings Bank, a savings bank located in Korea, for ₩45.3 billion, and received regulatory approval to merge Yehanbyoul Savings Bank into our existing subsidiary Shinhan Saving Bank. On April 1, 2013, Shinhan Savings Bank and Yehanbyoul Savings Bank merged into a single entity, with Yehanbyoul Savings Bank being the surviving entity and the newly merged bank being named Shinhan Savings Bank.
- (5) On February 1, 2019, we acquired a 59.15% interest in Orange Life Insurance, the former Korean unit of ING Life Insurance, as part of our efforts to diversify and enhance our non-banking businesses. On January 28, 2020, we acquired the remaining interests in Orange Life Insurance by effecting a comprehensive stock exchange under Articles 360-2 of the Korean Commercial Code whereby holders (other than us) of Orange Life Insurance's common stock transferred all of their shares to us and in return receive shares of our common stock, and hence Orange Life Insurance became our wholly owned subsidiary as of such date. Orange Life Insurance was subsequently merged with and into Shinhan Life Insurance in July 2021.
- (6) In October 2018, we announced the acquisition of a 60.0% interest in Asia Trust Co. Ltd. According to the transaction agreement, we seek to complete the acquisition by acquiring the remaining 40.0% shares in Asia Trust Co. Ltd. by 2022. The acquisition was approved by the Financial Services Commission on February 17, 2019 and closed on May 2, 2019. Upon closing, Asia Trust Co. Ltd. became our direct subsidiary. In May 2022, Asia Trust Co. Ltd. changed its name to Shinhan Asset Trust Co., Ltd.
- (7) On September 29, 2020, we acquired a 96.8% interest in Neoplux, a venture capital company formerly under the Doosan Group. On December 30, 2020, we acquired the remaining interest in Neoplux by effecting a small-scale stock exchange under Article 360-10 of the Korean Commercial Code, and hence Neoplux has become our wholly owned subsidiary as of such date. On January 11, 2021, Neoplux changed its legal name to Shinhan Venture Investment.
- (8) On January 15, 2021, we acquired the remaining 35% interest in Shinhan BNP Paribas Asset Management from BNP Paribas Asset Management Holding and changed its legal name to Shinhan Asset Management, and hence Shinhan Asset Management has become our wholly-owned subsidiary as of such date.
- (9) On June 30, 2022 we acquired 94.54% interest in BNP Paribas Cardif General Insurance, which then changed its name to Shinhan EZ General Insurance, Ltd. Subsequently in November 2022, Shinhan EZ General Insurance, Ltd. conducted a paid-in capital increase and our shares decreased to 85.1%.

# ITEM 4.B. Business Overview

Unless otherwise specifically mentioned, the following business overview is presented on a consolidated basis under IFRS.

# **Our Principal Activities**

We provide comprehensive financial services, principally consisting of the following:

- commercial banking services, mainly consisting of:
  - retail banking, which primarily focuses on making loans to or receiving deposits from individual customers (including high net-worth individuals and families) and, to a lesser extent, not-for-profit institutions such as hospitals, airports and schools;
  - corporate banking, which primarily focuses on making loans to or receiving deposits from for-profit corporations, including small- and medium-sized enterprises, and providing investment banking services to corporate clients;
  - international banking, which primarily focuses on management of overseas subsidiaries and branch operations and other international businesses; and
  - other banking, which consists of treasury business (including internal asset and liability management and other non-deposit funding activities), securities investing and trading and derivatives trading, as well as administration of the overall banking operations.

- credit card services;
- securities brokerage services;
- life insurance services;
- specialized credit services;
- asset management services, including securities investment trust management, investment advisory, call transaction, domestic and foreign private equity fund business, alternative investments through formation of private equity funds on a private placement basis and other management services; and
- other services savings banking services, loan collection and credit reporting, collective investment administrative services, financial system development services, real estate trust services, investment advisory services, venture capital services, and non-life insurance services.

In addition to the above-mentioned business activities, we, at the holding company level, have the following business departments and planning offices, the primary functions of which are to support cross-divisional management with respect to these specific functional areas: group & global investment banking business department, global market & securities planning office, global business planning office, wealth management planning office and retirement pension planning office.

Our principal business activities are not subject to any material seasonal trends. Although we have a number of overseas branches and subsidiaries, substantially all of our assets are located, and substantially all of our revenues are generated, in Korea.

## **Deposit-Taking Activities**

Principally through Shinhan Bank, we offer many deposit products that target different customer segments with features tailored to each segment's financial and other profiles. Our deposit products consist principally of the following:

- *Demand deposits*. Demand deposits do not accrue interest or accrue interest at a lower rate than time or savings deposits and allow the customer to deposit and withdraw funds at any time. If interest-bearing, demand deposits have interest accruing at a fixed or variable rate depending on the period and the amount of deposit. Demand deposits constituted 18.7%, 19.8% and 18.5% of our total deposits as of December 31, 2020, 2021 and 2022, respectively. Demand deposits paid average interest of 0.33%, 0.32% and 0.47% in 2020, 2021 and 2022, respectively.
- *Time and savings deposits*. Time deposits generally require the customer to maintain a deposit for a fixed term during which the deposit accrues interest at a fixed rate or a variable rate based on certain financial indexes, including the "cost of funds index," or COFIX, published by the Korean Federation of Banks. If the deposit is withdrawn prior to the end of the fixed term, the customer is paid a lower interest rate than that originally offered. The term typically ranges from one month to five years. Time deposits constituted 47.8%, 43.8% and 51.4% of our total deposits as of December 31, 2020, 2021 and 2022, respectively, and paid average interest of 1.46%, 1.05% and 2.04% in 2020, 2021 and 2022, respectively. Savings deposits allow the customer to deposit and withdraw funds at any time and accrue interest at an adjustable interest rate, which is typically lower than the rate applicable to time or installment deposits. Savings deposits constituted 31.7%, 31.9% and 26.2% of our total deposits as of December 31, 2020, 2021 and 2022, respectively, and paid 2022, respectively, and paid 2022, respectively, and paid average interest of 31.00% of our total deposits as of December 31, 2020, 2021 and 2022, respectively. Savings deposits constituted 31.7%, 31.9% and 26.2% of our total deposits as of December 31, 2020, 2021 and 2022, respectively, and paid average interest of 0.32%, 0.23% and 0.40% in 2020, 2021 and 2022, respectively.
- *Other deposits.* Other deposits consist mainly of certificates of deposit. Certificates of deposit typically have maturities from 30 days to two years. Interest rates on certificates of deposit are determined based on the length of the deposit and prevailing market interest rates. Certificates of deposit are sold at a discount to their face value, reflecting the interest payable on the certificates of deposit. Certificates of

deposit constituted 1.8%, 4.5% and 3.9% of our total deposits as of December 31, 2020, 2021 and 2022, respectively and paid average interest of 1.42%, 0.91% and 1.97% in 2020, 2021 and 2022, respectively.

We also offer deposits which provide the customer with preferential rights to housing subscriptions under the Housing Law and Rules on Housing Supply (the "Housing Law"), and eligibility for mortgage and home equity loans. As a result of an amendment to the Housing Law in June 2015, new subscriptions to housing subscription savings accounts, housing subscription time deposits accounts and housing subscription installment savings accounts became no longer available after September 1, 2015. Instead, general housing subscription savings accounts (which combine all of the functions of the aforementioned three accounts) presently remain available to all. The contribution period is from the subscription date to the date on which the account holder is selected as the purchaser of a house, and the required monthly contribution amount is from a minimum of ₩20,000 to a maximum of ₩500,000. The interests accrued on general housing subscription savings accounts are paid in lump sum upon termination of the account, and such interests shall be calculated at the interest rate determined and announced by the Ministry of Land, Infrastructure and Transport. Those who have a general housing subscription savings account and meet certain other criteria are granted a preferential subscription right for the purchase of a house. In the case of privately funded houses, the aggregate amount of contributions made to the account must be at least the applicable deposit threshold amount for the location and area of the relevant house (from  $\mathbb{W}2$  million up to  $\mathbb{W}15$  million). It is impossible to change the account holder name of a general housing subscription savings account except in the case of inheritance by the death of the original account holder. For information on our deposits in Korean Won based on the principal types of deposit products we offer, see "- Description of Assets and Liabilities - Funding - Deposits."

The rate of interest payable on our deposit products may vary significantly, depending on average funding costs, the rate of return on our interest-earning assets, prevailing market interest rates among financial institutions and other major financial indicators.

We also offer court deposit services for litigants in Korean courts, which involve providing effectively an escrow service for litigants involved in certain types of legal or other proceedings. Chohung Bank historically was a dominant provider of such services since 1958, and following the acquisition of Chohung Bank, we continue to hold a dominant market share in these services. Such deposits typically carry interest rates lower than the market rates (by approximately 0.5% per annum) and amounted to  $\Re$ 6,816 billion,  $\Re$ 7,610 billion and  $\Re$ 7,308 billion as of December 31, 2020, 2021 and 2022, respectively.

The Monetary Policy Committee of the Bank of Korea imposes a reserve requirement on Won currency deposits at commercial banks at rates ranging from 0% to 7%, based generally on maturity and the type of deposit instrument. See "— Supervision and Regulation — Principal Regulations Applicable to Banks — Liquidity."

The Depositor Protection Act provides for a deposit insurance system under which the Korea Deposit Insurance Corporation guarantees repayment of eligible bank deposits to depositors up to \$50 million per depositor and \$50 million per insured under the defined contribution retirement pension per bank. See "— Supervision and Regulation — Principal Regulations Applicable to Banks — Deposit Insurance System."

## **Retail Banking Services**

### Overview

We provide retail banking services primarily through Shinhan Bank, and, to a significantly lesser extent, through Jeju Bank, a regional commercial bank. Our retail loans, before allowance for credit losses on loans and deferred loan origination costs and fees and excluding credit card receivables, amounted to \$160,417 billion as of December 31, 2022.

Retail banking services include mortgage and home equity lending and retail lending as well as demand, savings and fixed deposit-taking, checking account services, electronic banking and automatic teller machines ("ATM") services, bill paying services, payroll and check-cashing services, currency exchange and wire fund transfer. We believe that providing modern and efficient retail banking services is important to maintaining our public profile and as a source of fee-based income. Accordingly, we believe that our retail banking services and products will become increasingly important in the coming years as the domestic banking sector further develops and becomes more complex.

Retail banking has been and will continue to remain one of our core businesses. Our strategy in retail banking is to provide prompt and comprehensive services to retail customers through increased automation and improved customer service, as well as a streamlined branch network focused on sales. The retail segment places an emphasis on targeting high net-worth individuals.

## Retail Lending Activities

We offer various retail loan products, consisting principally of loans to individuals and households. Our retail loan products target different segments of the population with features tailored to each segment's financial profile and other characteristics, including customer's occupation, age, loan purpose, collateral requirements and the duration of the customer's relationship with Shinhan Bank. Our retail loans consist principally of the following:

- *Mortgage and home equity loans*, which are mostly comprised of mortgage loans that are used to finance home purchases and are generally secured by the housing unit being purchased; and
- *Other retail loans,* which are loans made to customers for any purpose other than mortgage and home equity loans and the terms of which vary based primarily upon the characteristics of the borrower and which are either unsecured or secured, or guaranteed by deposits or by a third party. Other retail loans also include advance loans extended on an unsecured basis to retail borrowers the use of proceeds for which is restricted to financing of home purchases prior to the completion of the construction.

As of December 31, 2022, our mortgage and home equity loans and other retail loans accounted for 50.9% and 49.1% of our total retail loans, respectively.

For secured loans, our policy is to lend up to 40% to 100% of the appraisal value of the collateral, after taking into account the value of any lien or other security interest that has priority over our security interest (other than petty claims). For mortgage and home equity loans, our general policy is to lend up to 40% to 85% of the appraisal value of the collateral, but subject to the maximum loan-to-value ratio, debt-to-income ratio and debt service ratio requirements for mortgage loans implemented by the Government. The loan-to-value ratio of secured loans, including mortgage and home equity loans, is updated on a monthly basis using the most recent appraisal value of the collateral, and maximum loan-to-value ratios are further adjusted based on factors such as the location of the secured property, nature and purpose of the loans and level of competition in the market. Since January 11, 2019, maximum loan-to-value ratios are determined and may be adjusted in increments of 1% (as opposed to increments of 5%, which was the case prior to January 11, 2019), allowing us to set more precise and tailored maximum loan-to-value ratios for secured loans. As of December 31, 2022, the loan-to-value ratio of mortgage and home equity loans of Shinhan Bank was 41.70%. As of December 31, 2022, substantially all of its mortgage and home equity loans were secured by residential property.

Under the Regulation on the Supervision of the Banking Business and the Detailed Regulation on the Supervision of the Banking Business, our banking subsidiaries were subject to, when extending mortgage and home equity loans, the maximum loan-to-value ratio of 70% (irrespective of the location of the property, subject to certain exceptions) and the maximum debt-to-income ratio of 60% (only in respect of housing units located in the greater Seoul metropolitan area, subject to certain exceptions).

On January 31, 2018, the existing debt-to-income requirement was replaced by the modified debt-to-income ratio requirement, which reflects (i) both principal and interest payments on the applicable mortgage and home equity loan and existing mortgage and home equity loans and (ii) interest payments on other loans. The previous debt-to-income requirement had only reflected (i) both principal and interest payments on the applicable mortgage and home equity loan and (ii) interest payments on the applicable mortgage.

The regulations on mortgage and home equity loans are susceptible to the changes of housing market cycles and have been revised from time to time. From 2017 to 2022, the Government led by President Moon Jae-in announced and implemented a series of robust polices aimed at taming speculation and deterring the rise of housing prices. However, since the second half of 2022, the Government led by President Yoon Suk Yeol has announced and implemented a series of policies to ease the demand-side regulations in the real estate market in order to prevent housing prices from crashing due to the recent hike in interest rates. For example, the Government has released most areas from "speculative areas", "overheated speculative areas" and "adjustment targeted areas" (collectively, the "**regulated areas**") where tighter loan-to-value ratios and debt-to-income ratios are applicable to mortgage or home equity loans, with only Gangnam-Gu, Seocho-Gu, Songpa-Gu and Yongsan-Gu in the greater Seoul metropolitan area currently remaining as the regulated areas, removed the application of stricter loan-to-value ratio to new loans secured by high-price houses located in the regulated areas and allowed the extension of new loans secured by houses located in the regulated areas to households that already own one or more houses.

The Government also increased the loan-to-value ratio applicable to the regulated areas (i) up to 50% of the appraised value of the houses, except that such maximum loan-to-value ratio is 70% for low-income households that (1) have a combined (in case of married couple) annual income of no more than \$90 million, (2) do not currently own any housing and (3) are using the loan to purchase low-price housing valued at \$900 million or less (\$800 million or less in case of houses located in "adjustment targeted areas") and (ii) up to 80% of the appraised value of the houses, for new loans to a first-time home buyer with a maximum residential mortgage loan amount of \$600 million or less. The regulations on the debt-to-income ratio remained largely unchanged, with the debt-to-income ratio applicable to houses being (i) 60% for those that are located in "adjustment targeted areas" and (iii) 40% for those that are located in "speculative areas" or "overheated speculative areas". However, such debt-to-income ratios for houses located in regulated areas are adjusted to 60% for (i) low-income households that (1) have a combined (in case of married couple) annual income of no more than \$90 million, (2) do not currently own any housing and (3) are using the loan to purchase low-price housing valued at \$900 million, (2) do not exceed in regulated areas of married couple) annual income of no more than \$90 million, (2) do not currently own any housing and (3) are using the loan to purchase low-price housing valued at \$900 million, (2) do not currently own any housing and (3) are using the loan to purchase low-price housing valued at \$900 million, (2) do not currently own any housing and (3) are using the loan to purchase low-price housing valued at \$900 million or less (\$800 million or less in case of houses located in "adjustment targeted areas") and (ii) first-time homebuyers.

The Financial Services Commission also introduced a debt service ratio and a modified debt-to-income ratio in order to modernize credit review methods and stabilize the management of household debt. The modified debt-to-income ratio, which has been implemented beginning January 31, 2018 reflects (i) both principal and interest payments on the applicable mortgage and home equity loan and existing mortgage and home equity loans and (ii) interest payments on other loans. Previously, debt-to-income ratio had only reflected (i) both principal and interest payments on the applicable mortgage and home equity loan and (ii) interest payments on existing mortgage and home equity loan and (ii) interest payments on existing mortgage and home equity loan and (iii) interest payments on existing mortgage and home equity loans. Debt service ratios reflect principal and interest payments on both the applicable loan and other loans and have been fully implemented since October 2018. The modified debt-to-income ratios are used as the primary reference index in the evaluation and approval process for mortgage and home equity loans. For example, debt service ratios applicable to a loan applicant with a total aggregate loan amount exceeding **W**100 million (including the applied but not yet extended loan amount) should not exceed 40% unless otherwise specified by the applicable regulations.

In addition, the supervising authorities in Korea from time to time issue administrative instructions to Korean banks, which have the effect of regulating the access of borrowers to housing loans and, as such, demand

for real estate properties. For example, the Financial Supervisory Service issued administrative instructions to financial institutions to (except in limited circumstances) verify the borrower's ability to repay based on proof of income prior to making a mortgage and home equity loan regardless of the type or value of the collateral or the location of the property, which has had the effect of practically barring the grant of any new mortgage and home equity loans to borrowers without verifiable income.

Our banking subsidiaries extend mortgage and home equity loans in compliance with the applicable regulations and administrative instructions by the relevant supervising authorities.

The following table sets forth a breakdown of our retail loans.

	As of December 31,				
	2020	2021	2022		
	(In billions of	f Won, except p	ercentages)		
Retail loans <sup>(1)</sup>					
Mortgage and home equity loans	₩73,188	₩79,860	₩81,724		
Other retail loans	73,602	79,146	78,693		
Percentage of retail loans to total gross loans	40.7%	40.4%	38.4%		

Note:

(1) Before allowance for credit losses on loans and deferred loan origination costs and fees and excludes credit card receivables.

The total mortgage and home equity loans amounted to \$81,724 billion as of December 31, 2022, and as of such date, consisted of amortizing loans (whose principal is repaid by part of the installment payments) in the amount of \$50,046 billion and non-amortizing loans in the amount of \$31,678 billion. In addition, as of December 31, 2022, we also provided lines of credit in the aggregate outstanding amount of \$737 billion for non-amortizing loans.

# Pricing

The interest rates payable on Shinhan Bank's retail loans are either periodically adjusted floating rates (based on a base rate determined for three-month, six-month or twelve-month periods derived using an internal transfer price system, which reflects the market cost of funding, as adjusted to account for expenses related to lending and the profit margin of the relevant loan products) or fixed rates that reflect the market cost of funding, as adjusted to account for expenses related to lending and the profit margin. Fixed rate loans are offered only on a limited basis and at a premium to floating rate loans. For unsecured loans, which Shinhan Bank provides on a floating or fixed rate basis, interest rates thereon reflect a margin based on, among other things, the borrower's credit score as determined during its loan approval process. For secured loans, the credit limit is based on the type of collateral, priority with respect to the collateral and the loan-to-value ratio. Shinhan Bank may adjust the pricing of these loans to reflect the borrower's current and/or expected future contribution to Shinhan Bank's profitability. The interest rate on Shinhan Bank's loan products may become adjusted at the time the loan is extended. If a loan is repaid within three years following the date of the loan, the borrower is required to pay an early repayment fee, which is typically 0.7% to 1.4%, depending on types of loans and applicable interest rates, of the outstanding principal amount of and accrued and unpaid interest on the loan, multiplied by a fraction the numerator of which is the number of the remaining days on the loan until maturity and the denominator of which is the number of days comprising the term of the loan or three years, whichever is greater.

As of December 31, 2022, Shinhan Bank's three-month, six-month and twelve-month base rates were 3.98%, 4.36% and 4.36%, respectively. As of December 31, 2022, Shinhan Bank's fixed rates for mortgage and home equity loans with a maturity of five years was 5.39%. Shinhan Bank's fixed rates for other retail loans with a maturity of one year ranged from 5.16% to 14.00%, depending on the credit scores of its customers. As of

December 31, 2022, 93.3% of Shinhan Bank's total retail loans were floating rate loans and 6.7% were fixed rate loans. As of the same date, 94.1% of Shinhan Bank's retail loans with maturity of more than one year were floating rate loans and 5.9% were fixed rate loans.

The interest rate charged to customers by our banking subsidiaries is based, in part, on the "cost of funds index", or COFIX, which is published by the Korean Federation of Banks. COFIX is computed based on the weighted average interest of select funding products (including time deposits, housing and other installment savings deposits, repos, discounted bills and senior non-convertible financial debentures) of eight major Korean banks (comprised of Shinhan Bank, Kookmin Bank, Woori Bank, KEB Hana Bank, Nonghyup Bank, Industrial Bank of Korea, Citibank Korea Inc. and Standard Chartered Bank Korea Limited). Each bank then independently determines the interest rate applicable to its respective customers by adding a spread to the COFIX based on the difference between the COFIX and such bank's general funding costs, administration fees, the customer's credit score, the maturity of the loan and other customer-specific premiums and discounts based on the customer relationship with such bank. These interest rates are typically adjusted on a monthly basis. In January 2019, the Financial Services Commission announced plans to reflect rates for short term deposits such as demand deposits when computing the "cost of funds index," or COFIX, which is expected to result in lower interest rates for household loans compared to the previous COFIX rate.

## Private Banking

Historically, we have focused on customers with high net-worth. Our retail banking services include providing private banking services to high net-worth customers who seek personal advice in complex financial matters. Our aim in private banking is to help enhance wealth accumulation by, and increase the financial sophistication of, our high net-worth clients by offering them customized wealth management solutions and comprehensive financial services including asset portfolio and fund management, tax consulting, real estate management and family office services, among others. Since the end of 2011, in order to preemptively respond to evolving customer needs and promote asset growth by inducing greater synergy between commercial banking and investment advisory services offered by Shinhan Securities, Shinhan Bank launched private wealth management centers which combine certain branches of Shinhan Bank with those of Shinhan Securities located in the same area. Shinhan Bank's strength in private banking the grand prize at the Premium Brand Index by Korean Standards Association, Chosun Ilbo and Ministry of Trade, Industry and Energy (awarded 15 consecutive years), the Korea Prestige Brand Award by the Korea Economic Daily (awarded seven consecutive years), the Star Brand Award by Maekyung Media Group (awarded six consecutive years) and National Brand Award by Chosun Ilbo (awarded five consecutive years) in 2022.

As of December 31, 2022, Shinhan Bank operated 25 private wealth management service centers nationwide, including 17 in Seoul, 3 in Gyeonggi province and 5 in cities located in other regions in Korea. As of December 31, 2022, Shinhan Bank had approximately 19,462 private banking customers, who typically are required to have \$500 million or more in deposits with Shinhan Bank to qualify for its private banking services.

## **Corporate Banking Services**

## Overview

We provide corporate banking services, primarily through Shinhan Bank, to small- and medium-sized enterprises, including enterprises known as SOHO (standing for "small office, home office"), which are small enterprises operated by individuals or households, and, to a lesser extent, to large corporations, including corporations that are affiliated with *chaebols*. We also lend to government-controlled enterprises.

The following table sets forth the balances and percentage of our total loans (before allowance for credit losses on loans and deferred loan origination costs and fees) attributable to each category of our corporate lending business as of the dates indicated.

	As of December 31,					
	2020		2021		2022	
	(In billions of Won, except percentages)					
Small- and medium-sized enterprises loans <sup>(1)</sup>	₩108,016	29.9%	₩121,961	31.0%	₩131,304	31.4%
Large corporate loans	35,289	9.8	40,368	10.3	49,368	11.8
Others <sup>(2)</sup>		13.0	46,139	11.7	48,278	11.6
Total corporate loans	₩190,255	<u>52.7</u> %	₩208,468	53.0%	₩228,950	54.8%

Notes:

- Represents the principal amount of loans extended to corporations meeting the definition of small- and medium-sized enterprises under the Basic Act on Small- and Medium-sized Enterprises and its Presidential Decree.
- (2) Includes loans to governmental agencies, loans to banks and other corporate loans, including loans originated by subsidiaries other than Shinhan Bank which are classified as corporate loans for purposes of financial reporting.

## Small- and Medium-sized Enterprises Banking

Under the Basic Act on Small- and Medium-sized Enterprises (the "SME Basic Act") and the related Presidential Decree, as amended and effective from November 15, 2022, in order to qualify as a small- and medium-sized enterprise, (i) the enterprise's total assets at the end of the immediately preceding fiscal year must be less than \$500 billion, (ii) the enterprise must meet the standards prescribed by the Presidential Decree in relation to the average and total annual sales revenues applicable to the type of its main business, and (iii) the enterprise must meet the standards of management independence from ownership as prescribed by the Presidential Decree, including non-membership in a conglomerate as defined in the Monopoly Regulation and Fair Trade Act. An enterprise shall not qualify as a small- or medium-sized enterprise if it is incorporated into, or is deemed to be incorporated into a business group subject to disclosure under the Monopoly Regulation and Fair Trade Act. Non-profit enterprises that satisfy certain requirements prescribed in the SME Basic Act and its Presidential Decree may qualify as a small- and medium-sized enterprise. Furthermore, cooperatives and federations of cooperatives as prescribed by the Presidential Decree are deemed as small- and medium-sized enterprises, effective from April 15, 2014. As of December 31, 2022, we made loans to 499,616 small- and medium-sized enterprises for an aggregate amount of \$131,304 billion (before allowance for credit losses on loans and deferred loan origination costs and fees).

We believe that Shinhan Bank, whose traditional focus has been on small- and medium-sized enterprises lending, is well-positioned to succeed in the small- and medium-sized enterprises market in light of its marketing capabilities (which we believe have provided Shinhan Bank with significant customer loyalty) and its prudent risk management practices, including conservative credit rating systems for credit approval. To maintain or increase its market share of small- and medium-sized enterprises lending, Shinhan Bank:

- has accumulated a market-leading expertise and familiarity as to customers and products. We believe Shinhan Bank has an in-depth understanding of the credit risks embedded in this market segment, allowing Shinhan Bank to develop loan and other products specifically tailored to the needs of this market segment;
- operates a relationship management system to provide customer services that are tailored to smalland medium-sized enterprises. Shinhan Bank currently has relationship management teams in 185 banking branches, of which 53 are corporate banking branches and 132 are hybrid banking branches

designed to serve both retail customers and, to a limited extent, corporate customers. These relationship management teams market products, and review and approve smaller loans with less credit risks; and

 continues to focus on cross-selling loan products with other products. For example, when Shinhan Bank lends to small- and medium-sized enterprises, it also explores opportunities to cross-sell retail loans or deposit products to the employees of these enterprises or to provide financial advisory services.

## Large Corporate Banking

Large corporate customers consist primarily of member companies of *chaebols* and financial institutions. Our large corporate loans amounted to  $\Psi$ 49,368 billion (before allowance for credit losses on loans and deferred loan origination costs and fees) as of December 31, 2022. Large corporate customers tend to have better credit profiles than small- and medium-sized enterprises, and accordingly, Shinhan Bank has expanded its focus on these customers as part of its risk management policy.

Shinhan Bank aims to be a one-stop financial solution provider that also partners with its corporate clients in their corporate expansion and growth endeavors. To that end, Shinhan Bank provides a wide range of corporate banking services, including investment banking, real estate financing, overseas real estate project financing, large development project financing, infrastructure financing, structured financing, equity investments/venture investments, mergers and acquisitions consulting, securitization and derivatives services, including securities and derivative products and foreign exchange trading. Shinhan Bank, through its Hong Kong branch, also arranges financing for, and offers consulting services to, Korean companies expanding their business overseas, particularly in Asia.

## Digital Corporate Banking

Shinhan Bank offers corporate customers a web-based total cash management service known as "Shinhan Bizbank." Shinhan Bizbank supports substantially all types of banking transactions ranging from basic transaction history inquiries and fund transfers to opening letters of credit, trade finance, payment management, collection management, sales settlement service, acquisition settlement service, business-to-business settlement service, sweeping, pooling, ERP interface service, host-to-host banking solutions, SWIFT SCORE service and global cash and liquidity management service. In addition, Shinhan Bank provides customers with integrated and advanced access to its financial services through its "Inside Bank" program, which combines Internet banking, capital management services and enterprise resource planning to better serve corporate customers. The Inside Bank program also seeks to provide customized financial services to meet the comprehensive needs of target corporate customers ranging from conglomerates to small enterprises in various industries, with the goal of enhancing convenience to our corporate customers in accessing our financial services as well as assisting them to strategically manage their funds. In line with Shinhan Bank's efforts to facilitate non-face-to-face online transactions for corporate transactions, in 2018, Shinhan Bank upgraded its virtual account-based corporate fund management service, known as "Shinhan Damoa Service", making it available on mobile channels. In addition, Shinhan Bank has made the fund transfers via phone number service (allowing customers to make fund transfers without the recipients' account number), which was previously only available for personal banking customers, available for corporate banking customers as well. As part of Shinhan Bank's effort to lower settlement fees for small business owners, in May 2019, Shinhan Bank launched "ZeroPay Biz Shinhan", an account-based mobile payment service enabling vendors to easily receive payments from customers' accounts by scanning the vendor's QR code with a smartphone. In October 2020, Shinhan Bank upgraded the "Shinhan S Corporate Bank" platform to launch "Shinhan SOL Biz", a non-face-to-face application for corporate clients, with the goal of improving the platform so that Shinhan Bank can offer non-face-to-face channels to corporate clients that are as convenient and user-friendly as Shinhan Bank's online retail banking platforms. In August 2021, Shinhan Bank launched a non-face-to-face name verification for corporate banking customers via smartphone using Shinhan SOL Biz, enabling corporate customers to open new bank accounts without visiting a branch.

## Corporate Lending Activities

Our principal loan products for corporate customers are working capital loans and facilities loans. Working capital loans, which include discounted notes and trade financing, are generally loans used for general working capital purposes. Facilities loans are provided to finance the purchase of equipment and construction of manufacturing plants. As of December 31, 2022, working capital loans and facilities loans amounted to  $\Psi72,446$  billion and  $\Psi83,506$  billion, respectively, representing 45.3% and 52.2% of our total Won-denominated corporate loans. Working capital loans generally have a maturity of one year, but may be extended on an annual basis for an aggregate term of three years in the case of unsecured loans and five or ten years in the case of secured loans. Facilities loans have a maximum maturity of 15 years, are typically repaid in semiannual installments per annum and may be entitled to a grace period not exceeding one-third of the loan term with respect to the first repayment; facilities loans with a term of three years or less may be paid in full at maturity.

Loans to corporations may be unsecured or secured by real estate, deposits or guaranty certificates. As of December 31, 2022, secured loans and guaranteed loans (including loans secured by guaranty certificates issued by credit guarantee insurance funds) accounted for 68.1% and 14.2%, respectively, of our Won-denominated loans to small- and medium-sized enterprises. As of December 31, 2022, 46.5% of the corporate loans were secured by real estate.

When evaluating whether to extend loans to corporate customers, Shinhan Bank reviews their creditworthiness, credit score, value of any collateral and/or third party guarantee. The value of collateral is computed using a formula that takes into account the appraised value of the collateral, any prior liens or other claims against the collateral and an adjustment factor based on a number of considerations including, with respect to property, the average value of any nearby property sold in a court-supervised auction during the previous year. Shinhan Bank revalues collateral when a secured loan is renewed or if a trigger event occurs with respect to the loan in question.

## Pricing

Shinhan Bank determines the price for its corporate loan products based principally on their respective cost of funding and the expected loss rate based on the borrower's credit risk. As of December 31, 2022, 69.9% of Shinhan Bank's corporate loans with outstanding maturities of one year or more had variable interest rates as determined by the applicable market rates.

More specifically, interest rates on Shinhan Bank's corporate loans are generally determined as follows:

Interest rate = (Shinhan Bank's periodic market floating rate *or* reference rate) *plus* transaction cost *plus* credit spread *plus* risk premium *plus or minus* discretionary adjustment.

Depending on the market condition and the agreement with the borrower, Shinhan Bank may use either its periodic market floating rate or the reference rate as the base rate in determining the interest rate for the borrower. As of December 31, 2022, Shinhan Bank's periodic market floating rates (which are based on a base rate determined for a three-month, six-month, one-year, two-year, three-year or five-year period, as applicable, as derived using Shinhan Bank's market rate system) were 3.98% for three months, 4.36% for six months, 4.36% for one year, 4.43% for two years, 4.54% for three years and 4.67% for five years. As of the same date, Shinhan Bank's reference rate was 4.00%. The reference rate refers to the base lending rate used by Shinhan Bank and is determined annually by Shinhan Bank's Asset & Liability Management Committee based on, among others, Shinhan Bank's funding costs, cost efficiency ratio and discretionary margin.

Transaction cost reflects the standardized transaction cost assigned to each loan product and other miscellaneous costs, including contributions to the Credit Guarantee Fund, and education taxes. The Credit

Guarantee Fund is a statutorily created entity that provides credit guarantees to loans made by commercial banks and is funded by mandatory contributions from commercial banks in the amount of approximately 0.22% of all loans (excluding certain loans such as facility loans) made by them.

The credit spread is added to the periodic floating rate to reflect the expected loss based on the borrower's credit rating and the value of any collateral or payment guarantee. In addition, Shinhan Bank adds a risk premium which takes into account the potential of unexpected loss that may exceed the expected loss from the credit rating assigned to a particular borrower.

A discretionary adjustment rate is added or subtracted to reflect the borrower's current and/or future contribution to Shinhan Bank's profitability. If additional credit is provided by way of a guarantee, the adjustment rate is subtracted to reflect such change in the credit spread. In addition, depending on the price and other terms set by competing banks for similar borrowers, Shinhan Bank may reduce the interest rate to compete more effectively with other banks.

### International Business

Shinhan Bank also engages in treasury and investment activities in international capital markets, principally including foreign currency-denominated securities trading, foreign exchange trading and services, trade-related financial services, international factoring services and foreign banking operations through its overseas branches and subsidiaries. Shinhan Bank aims to become a leading bank in Asia and expand its international business by focusing on further bolstering its overseas network, localizing its overseas operations and diversifying its product offerings, particularly in terms of asset management, in order to meet the various financing needs of its current and potential customers overseas.

#### **Other Banking Services**

Other banking businesses carried on by Shinhan Bank include treasury business (including internal asset and liability management and other non-deposit funding activities), trading of, and investment in, debt securities and, to a lesser extent, equity securities for its own accounts, derivative trading activities, as well as managing back-office functions.

## Treasury

Shinhan Bank's treasury division provides funds to all of Shinhan Bank's business operations and ensures the liquidity of its operation. To secure stable long-term funds, Shinhan Bank uses fixed and floating rate notes, debentures, structured financing and other advanced funding methods. As for overseas funding, Shinhan Bank closely monitors the feasibility of raising funds in currencies other than the U.S. Dollar, such as the Japanese Yen and the Euro. In addition, Shinhan Bank makes call loans and borrows call money in the short-term money market. Call loans are short-term lending among banks and financial institutions in either Korean Won or foreign currencies with a minimum transaction amount of  $\Psi$ 100 million and maturities of typically one day.

### Securities Investment and Trading

Shinhan Bank invests in and trades securities for its own accounts in order to maintain adequate sources of liquidity and to generate interest income, dividend income and capital gains. Shinhan Bank's trading and investment portfolios consist primarily of Korean treasury securities and debt securities issued by Government agencies, local governments or certain government-invested enterprises, debt securities issued by financial institutions and equity securities listed on the KRX KOSPI Market and KRX KOSDAQ Market of the Korea Exchange. For a detailed description of our securities investment portfolio, see "— Description of Assets and Liabilities — Investment Portfolio."

## Derivatives Trading

Shinhan Bank provides to its customers, and to a limited extent, trades for its proprietary accounts, a broad range of derivatives products, which include:

- interest rate swaps, options, and futures relating to interest rate risks;
- cross-currency swaps, largely for Korean Won against U.S. Dollars, Japanese Yen and Euros;
- equity and equity-linked options;
- foreign currency forwards, options and swaps;
- commodity forwards, swaps and options;
- credit derivatives; and
- KOSPI 200 indexed equity options.

Shinhan Bank's outstanding derivatives commitments in terms of notional amount were W217,006 billion, W241,415 billion and W239,620 billion in 2020, 2021 and 2022, respectively. Such derivative operations generally focus on addressing the needs of Shinhan Bank's corporate clients to enter into derivatives contracts to hedge their risk exposure and entering into back-to-back derivatives to hedge Shinhan Bank's risk exposure that results from such client contracts.

Shinhan Bank also enters into derivative contracts to hedge the interest rate and foreign currency risk exposures that arise from its own assets and liabilities. In addition, to a limited extent, Shinhan Bank engages in the proprietary trading of derivatives within its regulated open position limits. See "— Description of Assets and Liabilities — Derivatives."

## **Trust Account Management Services**

### Overview

Shinhan Bank's trust account management services involve management of trust accounts, primarily in the form of money trusts. Trust account customers are typically individuals seeking higher rates of return than those offered by bank account deposits. Because deposit reserve requirements do not apply to deposits held in trust accounts as opposed to deposits held in bank accounts, and regulations governing trust accounts tend to be less strict, Shinhan Bank is generally able to offer higher rates of return on trust account products than on bank deposit products.

Trust account products generally require higher minimum deposit amounts than those required by comparable bank account deposit products. Unlike bank deposit products, deposits in trust accounts are invested primarily in securities (consisting principally of debt securities and beneficiary certificate for real estate financing) and, to a lesser extent, in loans, as the relative shortage of funding sources require that trust accounts be invested in a higher percentage of liquid assets.

Under the Banking Act, the Financial Investment Services and Capital Markets Act and the Trust Act, assets in trust accounts are required to be segregated from other assets of the trustee bank and are unavailable to satisfy the claims of the depositors or other creditors of such bank. Accordingly, trust accounts that are not guaranteed as to principal (or as to both principal and interest) are accounted for and reported separately from the bank accounts. See "— Supervision and Regulation." Trust accounts are regulated by the Trust Act and the Financial Investment Services and Capital Markets Act, and most national commercial banks offer similar trust account products. Shinhan Bank earns income from trust account management services, which is recorded as net trust management fees.

As of December 31, 2020, 2021 and 2022, Shinhan Bank had total trust assets of  $\Psi$ 96,269 billion,  $\Psi$ 92,077 billion and  $\Psi$ 95,855 billion, respectively, comprised principally of securities investments of  $\Psi$ 21,427 billion,  $\Psi$ 22,438 billion and  $\Psi$ 22,316 billion, respectively; real property investments of  $\Psi$ 12,696 billion,  $\Psi$ 10,926 billion and  $\Psi$ 9,767 billion, respectively; and loans with an aggregate principal amount of  $\Psi$ 348 billion,  $\Psi$ 396 billion and  $\Psi$ 461 billion, respectively. Securities investments consisted of corporate bonds, government-related bonds and other securities, primarily commercial paper. As of December 31, 2020, 2021 and 2022, debt securities accounted for 21.7%, 23.8% and 22.8%, respectively, and equity securities constituted 0.6%, 0.6% and 0.5%, respectively, of Shinhan Bank's total trust assets. Loans made by trust accounts are similar in type to those made by bank accounts, except that they are made only in Korean Won. As of December 31, 2020, 2021 and 2022, 72.2%, 76.0% and 83.4%, respectively, of the amount of loans from the trust accounts were collateralized or guaranteed. In making investment from funds received for each trust account, each trust product maintains investment guidelines applicable to each such product which set forth, among other things, company-, industry- and security-specific limitations.

## Trust Products

In Korea, trust products typically take the form of money trusts, which are discretionary trusts over which (except in the case of a specified money trust) the trustees have investment discretion subject to applicable law and is commingled and managed jointly for each type of trust account. The specified money trusts are established on behalf of customers who give specific directions as to how their trust assets should be invested.

Money trusts managed by Shinhan Bank's trust account business amounted to ₩51,998 billion, ₩53,763 billion and ₩61,110 billion as of December 31, 2020, 2021 and 2022, respectively.

Shinhan Bank offers variable rate trust products through its retail branch network. As of December 31, 2020, 2021 and 2022, Shinhan Bank's variable rate trust accounts amounted to \#47,930 billion, \#49,831 billion and \\$57,590 billion, respectively, of which principal guaranteed variable rate trust accounts amounted to ₩4,067 billion, ₩3,931 billion and ₩3,519 billion, respectively. Variable rate trust accounts offer their holders variable rates of return on the principal amount of the deposits in the trust accounts and do not offer a guaranteed return on the principal of deposits, except in the limited cases of principal guaranteed variable rate trust accounts, for which payment of the principal amount is guaranteed. Shinhan Bank charges a lump sum or a fixed percentage of the assets held in such trusts as a management fee, and, depending on the trust products, is also entitled to additional fees in the event of early termination of the trusts by the customer. Korean banks, including Shinhan Bank, are currently allowed to guarantee the principal of the following types of variable rate trust account products: (i) existing individual pension trusts, (ii) new individual pension trusts, (iii) existing retirement pension trusts, (iv) new retirement pension trusts, (v) pension trusts and (vi) employee retirement benefit trusts. Shinhan Bank also offers an insignificant amount of guaranteed fixed rate trust products (amounting to **W**1.0 billion, **W**1.0 billion and **W**1.0 billion as of December 31, 2020, 2021 and 2022, respectively), which provide to its holders a guaranteed return of the principal as well as a guaranteed fixed rate of return. These products are carry-overs from past offerings, and Shinhan Bank no longer offers guaranteed fixed rate trust products.

## **Credit Card Services**

#### **Products and Services**

We currently provide our credit card services principally through our credit card subsidiary, Shinhan Card, and to a limited extent, Jeju Bank.

Shinhan Card offers a wide range of credit card and other services, principally consisting of the following:

• *credit card services*, which involve providing cardholders with credit up to a preset limit to purchase products and services. Repayment for credit card purchases may be made either (i) on a lump-sum

basis, namely, in full at the end of a monthly billing cycle or (ii) on a revolving basis subject to a minimum monthly payment. The minimum monthly payment for holders of credit cards issued before December 30, 2014 is the greater of (x) 5% to 20% of the amount outstanding (depending on the cardholder's credit) or (y) \$30,000. The minimum monthly payment for holders of credit cards issued on or after December 30, 2014 is the greater of (x) 10% to 20% of the amount outstanding (depending on the cardholder's credit) or (y) \$30,000. Currently, the outstanding credit card balance subject to the revolving basis payments generally accrues interest at the effective annual rates of approximately 5.4% to 19.9%.

- *cash advances*, which enable the cardholders to withdraw cash subject to a preset limit from an ATM or a bank branch. Repayments for cash advances may be made either on a lump-sum basis or, in the case of credit cards issued before December 30, 2014, on a revolving basis. Currently, the lump-sum cash advances generally accrue interest at the effective annual rates of approximately 5.5% to 19.9% and the revolving cash advances generally accrue interest at a minimum rate of 6.4% to 19.9% of the outstanding balance (depending on the cardholder's credit).
- *installment purchases*, which provide customers with an option to purchase products and services from select merchants on an installment basis for which repayments must be made in equal amounts over a fixed term generally ranging from two to 24 months, and for certain limited types of cards, up to 36 months. Currently, the outstanding installment purchase balances generally accrue interest at the effective annual rates of approximately 9.5% to 19.9%.
- *card loans*, which enable cardholders to receive, up to a preset limit, a loan which is generally unsecured. Repayment of card loans is made generally by (i) repaying principal and interest in equal amounts on an installment basis over a fixed term of two to 36 months, (ii) repaying the principal and interest amounts in full at maturity, or (iii) making interest-only payments during the initial grace period of either three months or six months and repaying the principal and interest amounts on a monthly installment basis over the remaining period of typically two to 36 months. Currently, the outstanding card loan balances generally accrue interest at the effective annual rates of approximately 5.36% to 23.9%. Delinquent credit card receivables can also be restructured into loans, which we classify as card loans, and these loans generally accrue interest at the effective annual rates of approximately 11.9% to 19.5% over a fixed term whose maximum is 72 months.

Shinhan Card derives revenues from annual membership fees paid by credit cardholders, interest charged on credit card balances, fees and interest charged on cash advances and card loans, interest charged on late and deferred payments and merchant fees paid by retail and service establishments. Merchant fees and interest on cash advances constitute the largest source of revenue.

The annual membership fees for credit cards vary depending on the type of credit card and the benefits offered thereunder. For standard credit cards and most of the affinity and co-branded cards, Shinhan Card charges an annual membership fee ranging from \$1,000 to \$2,000,000 per credit card, depending on the type of the card and the cardholder profile. Certain government affinity cards have no annual membership fee. If Shinhan Card's customers make cash advances using ATMs of a financial institution other than Shinhan Card, Shinhan Card also charges a usage fee for such cash advances in an amount equivalent to the fees charged by such financial institution for the use of its ATM plus costs to cover Shinhan Card's related administration expenses.

Any accounts that are unpaid when due are deemed to be delinquent accounts, for which Shinhan Card levies a late charge in lieu of the interest rates applicable prior to default. The late charge rate currently ranges from 7.3% to 20.0% per annum. Since the first half of 2018, instead of levying a late charge in lieu of interest rates prior to default, Shinhan Card maintained the interest rates prior to default but added a late charge rate of 3% in addition to the interest rates prior to default.

Merchant discount fees, which are processing fees Shinhan Card charges to merchants, can be up to the regulatory limit of 2.3% of the purchased amount depending on the merchant used, with the average charge for

credit cards being 1.43% in 2022. For small- and medium-sized merchants, the applicable regulations impose reduced fee rates of 0.8% (in the case of merchants with annual sales of \$300 million or less) and 1.3% (in the case of merchants with annual sales of more than \$300 million and up to \$500 million), respectively, of the purchased amount.

Although making payments on a revolving basis is more common in many other countries, this payment method is still in its early stages of development in Korea. Cardholders in Korea are generally required to repay their purchases within approximately 14 to 44 days of purchase depending on their payment cycle, except in the case of installment purchases where the repayment term is typically three to six months. Accounts that remain unpaid after this period are deemed to be delinquent, and Shinhan Card levies late charges on and closely monitors such accounts. For purchases made on an installment basis, Shinhan Card charges interest on unpaid amounts at rates that vary according to the terms of repayment.

Cardholders are required to settle their outstanding balances in accordance with the terms of the credit cards they hold. Cardholders are required to select the monthly settlement date when they open the credit card account and may subsequently change the settlement date but no more than once every 60 days. Settlement dates at or around the end of each month are the most popular since salaries are typically paid at the end of the month.

In addition to credit card services, Shinhan Card also offers check cards, which are similar to debit cards in the United States and many other countries, to retail and corporate customers. A check card can be used at any of the merchants that accept credit cards issued by Shinhan Card and the amount charged to a check card is directly debited from the cardholder's designated bank account. Check cards have a low risk of default and involve minimal funding costs. Although Shinhan Card does not charge annual membership fees on the majority of check cards, merchants are charged fees on the amount purchased using check cards at a rate between 0.50% and 2.50%, depending on the type of business, which is lower than the corresponding fee charged for credit card use.

Recently, the Financial Services Commission has allowed certain financial institutions, including Shinhan Card, to test innovative financial services. Shinhan Card obtained approval from the Financial Services Commission to test nine business: (i) peer-to-peer credit card remittance services whereby individuals can send money to others directly using credit cards, (ii) a credit scoring system that evaluates individual business owners' credit standing based on their revenue records and history of credit card use, (iii) small-scale investment using credit cards, (iv) face recognition payments, (v) house rent payments using credit cards, (vi) rental brokerage platforms, (vii) overseas remittance using credit cards, (viii) quick payment to small merchants using credit card reward points and (ix) family cards for underage children. As of December 31, 2022, six businesses have been successfully commercialized, and we expect to launch the remaining three services in the foreseeable future.

## Credit Card Products

Shinhan Card offers a wide range of credit card products tailored for credit cardholders' lives and to satisfy their preferences and needs. Credit card products offered by Shinhan Card include:

- cards that provide additional benefits such as frequent flyer miles and reward program points that can be redeemed by the customer for complementary services, prices or cash;
- platinum cards and other preferred membership cards, which have higher credit limits and provide additional services in return for higher annual membership fees;
- cards with additional features to preferred customers, such as revolving credit cards, travel services and insurance;
- cards with fraud detection and security systems to prevent the misuse of credit cards and to encourage the use of credit cards over the Internet;
- corporate and affinity cards that are issued to employees or members of particular companies or organizations; and

 mobile phone cards allowing customers to conduct wireless credit card transactions through their mobile phones.

## Customers and Merchants

In addition to internal growth through cross-selling, we seek to enhance our market position by selectively targeting new customers with high net-worth and solid credit quality through the use of a sophisticated and market-oriented risk management system. Shinhan Card screens its credit card applicants and sets individualized credit limits for such applicants according to internal guidelines based on a comprehensive credit scoring system. We also seek to provide a wide variety of differentiated products and services tailored to our customers' individualized needs through precision analysis and customer segmentation based on the "big data" we have compiled on our approximately 22 million customers. We have also formed a team dedicated to the "fintech" business by actively pursuing technology developments and strategic alliances with key partners as well as additional teams focused on innovation and creating new sources of value for our clients through the development of big data and digital platforms and provision of big data-based consulting services. In 2019, utilizing an innovative platform based on big data analysis, Shinhan Card launched a "Super Personalization Service", aimed at providing our individual customers with tailored and personalized services that meet their individual needs. As Shinhan Card has obtained a license from the Financial Services Commission as a MyData service provider, Shinhan Card has been able to utilize additional external data to enhance its ability to further refine and tailor personalized services for its customers. In 2022, Shinhan Card further leveraged its existing big data capabilities by diversifying and accelerating revenue-generating businesses such as MyData-based loan brokerage, big data sales, credit bureau for small businesses, and commercial real estate analysis. In 2023, Shinhan Card plans to expand its capabilities as a platform company based on investments in big data and digital technology will seek to increase profitability by expanding and connecting its multiple financial and non-financial platforms. Additionally, Shinhan Card plans to advance big data marketing and data as a service business, further personalizing its marketing and servicing methods based on data-driven services such as open banking, digital document management and MyData. Shinhan Card seeks to optimize data processing to align its internal services, systems, processes, and channels and use such data by utilizing artificial intelligence, machine learning and robotic process automation throughout the financial services it provides in order to enhance customer experience.

The following table sets forth the number of customers of Shinhan Card and the number of merchants at which Shinhan Card can be used for purchases as of the dates indicated.

	As of December 31,				
	2020	2021	2022		
	(In thousands, except percentages)				
Shinhan Card:					
Number of credit card holders <sup>(1)</sup>	13,056	13,283	13,316		
Personal accounts	12,861	13,091	13,140		
Corporate accounts	195	192	176		
Active ratio <sup>(2)</sup>	95.86%	96.62%	96.61%		
Number of merchants	2,741	2,894	3,032		

Notes:

(1) Represents the number of cardholders whose card use is not subject to suspension or termination as of the relevant date.

(2) Represents the ratio of accounts used at least once within the last six months to the total accounts as of year-end.

## Installment Finance

Shinhan Card provides installment finance services to customers to facilitate purchases of durable consumer goods such as new and used cars, appliances, computers and other home electronics products. Revenues from installment finance operations accounted for 3.87% of Shinhan Card's total operating revenue in 2022. Shinhan Card pays the merchants when Shinhan Card's customers purchase such goods, and the customers remit monthly installment payments to Shinhan Card over a number of months, generally up to 36 months (and, in the case of installment financings for automobile purchases, up to 72 months), as agreed with the customers. For installment finance products for new cars, Shinhan Card historically charged, in addition to interest, an initial financing fee of up to 9.9% of the purchase price, depending on the customer's credit score, the installment period and installment amount. Initial financing fees charged in connection with installment finance products for new cars, however, were abolished effective March 2, 2013 pursuant to the Financial Consumer Report (Automobile Financings) issued by the Financial Supervisory Service on January 29, 2013. Shinhan Card has installment financing arrangements with over 42,000 merchants in Korea, including major car dealers, manufacturers and large retailers with nationwide networks, such as electronics goods stores.

Shinhan Card promptly processes installment financing applications and, based on the extensive credit information it possesses or can access, it is able to offer flexible installment payment terms tailored to individual needs of the customers. Shinhan Card also devotes significant efforts to developing and maintaining its relationships with merchants, which are the most important source of referrals for installment finance customers. Shinhan Card makes prompt payments to merchants for goods purchased by the installment finance customers.

# Auto Lease

Shinhan Card provides auto leasing financing to retail customers and corporations. Revenues from auto lease operations accounted for 6.64%, 9.19% and 10.83% of Shinhan Card's total operating revenue in 2020, 2021 and 2022, respectively.

#### Securities Brokerage Services

### Overview

Through Shinhan Securities, we provide a wide range of financial investment services to our diversified customer base including corporations, institutional investors, governments and individuals. Financial investment services offered by Shinhan Securities range from securities brokerage services, investment advice and financial planning services, and investment banking services such as underwriting and mergers and acquisitions advisory services. Subject to market conditions, Shinhan Securities also engages in equity- and stock index-linked derivatives sales and brokerage, proprietary trading and brokerage services for futures involving interest rates, currency and commodities as well as foreign exchange margin trading.

As of December 31, 2022, according to internal data, Shinhan Securities' annual market share of Korean equity brokerage market was 7.99% (consisting of 2.59% in the retail segment, 0.40% in the institutional segment and 5.01% in the international segment) in terms of total brokerage volume, ranking seventh among securities firms in Korea. As of the same date, according to internal data, Shinhan Securities' annual market share of Korean options and futures brokerage market were 14.23% and 20.40%, respectively, in terms of total brokerage volume with respect to these products.

## Products and Services

Shinhan Securities provides principally the following services:

• *retail client services*. These services include equity and bond brokerage, investment advisory and financial planning services to retail customers, with a focus on high net-worth individuals. The fees

generated include brokerage commissions for the purchase and sale of securities, asset management fees, interest income from credit extensions (including in the form of stock subscription loans), margin transaction loans and loans secured by deposited securities.

- *institutional client services*:
  - brokerage services. These services include brokerage of stocks, corporate bonds, futures and
    options provided to Shinhan Securities' institutional and international customers and sale of
    institutional financial products. These services are currently supported by a team of approximately
    60 research analysts that specialize in equity, bonds and derivatives research.
  - investment banking services. These services include a wide array of investment banking services to Shinhan Securities' corporate customers, such as domestic and international initial public offerings, mergers and acquisitions advisory services, bond issuances, underwriting, capital increase, asset-backed securitizations, issuance of convertible bonds and bonds with warrants, structured financing, issuance of asset-backed commercial papers and project financings involving infrastructure, real estate and shipbuilding.

Shinhan Securities also engages, to a limited extent, in proprietary trading in equity and debt securities, derivative products and over-the-counter market products.

With respect to brokerage services, in the face of intense competition in the domestic brokerage industry, Shinhan Securities primarily focuses on strengthening profitability through service differentiation and efficient management of its distribution network rather than enlarging its market share indiscriminately through lowering fees and commissions. Shinhan Securities' service differentiation efforts include offering its customers opportunities to purchase stocks in a wide range of countries (currently more than 29 countries), leveraging synergy opportunities afforded by affiliation with other Shinhan entities such as offering brokerage accounts maintained at Shinhan Bank and Shinhan Capital.

With respect to investment banking services, Shinhan Securities concentrates on equity capital markets, debt capital markets, project finance and mergers and acquisitions. To a limited extent, Shinhan Securities also engages in private equity investments through formation of private equity funds by soliciting investors on a private placement basis. To better serve its international customers, Shinhan Securities has established four overseas service centers in Hong Kong, New York, Vietnam and Indonesia. In July 2015, we acquired a 100% stake in Nam An Securities (subsequently launched as Shinhan Securities Vietnam Co., Ltd.), a Vietnamese securities services firm that provides investment banking and asset management services. In addition, in order to capitalize on the rapid growth opportunity and as part of its expansion efforts in Indonesia, Shinhan Securities acquired a 99% stake in PT Makinta Securities, an Indonesian investment banking firm in July 2016 and subsequently launched it as an overseas subsidiary offering investment banking and brokerage services under the name PT Shinhan Sekuritas Indonesia in December 2016. To further expand and stabilize our global businesses, we made further capital investments totaling US\$62 million in December 2017 in our subsidiaries located in Hong Kong, New York, Vietnam and Indonesia. In 2018, we acquired PT Archipelago Asset Management, the first acquisition of an Indonesian asset management firm by a Korean financial group, which we believe will strengthen our business portfolio in Indonesia and enhance our competitiveness in the Asian financial markets.

## Life Insurance Services

## Overview

We provide life insurance products and services primarily through Shinhan Life Insurance. Shinhan Life Insurance provides services through diversified distribution channels consisting of financial planners, telemarketers, agency marketers and bancassurance specialists. Shinhan Life Insurance had total assets of \$\prov\$36,778 billion, \$\prov\$70,536 billion and \$\prov\$66,754 billion as of December 31, 2020, 2021 and 2022, respectively, and net profits of \$\prov\$178 billion, \$\prov\$392 billion and \$\prov\$464 billion for the years ended December 31, 2020, 2021

and 2022, respectively. Total assets and net profits of Shinhan Life Insurance in 2021 included Orange Life Insurance's total assets and net profits after Orange Life Insurance was subsequently merged with and into Shinhan Life Insurance in July 2021.

Since the merger, Shinhan Life Insurance has focused on post-merger integration initiatives to bring together the core capabilities of Shinhan Life Insurance and Orange Life, based on a new motto of "NewLife, adding new values to life." In 2022, Shinhan Life Insurance successfully developed an integrated IT system by combining the resources of the two companies.

### Products and Services

Shinhan Life Insurance provides principally the following services:

- Life insurance. Shinhan Life Insurance develops products that are marketed to customer bases in
  various age groups through tailored marketing strategies and in-depth analysis of customer databases,
  backed by support for and training of competent insurance consultants. For example, Shinhan Life
  Insurance has launched innovative products that offer customized underwriting and premium options.
- *General agent ("GA")*. Shinhan Life Insurance acquired reputable GA organizations to lay the foundation for stable growth within the GA market.
- *Healthcare service*. As part of the efforts to grow its non-insurance services, Shinhan Life Insurance's healthcare services help bring in new customers by giving them access to a wide range of content based on their platform.

To better serve its international customers, Shinhan Life Insurance established Shinhan Life Insurance Vietnam Co., Ltd. in Vietnam which began its business operations in January 2021.

In response to the implementation of IFRS 17, Shinhan Life Insurance has updated its management strategies, settlement process and internal control systems. In addition, Shinhan Life Insurance upgraded its insurance risk measurement system in anticipation of a new regulatory solvency regime for insurance companies, the Korean-Insurance Capital Standard (the "K-ICS"). See "Item 3.D. Risk Factors — Risks Related to Our Other Businesses — Prolonged periods of declining or low interest rates or changes in related accounting standards may reduce or turn negative our investment margin on savings insurance products and result in an increase in the valuation of our liabilities associated with these products."

## Non-Life Insurance Services

We provide a wide range of general insurance products through Shinhan EZ General Insurance. Shinhan EZ Insurance was established in 2003 as Daum Direct Car Insurance. On June 30, 2022, we acquired BNP Paribas Cardif General Insurance and changed its name to Shinhan EZ General Insurance. General insurance products offered by Shinhan EZ General Insurance include collateral protection insurance, motor insurance, SMART repair and extend warranty. Shinhan EZ General Insurance also intends to switch to a digital insurance business model. Shinhan EZ General Insurance aims to offer innovative insurance products suitable for collaboration with startups based on advanced digital channels, in addition to traditional insurance products, such as health, injury, travel and leisure insurance. Shinhan EZ General Insurance is seeking to pursue sustainable growth by creating new business opportunities and collaborating with various startups and our affiliates and is also planning to expand coverage within the automotive insurance market.

### Specialized Credit Services

We provide leasing and equipment financing services to our corporate customers mainly through Shinhan Capital. Shinhan Capital provides customers with leasing, installment financing and new technology financing,

equipment leasing, and corporate credit financing. Shinhan Capital's strength has traditionally been in leasing of ships, printing machines, automobiles and other specialty items, but it also offers other leasing and financing services, such as corporate restructuring services for financially troubled companies, project financing for real estate and infrastructure development, corporate leasing and equipment financing.

### **Other Services**

Through our other subsidiaries, we also provide asset management, savings banking, loan collection and credit reporting, collective investment administration and financial system development services. Through Shinhan Asset Management, which merged with Shinhan Alternative Investment Management in January 2022 (in addition to Shinhan Securities), we are also engaged in alternative investments through formation of private equity funds by soliciting investors on a private placement basis.

### Asset Management Services

In addition to personalized wealth management services provided as part of our private banking and securities brokerage services, we also provide asset management services through Shinhan BNP Paribas Asset Management, formerly a joint venture with BNP Paribas Asset Management Holding, of which we and BNP Paribas Asset Management Holding held 65:35 interests, respectively. On January 15, 2021, we acquired the remaining 35% interest in Shinhan BNP Paribas Asset Management and changed its legal name to Shinhan Asset Management, and hence Shinhan Asset Management has become our wholly-owned subsidiary as of such date. Shinhan Asset Management ranked fifth among asset managers in Korea in terms of assets under management. As of December 31, 2022, and provides a wide range of investment products, including traditional equity/fixed income funds as well as alternative investment products, to retail and institutional clients. As a former joint venture with BNP Paribas's global network of investment professionals and expertise in the asset management industry. As of December 31, 2022, Shinhan Asset Management had assets under management amounting to **W**101,407 billion. To a limited extent, Shinhan Securities also provides asset management services for discretionary accounts, see "— Securities Brokerage Services."

### Savings Banking

Through Shinhan Savings Bank, we provide savings banking services in accordance with the Mutual Savings Bank Act to customers that generally would not, due to their credit profile, qualify for our commercial banking services or who seek higher returns on their deposits than those offered by our commercial banking subsidiaries. Established in December 2011, Shinhan Savings Bank offers savings and other deposit products with relatively higher interest rates and loans (usually in relatively small amounts and on customer-tailored terms and including loans for which we receive credit support from the Government) primarily to small- to medium-sized enterprises and low income households who would not generally qualify for our commercial banking services. Shinhan Savings Bank has assumed the assets and liabilities of Tomato Savings Bank, which we acquired in January 2012, and has merged into Yehanbyoul Savings Bank, which we acquired in March 2013, with Yehanbyoul Savings Bank as the surviving entity with its name changed to Shinhan Savings Bank. Both Tomato Savings Bank and Yehanbyoul Savings Bank were facing liquidity troubles due to difficulties in the real estate project financing business as a result of the prolonged slump in the Korean real estate market at the time we acquired them. We closely monitor the business activities and product offerings of Shinhan Savings Bank to ensure its financial soundness.

#### Loan Collection and Credit Reporting

We centralize credit collection and credit reporting operations for our subsidiaries through Shinhan Credit Information Co. Ltd. ("Shinhan Credit Information"), which also provides similar services to third party customers. Shinhan Credit Information's services include debt collection, credit inquiries, credit reporting, civil application/petition services and process agent services, among others. Shinhan Credit Information also manages participants in credit recovery programs and provides support to the Kookmin Happy Fund, which is a Government-established fund that supports retail borrowers with low credit scores by purchasing defaulted loans from creditors or providing credit guarantees to enable such borrowers to refinance at lower rates.

#### Collective Investment Administration Services

We provide integrated collective investment administration services through Shinhan AITAS Co., Ltd. Shinhan AITAS provides general management service, asset management systems, accounting systems and trading systems to asset management companies and institutional investors. The target customers for these collective investment administration services are asset managers, investment advisors and institutional investors, and Shinhan AITAS seeks to provide a comprehensive service package including the computation of the reference value for funds, evaluation of fund performance, provision of trading systems and fund-related legal administrative services.

#### Alternative Investments

To a limited extent, through Shinhan Asset Management, which merged with Shinhan Alternative Investment Management in January 2022, we are also engaged in private equity investments through formation of private equity funds. The private equity funds receive funding from investors on a private placement basis, which funds are then invested in alternative assets and equity securities in companies for a variety of reasons, including management control, business turnaround or corporate governance improvements.

### Financial System Development Services

We provide financial system development services through Shinhan DS, which offers system integration, system management, IT outsourcing, business process outsourcing and IT consulting services.

### Real Estate Investment Trust (REIT) Asset Management

Through our wholly owned subsidiary, Shinhan REITs Management Co., Ltd., we provide real estate investment and management services to real estate investment trusts.

## Real Estate Trust Services

Shinhan Asset Trust Co., Ltd. is a comprehensive real estate trust service provider, providing services including land development trust, management trust, proxy and agency businesses and consulting, etc.

#### Artificial Intelligence Based Investment Consulting

Shinhan AI. Co., Ltd. is an artificial intelligence-based investment consulting company established to enhance our competitiveness in the digital age and provide differentiated investment consulting services, with plans to expand business into the asset management sector.

### Venture Capital Investment

Shinhan Venture Investment Co, Ltd. is an alternative investment management firm specializing in identifying and investing in start-up companies as well as small to mid-sized companies and also promoting the formation and operation of early stage investment funds and private equity investment funds.

### **Our Distribution Network**

We offer a wide range of financial services to retail and corporate customers through a variety of distribution networks and channels established by our subsidiaries. The following table presents the geographical

distribution of our distribution network based on the branch offices and other distribution channels of our principal subsidiaries, as of December 31, 2022.

Distribution Channels in Korea <sup>(1)</sup>	Shinhan Bank	Jeju Bank	Shinhan Card	Shinhan Securities	Shinhan Life Insurance	Total
Seoul metropolitan	301	1	10	38	117	467
Gyeonggi province	153	_	1	11	28	193
Six major cities:	137	1	10	19	46	213
Incheon	52		1	3	6	62
Busan	29	1	3	4	17	54
Gwangju	11		1	3	6	21
Daegu	20		1	4	8	33
Ulsan	11		1	2	3	17
Daejeon	14	_	3	3	6	26
Sub-total	<u>591</u>	_2	21	68	191	873
Others	130	30	8	<u>13</u>	_27	208
Total	721	32	<u>29</u>	81	218	1,081

Note:

(1) Includes our main office and those of our subsidiaries.

#### **Banking Service Channels**

Our banking services are primarily provided through an extensive branch network, specializing in retail and corporate banking services, as complemented by self-service terminals and electronic banking, as well as an overseas services network.

As of December 31, 2022, Shinhan Bank's branch network in Korea comprised of 721 service centers, consisting of 521 retail banking service centers (including 25 private wealth management service centers and 118 retail offices), 15 large corporate banking service centers, 53 corporate banking services centers and 132 hybrid banking branches. Shinhan Bank's banking branches are designed to provide one-stop banking services tailored to their respective target customers. Recently, Shinhan Bank has been actively adopting digital technology to improve operational efficiency of its banking service channels. For example, Shinhan Bank introduced digital kiosks to banking branches, established 'Paperless Banking' by replacing paper applications with electronic documents, implemented a "robotic process automation system" for the automation of certain tasks and processes and increased the volume of client communications through non-face-to-face platforms.

#### Retail Banking Channels

In Korea, many retail transactions are conducted in cash or with credit cards, and conventional checking accounts are generally not offered or used as widely as in other countries such as the United States. An extensive retail branch network has traditionally played an important role as the main platform for a wide range of banking transactions. However, a growing number of customers are turning to other service channels to meet their banking needs, such as Internet banking, mobile banking and other forms of non-face-to-face platforms. In response to such changes, Shinhan Bank has recently focused on reorganizing its retail branch network, including shifting, merger or closure of certain branches that are considered redundant.

Recently, one of the key initiatives at Shinhan Bank has been to target high net-worth individuals through private banking. Our private banking services are provided principally through private banking relationship managers who, within target customer groups, assist clients in developing individual investment strategies. We

believe that such relationship managers help us foster enduring relationships with our clients. Private banking customers also have access to Shinhan Bank's retail branch network and other general banking products Shinhan Bank offers through its retail banking operations.

### Corporate Banking Channels

Shinhan Bank currently provides corporate banking services through corporate banking service centers primarily designed to serve large corporate customers and hybrid banking branches designed to serve retail as well as small-business corporate customers. Small- and medium-sized enterprises have traditionally been Shinhan Bank's core corporate customers and we plan to continue to maintain Shinhan Bank's strength vis-à-vis these customers.

### Self-Service Terminals

In order to complement its banking branch network, Shinhan Bank maintains an extensive network of automated banking machines, which are located in branches and in unmanned outlets. These automated banking machines consist of ATMs, cash dispensers and passbook printers. In December 2015, Shinhan Bank introduced digital kiosks, a new generation of automated self-service machines featuring biometric authentication technology and the ability to perform a wide range of services that were not available through traditional ATMs, such as opening new accounts, issuance of debit and check cards, foreign currency exchange and overseas remittance of foreign currency. As of December 31, 2022, Shinhan Bank had 4,849 ATMs, 7 cash dispensers and 224 digital kiosks. Shinhan Bank has actively promoted the use of these distribution outlets in order to provide convenient service to customers, as well as to maximize the marketing and sales functions at the branch level, reduce employee costs and improve profitability. In 2022, automated banking machine transactions accounted for a substantial portion of total deposit and withdrawal transactions of Shinhan Bank in terms of the number of transactions and fee revenue generated, respectively.

#### Digital Banking

Shinhan Bank's digital banking services are more comprehensive than those available at the counter, including services such as 24-hour account balance posting, real-time account transfer, overseas remittance, and loan requests. As of December 31, 2022, Shinhan Bank had 22,233,989 subscribers to its Internet banking services and 15,218,836 users of its smart banking apps, representing an increase of 6.2% and 9.6%, respectively, compared to December 31, 2021. Shinhan Bank continues to experience a rise in the number of online and mobile banking users. Shinhan Bank began offering online and mobile banking initially to save costs rather than to increase revenues, but it is exploring ways to increase revenues through online and mobile banking. These services offer customers more straightforward and convenient access to banking services without limitations of time and space and offer tailored and customized service to each customer. In February 2018, Shinhan Bank launched "SOL," a mobile banking application integrating Shinhan Bank's six previously existing mobile applications. Shinhan Bank began offering an open banking service in October 2019, allowing customers to access accounts, products, and services across multiple banks using only SOL. In November 2019, Shinhan Bank also launched "SOL Global," a mobile banking application for foreigners, allowing foreign customers to use open banking and other financial services. In 2020, Shinhan Bank expanded the network of financial institutions accessible through SOL's open banking service. It implemented upgrades that allowed users to customize the user interface to reflect personal asset management preferences. In addition, Shinhan Bank launched the "MoneyVerse" service in December 2021, which utilizes the financial MyData service and enables customers to transfer assets held in other institutions, such as banks, securities, insurance, pension, real estate, and automobiles, to Shinhan SOL. The service made it possible to conduct an integrated inquiry and management of assets. Shinhan Bank is promoting various efforts to transform SOL into a digital platform that goes beyond a financial service platform and becomes closely connected to customers' lives. In 2020 and 2021, Shinhan Bank launched the COVID-19 Government relief application service through SOL, allowing users to apply for Government emergency funds through the mobile application. In addition, in February 2020, Shinhan Bank

launched a medical insurance claim service on SOL, allowing users to easily submit medical insurance claims by sending photos of supporting documents through the SOL mobile application. In line with the recent trends of "live commerce," in October 2020, Shinhan Bank launched "SOL Live," a live broadcast marketing stream channel for financial products. Shinhan Bank also promoted digital innovation at its existing offline branches in 2021. For example, customers are greeted by an AI concierge and they can choose to use smart kiosk that enables self-service banking and digital service including remote video consulting. By taking part in the Consumer Electronics Show 2021, Shinhan Bank was able to introduce its innovative branch services and digital service devices such as digital desks that offer AI-powered customer service assistance and live video chat with service representatives to the world. Additionally, in 2022, Shinhan Bank launched "New SOL", an upgraded version of SOL that offers enhanced user experience and improved usability. New SOL has been transformed into a banking platform that is specifically designed based on customer feedback gathered during the application's planning phase. Due to improvements in software framework, the speed of the mobile application has improved substantially, along with the user experience. Chatbots have also been upgraded, and they now have improved multi-tasking capabilities in addressing user requests and inquiries. Shinhan Bank intends to continue introducing a range of innovative technologies that will enhance customer experience and open up new business opportunities, such as face recognition technology for user identity verification and voice banking services powered by artificial intelligence. Shinhan Bank will also continue to focus on security measures for privacy protection and financial crime detection. Also in 2022, Shinhan Bank launched a customer communication channel where customers are invited to submit their ideas on financial and banking services in general and also to post their feedback on our products and services.

### **Overseas Distribution Network**

The table below sets forth Shinhan Bank's overseas banking subsidiaries and branches as of December 31, 2022.

Business Unit	Location	Year Established or Acquired
Subsidiaries <sup>(1)</sup>		
Shinhan Bank Europe GmbH <sup>(2)</sup>	Frankfurt, Germany	1994
Shinhan Bank America	New York, U.S.A.	1990
Shinhan Bank (China) Limited	Beijing, China	2008
Shinhan Bank (Cambodia) PLC	Phnom Penh, Cambodia	2007
Shinhan Bank Kazakhstan Limited	Almaty, Kazakhstan	2008
Shinhan Bank Canada	Toronto, Canada	2009
Shinhan Bank Japan <sup>(3)</sup>	Tokyo, Japan	2009
Shinhan Bank Vietnam Ltd. <sup>(4)</sup>	Ho Chi Minh City, Vietnam	2011
Banco Shinhan de Mexico <sup>(5)</sup>	Mexico City, Mexico	2015
PT Bank Shinhan Indonesia <sup>(6)</sup>	Jakarta, Indonesia	2016
Branches		
New York	U.S.A.	1989
Singapore	Singapore	1990
London	United Kingdom	1991
Mumbai	India	1996
Hong Kong	China	2006
New Delhi	India	2006
Poonamallee	India	2010
Pune	India	2014
Manila	Philippines	2015
Dubai	United Arab Emirates	2015

Business Unit	Location	Year Established or Acquired
Sydney	Australia	2016
Yangon	Myanmar	2016
Ahmedabad	India	2016
Ranga Reddy	India	2016
<i>Representative Offices</i> <sup>(7)</sup>		
Mexico	Mexico City, Mexico	2008
Uzbekistan	Tashkent, Uzbekistan	2009
Poland <sup>(2)</sup>	Wroclaw, Poland	2014
Hungary <sup>(8)</sup>	Budapest, Hungary	2021

Notes:

- (1) Shinhan Bank's subsidiary in Hong Kong SAR, China, Shinhan Asia Ltd., was liquidated as of July 14, 2020.
- (2) Shinhan Bank Europe GmbH established a representative office in Poland in 2014.
- (3) While Shinhan Bank established the subsidiary in Japan in 2009, Shinhan Bank has provided banking services in Japan through a branch structure since 1986.
- (4) Prior to the establishment of this subsidiary in 2011, Shinhan Bank provided banking services in Vietnam through a branch since 1995.
- (5) Banco Shinhan de Mexico commenced operations in March 2018.
- (6) Shinhan Bank acquired a 98.01% stake in Bank Metro Express and a 100% stake in Centratama Nasional Bank, two banks in Indonesia, in November 2015 and December 2016, respectively. On March 3, 2016, Bank Metro Express obtained a license to conduct business activities in the name of PT Shinhan Bank Indonesia. Centratama Nasional Bank was merged with PT Bank Shinhan Indonesia on December 6, 2016.
- (7) Shinhan Bank's representative office in Myanmar was closed as of June 8, 2018.
- (8) Shinhan Bank's representative office in Hungary commenced operations on October 19, 2021.

Currently, our overseas subsidiaries and branches are primarily engaged in trade financing and local currency funding for Korean companies and Korean nationals in the overseas markets, as well as providing foreign exchange services in conjunction with Shinhan Bank's headquarters. On a limited basis, these overseas branches and subsidiaries also engage in investment and trading of securities of foreign issuers. In the future, as part of our globalization efforts, we plan to expand our coverage of local customers in the overseas markets by providing a wider range of services in retail and corporate banking, and to that end, we have increasingly established subsidiaries in lieu of branches in select markets and in 2011 merged two of our Vietnam banking subsidiaries in order to enhance our presence and enable greater flexibility in its service offerings in these markets. We plan to maintain our focus on organic growth, while we may selectively pursue acquisitions in markets where it is difficult to obtain local banking licenses through greenfield entry. In furtherance of this objective, Shinhan Bank acquired a 98.01% stake in Bank Metro Express and a 100% stake in Centratama Nasional Bank, two banks in Indonesia, in November 2015 and December 2016, respectively. Shinhan Bank completed the merger of the two banks in December 2016. Shinhan Bank also opened additional branches in Australia, Myanmar and India in the second half of 2016. In April 2017, Shinhan Bank Vietnam Co., Ltd. acquired ANZ Bank (Vietnam) Limited's retail division. In 2017, Shinhan Bank became the first Korean Bank to obtain a license to set up a local subsidiary in Mexico and started local business in Mexico in March 2018. We plan to continue our efforts to expand our overseas banking service network and global operations.

### Credit Card Distribution Channels

Shinhan Card primarily uses four distribution channels to attract new credit card customers: (i) the banking and credit card branch network, (ii) sales agents, (iii) business partnerships and affiliations with vendors and (iv) digital platforms such as Shinhan pLay.

As of December 31, 2022, the branch network for our credit card operations consisted of 876 branches of Shinhan Bank and 29 card sales branches of Shinhan Card. The use of the established distribution network of Shinhan Bank is part of the group-wide cross-selling efforts of selling credit card products to existing banking customers. In 2022, the number of new cardholders acquired through our banking distribution network accounted for approximately 16.4% of the total number of new cardholders. We believe that the banking distribution network will continue to provide a stable and low-cost venue for acquiring high-quality credit cardholders.

The sales agents represented the most significant source of Shinhan Card's new cardholders in 2022, and the number of new cardholders acquired through sales agents accounted for approximately 30.9% of the total number of Shinhan Card's new cardholders in 2022. As of December 31, 2022, Shinhan Card had 1,372 sales agents, who were independent contractors. These sales agents assist prospective customers with the application process and customer service. Compensation of these sales agents is generally tied to the transaction volume of the customers introduced by them, and we believe this system helps to enhance profitability.

As a way of acquiring new cardholders, Shinhan Card also has business partnership and affiliation arrangements with a number of vendors, including gas stations, major retailers, airlines and telecommunication and Internet service providers. Shinhan Card plans to continue to leverage its alliances with such vendors to attract new cardholders.

As part of a group-wide initiative to streamline our operations and create a digital-friendly business platform, Shinhan Card has strategically expanded its digital platforms. In October 2021, Shinhan Card launched "Shinhan pLay", a mobile platform providing consolidated financial and non-financial services. In addition to providing traditional financial services such as payment, open banking and asset management as well as services provided through traditional customer service means such as call centers and website applications, Shinhan pLay also offers a variety of non-financial content including entertainment, shopping, personal certificates and memberships in order to better provide customized financial services, Shinhan pLay utilizes digital technology such as artificial intelligence and big data to provide real-time customized services tailored to individual users and integrated access across services provided by various merchants and affiliates.

In November 2014, as an initial step to exploring potential opportunities overseas, Shinhan Card established its first overseas subsidiary in Kazakhstan, LLP MFO Shinhan Finance, as Kazakhstan was deemed to have relatively low entry barriers to foreign financial institutions, high growth potential for retail operations and the possibility of leveraging Shinhan Bank's network. LLP MFO Shinhan Finance obtained its business license in the first half of 2015 and commenced operations in July 2015, including installment financing and credit loans. In 2018, LLP MFO Shinhan Finance expanded its sales channels and introduced new credit loan products, while in 2019, the company further expanded its sales coverage while enhancing its risk management capabilities. In 2021, LLP MFO Shinhan Finance established a foundation for its automobile finance business through a captive partnership with a local dealership in Kazakhstan.

In December 2015, Shinhan Card acquired a majority stake in PT Swadharma Indotama Finance, a multi finance company in Indonesia, and changed its legal name to PT Shinhan Indo Finance. PT Shinhan Indo Finance engages in corporate and retail operations, including installment financing and financial leases, and began offering credit card services in January 2017 after obtaining its credit card business license in December 2016. In 2018, PT Shinhan Indo Finance began to expand its retail business across Indonesia. In 2019, PT Shinhan Indo Finance product with Shinhan Bank, maintaining a conservative approach to its retail business while steadily increasing its corporate leasing assets, particularly corporate fleet vehicle finance products. In 2020, PT Shinhan Indo Finance focused on expanding its fleet business and improving its financial performance. In 2023, PT Shinhan Indo Finance plans to maintain its fleet-centered strategy and also plans to explore additional partnerships for new businesses.

In March 2016, to accelerate our global business expansion, we established Shinhan Microfinance, a local subsidiary in Myanmar. Shinhan Microfinance obtained its microfinance business license in July 2016 and

launched operations in September 2016. In 2017, it expanded its business operations from Yangon to nearby Bago. In 2018, Shinhan Microfinance increased its assets and profit volume by diversifying the range of microfinance products it offers. In 2019, Shinhan Microfinance actively expanded its sales network and sought long term growth opportunities. In 2020, Shinhan Microfinance has grown significantly despite the spread of COVID-19 by expanding its branch network and launching new products. In 2023, Shinhan Microfinance plans to focus on risk management to achieve stable growth amidst the continued instability from the COVID-19 situation.

In January 2018, Shinhan Card acquired Prudential Vietnam Finance Company Limited in order to gain a stronger presence in Vietnam and increase synergy with Shinhan Bank and Shinhan Securities' Vietnam operations. In July 2019, Shinhan Card changed its legal name into Shinhan Vietnam Finance Company Ltd. ("Shinhan Vietnam Finance Company"). Utilizing its relatively lower funding cost resulting from cooperation with other affiliates in Vietnam such as Shinhan Bank and Shinhan Securities, Shinhan Vietnam Finance was able to expand its asset base, reaching total assets of US\$647.3 million as of December 31, 2022. As part of its diversification efforts, new products such as automobile loans, niche loans, and easy loans were launched in 2021, resulting in increased sales. The State Bank of Vietnam recently introduced Circular 18, which amends the regulation on consumer lending activities in Circular 43 and is aimed at improving soundness of Vietnam's consumer finance industry and facilitating a transition towards a cashless society by regulating the proportion of direct disbursements (for example, cash loans) to the total outstanding loans. According to the amendment, the rate of total consumer loans with direct disbursements to total consumer credit balance should gradually be decreased to 30% by 2024. In 2020, in concurrence with the State Bank of Vietnam's policies promoting consumer finance and movement towards a cashless society, Shinhan Vietnam Finance Company further diversified its offerings to include installment financing for automobiles and durable goods. Shinhan Vietnam Finance Company also launched iShinhan 3.0, a non-face-to-face loan platform. Shinhan Vietnam Finance Company plans to grow into a leading consumer finance company in Vietnam by accelerating digital transformation to increase business efficiency and create customer value. In response to the new regulatory changes, Shinhan Vietnam Finance plans to further diversify its business offerings and continue to leverage Shinhan Card's digitalization capabilities to increase efficiency and provide customers with innovative services.

### Securities Brokerage Distribution Channels

Our securities brokerage services are conducted principally through Shinhan Securities. As of December 31, 2022, Shinhan Securities had 81 service centers nationwide, and four overseas subsidiaries based in Hong Kong, New York, Vietnam and Indonesia to service our corporate customers.

Approximately 60% of our brokerage branches are located in the Seoul metropolitan area with a focus on attracting high net-worth individual customers as well as enhancing synergy with our retail and corporate banking branch network. We plan to continue to explore new business opportunities, particularly in the corporate customer segment, through further cooperation between Shinhan Securities and Shinhan Bank.

### **Insurance Sales and Distribution Channels**

We sell and provide our insurance services primarily through Shinhan Life Insurance. In addition to distributing bancassurance products through our bank branches, also distribute a wide range of life insurance products through their own branch network, agency network of financial planners and telemarketers, as well as through the Internet. As of December 31, 2022, Shinhan Life Insurance had 218 branches and 9 customer support centers. These branches are staffed by financial planners, telemarketers, agent marketers and bancassurance to meet the various needs of our insurance and lending customers. Our group-wide customer support centers arrange for policy loans (namely loans secured by the cash surrender value of the underlying insurance policy) for our insurance customers and, to a limited extent, other loans to other customers, and also handle insurance payments.

### Information Technology

We dedicate substantial resources to maintaining a sophisticated information technology system to support our operations management and provide high quality customer service. Our information and technology system is operated at a group-wide level based on comprehensive group-wide information collection and processing. We also operate a single group-wide enterprise information technology system known as "enterprise data warehouse" for customer relations management capabilities, risk management systems and data processing. We continually upgrade our group-wide information technology system in order to apply the best-in-class technology to our risk management systems to reflect the changes in our business environment as well as enhance differentiation from our competitors.

In 2013, we completed the construction of the Shinhan Data Center, which is responsible for comprehensive management of information technology systems for our subsidiaries on a group-wide basis. This center ensures a stable use of a central information processing facilities for at least 15 years and is designed to maximize operational and cost efficiency as well as enhance information security by combining the various data centers previously used by our subsidiaries. All of our subsidiaries relocated their information management capabilities to this center in 2014.

The information technology system for each of our subsidiaries is currently backed up on a real-time basis. In 2014, we converted the pre-existing data center to a back-up and disaster recovery center for all our subsidiaries' operations in order to provide customer services in a continued seamless manner even in the case of an interruption at Shinhan Data Center. We believe that our centralized back-up systems, including our data back-up centers and disaster recovery centers, enable more efficient back-up at a higher level of security.

In order to enhance security and trustworthiness of our financial services, we are continuously working to improve our information security systems and our customers' financial safety. Due to such improvements, we believe our fraud detection system has been preventing a substantial volume of voice phishing and fraud attempts. For example, we launched a group-wide customer information consent management system in June 2022 and expanded its scope to include six subsidiaries, enabling our customers to easily monitor how their information is used and make a better informed decision in giving consent.

At the subsidiary level, we also continue to increase investment in information and communication technologies ("ICT") to improve the quality of customer service in line with changing market trends. As of December 31, 2022, over the last five years the number of our employees in ICT sector has increased by 122% and the ICT budget has grown by 32%. As a result of this continued investment, our digital platforms were able to offer more services focused on the needs of the customer. In October 2022, Shinhan Bank launched New SOL, a new mobile application that operates at a substantially faster speed and offers unique features including customized home screen and transaction records editable by users. Shinhan Card's pLay app improved in-app customer support and increased the range of payment options available to its users by launching the open pay service, which enables users to register and make payments with credit cards issued by other credit card companies. Shinhan Securities' mobile application called "Alpha" plans to implement more customer-friendly user experience and Shinhan Life also launched "Square", an all-in-one insurance service platform.

In addition, in order to further improve customer convenience and experience, we plan to launch a universal mobile application in 2023 which will provide integrated services selected from the 1,400 services currently offered by Shinhan Financial Group. Additionally, as part of our ICT modernization strategy, we plan on strengthening our ICT capabilities based on utilization of public cloud and microservice architecture.

### Competition

Competition in the Korean financial services industry is, and is likely to remain, intense, including as a result of the sustained low interest rate environment (which narrows opportunities to make profit based on the

spread between lending rates and funding rates), the continuing sluggishness in the general economy, the growing maturation and saturation of the industry as a whole, the entry of new market participants and deregulation, among others.

In the banking sector, Shinhan Bank competes principally with other national commercial banks in Korea, but also faces competition from a number of additional banking institutions, including branches and subsidiaries of foreign banks operating in Korea, regional banks, Internet-only banks, government-owned development banks and Korea's specialized banks, such as Korea Development Bank, the Industrial Bank of Korea and the National Federation of Fisheries Cooperatives, as well as various other types of financial service providers, including savings institutions (such as mutual savings and finance companies, credit unions and credit cooperatives), investment companies (such as securities brokerage firms, merchant banking corporations and asset management companies) and life insurance companies. As of December 31, 2022, Korea had six major nationwide domestic commercial banks (including Citibank Korea Inc. and Standard Chartered Bank Korea Limited, both of which are domestic commercial banks acquired by global financial institutions), six regional commercial banks, three Internet-only banks and thirty-five branches and subsidiaries of foreign banks. Foreign financial institutions, many of which have greater experiences and resources than we do, may continue to enter the Korean market and compete with us in providing financial products and services either by themselves or in partnership with existing Korean financial institutions.

In the small- and medium-sized enterprise and retail banking segments, which have been Shinhan Bank's traditional core businesses, competition is expected to increase further. In recent years, Korean banks, including Shinhan Bank, have increasingly focused on stable asset growth based on quality credit, such as corporate borrowers with high credit ratings, loans to SOHO with high levels of collateralization, and mortgage and home equity loans within the limits of the prescribed loan-to-value ratios and debt-to-income ratios. This common shift in focus toward stable growth based on less risky assets has intensified competition as banks compete for the same limited pool of quality credit by engaging in price competition or by other means although Shinhan Bank has traditionally focused, and will continue to focus, on enhancing profitability rather than increasing asset size or market share, and has avoided, to the extent practicable, engaging in price competition by way of lowering lending rates. In addition, such competition may result in lower net interest margin and reduced overall profitability, especially if the low interest rate environment were to continue for a significant period of time. Shinhan Bank's net interest margin (on a separate basis) increased to 1.85% in 2022 from 1.62% in 2021 due to, at least partly, increases in base interest rate by the Bank of Korea from 1.00% to 1.25% in January 2022, from 1.25% to 1.50% in April 2022, from 1.50% to 1.75% in May 2022, from 1.75% to 2.25% in July 2022, from 2.25% to 2.50% in August 2022, from 2.50% to 3.00% in October 2022 and from 3.00% to 3.25% in November 2022. The Bank of Korea further raised the base interest rate from 3.25% to 3.50% in January 2023, which may be further increased during 2023. Even if interest rates were to increase, the effect on Shinhan Bank's results of operations may not be as beneficial as expected, or at all, due to factors such as increased volatility of market interest rates and tighter regulations regarding SOHO loans, including the implementation of additional credit review guidelines for individual businesses. Further, if competing financial institutions seek to expand market share by lowering their lending rates, Shinhan Bank may suffer customer loss, especially among customers who select their lenders principally on the basis of lending rates. In response thereto or for other strategic reasons, Shinhan Bank may subsequently lower its lending rates to stay competitive, which could lead to a further decrease in its net interest margins and outweigh any potential positive impact on the net interest margin from a general rise in market interest rates. Any future decline in Shinhan Bank's customer base or its net interest margins could have an adverse effect on our results of operations and financial condition.

In the credit card sector, Shinhan Card competes principally with existing "monoline" credit card companies, credit card divisions of commercial banks, consumer finance companies, other financial institutions and, recently, credit card service providers allied with mobile telecommunications service providers in Korea. Competition has been historically intense in this sector and the market has shown signs of saturation as existing and new credit card service providers make significant investments and engage in aggressive marketing campaigns and promotions to acquire new customers and target customers with high credit quality. While

competition has subsided somewhat recently due to stricter government regulations, such as curbs on excessive marketing expenses, competition remains intense and credit card issuers may continue to compete with Shinhan Card for customers by offering lower interest rates and fees, higher credit limits, more attractive promotions and incentives and alternative products such as credit card reward points, gift cards and low-interest consumer loan products. As a result, Shinhan Card may lose customers or service opportunities to competing credit card issuers and/or incur higher marketing expenses. Also, over the years, the Government has implemented regulations lowering certain merchant fees chargeable by credit card companies. In 2012, the Government adopted regulations mandating lower merchant fees chargeable to small- and medium-sized enterprises, and beginning January 31, 2016, a further reduction in the merchant fees chargeable to small- and medium-sized enterprises went into effect. The Enforcement Decree of the Specialized Credit Finance Business Act was amended in July 2017 and January 2019 to further expand the range of small- and medium-sized enterprises subject to lower merchant fees. Pursuant to the Specialized Credit Financial Business Act, the rates of fees chargeable to merchants are subject to review and revision every three years, and beginning January 2022, the fees chargeable to small- and medium-sized enterprises with respect to credit cards were further reduced as a result of this periodic review and revision. Additional amendments to regulations requiring further downward adjustments to merchant fees may come into force in the future. For further details on the Government's regulations on merchant fees chargeable by credit card companies, See "Item 3.D. Risk Factors - Risks Relating to Our Credit Card Business — Future changes in market conditions as well as other factors, such as stricter regulation, may lead to reduced revenues and deterioration in the asset quality of credit card receivables." In March 2023, the Financial Services Commission set up a task force consisting of members of the Financial Services Commission, the Financial Supervisory Service, credit card companies, and consumer groups, to discuss how to improve the merchant commission rate adjustment system in order to address disagreements among the stakeholders involved in the periodic review of the rates of fees charged to merchants.

In addition, since the implementation of the Improper Solicitation and Graft Act in September 2016, revenue growth for corporate cards and service related industries such as dining, floral and entertainment have shown signs of decline, and additional regulations on loans reducing maximum interest rates chargeable from 24% to 20% came into effect in July 2021. These developments have put further downward pressure on the results of operations for credit card companies, including Shinhan Card. Furthermore, the Government's recent guidelines to bolster consumer protection and protect customers' personal data in the aftermath of data leaks at certain credit companies (not including Shinhan Card) may result in additional compliance costs for Shinhan Card. Customer attrition, together with any further lowering of fees or reduction in base and market interest rates and/or additional expenses from more extensive marketing and promotional campaigns that Shinhan Card might implement to acquire and retain customers, could reduce its revenues and earnings. Furthermore, the average credit quality of Shinhan Card's customers may deteriorate if customers with higher credit quality borrow from our competitors rather than Shinhan Card and it may become more difficult for Shinhan Card to attract and maintain quality customers. In general, the growth, market share and profitability of Shinhan Card's operations may decline or become negative as a result of market saturation in this sector, interest rate competition, pressure to lower fee rates and incur higher marketing expenses, as well as Government regulation and social and economic developments in Korea that are beyond our control, such as changes in consumer confidence levels, spending patterns or public perception of credit card usage and consumer debt. If Shinhan Card fails to maintain or attract new cardholders or increase the card usage by existing customers or experiences deterioration in its asset quality and a rise in delinquency, our business, financial condition and results of operations may be adversely affected. In other financial services sectors, our other subsidiaries also compete in a highly fragmented market. Some of our competitors, particularly major global financial institutions, have greater experience and resources than we do.

Consolidation among our rival institutions and the Government's privatization efforts may also add competition in the markets in which we and our subsidiaries conduct business. A number of significant mergers and acquisitions in the industry have taken place in Korea recently. In January 2019, Woori Financial Group was established pursuant to a comprehensive stock transfer under the Korean Commercial Code whereby holders of the common stock of Woori Bank and certain of its subsidiaries transferred all of their shares to Woori Financial

Group (the new financial holding company) and in return received shares of Woori Financial Group. As a result, Woori Bank and certain of its former wholly-owned subsidiaries became direct and wholly-owned subsidiaries of Woori Financial Group. The Korea Deposit Insurance Corp., which as of April 9, 2021 owned 17.25% of the outstanding common stock of Woori Financial Group, has sold 13.63% of the outstanding common stock of Woori Financial Group. The Korea Deposit Insurance Corp. sold additional 2.33% of the outstanding common stock of Woori Financial Group in May 2022 and currently owns only 1.29% of the outstanding common stock of Woori Financial Group. In the asset management business sector, Woori Financial Group acquired two asset management companies, Tongyang Asset Management and ABL Global Asset Management (former Allianz Global Investors). In August 2021, KB Financial Group completed the acquisition of Prudential Life Insurance, the former Korean unit of Prudential Financial Inc. Any of these developments may place us at a competitive disadvantage and outweigh any potential benefit to us in the form of opportunities to acquire new customers who are displeased with the level of services at the newly reorganized entities or to provide credit facilities to corporate customers who wish to maintain relationships with a wide range of banks in order to diversify their sources of funding.

On February 1, 2019, we acquired a 59.15% interest in Orange Life Insurance, the former Korean unit of ING Life Insurance, as part of our efforts to diversify and enhance our non-banking businesses. On January 28, 2020, we acquired the remaining interests in Orange Life Insurance by effecting a comprehensive stock exchange under Articles 360-2 of the Korean Commercial Code whereby holders (other than us) of Orange Life Insurance's common stock transferred all of their shares to us and in return receive shares of our common stock, and hence Orange Life Insurance became our wholly owned subsidiary as of such date. In May 2021, the Financial Services Commission approved the merger of Shinhan Life Insurance and Orange Life Insurance, with Shinhan Life Insurance being the surviving entity upon completion of the merger. Orange Life Insurance was subsequently merged with and into Shinhan Life Insurance in July 2021. On September 29, 2020, we acquired a 96.8% interest in Neoplux, a venture capital company formerly under the Doosan Group. On December 30, 2020, we acquired the remaining interest in Neoplux by effecting a small-scale stock exchange under Article 360-10 of the Korean Commercial Code, and hence Neoplux has become our wholly owned subsidiary as of such date. On January 11, 2021, Neoplux changed its legal name to Shinhan Venture Investment. In addition, on January 15, 2021, we acquired the remaining 35% interest in Shinhan BNP Paribas Asset Management and changed its legal name to Shinhan Asset Management, and hence Shinhan Asset Management has become our wholly-owned subsidiary as of such date. On June 30, 2022 we acquired 94.54% interest in BNP Paribas Cardif General Insurance, which then changed its name to Shinhan EZ General Insurance, Ltd. Subsequently in November 2022, Shinhan EZ General Insurance, Ltd. conducted a paid-in capital increase and our shares decreased to 85.1%. We expect that such consolidation and other structural changes in the financial industry will continue. Other financial institutions may seek to acquire or merge with other entities, and the financial institutions resulting from such consolidation may, by virtue of their increased size and business scope, provide greater competition for us. Increased competition and continuing consolidation may lead to decreased margins, resulting in a material adverse impact on our future profitability.

Regulatory reforms and the general modernization of business practices in Korea have also led to increased competition among financial institutions in Korea. In December 2017, the Financial Services Commission introduced the "my account at a glance" system, which enables consumers to view their key financial account information online, including information on banks, insurances, mutual finance, loan and card issuances on one page. The "my account at a glance" system became available on mobile channels in February 2016 and expanded its scope of services to include savings banks and securities companies. Since their introduction, the integrated automatic payment transfers management service, integrated account management service and "my account at a glance" system have gained widespread acceptance. As the reform of the financial sector continues, competition may become more intense among existing banks, insurance companies, securities companies and other financial organizations, and may lead to significant changes in the current Korean financial market. Moreover, since January 1, 2020, in calculating loan to deposit ratio, retail loans and corporate loans are weighed differently, with retail loans subject to a multiple of 115% and corporate loans (excluding loans to SOHOs) subject to a multiple

of 85%, thereby increasing the impact of retail loans and reducing the impact of corporate loans in calculating such ratio. This may further intensify competition for corporate loans and deposits among commercial banks and, as a result, Shinhan Bank may face difficulties in increasing or retaining its corporate loans and deposits, which in turn may result in an increase in its cost of funding.

Furthermore, as the Korean economy further develops and new business opportunities arise, more competitors may enter the financial services industry. For example, as online service providers and technology companies with large-scale user networks, such as Kakao Corp., NAVER and Samsung Electronics, recently make significant inroads in providing virtual payment services through a system based on a growing convergence of financial services and technology commonly referred to as "fintech," competition for online customers is growing not just among commercial banks, but also from online and mobile payment service providers. In 2015, the Government announced its plans to allow Internet-only banks to operate in Korea. KT consortium's K-Bank, Kakao consortium's Kakao Bank and Viva Republica consortium's Toss Bank commenced operations in April 2017, July 2017 and October 2021, respectively. Internet-only banks may have advantages over traditional banks as the former can pass savings in labor and overhead costs to their customers by offering higher interest rates on deposit accounts, lower loan costs and reduced service fees. Accordingly, commercial banks will likely face increasing pressure to upgrade their service platforms to attract and maintain online users, which represents a growing customer base compared to traditional customers who have primarily conducted banking in-person at physical banking branches.

As part of the Government's financial policies to promote innovative digital finance, 10 commercial banks, including Shinhan Bank, began offering a preliminary open banking service in October 2019. More local banks and fintech companies joined in December 2019, when the open banking service was fully and officially launched. Open banking service allows each fintech company and bank to provide banking services, such as checking balances and making withdrawals and transfers, with regards to customers' accounts at other banks. Using open banking service, customers can easily access accounts, products and services across multiple banks, instead of being limited to the accounts, products and services available at the particular bank that they deal with. In addition, on January 9, 2020, the Korean National Assembly passed amendments to three major data privacy laws (the Personal Information Protection Act, the Act on the Promotion of Information and Communications Network Utilization and Information Protection and the Act on the Use and Protection of Credit Information). These amendments introduced the MyData service, allowing and requiring (upon the customer's request and subject to compliance requirements) financial institutions that have been approved by the Financial Service Commission as a MyData service provider access and sharing of customers' personal information, credit information and transaction data. On January 27, 2021, Shinhan Bank and Shinhan Card each obtained a license from the Financial Services Commission as a MyData service provider. On January 5, 2023, Shinhan Bank launched the MyData business and Shinhan Card is planning to provide advanced wealth management and various financial services. Until October 13, 2021, the Financial Services Commission granted MyData licenses to 58 companies (46 companies receiving main licenses and 12 companies receiving preliminary licenses), 22 of which were fintech firms (19 companies receiving main licenses and three companies receiving preliminary licenses), and competition between traditional financial institutions like us and fintech firms is expected to intensify, particularly with respect to asset management services. On January 5, 2022, the API-based MyData service was fully implemented and 33 companies (including ten fintech firms) are providing services. As of December 31, 2022, the Financial Services Commission had granted licenses to 64 companies to operate as MyData service providers, 24 of which were fintech or IT firms. If more fintech companies receive authorization as MyData service providers, we expect competition for customers among banks and fintech firms to intensify. In addition, the Financial Services Commission also led discussions in July 2022 about the creation of a government-led platform where consumers can compare loan products from various financial institutions and apply for debt consolidation on a single platform. The platform is expected to launch in May 2023.

Recently, following the global financial crisis, the Government has subjected Korean financial institutions to stricter regulatory requirements and guidelines in areas of asset quality, capital adequacy, liquidity and residential and other lending practices (including a requirement to maintain a certain ratio of core capital to total

risk exposure, which was introduced in January 2018 in order to control excessive leverage), which has had a dampening effect on competition. The Financial Services Commission implemented the capital requirements of Basel III, whose minimum requirements were phased in sequentially from December 1, 2013 through full implementation by January 1, 2015, based on the guidelines set forth in the amended Regulation on the Supervision of the Banking Business and the Detailed Regulation on the Supervision of the Banking Business. In addition, the Financial Services Commission has implemented the Basel III requirements relating to liquidity coverage ratio and capital conservation buffer, each of which have been fully phased in as of January 1, 2019. As of January 1, 2016, the Financial Services Commission implemented Basel III requirements relating to accumulation of additional capital for systemically important banks and bank holding companies and countercyclical capital buffer requirements. Each year, the Financial Services Commission may designate banks with significant influence (based on size and connectivity with other financial institutions) on the domestic financial system as a domestic systemically important bank and require the accumulation of additional capital in accordance with the highest of: (i) ratio of common equity capital to risk-weighted assets, ranging from 0.0% to 2.0%, depending on the systematic importance evaluation score, (ii) if the bank's holding company is a domestic systemically important bank holding company, the capital ratio corresponding to the additional capital required for the bank holding company under the Financial Holding Company Supervision Regulations, or (iii) if the bank is also a global systemically important bank, as defined by the Basel Committee, the capital ratio as required by the Basel Committee. According to the instructions of the Financial Services Commission, domestic systemically important banks, including Shinhan Bank, have been required to maintain an additional capital buffer of 0.25% since January 1, 2016, with such buffer increased by 0.25% annually to reach 1.00% as of January 1, 2019. The Financial Services Commission may also, upon quarterly review, determine and require banks to accumulate a required level of countercyclical capital buffer within the range of 0% to 2.5% of risk-weighted assets, taking into account factors such as the degree of increase in credit relative to the gross domestic product. In July 2021, Shinhan Financial Group, Hana Financial Group, KB Financial Group, NongHyup Financial Group and Woori Financial Group were designated by the Financial Services Commission as domestic systemically important bank holding companies, and Shinhan Bank, Hana Bank, Kookmin Bank, NongHyup Bank and Woori Bank were designated by the Financial Services Commission as domestic systemically important banks. In addition, in July 2021, the Financial Services Commission identified domestic systemically important bank holding companies and domestic systemically important banks as domestic systemically important financial institutions under the Act on the Structural Improvement of the Financial Industry. Domestic systemically important financial institutions are required to prepare and submit their own recovery plans to the Financial Supervisory Service within three months from the date of notification of designation pursuant to the Act on the Structural Improvement of the Financial Industry. However, there is no assurance that these measures will have the effect of curbing competition or that the Government will not reverse or reduce such measures or introduce other deregulatory measures, which may further intensify competition in the Korean financial services industry. For further details on the capital requirements applicable to us, see "Item 4.B. Business Overview - Supervision and Regulation — Principal Regulations Applicable to Financial Holding Companies — Capital Adequacy."

If, despite our efforts to adapt to the changing macroeconomic environment and comply with new regulations, we are unable to compete effectively in the changing business and regulatory environment, our profit margin and market share may erode and our future growth opportunities may become limited, which could adversely affect our business, financial condition and results of operations. See "Item 3.D. Risk Factors — Risks Relating to Our Overall Business — Competition in the Korean financial services industry is intense, and may further intensify" and "— Supervision and Regulation."

### **Description of Assets and Liabilities**

## Loans

As of December 31, 2022, our total gross loan portfolio was W417,827 billion, which represented an increase of 6.2% from W393,474 billion on December 31, 2021. The increase in our portfolio primarily reflects a 9.8% increase in corporate loans and an 0.9% increase in retail loans.

## Asset Quality Ratios

	As of December 31,					
	2020 2021				2022	
	(]	In billions o	of Wo	on, except p	ercer	ntages)
Total gross loans	₩3	360,804	₩3	393,474	₩	417,827
Total allowance for credit losses on loans	₩	3,061	₩	3,167	₩	3,651
Allowance for credit losses on loans as a percentage of total loans		0.85%	)	0.80%		0.87%
Impaired loans <sup>(1)</sup>	₩	2,011	₩	1,864	₩	2,084
Impaired loans as a percentage of total loans		0.56%	)	0.47%		0.50%
Allowance as a percentage of impaired loans		152.21%	)	169.90%		175.19%
Total non-performing loans <sup>(2)</sup>	₩	1,689	₩	1,826	₩	2,028
Non-performing loans as a percentage of total loans		0.47%	)	0.46%		0.49%
Allowance as a percentage of total assets		0.51%	)	0.49%		0.54%

### Notes:

- (1) Impaired loans include (i) loans for which the borrower has defaulted under Basel standards applicable during the relevant period and (ii) loans that qualify as "troubled debt restructurings" applicable during the relevant period.
- (2) Non-performing loans are defined as loans, whether corporate or retail, that are past due more than 90 days.

### Loan Types

The following table presents our loans by type as of the dates indicated. Except where specified otherwise, all loan amounts stated below are before deduction of allowance for credit losses on loans. Total loans reflect our loan portfolio, including past due amounts.

	As of December 31,			
	2020(6)	2021(6)	2022(6)	
	(1	n billions of Wo	n)	
Domestic:				
Corporate				
Corporate loans <sup>(1)</sup>	₩159,833	₩178,315	₩194,749	
Public and other <sup>(2)</sup>	3,735	3,469	3,897	
Loans to banks <sup>(3)</sup>	1,419	862	1,205	
Lease financing	1,689	1,497	682	
Total — Corporate	166,676	184,143	200,533	
Retail				
Mortgages and home equity	72,345	79,018	80,937	
Other retail <sup>(4)</sup>	65,627	69,459	67,571	
Total — Retail	137,972	148,477	148,508	
Credit cards	23,598	25,817	20,388	
Total domestic	328,246	358,437	369,429	

	As of December 31,			
	2020(6)	2021(6)	2022(6)	
	(I	n)		
Foreign:				
Corporate				
Corporate loans <sup>(1)</sup>	19,422	21,244	22,080	
Public and other <sup>(2)</sup>	—	—	—	
Loans to banks <sup>(3)</sup>	4,073	2,988	6,224	
Lease financing	84	93	113	
Total — Corporate	23,579	24,325	28,417	
Retail				
Mortgages and home equity	843	842	787	
Other retail <sup>(4)</sup>	7,975	9,687	11,122	
Total — Retail	8,818	10,529	11,909	
Credit cards	161	183	8,072	
Total foreign	32,558	35,037	48,398	
Total loans <sup>(5)</sup>	₩360,804	₩393,474	₩417,827	

Notes:

(1) Consists primarily of working capital loans, general purpose loans, bills purchased and trade-related notes and excludes loans to public institutions and commercial banks.

(2) Consists of working capital loans and loan facilities to public institutions and non-profit organizations.

(3) Consists of interbank loans and call loans.

(4) Consists of general unsecured loans and loans secured by collateral other than housing to retail customers.

(5) As of December 31, 2020, 2021 and 2022, 87.5%, 87.0% and 86.1% of our total gross loans, respectively, were Won-denominated.

(6) Loan amounts include loans at amortized cost and loans at fair value classified in accordance with IFRS 9. Corporate loans include loans at fair value in the amount of ₩2,017 billion, ₩1,683 billion and ₩2,389 billion as of December 31, 2020, 2021 and 2022, respectively.

## Loan Portfolio

The total exposure of us or our banking subsidiaries to any single borrower and exposure to any single group of companies belonging to the same conglomerate is limited by law to 25% of the Net Total Equity Capital (as defined in "— Supervision and Regulation").

## Twenty Largest Exposures by Individual Borrower

As of December 31, 2022, our 20 largest exposures, consisting of loans, securities and guarantees and acceptances, totaled W84,780.2 billion. The following table sets forth our total exposures to these top 20 borrowers as of December 31, 2022.

	As of December 31, 2022					
	Loans in Won Currency	Loans in Foreign Currency	Securities	Guarantees and Acceptances	Others	Total Exposure
			(In billions	of Won)		
Ministry of Economy & Finance	₩ 0.0	₩ —	₩34,240.9	₩ —	$\Psi$ —	₩34,240.9
Korea Housing Finance Corporation	0.0		9,027.9	—		9,027.9
Korea Development Bank	0.9	126.7	6,991.5	—	_	7,119.1
Bank of Korea	0.0		7,057.0	0.1		7,057.1
Industrial Bank of Korea	335.9	228.1	4,616.5	—		5,180.6
Export-Import Bank of Korea		25.3	2,455.4	70.2		2,551.0
LG Display	355.6	836.8	149.7	669.6		2,011.8
United States of America			1,888.1	—		1,888.1
Woori Bank	941.0	25.3	639.1	—		1,605.5
Nong Hyup Bank	599.5	138.5	664.3	64.4		1,466.8
Korea Land & Housing Corporation	0.0		1,450.6	—		1,450.6
Korea Expressway Corporation	0.0		1,374.5	—		1,374.5
KEB Hana Bank	557.5	187.1	584.8	31.4		1,360.8
NH Investment & Securities	815.2		529.1	—		1,344.3
Korea Electric Power Corporation	0.3		1,207.1	39.5		1,246.9
KB Bank	516.2	104.9	597.3	21.2		1,239.5
Hyundai Steel	340.7	458.6	381.5	22.6	0.0	1,203.5
SK Hynix	733.5	190.1	237.2	9.5		1,170.3
Lotte Hotel	100.5	375.5	320.8	362.7		1,159.4
Mirae Asset Securities	400.3	31.7	649.7			1,081.7
Total	₩5,697.4	₩2,728.7	₩75,063.0	₩1,291.1	₩0.0	₩84,780.2

### Exposure to Main Debtor Groups

As of December 31, 2022, our total exposure to the main debtor groups as identified by the Governor of the Financial Supervisory Service amounted to \$33,007.3 billion. The main debtor groups are largely comprised of *chaebols*. The following table shows, As of December 31, 2022, our total exposures to the 10 main debtor groups to which we have the largest exposure.

	As of December 31, 2022					
Main Debtor Groups	Loans in Won Currency	Loans in Foreign Currency	Securities	Guarantees and Acceptances	Others	Total Exposure
			(In billions	of Won)		
Hyundai Motors	₩ 904.8	₩2,879.4	₩ 1,786.6	₩ 670.5	₩0.1	₩ 6,241.4
Samsung	485.4	1,500.3	1,311.7	1,701.8	0.0	4,999.2
SK	1,730.9	930.1	1,479.5	495.6	0.0	4,636.1
Lotte	582.1	851.3	1,646.5	793.4	0.0	3,873.2
LG	768.7	1,027.6	974.7	1,031.3	0.0	3,802.3
Hyundai Heavy Industries	143.8	199.3	275.8	2,046.2	0.0	2,665.2
LS	318.3	762.8	199.9	877.5	0.0	2,158.5
Hanwha	213.9	431.3	861.9	623.2	0.0	2,130.3
GS	99.2	370.3	404.3	379.5	0.0	1,253.4
КТ	132.1	126.1	785.9	203.8	0.0	1,247.9
Total	₩5,379.2	₩9,078.5	₩ 9,726.7	₩8,822.8	₩0.1	₩33,007.3

### Loan Concentration by Industry

The following table shows the aggregate balance of our corporate loans by industry concentration as of December 31, 2022.

	As of December 31, 2022					
Industry	Aggregate Loan Balance	Percentage of Total Corporate Loan Balance				
	(In billions of Won)	(Percentages)				
Manufacturing	₩ 60,967	26.6%				
Real estate, leasing and service	49,915	21.8				
Retail and wholesale	28,364	12.4				
Finance and insurance	25,260	11.0				
Transportation, storage and						
communication	5,921	2.6				
Hotel and leisure	9,927	4.3				
Construction	5,057	2.2				
Other service <sup>(1)</sup>	25,360	11.1				
Other <sup>(2)</sup>	18,179	8.0				
Total	₩228,950	100%				

### Notes:

(1) Includes other service industries such as publication, media and education.

(2) Includes other industries such as agriculture, forestry, mining, electricity and gas.

### Maturity Analysis

The following table sets out the scheduled maturities (presented in terms of time remaining until maturity) of our loan portfolio as of December 31, 2022. The amounts below are before allowance for credit losses on

loans and deferred loan origination costs and fees. In the case of installment payment loans, maturities have been adjusted to take into account the timing of installment payments.

	As of December 31, 2022						
	1 Year or Less	Over 1 Year but Not More Than 5 Years	Over 5 Year but Not More Than 15 Years	Over 15 Years <sup>(1)</sup>	Total		
		(In	billions of Won)				
Corporate:							
Corporate loans	₩136,186	₩ 72,765	₩ 6,941	₩ 937	₩216,829		
Public and other	2,318	1,198	280	101	3,897		
Loans to banks	7,128	229	72		7,429		
Lease financing	243	547	5		795		
Total corporate	₩145,875	₩ 74,739	₩ 7,298	₩ 1,038	₩228,950		
Retail:							
Mortgage and home							
equity	₩ 17,491	₩ 22,792	₩17,779	₩23,662	₩ 81,724		
Other retail	44,479	20,533	4,459	9,222	78,693		
Total retail	₩ 61,970	₩ 43,325	₩22,238	₩32,884	₩160,417		
Credit cards	₩ 24,175	₩ 4,027	₩ 258	₩	₩ 28,460		
Total loans	₩232,020	₩122,091	₩29,794	₩33,922	₩417,827		

Note:

## (1) Includes overdue loans.

We may roll over our corporate loans (primarily consisting of working capital loans and facility loans) and retail loans (to the extent not payable in installments) after we conduct our standard loan reviews in accordance with our loan review procedures. Working capital loans may generally be extended on an annual basis for an aggregate term of up to five years. Facilities loans, which are generally secured, may generally be extended on an annual basis for a maximum of 15 years from the initial loan date. Retail loans may be extended for additional terms of up to 12 months for an aggregate term of ten years from the initial loan date for both unsecured loans and secured loans other than mortgages and home equity loans which can be extended up to 30 years in aggregate.

### Interest Rate Sensitivity

The following table presents a breakdown of our loans in terms of interest rate sensitivity as of December 31, 2022.

	As of December 31, 2022			
	Due Within 1 Year	Due After 1 Year	Total	
	(In billions of Won)			
Fixed rate loans <sup>(1)</sup>				
Corporate:				
Corporate loans	₩ 58,984	₩ 30,139	₩ 89,123	
Public and other	927	352	1,279	
Loans to banks	6,924	276	7,200	
Lease financing	65	65	130	
Total corporate	66,900	30,832	97,732	
Retail:				
Mortgage and home equity	137	3,015	3,152	
Other retail	6,516	6,955	13,471	
Total retail	6,653	9,970	16,623	
Credit cards	233	2	235	
Total fixed rate loans	73,786	40,804	114,590	
Variable rate loans <sup>(2)</sup>				
Corporate:				
Corporate loans	77,202	50,504	127,706	
Public and other	1,391	1,227	2,618	
Loans to banks	204	25	229	
Lease financing	178	487	665	
Total corporate	78,975	52,243	131,218	
Retail:				
Mortgage and home equity	17,354	61,218	78,572	
Other retail	37,963	27,259	65,222	
Total retail	55,317	88,477	143,794	
Credit cards	23,942	4,283	28,225	
Total variable rate loans	158,234	145,003	303,237	
Total loans	₩232,020	₩185,807	₩417,827	

Notes:

(1) Fixed rate loans are loans for which the interest rate is fixed for the entire term of the loan.

(2) Variable or adjustable rate loans are for which the interest rate is not fixed for the entire term of the loan.

For additional information regarding our management of interest rate risk, see "- Risk Management."

### Nonaccrual Loans and Past Due Accruing Loans

Except in the case of repurchased loans, we generally recognize interest income on nonaccrual loans using the rate of interest used to discount the future cash flows of such loans for the purpose of measuring impairment

loss. Generally, we discontinue accruing of interest on loans (other than repurchased loans) when payment of interest and/or principal becomes past due by 90 days. Loans (other than repurchased loans) are not reclassified as accruing until interest and principal payments are brought current.

We generally do not request borrowers to make immediate repayment of the whole outstanding principal balances and related accrued interest on loans whose interest payments are past due up to 14 days, 60 days, and 30 days in the case of commercial loans, mortgages and home equity loans and other retail loan, respectively.

Interest foregone is interest due on nonaccrual loans that has not been accrued in our books of account. In 2020, 2021 and 2022, we would have recorded gross interest income of  $\Psi$  59 billion,  $\Psi$ 66 billion and  $\Psi$ 92 billion, respectively, on loans accounted for on a nonaccrual basis throughout the respective years, or since origination for loans held for part of the year, had the loans been current with respect to their original contractual terms. The amount of interest income on those loans that was included in our net income in 2019, 2020 and 2021 were  $\Psi$ 33 billion,  $\Psi$ 30 billion and  $\Psi$ 46 billion, respectively.

The following table shows, at the dates indicated, the amount of loans that are placed on a nonaccrual basis and accruing loans which are past due one day or more. The term "accruing but past due one day" includes loans which are still accruing interest but on which principal or interest payments are contractually past due one day or more. We continue to accrue interest on loans where the total amount of loan outstanding, including accrued interest, is fully secured by cash on deposits.

	As of December 31,		
	2020	2021	2022
	(In	/on)	
Loans accounted for on a nonaccrual basis <sup>(1)</sup>			
Domestic:			
Corporate	₩ 874	₩ 780	₩ 848
Retail	438	384	521
Credit cards	88	68	74
Foreign:			
Corporate	265	340	432
Retail	29	43	36
Credit cards	18	44	35
Sub-total	1,712	1,659	1,946
Accruing loans which are contractually past due one day or more as to principal			
or interest			
Domestic:			
Corporate	279	114	256
Retail	609	550	912
Credit cards	413	344	610
Foreign:			
Corporate	50	51	34
Retail	52	44	55
Credit cards	18	39	45
Sub-total	1,421	1,142	1,912
Total	₩3,133	₩2,801	₩3,858

Note:

 "Troubled debt restructuring" and loans for which payment of interest and/or principal became past due by 90 days or more (adjusting for any overlap due to loans that satisfy both prongs so as to avoid double counting) may be included in loans accounted for on a nonaccrual basis.

### **Troubled Debt Restructurings**

The following table presents, at the dates indicated, our loans which are "troubled debt restructurings." These loans mainly consist of corporate loans that have been restructured through the process of workout and recovery proceedings. See "— Credit Exposures to Companies in Workout and Recovery Proceedings." These loans accrue interest at rates lower than the original contractual terms, or involve the extension of the original contractual maturity as a result of a variation of terms upon restructuring.

	As of December 31,					
	2020 2021		20	022		
	(In billions of Won)					
Loans classified as "troubled debt restructurings" (excluding nonaccrual and past						
due loans)	₩	96	₩	91	₩	30
Loans classified as "troubled debt restructurings" (including nonaccrual and past						
due loans)	₩	290	₩	237	₩	143

The following table presents, for the periods indicated and with respect to the restructured loans, the amounts that would have been recorded as our interest income under the original contract terms of the restructured loans, and the amounts that were actually recorded as our interest income for such loans under the restructured contractual terms of such loans.

		As of December 31,				
	2020 2021		202	2022		
	(In billions of Won)					
Interest income under the original contractual terms of the restructured loans <sup>(1)</sup>	₩	13	₩	10	₩	7
Interest income under the restructured contractual terms of the restructured						
loans <sup>(1)</sup>	₩	3	₩	2	₩	2

### Note:

(1) Includes nonaccrual and past due loans.

The following table presents a breakdown of the outstanding balance and specific allowance for credit losses on loans as of December 31, 2020, 2021 and 2022 of corporate loans classified as "troubled debt restructurings" (including nonaccrual and past due loans) by the type of restructuring to which such loans are subject.

			As of Dece	mber 31,		
	202	20	2021		2022	
	Outstanding Balance	Allowance	Outstanding Balance	Allowance	Outstanding Balance	Allowance
			(In billions of Won)			
Workout	<b>₩</b> 190	₩ 86	₩160	₩54	₩ 65	₩32
Recovery Proceedings	95	28	74	24	74	18
Others <sup>(1)</sup>	5	5	3		4	3
Total	₩290	₩119	₩237	₩78	₩143	₩53

Note:

(1) Principally consists of loans subject to corporate turnaround or corporate reorganization pursuant to the Debtor Rehabilitation and Bankruptcy Act (also known as the Consolidated Insolvency Act).

The following table presents the outstanding balance and specific allowance for credit losses on loans as of December 31, 2020, 2021 and 2022 of retail loans (including nonaccrual and past due loans) subject to credit rehabilitation programs for retail borrowers. All such loans became modified under credit rehabilitation programs and became beneficiaries of maturity extension and interest rate reductions, while a substantially limited portion of such loans also became beneficiaries of debt forgiveness and deferral. For more information on the credit

rehabilitation program, see "— Credit Exposures to Companies in Workout and Recovery Proceedings — Credit Rehabilitation Programs for Delinquent Consumer and Small- and Medium-sized Enterprise Borrowers."

			As of Dece	mber 31,		
	2020		2020 2021		202	2
	Outstanding Balance	Allowance	Outstanding Balance (In billions	Allowance s of Won)	Outstanding Balance	Allowance
Retail loans subject to credit rehabilitation programs <sup>(1)</sup>	₩148	₩81	₩125	₩49	₩249	₩129

Note:

(1) Includes nonaccrual and past due loans.

The following table presents, as of the dates indicated and with respect to corporate loans, the amounts of restructured loans that were considered impaired and classified as nonaccrual pursuant to our general interest accrual policy as described in "— Accrual Policy for Restructured Loans." The table also presents, for the periods indicated and with respect to corporate loans, the amounts of total charge-off on restructured loans and the amounts of charge-off as part of debt-to-equity conversions.

	As of and for	r the year ended	December 31,
	2020	2021	2022
	(In billions of Won)		
Impaired and nonaccrual restructured loans	₩194	₩146	₩113
Total charge-off of restructured loans	₩ 80	₩ 58	₩ 16
Charge-off as part of debt-to-equity conversion	₩ 59	₩ 32	$\Psi$ —

### Credit Exposures to Companies in Workout and Recovery Proceedings

Our credit exposures to restructuring are monitored and managed by our Corporate Credit Support Department. As of December 31, 2022, 0.03% of our total loans, or \$143 billion (of which \$113 billion was classified as nonaccrual and \$30 billion was classified as accruing), was under restructuring. Restructuring of our credit exposures generally takes the form of workout and recovery proceedings.

## Workout

The original Corporate Restructuring Promotion Act (Act No. 6504) was enacted on August 14, 2001 in order to facilitate the out-of-court restructuring of insolvent companies. This law expired on December 31, 2005, and new Corporate Restructuring Promotion Acts were enacted on August 3, 2007 (expired on December 31, 2010), May 19, 2011 (expired on December 31, 2013), January 1, 2014 (expired on December 31, 2015), March 18, 2016 (expired on June 30, 2018) and October 16, 2018 (to be expired on October 15, 2023, the new CRPA enacted and implemented on October 16, 2018 is hereinafter referred to as the "CRPA").

If the 'main Creditor Financial Institution' of a Failing Company provided notice of convening a Creditor Committee (defined below) on or before October 15, 2023, any proceedings commenced by such Creditor Committee will remain subject to the CRPA even after October 15, 2023 unless and until such proceedings are completed or discontinued.

The following is a summary of the key provisions of the CRPA. The CRPA applies to a financial creditor (the "Financial Creditor") who has financial claims against a debtor company by 'providing credit' to such debtor company or other third parties. "Provision of Credit" is defined in the CRPA as any transaction determined by the Financial Supervisory Commission to fall under any of the following:

- loans;
- purchase of promissory notes and debentures or bonds;

- equipment leasing;
- payment guarantees;
- providing advance payments on acceptances and guarantees under a payment guarantee;
- any direct or indirect financial transaction which may cause a loss to a counterparty as a consequence of a payment failure by a debtor company; or
- any transaction other than the transactions set out above which may have in substance the same effect as the transactions set out above.

The "debtor company" is defined under the CRPA as a company established under the Korean Commercial Code or other person performing profit-making activities. The Failing Company means a debtor company deemed, through a credit evaluation carried out in the manner set out in the CRPA, by its 'main Creditor Financial Institution' as having difficulty to repay debts to its financial creditor without external financial support or an additional loan (excluding loans obtained in the course of conducting normal financial transactions).

Once the debtor company is notified by the main Creditor Financial Institution to fall under the definition of Failing Company, such company may submit its business restructuring plan and the list of its Financial Creditors, and apply to such main Creditor Financial Institution for commencement of the management procedure to be assumed by a committee of Financial Creditors (the "Creditor Committee") or such main Creditor Financial Institution.

Under the CRPA, the main Creditor Financial Institution of a Failing Company is required to take or arrange one of the following actions if it determines that there is a possibility that the financial condition of the Failing Company may be rehabilitated or brought back to normal in accordance with its business restructuring plan:

- convocation of the first meeting of the Creditor Committee to decide whether to commence the management of the Failing Company by the Creditor Committee; or
- assumption of management of the Failing Company by the main Creditor Financial Institution.

Under the CRPA, in order to call for the first meeting of the Creditor Committee, the main Creditor Financial Institution is required to notify the Financial Creditors, the Failing Company and the Financial Supervisory Service. However, the main Creditor Financial Institution may omit the notification to some extent of the Financial Creditors who are set out in the CRPA such as a Financial Creditor who does not perform the financial business or a Financial Creditor who has only small claims against the Failing Company. The Financial Creditors who do not receive the notification from the main Creditor Financial Institution will be excluded from the Creditor Committee; provided that if they nevertheless want to attend the meeting, the main Creditor Financial Institution may not exclude such Financial Creditors. When the main Creditor Financial Institution calls for the first meeting of the Creditor Committee, it may require the Financial Creditors to grant a moratorium on the enforcement of claims (including the enforcement of security interests) until the end of the first meeting of the Creditor Committee. In addition, at the first meeting of the Creditor Committee, the Financial Creditors may resolve to declare a moratorium for up to one month (or three months if an investigation of the Failing Company's financial status is necessary) from the commencement date of the management procedure (which may be extended by one additional month by resolutions of the Creditor Committee).

The Financial Creditors who attend the first meeting of the Creditor Committee may resolve, among other things: (i) commencement of the management procedure, (ii) composition of the Financial Creditors who will participate in such management procedure and (iii) declaration of moratorium mentioned above.

Once the management procedure commences, the main Creditor Financial Institution is required to prepare the corporate restructuring plan of the Failing Company considering the investigation results of the Failing Company's financial status and submit such plan to the Creditor Committee for approval thereof. The corporate restructuring plan may include, among other things, the matters regarding rescheduling of debt owed by the Failing Company, provision of new credit and the business restructuring plan of the Failing Company. If the corporate restructuring plan is not approved by the date the moratorium period ends, the Creditor Committee's management of the Failing Company shall be deemed to have terminated.

The resolution at the Creditor Committee is generally passed by an approval of the Financial Creditors representing at least 75% of the outstanding credit to the Failing Company of the Financial Creditors who constitute the Creditor Committee; provided that if a single Financial Creditor holds at least 75% of the outstanding credit, the resolution shall be passed by an approval of not less than 40% of the total number of the Financial Creditors who constitute the Creditor Committee, including such single Financial Creditor. An additional approval of the Financial Creditors holding interests in 75% or more of the total amount of the secured claims owned by the Financial Creditors constituting the Creditor Committee against the Failing Company is required with respect to the debt rescheduling of the Failing Company.

A Financial Creditor which has opposed the resolutions of the Creditor Committee in respect of the commencement of management of the Failing Company by the Creditor Committee, establishment of or amendment to the corporate restructuring plan, extension of management procedure, the rescheduling of claims or provision of new credit (the "Opposing Financial Creditor") may, within seven days of such resolutions, request the main Creditor Financial Institutions to purchase its outstanding claims against the Failing Company, stating the type and number of claims. The Financial Creditors that have approved such resolutions (the "Approving Financial Creditors") shall jointly purchase such claims within six months of such request.

The purchase price and terms of such purchase shall be determined by mutual agreement of the Approving Financial Creditors and the Opposing Financial Creditor. Pending the agreement of such matters, the payments shall be made at a provisional price, and adjusting payments made once an agreement has been reached. If no such agreement is reached, then such matters shall be determined by the coordination committee established under the CRPA.

### Recovery Proceedings

Under the Debtor Rehabilitation and Bankruptcy Act, which took effect on April 1, 2006, court receiverships have been replaced with recovery proceedings. In a recovery proceeding, unlike court receivership proceedings where the management of the debtor company was vested in a court appointed receiver, the existing chief executive officer of the debtor company may continue to manage the debtor company, provided, that (i) neither fraudulent conveyance nor concealment of assets existed, (ii) the financial failure of the debtor company was not due to gross negligence of such chief executive officer, and (iii) no creditors' meeting was convened to request, based on reasonable cause, a court-appointed receiver to replace such chief executive officer. Recovery proceeding may be commenced by any insolvent debtor. Furthermore, in an effort to meet global standards, international bankruptcy procedures have been introduced in Korea under which a receiver of a foreign bankruptcy proceeding may, upon receiving Korean court approval of the ongoing foreign bankruptcy proceeding, apply for or participate in a Korean bankruptcy proceeding. Similarly, a receiver in a domestic recovery proceeding or a bankruptcy trustee is allowed to perform its duties in a foreign country where an asset of the debtor is located to the extent the applicable foreign law permits.

As of December 31, 2022, the total loan amount subject to recovery proceedings was W74 billion. No loan amount was subject to court receivership or composition proceedings.

Loans in the process of workout and recovery proceedings are reported as nonaccrual loans on our statements of financial position as described in "— Nonaccrual Loans and Past Due Accruing Loans" above since generally, they are past due by more than 90 days and interest does not accrue on such loans. Restructured loans that meet the definition of a troubled debt restructuring are reported as troubled debt restructurings as described above in "— Troubled Debt Restructurings." Such restructured loans are reported as either loans or securities on our statements of financial position depending on the type of instrument we receive as a result of the restructuring.

## Credit Rehabilitation Programs for Delinquent Consumer and Small- and Medium-sized Enterprise Borrowers

In light of the gradual increase in delinquencies in credit card and other consumer credit, the Government has implemented a number of measures intended to support the rehabilitation of the credit of delinquent consumer borrowers. These measures may affect the amount and timing of our collections and recoveries on our delinquent consumer credits.

The Credit Counseling and Recovery Service offers two programs for individual debtors, the pre-workout program and the individual workout program, both of which are available to individuals with total debt amounts of \$1.5 billion or less (secured debt amount of \$1 billion or less and unsecured debt amount of \$500 million or less). The pre-workout program is offered to individuals whose delinquency period is between 31 days and 89 days (including those whose delinquency period is between one day and 30 days but with annual income of \$40 million or less and cumulative delinquency period of 30 days or more within the year immediately preceding the application date), and the individual workout program is offered to individuals whose delinquency period is three months or more. When an individual debtor applies for the pre-workout or individual workout program, the Credit Counseling and Recovery Service will deliberate and resolve on a debt restructuring plan, and once the creditor financial institution that is in a credit recovery support agreement with the Credit Counseling and Recovery Service and holding the majority of each of the unsecured claims and secured claims to the relevant individual debtor agrees to such debt restructuring plan, the plan will be finalized and debt restructuring measures, such as extension of maturity, adjustment of interest rates or reduction of debt, will be taken according to the pre-workout program or individual workout program applied for.

Under the Debtor Rehabilitation and Bankruptcy Act, a qualified individual debtor with outstanding debts in an aggregate amount not exceeding threshold amounts of  $\mathbb{W}1$  billion of unsecured debt and/or  $\mathbb{W}1.5$  billion of secured debt may restructure his or her debts through a court-supervised debt restructuring that is binding on creditors.

Once a borrower is deemed to be eligible to participate in the pre-workout program, we promptly sell the collateral underlying such borrower's secured loans to mitigate our losses, and we may restructure such borrower's unsecured loans (regardless of their type) as follows:

- *Extension of maturity*: Based on considerations of the type of loan, the total loan amount, the repayment amount and the probability of repayment, the maturity of unsecured loans may be extended by up to 10 years and maturity of secured loans may be extended by up to 20 years with a grace period not exceeding three years.
- *Interest rate adjustment:* The interest rate of unsecured loans may be adjusted to 50% of the original interest rate within the range of the highest interest rate of 10% per annum and the lowest interest rate of 5% per annum; provided that if the original interest rate is less than 5% per annum, no adjustment applies. The adjusted interest rate applies to the principal amount following any adjustment thereto as part of the pre-workout program, and no interest accrues on the interest already accrued or fees payable.
- Debt forgiveness: Debt forgiveness under the pre-workout program is limited to the default interest.
- *Deferral*: If the foregoing three measures are deemed to be insufficient in terms of providing meaningful assistance to a qualifying borrower due to layoff, unemployment, business closure, disaster or earnings loss, loan repayment may be deferred for a maximum of three year, provided that the pre-workout committee may extend such deferral period every six months, for a period not to exceed six months, upon the borrower's application. The deferral period is not counted toward the repayment period, and interest accrues at 2% per annum during the deferral period.

In 2022, the aggregate amount of our retail credit (including credit card receivables) which became subject to the pre-workout program was  $\Psi$ 249 billion. We believe that our participation in such pre-workout program has not had a material impact on the overall asset quality of our retail loans and credit card portfolio or on our results of operations and financial condition to date.

#### Loan Modification Programs for Loans under Troubled Debt Restructuring

We generally offer the following types of concessions in relation to restructured loans: reduction of interest rate, forgiveness of overdue interest, extension of the term for repayment of principal, conversion of debt into equity or a combination of the foregoing. The nature and degree of such concessions vary depending on, among other things, the creditworthiness of the borrower, the size of loans being restructured, the existing terms of the loans and other factors deemed relevant by the relevant creditors' committee. We generally do not restructure an existing loan into multiple new loans. Recently, various Government-led financial support programs have been introduced in response to the COVID-19 pandemic, rising inflation and economic slowdown, such as loan rescheduling and principal and interest payment deferral programs, have helped financial institutions, including Shinhan Bank, manage their asset quality at a stable level. Such financial support programs have been introduced since April 1, 2020 and are available to small- and medium-sized enterprises and SOHOs that meet certain criteria, such as that they have not been delinquent on their prior loans and are not subject to liquidation or bankruptcy proceedings. Such financial support programs expired on September 30, 2022. However, the Government has decided, based on discussions with financial institutions, to provide further financial support to the debtors using the financial support programs as of the expiration date of such financial support programs in the forms of (i) the extension of loan maturity dates up to 3 years, (ii) the postponement of repaying loans up to 1 year until September 2023, or (iii) the rescheduling of loans under the New Start Fund set up by the Government on October 4, 2022 or loan rescheduling programs led by the financial institutions. Our participation in such Government initiatives may lead us to extend credit to small- and medium-sized enterprises and SOHOs that we would not otherwise extend, or offer terms on such credit that we would not otherwise offer, in the absence of such initiatives. There is no guarantee that the financial condition and liquidity of the small- and medium-sized enterprises benefiting from such initiatives will improve sufficiently for them to service their debt on a timely basis or at all. Accordingly, an increase in our exposure to small- and medium-sized enterprise borrowers resulting from such Government initiatives may have a material adverse effect on our financial condition and results of operations. We have classified the loans subject to loan rescheduling and principal and interest payment deferral under such financial support programs into stage 2 loans. For further details of our exposures due to such financial support programs, see Note 49 of the notes to our consolidated financial statements included in this annual report. For a discussion of expected credit losses related to the COVID-19 pandemic, see Note 4 of the notes to our consolidated financial statements included in this annual report.

The following table presents a breakdown of the gross amount of loans under restructuring as of December 31, 2020, 2021 and 2022 by our loan modification programs, as further categorized according to the loan category and performing versus non-performing status at each fiscal year end.

As of December :	31, 2020		
Modification Programs	Non-Performing	Performing	Total
	(In	billions of Won)	
Extension of due date for principal and			
interest	₩ 3	W =	₩ 3
Reduction of interest rate	29	186	215
Forgiveness of principal	_		
Equity conversion	_		—
Additional lending <sup>(1)</sup>	_	1	1
Others <sup>(2)</sup>	35	36	71
Total	₩67	₩223	₩290

As of December	31, 2021		
Modification Programs	Non-Performing	Performing	Total
	(In	billions of Won)	
Extension of due date for principal and			
interest	₩ 5	$\Psi$ —	₩ 5
Reduction of interest rate	16	156	172
Forgiveness of principal	_		_
Equity conversion	—		_
Additional lending <sup>(1)</sup>	—	—	
Others <sup>(2)</sup>	28	33	61
Total	₩49	₩189	₩238

As of December 31, 2022						
Modification Programs	Non-Performing	Performing	Total			
	(In	billions of Won)				
Extension of due date for principal and						
interest	₩13	<b>₩</b> 10	₩ 23			
Reduction of interest rate	6	61	67			
Forgiveness of principal	_		—			
Equity conversion	_		—			
Additional lending <sup>(1)</sup>	_		_			
Others <sup>(2)</sup>	40	13	53			
Total	₩59	₩84	₩143			

#### Notes:

- (1) Represents additional loans provided to the borrower at favorable terms as part of the restructuring package, which may include extension of the due date or reduction of interest rate, among others.
- (2) Principally consists of restructured loans whose restructuring terms were not determined as of the date indicated. A loan is deemed to be subject to restructuring upon the commencement of the recovery proceedings or when the relevant creditors' committee or our credit officer determines that the borrower will be subject to workout, and in many cases the restructuring terms for such loans are not determined at the time such loans are deemed to be subject to restructuring.

#### Debt-to-equity Conversion

We distinguish between loans that we consider to be collectible under modified terms and loans that we consider to be uncollectible regardless of any modification of terms. With respect to loans that are in the latter category, we convert a portion of such loans into equity securities following negotiation with the borrowers and charge off the remainder of such loans as further described below. The equity securities so converted are recorded at fair value, based on the market value of such securities if available or the appraisal value of such securities by an outside appraiser if a market value is unavailable. In 2022, the Bank did not have any loans restructured into equity securities.

Debt-to-equity conversion generally has two primary benefits. One, the debt-to-equity conversion reduces the amount of loans and related interest expenses of the borrower, resulting in lesser debt burden and greater liquidity for the borrower, a greater likelihood of its exit from restructuring and the repayment of its obligations to us. Two, in the case of a successful turnaround of the borrower, we are entitled to the upside gains from the increase in the value of the equity securities so converted. Notwithstanding these benefits, however, the resulting impact from the debt-to-equity conversion on our interest income is generally not material as the loans being converted as part of restructuring are generally deemed to be uncollectible regardless any modification of terms. As for the impact on our asset classification, we generally apply the same asset classification standards to both

non-restructured and restructured loans. As for restructured loans, we also consider additional factors such as the borrower's adherence to its business plans and execution of the self-help measures, among others, to the extent applicable. In consideration of such criteria, we generally classify loans subject to workout as "precautionary." For a general discussion of our loan classifications, see "Item 4.B. Business Overview — Supervision and Regulation — Principal Regulations Applicable to Financial Holding Companies — Capital Adequacy."

#### Evaluation of Loan Modification Programs

We currently do not conduct a systematic or quantitative evaluation of the success of any particular concession by type, whether historically, relative to each other or relative to other financial institutions in Korea, although we do monitor on an individual basis the compliance by the borrower with the modified terms of the restructured loans. This is principally due to the following reasons.

One, in the case of large corporations subject to or about to be subject to restructuring, which represents the most significant restructuring cases in Korea, the restructuring process is generally not driven by us, but by a creditors' committee involving several large creditor financial institutions, and in the case of very large corporations or corporations that are members of large business conglomerates, the process frequently involves the guidance of the Government in light of the potential ripple effects of the restructuring on the general economy. Hence, it is difficult for us to collect data that would help us to evaluate the success of a particular concession based on the credit profile of the borrower and the type of concessions offered.

Two, the unavailability of systematic analysis notwithstanding, our general sense is that the restructuring cases in Korea have, to a large part, been successful as measured in terms of the ability of the borrowers to exit restructuring programs relatively quickly and further that the failed cases have not been particularly material. As a result, to date, we have not found it particularly necessary or helpful to expend the time and resources required to conduct a systematic analysis for purposes of evaluating the success of concessions by the type of a particular concession offered.

We do, however, measure the success of concessions in limited ways, that is, principally in terms of how well the borrower complies with the terms and conditions of the restructuring plan as agreed between the borrower and its creditor institutions. A restructuring plan typically includes a business plan and self-help measures to be undertaken by the borrower. We monitor the borrower's compliance with the restructuring plan on a periodic basis (namely, annual, semiannual or quarterly in accordance with the terms of the restructuring plan) and evaluate the success thereof principally in terms of three attributes: (i) the progress in the execution of the business plan, (ii) the progress in the execution of the self-help measures and (iii) other qualitative factors such as major developments in the general economy, the regulatory environment, the competitive landscape, the quality of senior management and personnel, and transparency in management. We also closely monitor the cash inflows and outflows of the borrower, and the creditors' committee typically has the right to participate in decision-making related to major spending and borrowings by the borrower.

### Accrual Policy for Restructured Loans

For purposes of our accrual policy, we classify restructured loans principally into (i) loans subject to workout pursuant to the Corporate Restructuring Promotion Act and (ii) loans subject to recovery proceedings pursuant to the Debtor Rehabilitation and Bankruptcy Act, which is the comprehensive bankruptcy-related law in Korea. See "— Credit Exposures to Companies in Workout and Recovery Proceedings." As for loans subject to workout, our general policy is to discontinue accruing interest on a loan when payment of principal and/or interest thereon becomes past due by 90 days or more, as described above in "— Nonaccrual Loans and Past Due Accruing Loans". Interest is recognized on these loans on a cash basis (i.e., when collected) from the date such loan is reclassified as non-accruing, and such loans are not reclassified as accruing until the overdue principal and/or interest amounts are paid in full. This general policy also applies to loans subject to workout even if such loans are restructured loans. In the case of loans subject to recovery proceedings, we discontinue accruing

interest immediately upon the borrowers becoming subject to recovery proceedings (even if such loans are not yet delinquent) in light of the heightened uncertainty regarding the borrower's ability to repay. Interest on such loans is recognized on a cash basis and such loans are not reclassified as accruing until the borrower exits recovery proceedings. Accordingly, under our accrual policy, the number of payments made on a nonaccrual restructured loan is not a relevant factor in determining whether to reinstate such loan to the accrual status.

#### Determination of Performance of Restructured Loans

In determining whether a borrower has satisfactorily performed its obligations under the existing loan terms, we principally review the payment history of the borrower, namely whether the borrower has been delinquent by one day or more pursuant to our general interest accrual policy. In determining whether a borrower has shown the capacity to continue to perform under the restructured terms, we primarily rely upon the assessment of our credit officers (or the creditors' committee in the case of large corporate borrowers with significant outstanding loans) of the likelihood of the borrower's ability to repay under the restructured terms, which assessment takes into account the size of the loans in question, the credit profile of the borrower, the original terms of the loans and other factors deemed relevant by the relevant credit officers. Depending on various factors such as the size of the loans in question and the credit profile of the borrower, we or the relevant creditors' committee, as the case may be, sometimes engage an outside advisory firm to perform further due diligence in order to supplement the aforementioned assessment. In certain cases, the borrowers also submit self-help proposals to facilitate obtaining the approval for restructuring, which measures are then also taken into consideration by our credit officers or the relevant creditors' committees, as the case may be, in determining their future capacity to continue to perform under the restructured terms.

#### Charge-off of Restructured Loans

As for loans that we consider to be collectible under modified terms (for example, by extending the due date for the payment of principal and/or interest or reducing the interest rate below the applicable interest rate to a rate below the prevailing market rate, or a combination of the foregoing), we generally restructure such loans under the modified terms and do not charge off any portion of such loans.

As for loans that we consider to be uncollectible regardless of any modification of terms, we negotiate with the borrower to have a portion of such loans converted into equity securities (usually common stock) of the borrower in consideration, among others, of (i) the degree to which such conversion will alleviate the debt burdens and liquidity concerns of the borrower, (ii) our potential upside from the gain in the value of the equity securities compared to the likelihood of collection if the loans were not converted into equity securities, and (iii) the borrower's concerns regarding its shareholding structure subsequent to such conversion. We then charge off the remainder of the loans not converted into equity securities. The value of the equity securities so converted is recorded at fair value, based on the market value of such securities if available or the appraisal value of such securities by an outside appraiser if a market value is unavailable.

Since we generally do not accrue interest on loans subject to recovery proceedings while we generally accrue interest on loans subject to workout unless past due by 90 days or more, charge-off is not a relevant factor we consider when determining the accrual status of a particular restructured loan.

We continue to accrue interest on restructured loans if we conclude that repayment of interest and principal contractually due on the entire debt is reasonably assured. Such conclusion is reached only after we have carefully reviewed the borrower's ability to repay based on an assessment, among others, of various factors such as the size of the loans in question and the credit quality of the borrower by our credit officer or the relevant creditors' committee as supplemented by the due diligence by outside advisory firms, as the case may be.

#### **Potential Problem Loans**

We operate an "early warning system" in order to enable a more systematic and real-time monitoring of loans with significant potential of default. This system assists our management in making decisions by identifying loans which have serious doubt as to the ability of the borrowers to comply with their respective loan repayment terms as well as loans with significant potential of non-repayment.

We classify potential problem loans as loans that are designated as "early warning loans" and reported to the Financial Supervisory Service. The "early warning loans" designation applies to borrowers that have been (i) identified by our early warning system as exhibiting signs of credit risk based on the relevant borrower's financial data, credit information and/or transactions with banks and, following such identification and (ii) designated by our loan officers as potential problem loans on their evaluation of known information about such borrowers' possible credit problems. Such loans are required to be reported on a quarterly basis to the Financial Supervisory Service. If a borrower's loans are designated as "early warning loans" pursuant to the process described above and included in our quarterly report to the Financial Supervisory Service, we consider this to be an indication of serious doubt as to such borrower's ability to comply with repayment terms in the near future. As of December 31, 2022, we had **W**132 billion of potential problem loans.

### **Provisioning Policy**

#### Loans

We conduct periodic and systematic detailed reviews of our loan portfolios to identify credit risks and to establish the overall allowance for credit losses on loans. Our management believes the allowance for credit losses on loans reflects the best estimate of the expected credit losses as of the date of each statement of financial position.

At each reporting date, we assess whether the credit risk on a financial instrument has increased significantly since initial recognition. When making the assessment, we use the change in the risk of a default occurring over the expected life of the financial instrument instead of the change in the amount of expected credit losses. Upon assessment, each asset is classified as in one of the following three stages, which is used as the basis of calculating the loss allowances at the 12-month expected credit losses ("ECL") or the lifetime ECL, depending on the stage.

	Category	Provision for credit loss allowance
Stage 1	When credit risk has not increased significantly since the initial recognition	12-months ECL: The ECL associated with the probability of default events occurring within the next 12 months
Stage 2	When credit risk has increased significantly since the initial recognition	Lifetime ECL: A lifetime ECL associated with the probability of default events occurring over the
Stage 3	When assets are impaired	remaining lifetime

To make that assessment, we compare the risk of default of the financial instrument as at the reporting date with such risk of default as at the date of initial recognition, taking into account reasonable supporting information that is available without undue cost or effort and is indicative of significant increases in credit risk since initial recognition. Supporting information also includes historical default data held by us and analysis conducted by internal credit risk rating specialists.

We assign an internal credit risk rating to each individual exposure based on observable data and historical experiences that have been found to have a reasonable correlation with the risk of default. The internal credit risk rating is determined by considering both qualitative and quantitative factors that indicate the risk of default, which may vary depending on the nature of the exposure and the type of borrower.

We accumulate information after analyzing the information regarding exposure to credit risk and default information by the type of product and borrower as well as results of internal credit risk assessment. For some portfolios, we use information obtained from external credit rating agencies when performing these analyses. We apply statistical techniques to estimate (i) the probability of default for the remaining life of the exposure from the accumulated data and (ii) the changes in the estimated probability of default over time.

We use the indicators defined as per portfolio to determine the significant increase in credit risk. Such indicators generally consist of changes in the risk of default estimated from changes in the internal credit risk rating, qualitative factors, days of delinquency and others.

We consider a financial asset to be in default if it meets one or more of the following conditions:

- if a borrower is overdue 90 days or more from the contractual payment date, or
- if we determine that it is not possible to recover principal and interest without enforcing the collateral on a financial asset.

We use the following indicators when determining whether a borrower is in default:

- qualitative factors (e.g., breach of contract terms),
- quantitative factors (e.g., if the same borrower does not perform more than one payment obligations to us, the number of days past due per payment obligation. However, in the case of a specific portfolio, we use the number of days past due for each financial instrument), and
- internal and external data.

The definition of default applied by us generally conforms to the definition of default defined for regulatory capital management purposes. However, depending on the situation, the information used to determine whether default has incurred and the extent thereof may vary.

We measure expected credit losses on a forward-looking basis, and expected credit losses reflects information presented by internal experts based on a variety of sources. For purposes of estimating such forward-looking information, we utilize economic outlook and projections published by domestic and overseas research institutes or government and public agencies.

We reflect future macroeconomic conditions anticipated from a bias-free, neutral standpoint in measuring expected credit losses. Expected credit losses in this respect reflect conditions that are most likely to occur and are based on the same assumptions that we use in our business plan and management strategy.

Key variables used in measuring expected credit losses are as follows:

- Probability of default (PD)
- Loss given default (LGD)
- Exposure at default (EAD)

These variables have been estimated from historical experience data by using statistical techniques developed internally by Shinhan Bank and have been adjusted to reflect forward-looking information. When measuring expected credit losses on financial assets, Shinhan Bank reflects a period of expected credit loss measurement based on a contractual maturity. Shinhan Bank takes into consideration the extension rights held by a borrower when deciding the contractual maturity.

Risk factors such as PD, LGD and EAD are collectively estimated according to the following criteria:

- Type of products,
- Internal credit risk rating,
- Type of collateral,

- Loan-to-value ratio,
- Industry that the borrower belongs to,
- Location of the borrower or collateral, and
- Days of delinquency.

The criteria for classification of groups are periodically reviewed to maintain homogeneity of the group and are adjusted if necessary. We use external benchmark information to supplement internal information for a particular portfolio that does not have sufficient internal data accumulated from the past experience.

### Credit Cards

Prior to 2017, we established an allowance for the credit card portfolio using a roll-rate model. A roll-rate model is a statistical tool used to monitor the progression of loans based on aging of the balance and established loss rates. The actual loss rates derived from this model are used to project the percentage of losses within each aging category based on performance over a five-year look-back period. Basel II requires a minimum of nine years of data collection (consisting of a minimum five-year observation period for defaults and a minimum four-year observation period for post-default recoveries) as a necessary condition to using the internal model approach. After its merger with LG Card in 2007, Shinhan Card has worked to establish a risk management system and met the Basel II nine-year data collection requirement in October 2016. Through the operation of a credit review system and risk management system based on Basel II requirements, we have gained the necessary data to create internal models that can calculate PD/LGD and credit conversion factors for different groups of borrowers of financial assets.

At the end of December 2016, the Financial Supervisory Service granted Shinhan Card final approval to use the internal model approach. During the first quarter of 2017, Shinhan Card completed the establishment of the IFRS loan loss calculation system, for example, by replacing Basel II risk components with risk components for financial reporting in accordance with IAS 39, and Shinhan Card revised the calculation methodology of loan losses from a roll-rate model to an internal model approach.

The internal model approach calculates separate default rates and loss given default for different groups of customers, differentiated based on the characteristics of both the customers and the products that they use. The internal model approach disaggregates customers into more than twice the number of groups than does the roll-rate model. Whereas the roll-rate model does not distinguish between customers with high and low risks of default when calculating roll rates, the internal model approach allows for a more sophisticated calculation of loan loss that reflects the customers' credit ratings.

Our general policy is to be proactive in our collection procedures, and we therefore emphasize collections at an early stage of delinquency, although we increase the level of collection efforts as the delinquency period increases with respect to the relevant account. Efforts to collect from cardholders whose account balances are up to 30 days past due are generally made by our credit support centers at Shinhan Card.

For credit card accounts with balances that are more than 30 days past due, we generally assign collection to collection companies such as Shinhan Credit Information, a subsidiary of ours, and Mirae Credit Information. For credit card accounts that are charged off, we outsource collection to collection companies such as Shinhan Credit Information Services Corp. and Koryo Credit Information.

## Loan Aging Schedule

The following table shows our loan aging schedule (excluding accrued interest) for all loans as of the dates indicated.

	Curr	Current Past Due Up to 3 Months					Past Due Than 6 N		Total
As of December 31,	Amount	%	Amount	%	Amount	%	Amount	%	Amount
			(In bill	ions of <b>V</b>	Von, excep	t percent	tages)		
2020	357,729	99.15	1,386	0.38	769	0.21	920	0.26	360,804
2021	390,297	99.19	1,351	0.34	773	0.20	1,053	0.27	393,474
2022	413,887	99.06	1,912	0.46	923	0.22	1,105	0.26	417,827

## Non-Performing Loans

Non-performing loans are defined as loans past due by more than 90 days. The following table shows, as of the dates indicated, the amount of the total non-performing loan portfolio and as a percentage of our total loans.

	As	of December 31	,	
	2020 2021 2022			
	(In billions of Won, except percentages)			
Total non-performing loans	₩1,689	₩1,826	₩2,028	
As a percentage of total loans	0.47%	0.46%	0.49%	

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The following table sets forth, for the periods indicated, the total non-performing loans by the borrower type.

				As	As of December 31,	1,			
		2020			2021			2022	
	Total Loans	Non- Performing Loans <sup>(1)</sup>	Ratio of Non- Performing Loans	Total Loans	Non- Performing Loans <sup>(1)</sup>	Ratio of Non- Performing Loans	Total Loans	Non- Performing Loans <sup>(1)</sup>	Ratio of Non- Performing Loans
				(In billions of	(In billions of Won, except percentages)	ercentages)			
Domestic: Cornorate									
Corporate loans	<del>W</del> 159,833	<del>W</del> 465	0.29%	<del>W</del> 178,315	₩ 468	0.26%	<del>W</del> 194,749	<del>W</del> 513	0.26%
Public and other <sup>(2)</sup>	3,735	14	0.37	3,469	13	0.37	3,897	10	0.26
Loans to banks	1,419			862			1,205		
Lease financing	1,689	11	0.65	1,497	L	0.47	682	9	0.88
Total corporate	166,676	490	0.29	184,143	488	0.27	200,533	529	0.26
Retail									
Mortgage and home equity	72,345	63	0.09	79,018	56	0.07	80,937	69	0.09
Other retail	65,627	380	0.58	69,459	455	0.66	67,571	557	0.82
Total retail	137,972	443	0.32	148,477	511	0.34	148,508	626	0.42
Credit cards	23,598	458	1.94	25,817	427	1.65	20,388	494	2.42
Total domestic	328,246	1,391	0.42	358,437	1,426	0.40	369,429	1,649	0.45
Foreign:	32,558	298	0.92	35,037	400	1.14	48,398	379	0.78
Total	<del>W</del> 360,804	<del>W</del> 1,689	$\frac{0.47\%}{==}$	<del>W</del> 393,474	<del>W</del> 1,826	0.46%	<del>W</del> 417,827	<del>W</del> 2,028	$\frac{0.49\%}{==}$

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Notes:

(1) The number of days past due of restructured credit card loans is calculated from the first date of non-payment regardless of subsequent modification of terms.

(2) Includes debtors such as local and regional authorities, state-owned enterprises and non-profit organizations.

# Non-Performing Loans by Industry

The following table sets forth a breakdown of our non-performing corporate loans by industry as of December 31, 2022.

Industry	Aggregate Non- Performing Corporate Loan Balance	Percentage of Total Non-Performing Corporate Loan Balance	
	(In billions of Won)	(Percentages)	
Construction	₩ 24	2.9%	
Manufacturing	127	15.2	
Real estate, leasing and service	68	8.1	
Retail and wholesale	48	5.7	
Finance and insurance	42	5.0	
Hotel and leisure	28	3.3	
Transportation, storage and			
communication	29	3.5	
Other service <sup>(1)</sup>	46	5.5	
Other <sup>(2)</sup>	426	50.8	
Total	₩838	100.0%	

### Notes:

(1) Includes other service industries such as publication, media and education.

(2) Includes other industries such as agriculture, forestry, mining, electricity and gas.

## Top 20 Non-Performing Loans

As of December 31, 2022, our 20 largest non-performing loans accounted for 31.3% of our total non-performing loan portfolio. The following table shows, at the date indicated, certain information regarding our 20 largest non-performing loans.

		As of December 31, 2022		
		Industry	Gross Principal Outstanding	Allowance for credit losses on loans
		(In billions of Won)		
1	Borrower A	Other service	₩134	₩ —
2	Borrower B	Other service	125	98
3	Borrower C	Other service	78	_
4	Borrower D	Other service	56	56
5	Borrower E	Other service	38	_
6	Borrower F	Other service	35	_
7	Borrower G	Finance and insurance	25	15
8	Borrower H	Other service	19	11
9	Borrower I	Real estate, leasing and service	17	4
10	Borrower J	Finance and insurance	15	15
11	Borrower K	Transportation, storage, and		
		communication	14	11
12	Borrower L	Other service	13	_
13	Borrower M	Real estate, leasing and service	12	_
14	Borrower N	Transportation, storage, and		
		communication	11	9
15	Borrower O	Real estate, leasing and service	10	1
16	Borrower P	Hotel and leisure	10	4

		As of Decemb		
		Industry	Gross Principal Outstanding	Allowance for credit losses on loans
		(In billions	s of Won)	
	Borrower Q	Real estate, leasing and service	7	2
	Borrower R	Manufacturing	6	1
)	Borrower S	Real estate, leasing and service	5	_
)	Borrower T	Retail and wholesale	5	2
			₩635	₩229

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## Non-Performing Loan Strategy

One of our primary objectives is to prevent our loans from becoming non-performing. Through our corporate credit rating system, which is designed to prevent our loan officers from extending new loans to borrowers with high credit risks based on the borrower's credit rating, we seek to reduce credit risk related to future non-performing loans. Our early warning system is designed to bring any sudden increase in a borrower's credit risk to the attention of our loan officers, who then closely monitor such loans.

If a loan becomes non-performing notwithstanding such preventive mechanism, an officer at the branch level responsible for monitoring non-performing loans will commence due diligence on the borrower's assets, send a notice demanding payment or a notice that we will take or prepare for legal action.

At the same time, we also initiate our non-performing loan management process, which includes:

- identifying loans subject to a proposed sale by assessing the estimated losses from such sale based on the estimated recovery value of collateral, if any, for such non-performing loans;
- ٠ identifying loans subject to charge-off based on the estimated recovery value of collateral, if any, for such non-performing loans and the estimated rate of recovery of unsecured loans; and
- to a limited extent, identifying commercial loans subject to normalization efforts based on the cashflow situation of the borrower.

Once the details of a non-performing loan are identified, we pursue early solutions for recovery. Actual recovery efforts for non-performing loans are handled by the relevant department, depending on the nature of such loans and the borrower, among others. The officers or agents of the responsible departments and units use a variety of methods to resolve non-performing loans, including:

- making phone calls and paying visits to the borrower to request payment;
- continuing to assess and evaluate assets of our borrowers; and
- if necessary, initiating legal action such as foreclosures, attachment and litigation. •

In order to promote speedy recovery on loans subject to foreclosures and litigation, the branch responsible for handling these loans may transfer them to the relevant unit at headquarters.

Our policy is to commence legal action within one month after default on promissory notes and four months after delinquency of payment on other types of loans. For loans to insolvent or bankrupt borrowers or when we conclude that it is not possible to recover through normal procedures, we take prompt legal actions regardless of the grace period.

In addition to making efforts to collect on these non-performing loans, we take other measures to reduce the level of our non-performing loans, including:

selling non-performing loans to third parties including the Korea Asset Management Corporation;

- entering into asset-backed securitization transactions with respect to non-performing loans;
- managing retail loans that are three months or more past due through Shinhan Credit Information under an agency agreement; and
- using third-party collection agencies including credit information companies.

In 2022, we sold non-performing loans in the amount of  $\Psi$ 40 billion to third parties, including  $\Psi$ 25 billion transferred to UAMCO, Ltd., an investment management company. Loans transferred to third parties meet the criteria of true sale and are derecognized accordingly.

The following table presents a roll-forward of our non-performing loans in 2022.

Non-performing loans as of December 31, 2021	(In billions of Won) $\underline{\texttt{W}1,826}$
Additional non-performing loans due to delinquency	915
Loans sold	(40)
Loans charged off	(439)
Loans modified and returned to performing	(15)
Other adjustments <sup>(1)</sup>	(219)
Non-performing loans as of December 31, 2022	₩2,028

#### Note:

(1) Represents loans paid down or paid off and loans returned to performing other than as a result of modification. We do not separately collect and analyze data relating to non-performing loans other than those that were sold, charged off, modified and returned to performing, or transferred to held-for-sale investment portfolio.

## Loan Charge-offs

Our gross charge-offs decreased by 2.8% from \$1,185 billion in 2021 to \$1,152 billion in 2022, primarily due to a decrease in the amount of charge-offs for corporate loans in 2022 compared to 2021. Our gross charge-offs decreased by 2.9% from \$1,220 billion in 2020 to \$1,185 billion in 2021, primarily due to a decrease in the amount of charge-offs for corporate loans in 2021 compared to 2020.

In 2022, the charge-off on restructured loans amounted to  $\mathbb{W}16$  billion. With respect to a loan that we consider to be uncollectible regardless of any modification of terms, we convert a portion of such loan into equity securities following negotiation with the borrower and charge off the remainder of such loan as previously discussed in "— Troubled Debt Restructurings — Charge-off of Loans Subject to Restructuring." The equity securities so converted are recorded at fair value, based on the market value of such securities if available or the appraisal value of such securities by an outside appraiser if a market value is unavailable.

We attempt to minimize loans to be charged off by practicing a sound credit approval process based on credit risk analysis prior to extending loans and a systematic management of outstanding loans. For charge-off of restructured loans, see "— Loan Modification Programs for Loans under Restructuring — Charge-off of Restructured Loans" above.

#### Loans to be Charged-off

Loans are charged off if they are deemed to be uncollectible by falling under any of the following categories:

• loans for which collection is not foreseeable due to insolvency or bankruptcy, dissolution or the termination of the debtor's business;

- loans for which collection is not foreseeable due to the death or disappearance of debtors;
- · loans for which collection expenses exceed the collectible amount;
- loans for which collection is not possible through legal or any other means;
- payments in arrears in respect of credit cards that are overdue for more than six months;
- payments outstanding on unsecured retail loans that are overdue for more than 12 months;
- payments in arrears in respect of leases that are overdue for more than 12 months;
- the portion of loans classified as "estimated loss," net of any recovery from collateral, which is deemed to be uncollectible; or
- domestic loans that are required by the Financial Supervisory Service to be charged-off, or loans held by our foreign subsidiaries or branches for which a charge-off or special provisioning is required by the relevant regulatory authority.

## Timeline for Charge-off

Shinhan Bank's loans to be charged-off must be charged-off within one year of the month they are deemed to be uncollectible. If such loans are not charged-off within one year, the reason for the delay must be reported to Shinhan Bank's Audit Department.

#### Procedure for Charge-off Approval

An application for Shinhan Bank's loans to be charged-off is submitted by the relevant branch or department to the Credit Collection Department. The Credit Collection Department refers the application to the Audit Department for their review to ensure compliance with Shinhan Bank's internal procedures for charge-offs. The Credit Collection Department, after reviewing the application to confirm that it meets relevant requirements, seeks approval from the Financial Supervisory Service for the charge-offs, which is typically granted. Once the Financial Supervisory Service approves (except for household loans with estimated losses of \$10 million or less, whose charge-off is considered automatically approved by the Financial Supervisory Service), loans are charged-off upon approval by the President of Shinhan Bank. As for Shinhan Card, it generally charges off receivables that are 180 days past due following internal review.

#### Treatment of Loans Charged-off

Once loans are charged off, they are derecognized from our statements of financial position and are classified as charged-off loans. We continue collection efforts in respect of these loans through third-party collection agencies, including the Korea Asset Management Corporation, and Shinhan Credit Information, which is our subsidiary. The General Manager of the Credit Collection Department must report to the Financial Supervisory Service the amounts of loans permanently written off or recovered during each reporting period.

#### Treatment of Collateral

When we determine that a loan collateralized by real estate cannot be recovered through normal collection channels, we generally petition a court to foreclose and sell the collateral through a court-supervised auction within one month after default and insolvency and within four months after delinquency. However, this procedure does not apply to companies under restructuring, recovery proceedings, workout or other court proceedings where there are restrictions on such auction procedures. Filing of such petition with the court generally encourages the debtor to repay the overdue loan. If a debtor ultimately fails to repay and the court grants its approval for foreclosure, we sell the collateral and recover the principal amount and interest accrued up to the sales price, net of expenses incurred from the auction. Foreclosure proceedings under the laws and regulations of Korea typically take seven months to one year from initiation to collection depending on the nature of the collateral.

#### Financial Statement Presentation

Our financial statements generally report as charge-offs all unsecured retail loans that are overdue for more than 12 months. Leases are charged off when past due for more than 12 months. For collateral dependent loans, we charge off the excess of the book value of the subject loan over the amount received or to be received from the sale of the underlying collateral when the collateral is sold as part of a foreclosure proceeding and its sale price becomes known through court publication as part of such proceeding.

## Net Charge-offs

The following table sets forth, for the periods indicated, the net charge-offs.

	As of December 31,									
		2020			2021			2022		
	Average Loan	Net Charge- Offs	Ratio	Average Loan	Net Charge- Offs	Ratio	Average Loan	Net Charge- Offs	Ratio	
~ .	(In bill			ions of Won, ex	cept percei					
Domestic: Corporate										
Corporate										
loans	₩152,819	₩252	0.16%	₩169,539	₩215	0.13%	₩187,098	<b>₩</b> 197	0.11%	
Public and										
other	3,583	3	0.08	3,608	—		3,569	1	0.03	
Loans to banks	1,446	—	—	1,470	—	—	1,117	—		
Lease		• •								
financing	1,758	20	1.14	1,565	21	1.34	485	8	1.65	
Total										
corporate	159,606	275	0.17	176,182	236	0.13	192,269	206	0.11	
Retail										
Mortgage and										
home equity	61,189	3		65,778	15	0.02	70,306	2	0.00	
Other retail	68,495	153	0.22	75,992	140	0.18	81,744	109	0.13	
Total retail	129,684	156	0.12	141,770	155	0.11	152,050	111	0.07	
Credit cards	20,781	380	1.83	21,792	351	1.61	23,761	363	1.53	
Total domestic	310,071	811	0.26	339,744	742	0.22	368,080	680	0.18	
Foreign:	34,617	59	0.17	37,447	55	0.15	41,005	90	0.22	
Total	₩344,688	₩870	0.25%	₩377,191	₩797	0.21%	₩409,085	₩770	0.19%	

#### **Investment Portfolio**

### **Investment Policy**

We invest in and trade Won-denominated and, to a lesser extent, foreign currency-denominated securities for our own account in order to:

- maintain the stability and diversification of our assets;
- · maintain adequate sources of back-up liquidity to match our funding requirements; and
- supplement income from our core lending activities.

When making an investment decision with respect to particular securities, we consider macroeconomic trends, industry analysis and credit evaluation, among others.

Our securities investment activities are subject to a number of regulatory guidelines, including limitations prescribed under the Financial Holding Companies Act and the Banking Act. Generally, a financial holding company is prohibited from acquiring more than 5% of the total issued and outstanding shares of another finance-related company (other than its direct and indirect subsidiaries). Furthermore, under these regulations, Shinhan Bank must limit its investments in shares and securities with a maturity in excess of three years (other than monetary stabilization bonds issued by the Bank of Korea and national government bonds) to 100.0% of the sum of Tier I and Tier II capital (less any deductions) of Shinhan Bank. Generally, Shinhan Bank is also prohibited from acquiring more than 15.0% of the shares with voting rights issued by any other corporation (other than for the purpose of establishing or acquiring a subsidiary). Further information on the regulatory environment governing our investment activities is set out in "— Supervision and Regulation — Principal Regulations Applicable to Banks — Restrictions on Investments in Property," "— Principal Regulations Applicable to Banks — Restrictions on Shareholdings in Other Companies," "— Principal Regulations Applicable to Financial Holding Companies — Liquidity" and "— Principal Regulations Applicable to Financial Holding Companies — Liquidity" and "— Principal Regulations Applicable to Financial Holding Companies — Liquidity" and "— Principal Regulations Applicable to Financial Holding Companies — Liquidity" and "— Principal Regulations Applicable to Financial Holding Companies — Liquidity" and "— Principal Regulations Applicable to Financial Holding Companies — Liquidity" and "— Principal Regulations Applicable to Financial Holding Companies — Liquidity" and "— Principal Regulations Applicable to Financial Holding Companies in Other Companies."

## **Book Value and Fair Value**

The following tables set out the book value and fair value of investments in our investment portfolio as of the dates indicated.

$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
Value         Securities at fair value through other comprehensive income       W       907       ₩       907       ₩       1,031       ₩       1,568       ₩       1,568         Debt securities: Korean treasury and governmental       Korean treasury an
Securities at fair value through other comprehensive income         Equity securities
comprehensive incomeEquity securities
Debt securities: Korean treasury and governmental
Korean treasury and governmental
agencies 17,834 17,834 23,742 23,742 23,591 23,591
Debt securities issued by financial
institutions
Corporate debt securities
Debt securities issued by foreign
government 1,536 1,536 1,945 1,945 3,607 3,607
Mortgage-backed and asset-backed
securities
Total — Securities at fair value through
other comprehensive income₩58,316 ₩58,316 ₩64,838 ₩64,838 ₩63,662 ₩63,662
Securities at amortized cost
Debt securities:
Korean treasury and governmental
agencies
Debt securities issued by financial
institutions
Corporate debt securities
Debt securities issued by foreign
government 1,118 1,245 1,254 798 1,439 947
Mortgage-backed and asset-backed
securities 6,331 6,373 6,523 3,910 6,906 3,794
Total — Securities at amortized cost $\overline{\mathbf{W}47,283}$ $\overline{\mathbf{W}49,454}$ $\overline{\mathbf{W}49,930}$ $\overline{\mathbf{W}49,605}$ $\overline{\mathbf{W}57,971}$ $\overline{\mathbf{W}51,543}$

	As of December 31,					
	20	20	20	21	2022	
	Book Value	Fair Value	Book Value	Fair Value	Book Value	Fair Value
			(In billion	s of Won)		
Financial assets at fair value through						
profit or loss						
Equity securities	₩ 1,736	₩ 1,736	₩ 2,375	₩ 2,375	₩ 2,624	₩ 2,624
Debt securities:						
Korean treasury and governmental						
agencies	4,038	4,038	3,557	3,557	3,832	3,832
Debt securities issued by financial						
institutions	14,013	14,013	13,627	13,627	11,636	11,636
Corporate debt securities	19,181	19,181	21,245	21,245	17,260	17,260
Debt securities issued by foreign						
governments	210	210	404	404	473	473
Mortgage-backed and asset-backed						
securities	595	595	265	265	338	338
Other debt securities <sup>(1)</sup>	17,050	17,050	19,130	19,130	17,990	17,990
Sub-total — Securities at fair value	56,823	56,823	60,603	60,603	54,153	54,153
Others:						
Loans at fair value	2,017	2,017	1,683	1,683	2,389	2,389
Due from banks at fair value	63	63	34	34	26	26
Gold/Silver deposits	188	188	84	84	76	76
Total — Financial assets at fair value						
through profit or loss	₩59,091	₩59,091	₩62,404	₩62,404	₩56,644	₩56,644

Note:

(1) Other debt securities included puttable equity investment, beneficiary certificates and restricted reserve for claims of customers' deposits (trusts) classified as debt instruments in accordance with IFRS 9.

## Maturity Analysis

The following table categorizes our securities at amortized cost by maturity and weighted average yield as of December 31, 2022.

		As of December 31, 2022								
	1 Year	or Less	Over 1 but within 5 Years		Over 5 but within 10 Years		Over 10 Years		Total	
	Carrying Amount	Weighted Average Yield <sup>(1)</sup>	Carrying Amount	Weighted Average Yield <sup>(1)</sup>		Weighted Average Yield <sup>(1)</sup>	Carrying Amount	Weighted Average Yield <sup>(1)</sup>		Weighted Average Yield <sup>(1)</sup>
				(In billio	ns of Won,	except per	centages)			
Korean treasury securities and										
government agencies	₩4,553	1.57%	₩12,600	2.90%	₩7,010	3.66%	₩12,769	2.35%	₩36,932	2.69%
Debt securities issued by financial										
institutions	642	4.90	5,226	3.84	98	5.11	798	3.10	6,764	3.87
Corporate debt securities	473	2.15	2,262	3.76	817	3.59	2,378	3.00	5,930	3.30
Debt securities issued by foreign										
governments	233	3.64	429	3.70	164	7.33	613	2.78	1,439	3.72
Mortgage-backed securities and asset-										
backed securities	582	1.95	2,838	2.13	1,814	2.85	1,672	2.37	6,906	2.36
Total	₩6,483	2.05%	₩23,355	3.11%	₩9,903	3.58%	₩18,230	2.48%	₩57,971	2.88%

#### Note:

(1) The weighted-average yield for the portfolio represents the yield to maturity for each individual security, weighted using its amortized cost.

#### **Concentrations of Risk**

The following table presents securities held by us whose aggregate book value exceeded 10% of our stockholders' equity as of December 31, 2022. As of December 31, 2022, 10% of our stockholders' equity was \$5,113 billion.

	As of December 31, 2022		
	Book Value Fair Valu		
	(In billion	s of Won)	
Name of issuer:			
Ministry of Strategy and Finance	₩61,823	₩58,541	
The Korea Development Bank	7,087	7,001	
The Bank of Korea	8,077	8,078	
The Korea Housing Finance Corp	8,953	8,196	
Industrial Bank of Korea	5,396	5,394	

All of the above entities are either an agency of the Government or an entity controlled by the Government.

## **Credit-Related Commitments and Guarantees**

In the normal course of our operations, we make various commitments and guarantees to meet the financing and other business needs of our customers. Commitments and guarantees are usually in the form of, among others, commitments to extend credit, commercial letters of credit, standby letters of credit and performance guarantees. The contractual amount of these financial instruments represents the maximum possible loss amount if the account party draws down the commitment or we should fulfill our obligation under the guarantee and the account party fails to perform under the contract.

The following table sets forth our credit-related commitments and guarantees as of the dates indicated.

	As of December 31,				
	2020	2021	2022		
	(1	In billions of Wo	n)		
Commitments to extend credit	₩ 99,512	₩101,055	₩107,848		
Commercial letters of credit	2,700	3,505	3,138		
Others <sup>(1)</sup>	108,040	113,723	119,543		
Total	₩210,252	₩218,283	₩230,529		

Note:

(1) Consists of financial guarantees, performance guarantees, liquidity facilities to special purpose entities, acceptances, guarantee on trust accounts, endorsed bills and unused credit limits on credit cards.

We have credit-related commitments that are not reflected in our statements of financial position, which primarily consist of commitments to extend credit and commercial letters of credit. Commitments to extend credit, including credit lines, represent unfunded portions of authorizations to extend credit in the form of loans. These commitments expire on fixed dates and a customer is required to comply with predetermined conditions to draw funds under the commitments. Commercial letters of credit are undertakings on behalf of customers authorizing third parties to make drawdowns up to a stipulated amount under specific terms and conditions. They are generally short-term and collateralized by the underlying shipments of goods to which they relate.

We also have guarantees that are recorded on our statements of financial position at their fair value at inception which are amortized over the life of the guarantees. Such guarantees generally include standby letters of credit, other financial and performance guarantees and liquidity facilities to special purpose entities. Standby letters of credit are irrevocable obligations to pay third-party beneficiaries when our customers fail to repay loans or debt instruments, which are generally in foreign currencies. A substantial portion of these standby letters of credit is secured by collateral, including trade-related documents. Other financial and performance guarantees are irrevocable assurances that we will pay beneficiaries if our customers fail to perform their obligations under certain contracts. Liquidity facilities to special purpose entities are irrevocable commitments to provide contingent liquidity credit lines to special purpose entities established by our customers in the event that a triggering event such as shortage of cash occurs.

The commitments and guarantees do not necessarily represent our exposure since they often expire unused.

#### Derivatives

As discussed under "— Our Principal Activities — Other Banking Services — Derivatives Trading" above, we engage in derivatives trading activities primarily on behalf of our customers so that they may hedge their risks and also enter into back-to-back derivatives with other financial institutions to cover exposures arising from such transactions. In addition, we enter into derivatives transactions to hedge against risk exposures arising from our own assets and liabilities, some of which are non-trading derivatives that do not qualify for hedge accounting treatment.

The following table shows, As of December 31, 2022, the gross notional or contractual amounts of
derivatives held or issued for (i) trading and (ii) non-trading that qualify for hedge accounting.

	As of December 31, 2022		
	Underlying Notional Amount <sup>(1)</sup>	Estimated Fair Value Assets	Estimated Fair Value Liabilities
	(In	billions of Wo	n)
Trading:			
Foreign exchange derivatives: Future and forward contracts	₩130,264	₩3,090	₩2,840
Swaps	40,558	1,626	1,807
Options	1,328	15	14
Sub-total	172,150	4,731	4,661
Interest rate derivatives:			
Future and forward contracts	2,784	2	1
Swaps	131,974	773	1,063
Options	227	5	2
Sub-total	134,985	780	1,066
Credit derivatives:			
Swaps	5,155	424	19
Sub-total	5,155	424	19
Equity derivatives:			
Swaps and forward contracts	4,009	170	394
Options	2,322	14	147
Future contracts	2,443	31	100
Sub-total	8,774	215	641
Commodity derivatives:			
Swaps and forward contracts	898	11	137
Options	8		1
Future contracts	70	3	1
Sub-total	976	14	139
Total	₩322,040	₩6,164	₩6,526
Non-trading:			
Hedge accounting:			
Foreign exchange derivatives:			
Swaps	₩ 4,647	₩ 158	₩ 72
Future and forward contracts	1,250	23	38
Sub-total	5,897	181	110
	5,071		
Interest rate derivatives:			
	16,475	117	1,069

Note:

<sup>(1)</sup> Notional amounts in foreign currencies were converted into Won at prevailing exchange rates as of December 31, 2022.

#### Funding

We obtain funding from a variety of sources, both domestic and foreign. Our principal source of funding is customer deposits obtained from our banking operations, and we from time to time issue equity and debt securities, including preferred shares. In addition, our subsidiaries acquire funding through call money, borrowings from the Bank of Korea, other short-term borrowings, corporate debentures and other long-term debt, including debt and equity securities issuances, asset-backed securitizations and repurchase transactions, to complement, or if necessary, replace funding through customer deposits. For further details relating to funding by us and our subsidiaries, see "Item 5.B. Liquidity and Capital Resources."

#### **Deposits**

Although the majority of our bank deposits are short-term, the majority of our depositors have historically rolled over their deposits at maturity, providing our banking operation with a stable source of funding.

The following table shows the average balances of our deposits and the average rates paid on our deposits for the periods indicated, and the outstanding balances of uninsured deposits as of the ends of periods indicated.

	2020		20	021	2022		
	Average Balance <sup>(1)</sup>	Average Rate Paid	Average Balance <sup>(1)</sup>	Average Rate Paid	Average Balance <sup>(1)</sup>	Average Rate Paid	
		(In	billions of Won	, except percenta	iges)		
Non-interest-bearing							
deposits:	₩ 3,908		₩ 4,818		₩ 5,390		
Interest-bearing deposits:							
Demand deposits	₩ 50,751	0.33%	₩ 65,907	0.32%	₩ 68,656	0.47%	
Savings deposits	91,474	0.32	106,172	0.23	108,419	0.40	
Time deposits	154,516	1.46	153,718	1.05	174,029	2.04	
Other deposits	8,482	1.42	11,180	0.91	17,169	1.97	
Total interest-bearing							
deposits	₩305,223	0.93%	₩336,977	0.65%	₩368,273	1.26%	
	2020		2021		2022		
Uninsured deposits	¥	₹242,927		ns of Won) ₩275,519	<del>/</del>	₩288,754	

Note:

(1) Average balances are based on (a) daily balances of Shinhan Bank and (b) quarterly balances for other subsidiaries.

For a breakdown of deposit products, see "— Our Principal Activities — Deposit-taking Activities," except that cover bills sold are recorded on short-term borrowings and securities sold under repurchase agreements are recorded as secured borrowings.

## Uninsured Time Deposits

The following table shows the amount of time deposits that exceed the insurance limit as of December 31, 2022, and the amount of time deposits that are otherwise uninsured, segregated by remaining maturity as of December 31, 2022.

	As of December 31, 2022
	(In billions of Won)
Portion of Time deposits in excess of insurance	
limit:	₩98,427
Time deposits otherwise uninsured with a maturity of:	
Maturing within three months	₩24,459
After three but within six months	9,798
After six but within 12 months	19,416
After 12 months	4,262
Total	₩57,935

			2020					2021					2022		
	Balance Outstanding (	Highest Average Balance at Balance Any Outstanding Outstanding <sup>(1)</sup> Month-end	Highest V Balances at Any Month-end	Weighted Average Interest Rate <sup>(2)</sup>	Year-end Interest Rate	Balance Outstanding C	Highest V Average Balances at Balance Balance Any Outstanding Outstanding Outstanding	Highest Weighted Balances at Average Any Interest Month-end Rate <sup>(2)</sup>	Weighted Average Interest Rate <sup>(2)</sup>	Y ear-end Interest Rate	Highest T Average Balances at Balance Balance Any Outstanding Outstanding <sup>(1)</sup> Month-end	Average Balance Dutstanding <sup>(1)</sup>	Highest Weighted Balances at Average Any Interest Month-end Rate <sup>(2)</sup>	Weighted Average Interest Rate <sup>(2)</sup>	Year-end Interest Rate
							(In billions of Won, except for percentages)	Von, except fc	or percents	ages)					
Borrowings from The Bank of Korea <sup>(3)</sup>	<del>W</del> 5,351 W 3,479 W 5,351 0.30%	₩ 3,479	<del>W</del> 5,351	0.30%	0.25%	0.25% <del>W</del> 5,278 <del>W</del> 5,310 <del>W</del> 5,545 0.25%	<del>W</del> 5,310 <sup>-</sup>	<del>W</del> 5,545	0.25%		<del>W</del> 5,100	<del>W</del> 5,082	<del>W</del> 5,157	0.62%	0.25% <b>W</b> 5,100 <b>W</b> 5,082 <b>W</b> 5,157 0.62% 0.25 - 1.75%
Call money	. 1,760	1,221	1,760	1.60	0.35 - 0.55	1,535	1,575	2,015	2,015 1.31	(0.30) –	1,276	2,301	3,750	3,750 2.65	0.00 - 6.30
borrowings <sup>(4)</sup>	. 24,360	25,401	27,347	1.05 0	1.05  0.00 - 12.45	28,559	25,602 28,559	28,559		0.75 (0.49) - 12.29	34,002	33,757	38,263		1.73  0.00 - 21.20
	<del>W</del> 31,471	<u>W31,471</u> <u>W30,101</u> <u>W34,458</u>	<del>W</del> 34,458	$\frac{0.98\%}{}$		<del>W</del> 35,372	<del>W</del> 32,487 <del>W</del> 36,119	<del>W</del> 36,119	0.70%		<del>W</del> 40,378	<del>W</del> 41,140	<del>W</del> 47,170	1.65%	
Notes:															
(1) Average balances are based on (a) daily balances of Shinhan Bank and (b) quarterly balances for other subsidiaries.	es are base	ed on (a) (	daily bal:	ances o ed by d	of Shinhan	Bank and	(b) quart	erly bala	inces fu	or other subs	idiaries.				
	n the Ban	k of Kore igs includ	a general led bond:	lly mat s sold u	ure within inder repur	one montl chase agr	h for borr eements ;	rowings and borr	in Wol owing:	n and six mo	and forei	u. orrowing gn curre	ss in fore ncies.	ign cur	rencies.
Our short-term borrowings have maturities of less than one year and are generally unsecured with the exception of borrowings from the Bank of	orrowing	s have maturit	aturities (	of less	es of less than one year and are	ear and an	e general	generally unsecured with	ured w	ith the excep	exception of borrowir	orrowing	s from th	ie Bank	t of

Short-term Borrowings

Korea, which are generally secured with securities at fair value through other comprehensive income or at amortized cost held by us.

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#### **Risk Management**

#### Overview

As a financial services provider, we are exposed to various risks relating to our lending, credit card, insurance, securities investment, trading and leasing businesses, our deposit taking and borrowing activities and our operating environment. The principal risks to which we are exposed are credit risk, market risk, interest rate risk, liquidity risk and operational risk. These risks are recognized, measured and reported in accordance with risk management guidelines established at our holding company level and implemented at the subsidiary level through a carefully stratified checks-and-balances system.

We believe that our risk management system has been instrumental to building our reputation as a wellmanaged and prudent financial service provider and withstanding various external shocks. In particular, during the global financial crisis of 2008 and 2009, we believe our risk management provided effective early warning signals which helped us to proactively reconfigure our asset portfolio and substantially reduce our exposure to troubled debtors and thereby avoid what could have been a substantially greater credit loss during such crisis, and we are carefully upgrading and refining our risk management system in the face of current and potential economic difficulties at global, regional and domestic levels.

Our group-wide risk management philosophy is to instill a culture of effective risk management and awareness at all levels of our organization and pursue a proper balance between risk and return in our business activities in order to achieve a sustainable growth. In particular, our group-wide risk management is guided by the following core principles:

- carrying out all business activities within prescribed risk tolerance levels and prudently balancing profitability and risk management;
- standardizing the risk management process and monitoring compliance at a group-wide level;
- operating a prudent risk management decision making system backed by active participation by management;
- creating and operating a risk management organization independent of business activities;
- operating a performance management system that enhances clear and prompt identification of risks when making business decisions;
- · aiming to achieve preemptive and practical risk management; and
- prudent preparation for known and unknown contingencies.

We take the following steps to implement the foregoing risk management principles:

- risk capital management Risk capital refers to capital necessary to compensate for losses in case of
  a potential risk being realized, and risk capital management refers to the process of asset management
  based on considerations of risk exposure and risk appetite for our total assets so that we can maintain
  an appropriate level of risk capital. As part of our risk capital management, we and our subsidiaries
  have adopted and maintain various risk planning processes and reflect such risk planning in our
  business and financial planning. We also maintain a risk limit management system to ensure that risks
  in our business do not exceed prescribed limits.
- *risk monitoring* We proactively, preemptively and periodically review risks that may impact our overall operations, including through a multidimensional risk monitoring system. Currently, each of our subsidiaries is required to report to the holding company any factors that could have a material impact on group-wide risk management, and the holding company reports to our chief risk officer and other members of our senior management the results of risk monitoring weekly, monthly and on an *ad hoc* basis as needed. In addition, we perform preemptive risk management through a "risk dashboard

system" under which we closely monitor any increase in asset size, risk levels and sensitivity to external factors with respect to the major asset portfolios of each of our subsidiaries, and to the extent such monitoring yields any warning signals, we promptly analyze the causes and, if necessary, formulate and implement actions in response thereto.

- *risk review* Prior to entering any new business, offering any new products or changing any major policies, we review any relevant risk factors based on a prescribed risk management checklist and, in the case of changes for which assessment of risk factors is difficult, perform reasonable decision-making in order to avoid taking any unduly risky action. The risk management departments of all our subsidiaries are required to review all new businesses, products and services prior to their launch and closely monitor the development of any related risks following their launch, and in the case of any action that involves more than one subsidiary, the relevant risk management departments are required to consult with the risk management team at the holding company level prior to making any independent risk reviews.
- *crisis management* We maintain a group-wide risk management system to detect the early warning signals of any crisis and, in the event of a crisis actually happening, to respond on a timely, efficient and flexible basis so as to ensure our survival as a going concern. Each of our subsidiaries maintains crisis planning for three levels of contingencies, namely, "alert," "imminent crisis" and "crisis," determination of which is made based on quantitative and qualitative monitoring and consequence analysis, and upon the occurrence of any such contingency, is required to respond according to a prescribed contingency plan. At the holding company level, we maintain and install a crisis detection and response system which is applied consistently group-wide, and upon the occurrence of an "imminent crisis" or "crisis" event at a subsidiary level, we directly take charge of the situation at the holding company level so that we manage it on a concerted group-wide basis.

#### Organization

Our risk management system is organized along the following hierarchy (from top to bottom): at the holding company level, the Group Risk Management Committee, the Group Risk Management Council, the Group Chief Risk Officer and the Group Risk Management Team, and at the subsidiary level, the Risk Management Committee, the Chief Risk Officer and the Risk Management Team of the relevant subsidiary. The Group Risk Management Committee, which is under the supervision of our holding company's board of directors, sets the basic group-wide risk management policies and strategies. Our Group Chief Risk Officer reports to the Group Risk Management Committee, and the Group Risk Management Council coordinates the risk management policies and strategies at the group level as well as at the subsidiary level among each of our subsidiaries. Each of our subsidiaries also has a separate Risk Management Committee, Risk Management Working Committee and Risk Management Team, whose tasks are to implement the group-wide risk management policies and strategies at the subsidiary level as well as to set risk management policies and strategies specific to such subsidiary in line with the group-wide guidelines. We also have the Group Risk Management Team, which supports our Chief Risk Officer in his or her risk management and supervisory role.

In order to maintain the group-wide risk at an appropriate level, we use a hierarchical risk limit system under which the Group Risk Management Committee assigns reasonable risk limits for the entire group and each of our subsidiaries, and the Risk Management Committee and the Risk Management Working Committee of each of our subsidiaries manage the subsidiary-specific risks by establishing and managing risk limits in more detail by type of risk and type of product for each department and division within such subsidiary. Further details follow.

At the holding company level:

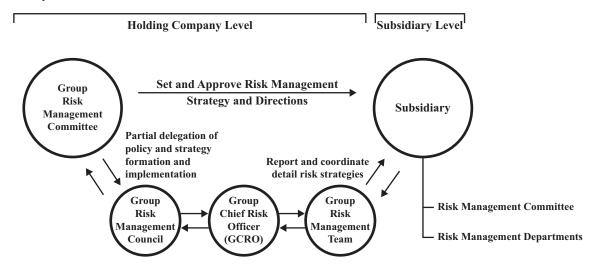
 Group Risk Management Committee — The Group Risk Management Committee consists of four outside directors of our holding company. The Group Risk Management Committee convenes at least quarterly and on an *ad hoc* basis as needed. Specifically, the Group Risk Management Committee does the following: (i) establish the overall risk management policies consistent with management strategies, (ii) set reasonable risk limits for the entire group and each of our subsidiaries, (iii) approve appropriate investment limits or permissible loss limits, (iv) enact and amend risk management regulations, and (v) decide other risk management-related issues the board of directors or the Group Risk Management Committee sees fit to discuss. The results of the Group Risk Management Committee meetings are reported to the board of directors of our holding company. The Group Risk Management Committee makes decisions through affirmative votes by a majority of the committee members.

- Group Risk Management Council Comprised of the Group Chief Risk Officer and Chief Risk
  Officers of each of our subsidiaries, the Group Risk Management Council provides a forum for risk
  management executives from each subsidiary to discuss our group-wide risk management guidelines
  and strategy in order to maintain consistency in the group-wide risk policies and strategies.
- Group Chief Risk Officer The Group Chief Risk Officer assists the Group Risk Management Committee by implementing the risk policies and strategies as well as ensuring consistency in the risk management systems of our subsidiaries. Furthermore, the Group Chief Risk Officer evaluates the Chief Risk Officer of each subsidiary in addition to monitoring the risk management practices of each subsidiary.
- *Group Risk Management Team* This team provides support and assistance to the Group Chief Risk Officer in carrying out his or her responsibilities.

At the subsidiary level:

- *Risk Management Committee* In order to maintain group-wide risk at an appropriate level, we have established a hierarchical risk limit system where the Group Risk Management Committee establishes risk limits for us and our subsidiaries, and each of our subsidiaries establishes and manages risk limits in more detail by type of risk and type of product for each department and division within such subsidiary. In accordance with the group risk management policies and strategies, the Risk Management Committee at the subsidiary level establishes its own risk management policies and strategies in more detail and the respective risk management department implements those policies and strategies.
- *Risk Management Team* The Risk Management Team, operating independently from the business units of each of our subsidiaries, monitors, assesses, manages and controls the overall risk of its operations and reports all major risk-related issues to the Group Risk Management Team at the holding company level, which then reports to the Group Chief Risk Officer.

The following is a flowchart of our risk management system at the holding company level and the subsidiary level.



#### **Credit Risk Management**

Credit risk, which is the risk of loss from default by borrowers, other obligors or other counterparties to the transactions that we have entered into, is the greatest risk we face. Our credit risk management encompasses all areas of credit that may result in potential economic loss, including not just transactions that are recorded on our balance sheets, but also off-balance-sheet transactions such as guarantees, loan commitments and derivatives transactions. A substantial majority of our credit risk relates to the operations of Shinhan Bank and Shinhan Card.

#### **Credit Risk Management of Shinhan Bank**

Shinhan Bank's credit risk management is guided by the following principles:

- achieve a profit level corresponding to the level of risks involved;
- improve asset quality and achieve an optimal mix of asset portfolios;
- avoid excessive loan concentration in a particular borrower or sector;
- closely monitor the borrower's ability to repay the debt; and
- provide financial support to advance the growth of select customers.

Major policies for Shinhan Bank's credit risk management, including Shinhan Bank's overall credit risk management plan and credit policy guidelines, are determined by the Risk Policy Committee of Shinhan Bank, the executive decision-making body for management of credit risk. The Risk Policy Committee is headed by the Chief Risk Officer, and also comprises of the Chief Credit Officer and the heads of each business unit. In order to separate the loan approval functions from credit policy decision-making, Shinhan Bank has a Credit Review Committee that performs credit review evaluations with a focus on improving the asset quality of and profitability from the loans being made and operates separately from the Risk Policy Committee. Both the Risk Policy Committee and the Credit Review Committee make decisions by a vote of two-thirds or more of the attending members of the respective committees, which must constitute at least two-thirds of the respective committee members to satisfy the respective quorum.

Shinhan Bank complies with credit risk management procedures pursuant to internal guidelines and regulations and continually monitors and improves these guidelines and regulations. Its credit risk management procedures include:

- credit evaluation and approval;
- credit review and monitoring; and
- credit risk assessment and control.

#### Credit Evaluation and Approval

All loan applicants and guarantors are subject to credit evaluation before approval of any loans. Credit evaluation of loan applicants is carried out by senior officers of Shinhan Bank specifically charged with granting loan approvals. Loan evaluation is carried out by a group rather than by an individual reviewer through an objective and deliberative process. Credit ratings of loan applicants and guarantors influence loan interest rates, the level of internal approval required, credit exposure limits, calculation of potential losses and estimated cost of capital, and therefore are determined objectively and independently by the relevant business unit. Shinhan Bank uses a credit scoring system for retail loans and a credit-risk rating system for corporate loans.

Each of Shinhan Bank's borrowers is assigned a credit rating, which is based on a comprehensive internal credit evaluation system that considers a variety of criteria. For retail borrowers, the credit rating takes into account the borrower's biographic details, past dealings with Shinhan Bank and external credit rating information, among other things. For corporate borrowers, the credit rating takes into account financial indicators such as industry risk, operational risk and management risk, among other things. The credit rating, once assigned, serves as the fundamental instrument for Shinhan Bank's credit risk management, and is applied to a wide range of credit risk management processes, including credit approval, credit limit management, loan pricing and computation of allowance for credit losses on loans. Shinhan Bank has separate credit evaluation systems for retail customers, SOHO customers and corporate customers, which are further segmented and refined to meet Basel II requirements, which requirements have not changed under Basel III.

#### Retail Loans

Loan applications for retail loans are reviewed in accordance with Shinhan Bank's credit scoring system and the objective statistics models for secured and unsecured loans maintained and operated by Shinhan Bank's Retail Banking Division. Shinhan Bank's credit scoring system is an automated credit approval system used to evaluate loan applications and determine the appropriate pricing for the loan, and takes into account factors such as a borrower's personal information, transaction history with Shinhan Bank and other financial institutions and other relevant credit information. The applicant is assigned a score, which is used to determine (i) whether to approve the applicant's loan, (ii) the amount of loan to be granted, and (iii) the interest rates thereon. The applicant's score also determines whether the applicant is approved for credit, conditionally approved, subject to further assessment, or denied. If the applicant becomes subject to further assessment, the appropriate discretionary body, either at the branch level or at the headquarter level, makes a reassessment based on qualitative as well as quantitative factors, such as credit history, occupation and past relationship with Shinhan Bank.

For mortgage and home equity loans and loans secured by real estate, Shinhan Bank evaluates the value of the real estate offered as collateral using a proprietary database, which contains information about real estate values throughout Korea. In addition, Shinhan Bank uses up-to-date information provided by third parties regarding the real estate market and property values in Korea. While Shinhan Bank uses internal staff from the processing centers to appraise the value of the real estate collateral, Shinhan Bank also hires certified appraisers to review and co-sign the appraisal value of real estate collateral that have an appraisal value exceeding W3 billion, as initially determined by the processing centers. Shinhan Bank also reevaluates internally, on a summary basis, the appraisal value of collateral at least every year.

For loans secured by securities, deposits or other assets other than real estate, Shinhan Bank requires borrowers to observe specified collateral ratios in respect of secured obligations.

#### Corporate Loans

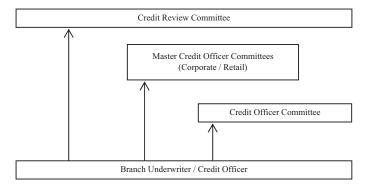
Shinhan Bank rates all of its corporate borrowers using internally developed credit evaluation systems. These systems consider a variety of criteria (quantitative, qualitative, financial and non-financial) in order to standardize credit decisions and focus on the quality of borrowers rather than the size of loans. The quantitative considerations include the borrower's financial and other data, while the qualitative considerations are based on the judgment of Shinhan Bank's credit officers as to the borrower's ability to repay. Financial considerations include financial variables and ratios based on customer's financial statements, such as return on assets and cash flow to total debt ratios, and non-financial considerations include, among other things, the industry to which the borrower's businesses belong, the borrower's competitive position in its industry, its operating and funding capabilities, the quality of its management and controlling stockholders (based in part on interviews with its officers and employees), technological capabilities and labor relations.

In addition, in order to enhance the accuracy of its internal credit reviews, Shinhan Bank also considers reports prepared by external credit rating services, such as Nice Information Service and Korea Rating & Data (KoDATA), and monitors and improves the effectiveness of the credit risk-rating systems using a database that it updates continually with actual default records.

Based on the scores calculated under the credit rating system, which takes into account the evaluation criteria described above and the probability of default, Shinhan Bank assigns the borrower one of 23 grades (from the highest of AAA to the lowest of-D3). Grades AA through B are further broken down into "+", "0" or "-." Grades AAA through B- are classified as normal, grade CCC precautionary, and grades CC through D3 non-performing. The credit risk-rating model is further differentiated by the size of the corporate borrower and the type of credit facilities.

#### Loan Approval Process

Loans are generally approved after evaluations and approvals by the relationship manager at the branch level as well as the committee of the applicable business unit at Shinhan Bank. The approval limit for retail loans is made based on Shinhan Bank's automated credit scoring system. In the case of large corporate loans, approval limits are also reviewed and approved by a Credit Officer at the headquarter level. Depending on the size and the importance of the loan, the approval process is further reviewed by the Credit Officer Committee or the Master Credit Officer Committee. If the loan is considered significant or the amount exceeds the discretion limit of the Master Credit Officer Committee, further evaluation is made by the Credit Review Committee, which is Shinhan Bank's highest decision-making body in relation to credit approval. The Credit Review Committee's evaluation and approval of loan limits vary depending on the borrower's credit ratings as determined by Shinhan Bank's internal credit rating system and the borrower's size of business. For example, for borrowers with a credit rating of B-, the Credit Review Committee evaluates and approves unsecured loans in excess of \$10 billion and secured loans in excess of \$15 billion, whereas for borrowers with a credit rating of AAA, the Credit Review Committee evaluates and approves unsecured loans in excess of \$10 billion and secured loans in excess of \$120 billion. The Credit Review Committee holds at least two meetings a week to approve applications for large-sized loans whose principal amounts exceed prescribed levels set by it. The chart below summarizes the credit approval process of our banking operation. The Master Credit Officer and the Head of Business Division do not make individual decisions on loan approval, but are part of the decision-making process at the group level.



The reviewer at each level of the review process may in its discretion approve loans up to a maximum amount per loan assigned to such level. The discretionary loan approval limit for each level of the loan approval process takes into account the total amount of loans extended to the borrower, the credit level of the applicant based on credit review, the existence and value of collateral, the size of business and the level of credit risk established by the credit rating system. The discretionary loan amount approval limit ranges from \$50 million for unsecured retail loans with a credit rating of B-, which are subject to approvals by the retail branch manager, to \$120 billion for secured loans with a credit rating of AAA, which are subject to approvals by the Master Credit Officer Committee. Any loans exceeding the maximum discretionary loan amount approval limit must be approved by the Credit Review Committee.

## Credit Review and Monitoring

Shinhan Bank continually reviews and monitors credit risks primarily with respect to borrowers. In particular, Shinhan Bank's automated early warning system conducts daily examination for borrowers using financial and non-financial factors, and the branch manager and the credit officer must conduct periodic loan monitoring and report to an independent Credit Review Department which analyzes the results in detail and adjusts monitoring grades and credit ratings accordingly. Based on these reviews, Shinhan Bank adjusts a borrower's credit rating, credit limit and credit policies. In addition, the group credit ratings of the main debtor groups, if applicable, may be adjusted followed by a periodic review of the main debtor groups, as identified by the Governor of the Financial Supervisory Service based on their outstanding credit exposures. Shinhan Bank also continually reviews other factors, such as industry-specific conditions for the borrower's business and its domestic and overseas asset base and operations, in order to ensure that the assigned ratings are appropriate. The Credit Review Department provides credit review reports, independent of underwriting, to the Chief Risk Officer on a monthly basis.

The early warning system performs automatic daily checks for borrowers to whom Shinhan Bank has credit exposure (which represents the total outstanding amount due from a borrower, net of collateral for deposit, installment savings, guarantees and import guarantee money). When the early warning systems detect warning signals, such signals and other findings from the loan monitoring are reviewed by the Credit Review Department. In addition, Shinhan Bank carries out credit review in a timely manner on each borrower in accordance with changes in credit risk factors based on changes in the economic environment. The results of such credit review are continually reported to the Chief Risk Officer of Shinhan Bank.

Depending on the nature of the signals detected by the early warning system, a borrower may be classified as "worsening credit" and become subject to evaluation for a possible downgrade in credit rating, or may be initially classified as "showing early warning signs" or become reinstated to the "normal borrower" status. For

borrowers classified as "showing early warning signs," the relevant branch manager gathers information and conducts a review of the borrower to determine whether the borrower should be classified as a worsening credit or whether to impose management improvement warnings or implement joint creditors' management. If the borrower becomes non-performing, Shinhan Bank's collection department directly manages such borrower's account in order to maximize recovery rate, and conducts auctions, court proceedings, sale of assets or corporate restructuring as needed.

Pursuant to the foregoing credit review and monitoring procedures and in order to promptly prevent deterioration of loan qualities, Shinhan Bank classifies potentially problematic borrowers into (i) borrowers that show early warning signals, (ii) borrowers that require precaution, (iii) borrowers that require observation and (iv) normal borrowers, and treats them differentially accordingly.

In order to curtail delinquency among its corporate customers, Shinhan Bank primarily takes the following measures: (i) systematic monitoring of borrowers with outstanding loans, (ii) heightened monitoring of borrowers with bad credit history and/or borrowers that belong to troubled industries and (iii) assignment of industry-specific lending caps, as adjusted for whether specific industries are particularly sensitive to general business cycles and/or are troubled at a given time.

*Systematic monitoring of borrowers with outstanding loans*. Shinhan Bank currently applies a heightened monitoring system to corporate borrowers with outstanding loans (other than guaranteed loans and loans secured by specified types of collaterals such as deposits with us or letters of credit). Under this monitoring system, each borrower is assigned to one of the following ratings:

- "Normal Company" a borrower who is determined to have a low probability of insolvency with a credit rating above CCC (sub-borrower rating applicable);
- "Observation Company" a borrower that carries some risk of affecting the corporate insolvency in the future and is subject to consistent observation to detect any change of such risk;
- "Precaution Company" a borrower with a possibility of insolvency due to an increase in risk of default and therefore requires detailed inspection of the credit quality of such borrower and precaution in extending any further loans;
- "Early Warning Company" a borrower with a high possibility of insolvency; and
- "Problematic Reorganized Company" a borrower currently undergoing rehabilitation procedures, such as management improvement plans, workout or corporate recovery or showing no signs of recovery.

Shinhan Bank conducts systematic monitoring of the foregoing borrowers at intervals depending on the borrower's monitoring grade determined by the early warning system (for example, every 3 or 6 months for an "Observation Company", and 3 months for borrowers with a monitoring grade below "Precaution Company" or borrowers with a credit rating below CCC, and no regular monitoring for a "Normal Company"). In addition, the Review Credit Officer may request more frequent monitoring if the borrower is showing signs of deteriorated credit quality. For borrowers with outstanding loan amounts of  $W^2$  billion or more, Shinhan Bank also monitors the revenues and earnings of such borrower on a quarterly basis within five to seven weeks following the end of each quarter depending on the borrower's credit profile.

Heightened monitoring of borrowers with bad credit history and/or borrowers that belong to troubled industries. In addition to the systematic monitoring discussed above, Shinhan Bank also carries out additional monitoring for borrowers that, among others, (i) are rated as "requiring observation," "requiring precaution" or "with early warning signs" as noted above, (ii) have prior history of delinquency or restructuring or (iii) have borrowings that are classified as substandard or below. Based on the heightened monitoring of these borrowers, Shinhan Bank adjusts contingency planning as to how the overall asset quality of a specific industry should be

managed for each phase of the business cycle, how Shinhan Bank should limit or reduce its credit exposure to such borrowers, and how our group-wide delinquency and non-performing ratio would be changed, among other things.

#### Credit Risk Assessment and Control

In order to assess credit risk in a systematic manner, Shinhan Bank has developed and upgraded systems designed to quantify credit risk based on selection and monitoring of various statistics, including delinquency rate, non-performing loan ratio, expected loan losses and weighted average risk rating.

Shinhan Bank controls loan concentration by monitoring and managing loans at two levels: portfolio level and individual loan account level. In order to maintain portfolio-level credit risk at an appropriate level, Shinhan Bank manages its loans using value-at-risk ("VaR") limits for the entire bank as well as for each of its business units. In order to prevent concentration of risk in a particular borrower or borrower class, Shinhan Bank also manages credit risk by borrower, industry, country and other detailed categories.

Shinhan Bank measures credit risk using internally accumulated data. Shinhan Bank measures expected and unexpected losses with respect to total assets monthly, which Shinhan Bank refers to when setting risk limits for, and allocating capital to, its business groups. Expected loss is calculated based on the probability of default, the loss given default, the exposure at default and the past bankruptcy rate and recovery rate, and Shinhan Bank provides allowance for loan losses accordingly. Shinhan Bank makes provisioning at a level which is the higher of the Financial Supervisory Service requirement or Shinhan Bank's internal calculation. Unexpected loss is predicted based on VaR, which is used to determine compliance with the aggregate credit risk limit for Shinhan Bank as well as the credit risk limit for the relevant department within Shinhan Bank. Shinhan Bank uses the AIRB method as proposed by the Basel Committee to compute VaR at the account-specific level as well as to measure risk adjusted performance.

#### **Credit Risk Management of Shinhan Card**

Major policies for Shinhan Card's credit risk management are determined by Shinhan Card's Risk Management Council, and Shinhan Card's Risk Management Committee is responsible for approving them. Shinhan Card's Risk Management Council is headed by the Chief Risk Officer, and also comprises of the heads of each business unit, supporting unit and relevant department at Shinhan Card. Shinhan Card's Risk Management Council convenes at least once every month and may also convene on an *ad hoc* basis as needed. Shinhan Card's Risk Management Committee is comprised of three Non-Standing Directors. Shinhan Card's Risk Management Committee convenes at least once every quarter and may also convene on an *ad hoc* basis as needed.

The risk of loss from default by the cardholders or credit card loan borrowers is Shinhan Card's greatest credit risk. Shinhan Card manages its credit risk based on the following principles:

- achieve profit at a level corresponding to the level of risks involved;
- improve asset quality and achieve an optimal mix of asset portfolios; and
- closely monitor borrower's ability to repay the debt.

#### Credit Card Approval Process

Shinhan Card uses an automated credit scoring system to approve credit card applications or credit card authorizations. The credit scoring system is divided into two sub-systems: the behavior scoring system and the application scoring system. The behavior scoring system is based largely on the credit history of the cardholder or borrower, and the application scoring system is based largely on personal information of the applicant. For

credit card applicants with whom we have an existing relationship, Shinhan Card's credit scoring system considers internally gathered information such as the ability to repay, total assets, the length of the existing relationship and the applicant's contribution to Shinhan Card's profitability. The credit scoring system also automatically conducts credit checks on all credit card applicants. Shinhan Card gathers information about the applicant's transaction history with financial institutions, including banks and credit card companies, from a number of third party credit reporting agencies including, among others, National Information & Credit Evaluation Inc. and Korea Credit Bureau. These credit checks reveal a list of the delinquent customers of all credit card issuers in Korea.

If a credit score assigned to an applicant is above the minimum threshold, the application is approved unless overridden based on other considerations such as delinquencies with other credit card companies. For a credit card application by a long-standing customer with a good credit history, Shinhan Card may, on a discretionary basis, approve the application notwithstanding the assigned credit score unless overridden by other considerations. All of these factors also serve as the basis for setting a credit limit for approved applications.

The following describes the process of how Shinhan Card sets credit limits for credit cards, cash advances and card loans:

- *Credit purchase and cash advance limits* These limits are set based on the applicant's limit request and Shinhan Card's credit screening criteria. Unless a cardholder requests a reduction in the credit purchase and/or cash advance limit, Shinhan Card is required to provide prior notice to the cardholder for any reduction in such cardholder's limit. However, if the account holder defaults or the cardholder's credit limit is reduced according to the terms of the card agreement, Shinhan Card may lower the credit limit before notifying the account holder.
- *Card loan limit* This limit is set monthly by Shinhan Card based on the cardholder's credit rating and transaction history. The card loan limit can be adjusted monthly based on the cardholder's credit standing without prior notification.

## Monitoring

Shinhan Card continually monitors all cardholders and accounts using a behavior scoring system. The behavior scoring system predicts a cardholder's payment pattern by evaluating the cardholder's credit history, card usage and amounts, payment status and other relevant data. The behavior score is recalculated each month and is used to manage the accounts and approval of additional loans and other products to the cardholder. Shinhan Card also uses the scoring system to monitor its overall risk exposure and to modify its credit risk management strategy.

#### Loan Application Review and On-going Credit Review

When reviewing new applications and conducting an ongoing credit review for retail loans, installment purchase loans and personal leases, Shinhan Card uses criteria substantially similar to those used in the credit underwriting system and the credit review system for cardholders. For retail loans, installment purchase loans and personal leases to existing cardholders, Shinhan Card reviews their card usage history in addition to other factors such as their income, occupation and assets.

## Fraud Loss Prevention

Shinhan Card seeks to minimize losses from the fraudulent use of credit cards issued by it. Shinhan Card focuses on preventing fraudulent uses and, following the occurrence of a fraudulent use, makes investigations in order to make the responsible party bear the losses. Misuses of lost credit cards account for a substantial majority of Shinhan Card's fraud-related losses. Through its fraud loss prevention system, Shinhan Card seeks to detect, on a real-time basis, transactions that are unusual or inconsistent with prior usage history and calls are made to

the relevant cardholders to confirm their purchases. A team at Shinhan Card dedicated to investigating fraud losses also examines whether the cardholder was at fault by, for example, not reporting a lost card or failing to endorse the card, or whether the relevant merchant was negligent in checking the identity of the user. Fault may also lie with delivery companies that fail to deliver credit cards to the relevant applicant. In such instances, Shinhan Card attempts to recover fraud losses from the responsible party. To prevent misuse of a card as well as to manage credit risk, Shinhan Card's information technology system will automatically suspend the use of a card (i) when, as a result of ongoing monitoring, fraudulent use or loss of the card is suspected based on the account holder's credit score, or (ii) at the request of the account holder.

Approximately 94% of Shinhan Card's cardholders consent to Shinhan Card's accessing their travel records to detect any misuse of credit cards while they are traveling abroad. Shinhan Card also offers cardholders additional fraud protection through a fee-based texting service. At the cardholder's option, Shinhan Card notifies the cardholder of any credit card activity in his or her account by sending a text message to his or her mobile phone. This notification service allows customers to quickly and easily identify any fraudulent use of their credit cards.

#### **Credit Risk Management of Shinhan Securities**

In accordance with the guidelines of the Financial Supervisory Service, Shinhan Securities assesses its credit risks (including through VaR analyses) and allocates the maximum limit for the credit amount at risk by department. Shinhan Securities also assesses the counterparty risks in all credit-related transactions, such as loans, acquisition financings and derivative transactions and takes corresponding risk management measures. In assessing the credit risk of a corporate counterparty, Shinhan Securities considers such counterparty's corporate credit rating obtained from Shinhan Group Corporate Credit Rating System. Through its risk management system, Shinhan Securities also closely monitors credit risk exposures by counterparty, industry, conglomerates, credit ratings and country. Shinhan Securities conducts credit risk stress tests on a daily basis based on probability of default and also conducts more advanced stress tests from time to time, the results of which are then reported to its management as well as the Group Chief Risk Officer to support group-wide credit risk management.

#### Credit Risk Management of Shinhan Life Insurance

Shinhan Life Insurance also assesses credit risks for all of its credit-related transactions, including provision of loans and acquisitions of financial instruments. Shinhan Life Insurance conducts additional risk reviews for new types of investments and financial instruments, such as those denominated in currencies it previously did not deal with. In assessing the credit risk of corporate customers, Shinhan Life Insurance considers such corporation's credit rating obtained from Shinhan Group Corporate Credit Rating System. Through its risk management system Shinhan Life Insurance conducts credit risk monitoring based on the credit history of debtors. To closely monitor credit risk, Shinhan Life Insurance's loan review department performs periodic loan review of its loan assets and plans on-site inspections where necessary. Furthermore, in the retail business, Shinhan Life Insurance operates its own credit-scoring system to assess credit risk and update customers' behavior scores.

#### **Market Risk Management**

Market risk is the risk of loss generated by fluctuations in market prices such as interest rates, foreign exchange rates and equity prices. The principal market risks to which we are exposed are interest rate risk and, to a lesser extent, foreign exchange and equity price risk. These risks stem from our trading and non-trading activities relating to financial instruments such as loans, deposits, securities and financial derivatives. We divide market risk into risks arising from trading activities and risks arising from non-trading activities.

Our market risks arise primarily from Shinhan Bank, and to a lesser extent, Shinhan Securities, our securities trading and brokerage subsidiary, which faces market risk relating to its trading activities.

Shinhan Bank's Risk Management Committee establishes overall market risk management principles for both the trading and non-trading activities of Shinhan Bank. Based on these principles, the Risk Policy Committee acts as the executive decision-making body in relation to Shinhan Bank's market risks in terms of setting its risk management policies and risk limits in relation to market risks and assets and controlling market risks arising from trading and non-trading activities of Shinhan Bank. The Risk Policy Committee consists of deputy presidents in charge of Shinhan Bank's seven business groups and Shinhan Bank's Chief Risk Officer and the Chief Financial Officer. At least on a monthly basis, the Risk Policy Committee reviews and approves reports relating to, among others, the position and VaR with respect to Shinhan Bank's trading activities and the position, VaR, duration gap and market value analysis and net interest income simulation with respect to its non-trading activities. In addition, Shinhan Bank's Operating Department comprehensively manages market risks on an independent basis from Shinhan Bank's operating departments, and functions as the middle office of Shinhan Bank. Shinhan Bank measures market risk with respect to all assets and liabilities in bank accounts and trust accounts in accordance with the regulations promulgated by the Financial Services Commission.

Shinhan Securities manages its market risk based on its overall risk limit established by its risk management committee as well as the risk limits and detailed risk management guidelines for each product and department established by its Risk Management Working Committee. Shinhan Securities' Risk Management Working Committee is the executive decision-making body for managing market risks related to Shinhan Securities, and determines, among other things, Shinhan Securities' overall market risk management policies and strategies, and assesses and approves trading activities and limits. In addition, Shinhan Securities' Risk Management Department manages various market risk limits and monitors operating conditions on an independent basis from Shinhan Securities' operating departments. Shinhan Securities assesses the adequacy of these limits at least annually. In addition, Shinhan Securities assesses the market risks of its trading assets. The assessment procedure is based on the standard procedures set by the Financial Supervisory Service as well as an internally developed model. Shinhan Securities assesses the risk amount and VaR, and manages the risk by setting a risk limit per sector as well as a VaR limit.

Shinhan Life Insurance manages its market risk based on its overall risk limit established by its risk management committee. Shinhan Life Insurance manages market risk in regard to assets that are subject to trading activities and foreign exchange positions. Shinhan Life Insurance assesses the market risk amount and the 10-day VaR, a procedure based on the delta-normal method, and manages market risk by setting a 10-day VaR limit. Shinhan Life Insurance assessed the adequacy of these limits at least annually and implements back tests on market risk determinations by comparing daily profit and loss against one-day VaR in 2017.

Shinhan Card does not have any assets with significant exposure to market risks and therefore does not maintain a risk management policy with respect to market risks.

We use financial information prepared on a separate basis according to IFRS for the market risk management of our subsidiaries and, unless otherwise specified herein, financial information in this annual report presented for quantitative market risk disclosure relating to our subsidiaries have been prepared in accordance with IFRS on a separate basis.

#### Market Risk Exposure from Trading Activities

Shinhan Bank's trading activities principally consist of:

 trading activities to realize short-term profits from trading in the equity and debt securities markets and the foreign currency exchange markets based on Shinhan Bank's short-term forecast of changes in market situation and customer demand, for its own account as well as for the trust accounts of Shinhan Bank's customers; and • trading activities primarily to realize profits from arbitrage transactions involving derivatives such as swaps, forwards, futures and options, and, to a lesser extent, to sell derivative products to Shinhan Bank's customers and to cover market risk associated with those trading activities.

Shinhan Securities' trading activities principally consist of trading for customers and for proprietary accounts equity and debt securities and derivatives based on stock prices, stock indexes, interest rates, foreign currency exchange rates and commodity prices.

As a result of these trading activities, Shinhan Bank is exposed principally to interest rate risk, foreign currency exchange rate risk and equity risk, and Shinhan Securities is exposed principally to equity risk and interest rate risk.

#### Interest Rate Risk

Shinhan Bank's exposure to interest rate risk arises primarily from Won-denominated debt securities, directly held or indirectly held through beneficiary certificates, and, to a lesser extent, from interest rate derivatives. Shinhan Bank's exposure to interest rate risk arising from foreign currency-denominated trading debt securities is minimal since its net position in those securities is not significant. As Shinhan Bank's trading accounts are marked-to-market daily, it manages the interest rate risk related to its trading accounts using VaR, a market value-based tool.

Shinhan Securities' interest rate risk arises primarily from management of its interest rate-sensitive asset portfolio, which mainly consists of debt securities, interest rate swaps and government bond futures, and the level of such risk exposure depends largely on the variance between the interest rate movement assumptions built into the asset portfolio and the actual interest rate movements and the spread between a derivative product and its underlying assets. Shinhan Securities quantifies and manages the interest rate-related exposure by daily conducting VaR and stress tests on a marked-to-market basis.

#### Foreign Currency Exchange Rate Risk

Shinhan Bank's exposure to foreign currency exchange rate risk mainly relates to its assets and liabilities, including derivatives such as foreign currency forwards and futures and currency swaps, which are denominated in currencies other than the Won. Shinhan Bank manages foreign currency exchange rate risk, including the corresponding risks faced by its overseas branches, on a consolidated basis by covering all of its foreign exchange spot and forward positions in both trading and non-trading accounts.

Shinhan Bank's net foreign currency open position represents the difference between its foreign currency assets and liabilities as offset against forward foreign currency positions, and is Shinhan Bank's principal exposure to foreign currency exchange rate risk. The Risk Policy Committee oversees Shinhan Bank's foreign currency exposure for both trading and non-trading activities by establishing limits for the net foreign currency open position, loss limits and VaR limits. Shinhan Bank centrally monitors and manages its foreign exchange positions through its Financial Engineering Center. Dealers in the Financial Engineering Center manage Shinhan Bank's consolidated position within preset limits through spot trading, forward contracts, currency options, futures and swaps and foreign currency swaps. Shinhan Bank sets a limit for net open positions by currency. The limits for currencies other than the U.S. Dollar, Japanese Yen, Euro and Chinese Yuan are set in a conservative manner in order to minimize trading in such currencies.

Shinhan Securities faces foreign currency exchange rate risk in relation to the following product offerings: currency forwards, currency swaps and currency futures. Shinhan Securities centrally monitors and manages transactions involving such products through its Fixed Income, Currency & Commodities Departments. Shinhan Securities' Risk Management Working Committee, which is delegated with the authority to approve foreign currency-related transactions and limits on the related open positions, manages the related foreign exchange risk by setting nominal limits on the amounts of foreign exchange-related products and monitoring compliance with such limits on a daily basis. As of December 31, 2022, Shinhan Securities' net open position related to foreign currency-related products was US\$1,339 million, and its open positions related to the sale of Won-U.S. Dollar forwards and Won-U.S. Dollar futures were US\$533 million and US\$(107) million, respectively.

Shinhan Capital manages its foreign exchange risk resulting from the difference in its foreign currency assets and liabilities through derivative transactions such as forwards or swaps and maintains its net exposure at US\$13.02 million.

The net open foreign currency positions held by our other subsidiaries are insignificant.

The following table shows Shinhan Bank's net foreign currency open positions as of December 31, 2020, 2021 and 2022. Positive amounts represent long exposures and negative amounts represent short exposures.

	As	of December 3	31,
Currency	2020	2021	2022
	(In	millions of US	\$\$)
U.S. Dollars	\$ (299.4)	\$ (15.6)	\$ 40.8
Japanese Yen	3.9	447.3	467.7
Euro	12.4	23.6	5.3
Others	1,201.2	2,247.7	2,320.9
Total	\$ 918.0	\$2,703.1	\$2,834.6

## Equity Risk

Shinhan Bank's equity risk related to trading activities mainly involves trading equity portfolios of Korean companies and Korea Stock Price Index futures and options. The trading equity portfolio consists of stocks listed on the KRX KOSPI Market or the KRX KOSDAQ Market of the Korea Exchange and nearest-month or second nearest-month futures contracts under strict limits on diversification as well as limits on positions. Shinhan Bank maintains strict scrutiny of these activities in light of the volatility in the Korean stock market and closely monitors the loss limits and the observance thereof. Although Shinhan Bank holds a substantially smaller amount of equity securities than debt securities in its trading accounts, the VaR of trading account equity risk is generally higher than that of trading account interest rate risk due to high volatility in the value of equity securities. As of December 31, 2020, 2021 and 2022, Shinhan Bank held \$13.7 billion, \$171.7 billion and \$74.0 billion, respectively, of equity securities in its trading accounts (including the trust accounts).

Shinhan Securities' equity risk related to trading activities also mainly involves the trading of equity portfolio of Korean companies and Korea Stock Price Index futures and options. As of December 31, 2020, 2021 and 2022, the total amount of equity securities at risk held by Shinhan Securities was \$53.8 billion, \$55.3 billion and \$21.7 billion, respectively.

Equity positions held by our other subsidiaries are insignificant.

#### Management of Market Risk from Trading Activities

The following tables present an overview of market risk, measured by VaR, from trading activities of Shinhan Bank and Shinhan Securities, respectively, as of and for the year ended December 31, 2022. For market risk management purposes, Shinhan Bank includes in the computation of total VaR its trading portfolio in bank accounts and assets in trust accounts, in each case, for which it guarantees principal or fixed return in accordance with the Financial Services Commission regulations.

		Trading Portfolio VaR for the Year 2022							
	А	verage	Mi	nimum	Μ	aximum		As of ber 31, 2022	
				(In bil	lions o	f Won)			
Shinhan Bank: <sup>(1)</sup>									
Interest rate	₩	44.7	₩	24.3	₩	64.6	₩	53.8	
Foreign exchange <sup>(2)</sup>		191.0		161.8		262.5		252.5	
Equities		20.3		13.4		24.9		21.7	
Option volatility <sup>(3)</sup>		0.1		0.0		0.2		0.1	
Less: portfolio									
diversification <sup>(4)</sup>		(33.8)		(10.9)		(77.3)		(63.0)	
Total VaR <sup>(5)</sup>	₩	222.4	₩	188.7	₩	274.9	₩	265.1	
Shinhan Securities: (1)									
Interest rate	₩	30.00	₩	17.12	₩	44.13	₩	39.58	
Equities		36.10		14.51		63.96		25.76	
Foreign exchange		31.71		13.45		63.48		63.48	
Option volatility <sup>(3)</sup>		70.02		40.81		103.93		43.10	
Less: portfolio									
diversification <sup>(4)</sup>		(64.64)	(	(147.83)		(9.07)		(74.89)	
Total VaR	₩	103.19	₩	76.82	₩	127.67	₩	97.04	

Notes:

(1) Shinhan Bank and Shinhan Securities' 10-day VaR is based on a 99.9% confidence level.

(2) Includes both trading and non-trading accounts as Shinhan Bank and Shinhan Securities manage foreign exchange risk on a total position basis.

(3) Volatility implied from the option price using the Black-Scholes or a similar model.

(4) Calculation of portfolio diversification effects is conducted on different days' scenarios for different risk components. Total VaRs are less than the simple sum of the risk component VaRs due to offsets resulting from portfolio diversification.

(5) Includes trading portfolios in Shinhan Bank's bank accounts and assets in trust accounts, in each case, for which it guarantees principal or fixed return.

Shinhan Bank generally manages its market risk from the trading activities of its portfolios on an aggregated basis. To control its trading portfolio market risk, Shinhan Bank uses position limits, VaR limits, stop loss limits, Greek limits and stressed loss limits. In addition, it establishes separate limits for investment securities. Shinhan Bank maintains risk control and management guidelines for derivative trading based on the regulations and guidelines promulgated by the Financial Services Commission, and measures market risk from trading activities to monitor and control the risk of its operating divisions and teams that perform trading activities. Shinhan Bank manages VaR measurements and limits on a daily basis based on automatic interfacing of its trading positions into its market risk measurement system. In addition, Shinhan Bank presets limits on loss, sensitivity, investment and stress for its trading departments and desks and monitors such limits and observance thereof on a daily basis.

*Value-at-risk analysis.* Shinhan Bank uses 10-day and one-day VaRs to measure its market risk. Shinhan Bank calculates (i) 10-day VaRs on a daily basis based on data for the previous 12 months for the holding periods of 10 days and (ii) one-day VaRs on a daily basis based on data for the previous 12 months for the

holding periods of one day. A 10-day VaR and one-day VaR are statistically estimated maximum amounts of loss that can occur for 10 days and one day, respectively, under normal market conditions. If a VaR is measured using a 99% confidence level, the actual amount of loss may exceed the expected VaR, on average, once out of every 100 business days, while if a VaR is measured using a 99.9% confidence level, the actual amount of loss may exceed the expected VaR, on average, once out of loss may exceed the expected VaR, on average, once out of 1,000 business days.

Shinhan Bank currently uses the 10-day 99% confidence level-based VaR and stressed VaR for purposes of calculating the regulatory capital used in reporting to the Financial Supervisory Service. Stressed VaR reflects the potential significant loss in the current trading portfolio based on scenarios derived from a crisis simulation during the preceding 12 months. Shinhan Bank also uses the more conservative 10-day 99.9% confidence level-based VaR for purposes of calculating its "economic" capital used for internal management purposes, which is a concept used in determining the amount of Shinhan Bank's requisite capital in light of the market risk. In addition, Shinhan Bank uses the one-day 99% confidence level-based VaR on a supplemental basis for purposes of setting and managing risk limits specific to each desk or team in its operating units as well as for back-testing purposes. For Shinhan Bank, the amount of losses (either actual or virtual) exceeded the one-day 99% confidence level-based VaR amount two times in 2020, one time in 2021 and five times in 2022. The increased frequency of instances in which the amount of losses exceeded the VaR amount in 2022 was primarily because the foreign currency exchange market experienced unusually high volatility. The VaR exceptions referred to above were all due to the amount of virtual losses exceeding the VaR amount. Virtual losses represent the potential changes in the value of a portfolio when simulating the same portfolio with market variables of the next trading day.

Shinhan Securities currently uses the same 10-day 99.9% confidence level-based historical VaR for purposes of calculating its "economic" capital used for internal management purposes, although such model is not subject to regulatory review or reporting requirements. In addition, Shinhan Securities applies this VaR as a risk limit for the entire company as well as individual departments and products, and the adequacy of such VaR is reviewed by way of daily back-testing. When computing VaR, Shinhan Securities does not assume any particular probability distribution and calculates it through a simulation of the "full valuation" method based on changes of market variables such as stock prices, interest rates and foreign exchange rates in the past one year. For Shinhan Securities, the amount of losses (either actual or virtual) exceeded the one-day 99% confidence level-based VaR amount four times in 2020, zero times in 2021 and zero times in 2022. The VaR exceptions referred to above were all due to the amount of virtual losses exceeding the VaR amount.

Value-at-risk is a commonly used market risk management technique. However, VaR models have the following shortcomings:

- VaR estimates possible losses over a certain period at a particular confidence level using past market movement data. Past market movement, however, is not necessarily a reliable indicator of future events, particularly those that are extreme in nature;
- VaR may underestimate the probability of extreme market movements;
- Shinhan Bank's VaR models assume that a holding period of generally one to 10 days is sufficient prior to liquidating the underlying positions, but such assumption regarding the length of the holding period may actually prove to be inadequate;
- The 99.9% confidence level does not take into account or provide indication of any losses that might occur beyond this confidence level; and
- VaR does not capture all complex effects of various risk factors on the value of positions and portfolios and could underestimate potential losses.

Currently, Shinhan Bank and Shinhan Securities conduct back-testing of VaR results against actual outcomes on a daily basis.

Shinhan Bank operates an integrated market risk management system which manages Shinhan Bank's Won-denominated and foreign-denominated accounts. This system uses historical simulation to measure both

linear risks arising from products such as equity and debt securities and nonlinear risks arising from other products including options. We believe that this system enables Shinhan Bank to generate elaborate and consistent VaR information and to perform sensitivity analysis and back testing in order to check the validity of the models on a daily basis. Shinhan Life Insurance also measures market risks based on a VaR analysis.

*Stress test.* In addition to VaR, Shinhan Bank performs stress tests to measure market risk. As VaR assumes normal market situations, Shinhan Bank assesses its market risk exposure to unlikely abnormal market fluctuations through the stress test. Stress test is a valuable supplement to VaR since VaR does not cover potential loss if the market moves in a manner which is outside Shinhan Bank's normal expectations. Stress test projects the anticipated change in value of holding positions under certain scenarios assuming that no action is taken during a stress event to change the risk profile of a portfolio.

Shinhan Bank uses seven relatively simple but fundamental scenarios for stress test by taking into account four market risk components: foreign currency exchange rates, stock prices, and Won-denominated interest rates and foreign currency-denominated interest rates. For the worst case scenario, Shinhan Bank assumes instantaneous and simultaneous movements in four market risk components: appreciation of Won by 20%, a decrease in Korea Exchange Composite Index by 30% and increases in Won-denominated and U.S. Dollar-denominated interest rates by 200 basis points each, respectively. Under this worst-case scenario, the market value of Shinhan Bank's trading portfolio would have declined by \\$626 billion as of December 31, 2022. Shinhan Bank performs stress test on a daily basis and reports the results to its Risk Policy Committee on a monthly basis and its Risk Management Committee on a quarterly basis.

Shinhan Securities uses nine scenarios for stress tests by taking into account four market risk components: stock prices (both in terms of stock market indices and  $\beta$ -based individual stock prices), interest rates for Won-denominated loans, foreign currency exchange rates and historical volatility. As of December 31, 2022, under the worst case scenario assuming a 1% point increase in the three-year government bond yield, the market value of Shinhan Securities' trading portfolio would have fluctuated by  $\Psi$ 48 billion for one day.

Shinhan Bank sets limits on stress testing for its overall operations. Shinhan Securities sets limits on stress testing for its overall operations as well as at its department level. Although Shinhan Life Insurance does not set any limits on stress testing, it monitors the impact of market turmoil or other abnormalities. In the case of Shinhan Bank, Shinhan Securities and Shinhan Life Insurance, if the potential impact is large, their respective head of Risk Management will notify such impact and may request a portfolio restructuring or other proper action.

#### Hedging and Derivative Market Risk

The principal objective of our group-wide hedging strategy is to manage market risk within established limits. We use derivative instruments to hedge our market risk as well as to make profits by trading derivative products within preset risk limits. Our derivative trading includes interest rate and cross-currency swaps, foreign currency forwards and futures, stock index and interest rate futures, and stock index and currency options.

While we use derivatives for hedging purposes, derivative transactions by nature involve market risk since we take trading positions for the purpose of making profits. These activities consist primarily of the following:

- arbitrage transactions to make profits from short-term discrepancies between the spot and derivative markets or within the derivative markets;
- sales of tailor-made derivative products that meet various needs of our corporate customers, principally
  of Shinhan Bank and Shinhan Securities, and related transactions to reduce their exposure resulting
  from those sales;
- · taking positions in limited cases when we expect short-swing profits based on our market forecasts; and
- trading to hedge our interest rate and foreign currency risk exposure as described above.

In accordance with accounting requirements under IFRS 9, "Financial Instruments", which has replaced IAS 39, "*Financial Instruments: Recognition and Measurement*" since January 1, 2018, we have implemented internal processes which include a number of key controls designed to ensure that fair value is measured appropriately, particularly where a fair value model is internally developed and used to price a significant product.

Shinhan Bank assesses the adequacy of the fair market value of a new product derived from its internal model prior to the launch of such product. The assessment process involves the following:

- computation of an internal dealing system market value (based on assessment by the quantitative analysis team of the adequacy of the formula and the model used to compute the market value as derived from the dealing system);
- · computation of the market value as obtained from an outside credit evaluation company; and
- following comparison of the market value derived from an internal dealing system to that obtained from outside credit evaluation companies, determination as to whether to use the internally developed market value based on inter-departmental consensus.

The dealing system market value, which is used officially by Shinhan Bank after undergoing the assessment process above, does not undergo a sampling process that confirms the value based on review of individual transactions, but is subject to an additional assessment procedure of comparing such value against the profits derived from the dealing systems based on the deal portfolio sensitivity.

Shinhan Securities follows an internal policy as set by its Fair Value Evaluation Committee for computing and assessing the adequacy of fair value of all of its over-the-counter derivative products. Shinhan Securities computes the fair value based on an internal model and internal risk management systems and assesses the adequacy of the fair value through cross-departmental checks as well as comparison against fair values obtained from outside credit evaluation companies. See Note 3 of the notes to our consolidated financial statements included in this annual report.

Market risk from derivatives is not significant since derivative trading activities of Shinhan Bank and Shinhan Securities are primarily driven by arbitrage and customer deals with highly limited open trading positions. Market risk from derivatives is also not significant for Shinhan Life Insurance as its derivative trading activities are limited to those within preset risk limits and are subject to heavy regulations imposed on the insurance industry. Market risk from derivatives is not significant for our other subsidiaries since the amount of such positions by our other subsidiaries is insignificant.

#### Market Risk Management for Non-trading Activities

## Interest Rate Risk

Interest rate risk represents Shinhan Bank's principal market risk from non-trading activities. Interest rate risk is the risk of loss resulting from interest rate fluctuations that adversely affect the financial condition and results of operations of Shinhan Bank. Shinhan Bank's interest rate risk primarily relates to the differences between the timing of rate changes for interest-earning assets and that for interest-bearing liabilities.

Interest rate risk affects Shinhan Bank's earnings and the economic value of Shinhan Bank's net assets as follows:

- *Earnings:* interest rate fluctuations have an effect on Shinhan Bank's net interest income by affecting its interest-sensitive operating income and expenses.
- *Economic value of net assets:* interest rate fluctuations influence Shinhan Bank's net worth by affecting the present value of cash flows from the assets, liabilities and other transactions of Shinhan Bank.

Accordingly, Shinhan Bank measures and manages interest rate risk for non-trading activities by taking into account the effects of interest rate changes on both its income and net asset value. Shinhan Bank measures and manages interest rate risk on a daily and monthly basis with respect to all interest-earning assets and interest-bearing liabilities in Shinhan Bank's bank accounts (including derivatives denominated in Won which are principally interest rate swaps entered into for the purpose of hedging) and in trust accounts, except that Shinhan Bank measures VaRs on a monthly basis. Most of Shinhan Bank's interest-earning assets and interest-bearing liabilities are denominated in Won.

#### Interest Rate Risk Management

The principal objectives of Shinhan Bank's interest rate risk management are to generate stable net interest income and to protect Shinhan Bank's net asset value against interest rate fluctuations. Through its asset and liability management system, Shinhan Bank monitors and manages its interest rate risk based on various analytical measures such as interest rate gap, duration gap and net present value and net interest income simulations, and monitors on a monthly basis its interest rate VaR limits, interest rate earnings at risk ("EaR") limits and interest rate gap ratio limits. Shinhan Bank measures its interest rate VaR and interest rate EaR based on interest rate risk in the banking book standardized approach presented by the Bank for International Settlements (the "IRRBB standardized approach"). IRRBB, which is part of the Basel capital framework's Pillar 2 and subject to the Committee's guidance set out in the 2004 revised principles for the management and supervision of interest rate risk, refers to current or prospective risk to a bank's capital and earnings arising from adverse movements in interest rates that affect the bank's banking book position. Interest rate risk is managed by reflecting possible future interest rate environments and customer behavior based on the IRRBB standardized approach. Interest rate VaR is measured by the change in economic value of equity under six types of scenarios (parallel up, parallel down, stiffener, flattener, short-term interest rate-up and short-term interest rate-down). Interest rate EaR is measured by the largest loss amount based on two types of scenarios (parallel up and parallel down). The Risk Policy Committee sets the interest rate risk limits for Shinhan Bank's Won-denominated and foreign currency-denominated non-trading accounts and trust accounts, and the Risk Management Committee sets Shinhan Bank's overall interest rate risk limit, in both cases, at least annually. The Risk Management Department monitors Shinhan Bank's compliance with these limits and reports the monitoring results to the Risk Policy Committee on a monthly basis and the Risk Management Committee on a quarterly basis. Shinhan Bank uses interest rate swaps to control its interest rate exposure limits.

Interest rate VaR represents the maximum anticipated loss in a net present value calculation (computed as the present value of interest-earning assets minus the present value of interest-bearing liabilities), whereas interest rate EaR represents the maximum anticipated loss in a net earnings calculation (computed as interest income minus interest expenses) for the immediately following one-year period, in each case, as a result of negative movements in interest rates. Therefore, interest rate VaR is a more expansive concept than interest rate EaR in that the former covers all interest-earning assets and all interest-bearing liabilities, whereas the latter covers only those interest-earning assets and interest-bearing liabilities that are exposed to interest rate volatility for a one-year period.

Hence, for interest rate VaRs, the duration gap (namely, the weighted average duration of all interestearning assets minus the weighted average duration of all interest-bearing liabilities) can be a more critical factor than the relative sizes of the relevant assets and liabilities in influencing interest rate VaRs. In comparison, for interest rate EaRs, the relative sizes of the relevant assets and liabilities in the form of the "one year or less interest rate" gap (namely, the volume of interest-earning assets with maturities of less than one year minus the volume of interest-bearing liabilities with maturities of less than one year) are the most critical factor in influencing the interest rate EaRs.

On a monthly basis, we monitor whether the non-trading positions for interest rate VaR and EaR exceed their respective limits as described above.

Interest rate VaR cannot be meaningfully compared to the 10-day 99% confidence level based VaR ("market risk VaR") for managing trading risk principally because (i) the underlying assets are different (namely, non-trading interest-bearing assets as well as liabilities in the case of the interest rate VaR, compared to trading assets only in the case of the market risk VaR), and (ii) interest rate VaR is sensitive to interest rate movements only while the market risk VaR is sensitive to interest rate movements as well as other factors such as foreign currency exchange rates, stock market prices and option volatility.

Even if comparison were to be made between the interest rate VaR and the interest rate portion only of the market risk VaR, we do not believe such comparison would be meaningful since the interest rate VaR examines the impact of interest rate movements on both assets and liabilities (which will likely have offsetting effects), whereas the interest rate portion of the market VaR examines the impact of interest rate movements on assets only.

Shinhan Bank uses various analytical methodologies to measure and manage its interest rate risk for non-trading activities on a daily and monthly basis, including the following analyses:

- Interest rate gap analysis;
- Duration gap analysis;
- Market value analysis; and
- Net interest income simulation analysis.

#### Interest Rate Gap Analysis

Shinhan Bank performs an interest gap analysis to measure the difference between the amount of interestearning assets and that of interest-bearing liabilities at each maturity and re-pricing date for specific time intervals by preparing interest rate gap tables in which Shinhan Bank's interest-earning assets and interestbearing liabilities are allocated to the applicable time intervals based on the expected cash flows and re-pricing dates.

On a daily basis, Shinhan Bank performs interest rate gap analysis for Won- and foreign currencydenominated assets and liabilities in its bank and trust accounts. Shinhan Bank's gap analysis includes Won-denominated derivatives (which are interest rate swaps for the purpose of hedging) and foreign currencydenominated derivatives (which are currency swaps for the purpose of hedging), which are managed centrally at the Financial Engineering Center. Through the interest rate gap analysis that measures interest rate sensitivity gaps, cumulative gaps and gap ratios, Shinhan Bank assesses its exposure to future interest risk fluctuations. For interest rate gap analysis, Shinhan Bank assumes and uses the following maturities for different types of assets and liabilities:

- With respect to the maturities and re-pricing dates of Shinhan Bank's assets, Shinhan Bank assumes that the maturity of Shinhan Bank's prime rate-linked loans is the same as that of its fixed-rate loans. Shinhan Bank excludes equity securities from interest-earning assets.
- With respect to the maturities and re-pricing of Shinhan Bank's liabilities, Shinhan Bank assumes that money market deposit accounts and "non-core" demand deposits under the Financial Services Commission guidelines have a maturity of one month or less for both Won-denominated accounts and foreign currency-denominated accounts.
- With respect to "core" demand deposits under the Financial Services Commission guidelines, Shinhan Bank assumes that they have maturities of eight different intervals ranging from one month to five years.

The following tables show Shinhan Bank's interest rate gaps as of December 31, 2022 for (i) Won-denominated non-trading bank accounts, including derivatives entered into for the purpose of hedging and (ii) foreign currency-denominated non-trading bank accounts, including derivatives entered into for the purpose of hedging.

			As of D	ecember 31,	2022		
	0-3 Months	3-6 Months	6-12 Months	1-2 Years	2-3 Years	Over 3 Years	Total
		(I	n billions of V	Von, except	percentage	s)	
Interest-earning assets	152,799	82,871	40,672	36,040	23,812	30,891	367,085
Fixed rates	25,737	20,040	24,452	25,431	16,300	17,318	129,280
Floating rates	126,712	62,071	11,400	8,338	7,512	13,573	229,605
Interest rate swaps	350	760	4,820	2,270	0	0	8,200
Interest-bearing liabilities	177,253	49,663	80,055	22,540	16,302	26,859	372,673
Fixed liabilities	80,227	35,238	67,062	9,968	3,538	1,931	197,964
Floating liabilities	88,827	14,425	12,993	12,573	12,764	24,928	166,510
Interest rate swaps	8,200	0	0	0	0	0	8,200
Sensitivity gap	(24,454)	33,208	(39,383)	13,499	7,510	4,032	(5,588)
Cumulative gap	(24,454)	8,754	(30,629)	(17,130)	(9,620)	(5,588)	(5,588)
% of total assets	(6.66)	% 2.38%	6 (8.34)%	(4.67)	% (2.62)	% (1.52)	% (1.52)%

#### Won-denominated non-trading bank accounts<sup>(1)</sup>

#### Foreign currency-denominated non-trading bank accounts<sup>(1)</sup>

		Α	s of Decemb	er 31, 2022		
	0-3 Months	3-6 Months	6-12 Months	1-3 Years	Over 3 Years	Total
		(In millio	ons of US\$, e	xcept perce	entages)	
Interest-earning assets	30,229	10,089	4,925	5,525	6,356	57,125
Interest-bearing liabilities	33,112	7,488	7,607	7,397	7,727	63,333
Sensitivity gap	(2,883)	2,601	(2,683)	(1,872)	(1,371)	(6,208)
Cumulative gap	(2,883)	(282)	(2,965)	(4,837)	(6,208)	(6,208)
% of total assets	(5.05)%	6 (0.49)%	6 (5.19)%	(8.47)	%(10.87)%	% (10.87)%

Note:

(1) Includes merchant banking accounts.

#### Duration Gap Analysis

Shinhan Bank performs a duration gap analysis to measure the differential effects of interest rate risk on the market value of its assets and liabilities by examining the difference between the durations of Shinhan Bank's interest-earning assets and those of its interest-bearing liabilities, which durations represent their respective weighted average maturities calculated based on their respective discounted cash flows using applicable yield curves. These measurements are done on a daily basis and for each operating department, account, product and currency, the respective durations of interest-earning assets and interest-bearing liabilities.

The following tables show duration gaps and market values of Shinhan Bank's Won-denominated interestearning assets and interest-bearing liabilities in its non-trading accounts as of December 31, 2022 and changes in these market values when interest rate increases by one percentage point.

#### Duration as of December 31, 2022 (for non-trading Won-denominated bank accounts<sup>(1)</sup>)

	Duration as of December 31, 2022
	(In months)
Interest-earning assets	9.22
Interest-bearing liabilities	11.14
Gap	(1.92)

#### Note:

(1) Includes merchant banking accounts and derivatives for the purpose of hedging.

#### Market Value Analysis

Shinhan Bank performs a market value analysis to measure changes in the market value of Shinhan Bank's interest-earning assets compared to that of its interest-bearing liabilities based on the assumption of parallel shifts in interest rates. These measurements are done on a monthly basis.

#### Market Value as of December 31, 2022 (for non-trading Won-denominated bank accounts<sup>(1)</sup>)

	Market Va	alue as of Dece 2022	mber 31,
	Actual	1% Point Increase	Changes
	(In	billions of Wo	n)
Interest-earning assets	373,695	371,124	(2,571)
Interest-bearing liabilities	384,780	381,588	(3,192)
Gap	(11,085)	(10,464)	621

#### Note:

(1) Includes merchant banking accounts and derivatives for the purpose of hedging.

#### Net Interest Income Simulation

Shinhan Bank performs net interest income simulation to measure the effects of the change in interest rate on its results of operations. Such simulation uses the deterministic analysis methodology to measure the estimated changes in Shinhan Bank's annual net interest income (interest income less interest expenses) under the current maturity structure, using different scenarios for interest rates (assuming parallel shifts) and funding requirements. For simulations involving interest rate changes, based on the assumption that there is no change in funding requirements, Shinhan Bank applies three scenarios of parallel shifts in interest rate: (1) no change, (2) a 1% point increase in interest rates and (3) a 1% point decrease in interest rates.

The following table illustrates by way of an example the simulated changes in Shinhan Bank's annual net interest income for 2021 with respect to Won-denominated interest-earning assets and interest-bearing liabilities, using Shinhan Bank's net interest income simulation model, assuming (a) the maturity structure and funding requirement of Shinhan Bank as of December 31, 2022 and (b) the same interest rates as of December 31, 2022 and a 1% point increase or decrease in the interest rates.

					ncome for 20 nated Bank A			
	Assur	ned Interes	t Rates		e in Net Income		e in Net Income	
	No Change	1% Point Increase	1% Point Decrease	Amount (1% Point Increase)	% Change (1% Point Increase)	Amount (1% Point Decrease)	% Change (1% Point Decrease)	
	(In billions of Won, except percentages)							
Simulated interest income	17,573	19,616	15,530	2,043	11.63%	(2,043)	(11.63)%	
Simulated interest expense	10,551	12,113	8,990	1,562	14.80%	(1,562)	(14.80)%	
Net interest income	7,021	7,503	6,540	482	6.86%	(482)	(6.86)%	

Note:

(1) Includes merchant banking accounts and derivatives entered into for the purpose of hedging.

Shinhan Bank's Won-denominated interest-earning assets and interest-bearing liabilities in non-trading accounts have a maturity structure that benefits from an increase in interest rates, because the re-pricing periods for interest-earning assets in Shinhan Bank's non-trading accounts are, on average, shorter than those of the interest-bearing liabilities in these accounts. This is primarily due to a sustained low interest rate environment in the recent years in Korea, which resulted in a significant increase in demand for floating rate loans (which tend to have shorter maturities or re-pricing periods than fixed rate loans) as a portion of Shinhan Bank's overall loans, which in turn led to the shortening, on average, of the maturities or re-pricing periods of Shinhan Bank's loans on an aggregate basis. As a result, Shinhan Bank's net interest income tends to decrease during times of a decrease in the market interest rates while the opposite is generally true during times of an increase in the market interest rates.

#### Interest Rate VaRs for Non-trading Assets and Liabilities

Shinhan Bank measures VaRs for interest rate risk from non-trading activities on a monthly basis. The following table shows, as of and for the year ended December 31, 2022, the VaRs of interest rate mismatch risk for other assets and liabilities, which arises from mismatches between the re-pricing dates for Shinhan Bank's non-trading interest-earning assets (including available-for-sale investment securities) and those for its interest-bearing liabilities. Under the regulations of the Financial Services Commission, Shinhan Bank includes in calculation of these VaRs interest-earning assets and interest-bearing liabilities in its bank accounts and its merchant banking accounts.

		VaR for t	he Year 2022(1)	)
	Average	Minimum (In bill	Maximum ions of Won)	As of December 31
Interest rate mismatch — non-trading assets and liabilities	584	287	1,113	860

*Note:* 

<sup>(1)</sup> One-year VaR results computed based on the interest rate risk in the banking book standardized approach presented by the Bank for International Settlements. See "— Interest Rate Risk Management."

#### Interest Rate Risk for Other Subsidiaries

Shinhan Card monitors and manages its interest rate risk for all its interest-bearing assets and liabilities (including off-balance sheet items) in terms of the impact on its earnings and net asset value from changes in interest rates. Shinhan Card primarily uses interest rate VaR and EaR analyses to measure its interest rate risk.

The interest rate VaR analysis used by Shinhan Card principally focuses on the maximum impact on its net asset value from adverse movements in interest rates and consists of (i) historical interest rate VaR analysis and (ii) interest rate gap analysis. The historical interest rate VaR analysis is made through simulation of net asset value based on the interest rate volatility over a fixed past period to produce expected future interest rate scenarios and computes the maximum value at risk at a 99.9% confidence level by analyzing the net present value distribution under each such scenario. As for interest rate gap analysis, Shinhan Card computes the value at risk based on the duration proxies and interest rate shocks for each time interval as recommended under the Basel Accord.

The interest rate EaR analysis used by Shinhan Card computes the maximum loss in net interest income for a one-year period following adverse movements in interest rates, based on an interest rate gap analysis using the time intervals and the "middle of time band" as recommended under the Basel Accord.

Shinhan Securities uses historical interest rate VaR analysis based on its internal model to monitor and manage its interest rate risk. The historical interest rate VaR analysis is made through simulation of net asset value based on the interest rate volatility over the past three years to compute the maximum value at risk at a 99.9% confidence level. Shinhan Securities also measures its level of IRRBB exposure.

Shinhan Life Insurance monitors and manages its interest rate risk for its investment assets and liabilities based on simulations of its asset-liability management system. These simulations typically involve subjecting Shinhan Life Insurance's current and future assets and liabilities to more than 2,000 market scenarios based on varying assumptions, such as new debt purchases and current investment portfolios, so as to derive its net asset value forecast for the next one year at a 99.9% confidence level.

Interest rate risk for our other subsidiaries is insignificant.

#### Equity Risk

Substantially all of Shinhan Bank's equity risk relates to its portfolio of common stock in Korean companies. As of December 31, 2022, Shinhan Bank held an aggregate amount of W344.6 billion of equity interest in unlisted foreign companies (including W0.03 billion invested in unlisted private equity funds).

The equity securities in Won held in Shinhan Bank's investment portfolio consist of stocks listed on the KRX KOSPI Market or the KRX KOSDAQ Market of the Korea Exchange and certain non-listed stocks. Shinhan Bank sets exposure limits for most of these equity securities to manage their related risk. As of December 31, 2022, Shinhan Bank held equity securities in an aggregate amount of W1,482.7 billion in its non-trading accounts, including equity securities in the amount of W279.8 billion that it held, among other reasons, for management control purposes and as a result of debt-to-equity conversion as a part of reorganization proceedings of the companies to which it had extended loans.

As of December 31, 2022, Shinhan Bank held Won-denominated convertible bonds in an aggregate amount of  $\Psi$ 22.0 billion and did not hold any Won-denominated exchangeable bonds or Won-denominated bonds with warrants, in each case, in its non-trading accounts. Shinhan Bank does not measure equity risk with respect to convertible bonds, exchangeable bonds or bonds with warrants, and the interest rate risk of these equity-linked securities are measured together with the other debt securities. As such, Shinhan Bank measures interest rate risk VaRs but not equity risk VaRs for these equity-linked securities.

# Liquidity Risk Management

Liquidity risk is the risk of insolvency, default or loss due to disparity between inflow and outflow of funds, including the risk of having to obtain funds at a high price or to dispose of securities at an unfavorable price due to lack of available funds. Each of our subsidiaries seeks to minimize liquidity risk through early detection of risk factors related to the sourcing and managing of funds that may cause volatility in liquidity and by ensuring that it maintains an appropriate level of liquidity through systematic management. At the group-wide level, we manage our liquidity risk by conducting monthly stress tests that compare liquidity requirements under normal situations against those under three types of stress situations, namely, our group-specific internal crisis, crisis in the external market and a combination of internal and external crisis. In addition, in order to preemptively and comprehensively manage liquidity risk, we measure and monitor liquidity risk management using various indices, including the "limit management index," "early warning index" and "monitoring index."

Shinhan Bank applies the following basic principles for liquidity risk management:

- raise funds in sufficient amounts, at the optimal time at reasonable costs;
- maintain liquidity risk at appropriate levels and preemptively manage them through a prescribed risk limit system and an early warning signal detection system;
- secure stable sources of revenue and minimize actual losses by implementing an effective assetliability management based on diversified sources of funding with varying maturities;
- monitor and manage daily and intra-daily liquidity positions and risk exposures for timely payment and settlement of financial obligations due under both normal and crisis situations;
- conduct periodic liquidity stress test in anticipation of any potential liquidity crisis and establish and implement contingency funding plans in case of an actual crisis; and
- consider liquidity-related costs, benefits of and risks in determining the pricing of our products and services, performance evaluations and approval of launching of new products and services.

Each of our subsidiaries manages liquidity risk in accordance with the risk limits and guidelines established internally and by the relevant regulatory authorities. Pursuant to principal regulations applicable to financial holding companies and banks as promulgated by the Financial Services Commission, we, at the holding company level, are required to maintain a liquidity coverage ratio and a foreign currency liquidity coverage ratio. These ratios require us to maintain the relevant ratios above certain minimum levels.

Shinhan Bank manages its liquidity risk within the limits set on Won and foreign currency accounts in accordance with the regulations of the Financial Services Commission. The Financial Services Commission implemented a minimum liquidity coverage ratio requirement for Korean banks, including Shinhan Bank, of at least 90.0% as of January 1, 2017, 95.0% as of January 1, 2018 and 100.0% as of January 1, 2019. Financial Services Commission defines liquidity coverage ratio as high quality liquid assets that can be immediately converted into cash with little or no loss in value, as divided by the net amount of cash outflow for the next 30 day period, under the stress level established according to the liquidity coverage ratio, pursuant to the Regulation on the Supervision of the Banking Business, which was amended as of June 28, 2016 to implement the liquidity coverage ratio requirements under Basel III. In addition to the liquidity coverage ratio, the Financial Supervisory Commission introduced the net stable funding ratio into the Regulation on the Supervision of the Banking Business that came into effect in January 2018. Whereas liquidity coverage ratio is aimed at measuring liquidity for the next 30-day period, net stable funding ratio, calculated as the ratio of available stable funding to required stable funding, is aimed at measuring liquidity for the next one-year period. A bank's available stable funding is the portion of its capital and liabilities that are safely expected to remain with the bank for more than one year. A bank's required stable funding is the amount of stable funding that it is required to hold given the liquidity characteristics and residual maturities of its assets and the contingent liquidity risk arising from its off-balance sheet exposures. Shinhan Bank is required by the Financial Services Commission to maintain a net stable funding ratio of at least 100%.

With respect to foreign currency liquidity coverage ratio, the Regulation on the Supervision of the Banking Business requires that financial institutions dealing with foreign exchange affairs (i.e., banks) whose foreign-currency denominated liabilities are equal to or greater than US\$500 million or 5% of its total liabilities, as of the end of the immediately preceding half-year period, maintain a foreign currency liquidity coverage ratio of 60% or higher beginning January 1, 2017, 70% or higher beginning January 1, 2018 and 80% or higher beginning January 1, 2019. The term "foreign currency liquidity coverage ratio" means the ratio of high quality liquidity assets to the net cash outflow in respect of foreign-currency denominated assets and liabilities for the next 30 days.

In April 2020, in response to the COVID-19 pandemic, the Financial Services Commission temporarily lowered the liquidity coverage ratio requirement from 100% to 85%. The Financial Services Commission subsequently decided to gradually restore this ratio on a quarterly basis from the third quarter of 2022, to a ratio of 90% in the third quarter of 2022, 92.5% in the fourth quarter of 2022, 95% in the first quarter of 2023, 97.5% in the second quarter of 2023 and 100% from the third quarter of 2023. However, in October 2022, the Financial Services Commission decided to apply the 92.5% ratio until the end of June 2023 in response to the increasing volatility and uncertainty in the short-term money market, as determined through a financial market inspection meeting.

Shinhan Bank's Treasury Department is in charge of liquidity risk management with respect to Shinhan Bank's Won and foreign currency funds. The Treasury Department submits Shinhan Bank's monthly funding and asset management plans to Shinhan Bank's Asset and Liability Committee for approval, based on the analysis of various factors, including macroeconomic indices, interest rate and foreign exchange movements and maturity structures of Shinhan Bank's assets and liabilities. Shinhan Bank's Risk Engineering Department measures Shinhan Bank's liquidity coverage ratio on a daily basis and net stable funding ratio on a monthly basis and reports whether they are in compliance with the respective limits to Shinhan Bank's Risk Policy Committee, which sets and monitors Shinhan Bank's liquidity coverage ratio and net stable funding ratio on a monthly basis.

The following tables show Shinhan Bank's (i) average liquidity coverage ratio, (ii) average foreign currency liquidity coverage ratio, and (iii) net stable funding ratio, each for the month of December 2022 in accordance with the regulations of the Financial Services Commission.

	For the Month of December 2022	
	(in billions of Won, except percentages)	
High quality liquid assets (A)	₩ 83,735	
Net cash outflows over the next 30 days (B)	85,549	
Cash outflow	116,683	
Cash inflow	31,134	
Liquidity coverage ratio (A/B)	97.88%	

#### Shinhan Bank's Average Foreign Currency Liquidity Coverage Ratio for the Month of December 2022

	For the Month of December 2022	
	(in millions of US\$, except percentages)	
High quality liquid assets (A)	\$ 6,885	
Net cash outflows over the next 30 days (B)	4,858	
Cash outflow	17,244	
Cash inflow	12,386	
Liquidity coverage ratio (A/B)	141.32%	

Shinhan Bank's Net Stabl	e Funding Ratio	for the Month	of December 2022

	For the Month of December 2022	
	(in billions of Won, except percentages)	
Available stable funding (A)	₩292,867	
Required stable funding (B)	266,253	
Net stable funding ratio (A/B)	110.00%	

Shinhan Bank maintains diverse sources of liquidity to facilitate flexibility in meeting its funding requirements. Shinhan Bank funds its operations principally by accepting deposits from retail and corporate depositors, accessing the call loan market (a short-term market for loans with maturities of less than one month), issuing debentures and borrowing from the Bank of Korea. Shinhan Bank uses the funds primarily to extend loans or purchase securities. Generally, deposits are of shorter average maturity than loans or investments.

Shinhan Card manages its liquidity risk according to the following principles: (i) provide a sufficient volume of necessary funding in a timely manner at a reasonable cost, (ii) establish an overall liquidity risk management strategy, including in respect of liquidity management targets, policy and internal control systems, and (iii) manage its liquidity risk in conjunction with other risks based on a comprehensive understanding of the interaction among the various risks. As for any potential liquidity shortage at or near the end of each month, Shinhan Card maintains liquidity at a level sufficient to withstand credit shortage for three months.

In addition, Shinhan Card manages liquidity risk by setting and complying with specific guidelines for various measures of liquidity, including the breakdown of contractual payment obligations by maturity, overseas funding, the ratio of asset-backed securitized borrowings to the total borrowing, the ratio of requisite liquidity to reserve liquidity, and the ratio of fixed interest rate borrowings to floating interest rate borrowings. Furthermore, Shinhan Card closely monitors various indicators of a potential liquidity crisis, such as the actual liquidity gap ratio (in relation to the different maturities for assets as compared to liabilities), the liquidity buffer ratio. Shinhan Card also has contingency plans in place in case of any emergency or crisis. In managing its liquidity risk, Shinhan Card focuses on a prompt response system based on periodic monitoring of the relevant early signals, stress testing and contingency plan formulations. Shinhan Card identifies its funding needs on a daily, monthly, quarterly and annual basis based on the maturity schedule of its liabilities as well as short-term liquidity needs, based upon which it formulates its funding plans using diverse sources such as corporate debentures, commercial papers, asset-backed securitizations and credit line facilities. When entering into asset-backed securitizations, Shinhan Card provides sufficient credit enhancements to avoid triggering early amortization events. In addition, prior to entering into any funding transaction and related derivative transaction, Shinhan Card conducts pre-transaction risk analyses, including in respect of counterparty credit risk and its total exposure limit by country and by financial institution.

Shinhan Card also manages its liquidity risk within the limits set on Won accounts in accordance with the regulations of the Financial Services Commission. Under the Specialized Credit Financial Business Act and the regulations thereunder, credit card companies in Korea are required to maintain a Won liquidity ratio of at least 100.0%.

The following tables show Shinhan Card's liquidity status and limits for Won-denominated accounts as of December 31, 2022 in accordance with the regulations of the Financial Services Commission.

	As of December 31, 2022							
Won-Denominated Accounts	7 Days or Less	1 Month or Less	3 Months or Less	6 Months or Less	1 Year or Less	Over 1 Year	Over 2 Years	Total
	(In billions of Won, except percentages)							
Assets	₩3,202	₩14,180	₩21,102	₩25,064	₩30,118	₩35,803	₩ 7,306	₩43,109
Liabilities	952	4,217	5,863	7,521	11,444	19,217	13,401	32,618
Liquidity ratio			360%	6				

### Shinhan Card's Won-denominated accounts

Shinhan Securities manages its liquidity risk for its Won-denominated accounts by setting a limit of \$300 billion on each of its seven-day, one-month and three-month liquidity gap, a limit of 110% on its one-month and three-months liquidity ratios and a limit of \$50 billion on its liquidity VaR. As for its foreign currency-denominated accounts, Shinhan Securities manages the liquidity risk on a quarterly basis in compliance with the guidelines of the Financial Supervisory Service, which requires the seven-day and one-month maturity mismatch ratios to be 0% and -10% or higher, respectively, and the three months liquidity ratio to be 80% or higher.

Our other subsidiaries fund their operations primarily through call money, bank loans, commercial paper, corporate debentures and asset-backed securities. Our holding company acts as a funding vehicle for long-term financing of our subsidiaries whose credit ratings are lower than the holding company, including Shinhan Card and Shinhan Capital, to lower the overall funding costs within regulatory limitations. Under the Monopoly Regulation and Fair Trade Act, however, a financial holding company is prohibited from borrowing funds in excess of 200% of its total stockholders' equity.

In addition to liquidity risk management under the normal market situations, we have contingency plans to effectively cope with possible liquidity crisis. Liquidity crisis arises when we would not be able to effectively manage the situations with our normal liquidity management measures due to, among other reasons, inability to access our normal sources of funds or epidemic withdrawals of deposits as a result of various external or internal factors, including a collapse in the financial markets or abrupt deterioration of our credit. We have contingency plans corresponding to different stages of liquidity crisis: namely, "alert stage," "imminent-crisis stage" and "crisis stage," based on the following liquidity indices:

- indices that reflect the market movements such as interest rates and stock prices;
- · indices that reflect financial market sentiments, an example being the size of money market funds; and
- indices that reflect our internal liquidity condition.

### **Operational Risk Management**

Operational risk is difficult to quantify and subject to different definitions. The Basel Committee defines operational risk as the risk of loss resulting from inadequate or failed internal processes, people and systems or from other external events. Similarly, we define operational risk as the risks related to our overall management other than credit risk, market risk, interest rate risk and liquidity risk. These include risks arising from system failure, human error, non-adherence to policy and procedures, fraud, inadequate internal controls and procedures or environmental changes and resulting in financial and non-financial loss. We monitor and assess operational risks related to our business operations, including administrative risk, information technology risk (including cyber security risk), managerial risk and legal risk, with a view to minimizing such losses.

Our holding company's Audit Committee, which consists of three outside directors, one of whom is an accounting or financial expert as required by internal control regulations under the Act on Corporate Governance

of Financial Companies, oversees and monitors our operational compliance with legal and regulatory requirements. The Audit Committee also oversees management's operations and may, at any time it deems appropriate, demand additional operations-related reporting from management and inspects our asset condition. At the holding company level, we define each subsidiary's operational process and establish an internal review system applicable to each subsidiary. Each subsidiary's operational risk is internally monitored and managed at the subsidiary level and the Group Internal Audit Department at our holding company, which reports to our Audit Committee, continuously monitors the integrity of our subsidiaries' operational risk management system. Our holding company's board of directors and the Group Risk Management Committee establish our basic policies for internal control at the group level. The Group Internal Audit Department at our holding company is directly responsible for overseeing our internal controls with a focus on legal, regulatory, operational and reputational risks. The Group Internal Audit Department audits both our and our subsidiaries' operations and asset condition in accordance with our annual audit plan, which is approved by the Audit Committee, and submits regular reports to the Audit Committee pursuant to our internal reporting system. If the Group Internal Audit Department discovers any non-compliance with operational risk procedures or areas of weaknesses, it promptly alerts the business department in respect of which such non-compliance was discovered and demands implementation of corrective measures. Implementation of such corrective measures is subsequently reviewed by the Group Internal Audit Department.

To monitor and manage operational risk, Shinhan Bank maintains a system of comprehensive policies and has in place a control framework designed to provide a stable and well-managed operational environment throughout the organization. Currently, the primary responsibility for ensuring compliance with our banking operational risk procedures remains with each of the business units and operational teams. In addition, the Audit Department, the Risk Management Department and the Compliance Department of Shinhan Bank also play important roles in reviewing and maintaining the integrity of Shinhan Bank's internal control environment.

The operational risk management system of Shinhan Bank is managed by the operational risk team under the Risk Management Department. The current system principally consists of risk control self-assessment, risk quantification using key risk indicators, loss data collection, scenario analysis and operational risk capital measurement. Shinhan Bank operates several educational and awareness programs designed to have all of its employees to be familiar with this system. In addition, Shinhan Bank has a designated operational risk manager at each of its departments and branch offices, who serves as a coordinator between the operational risk team at the headquarters and the employees in the front office and seeking to provide centralized feedback to further improve the operational risk management system.

As of December 31, 2022, Shinhan Bank has conducted risk control self-assessments on its departments as well as domestic and overseas branch offices, from which it collects systematized data on all of its branch offices, and uses the findings from such self-assessments to improve the procedures and processes for the relevant departments or branch offices. In addition, Shinhan Bank has accumulated risk-related data since 2003, improved the procedures for monitoring operational losses and is developing risk simulation models. In addition, Shinhan Bank selects and monitors, at the department level, approximately 350 key risk indicators.

The Audit Committee of Shinhan Bank, which consists of one standing director and two outside directors, is an independent inspection authority that supervises Shinhan Bank's internal controls and compliance with established ethical and legal principles. The Audit Committee performs internal audits of, among other matters, Shinhan Bank's overall management and accounting, and supervises its Audit Department, which assists Shinhan Bank's Audit Committee. Shinhan Bank's Audit Committee also reviews and evaluates Shinhan Bank's accounting policies and their changes, financial and accounting matters and fairness of financial reporting.

Shinhan Bank's Audit Committee, Audit Department and Compliance Department supervise and perform the following duties:

• general audits, including full-scale audits performed annually for the overall operations, sectional audits of selected operations performed as needed, and periodic and irregular spot audits;

- special audits, performed when the Audit Committee deems it necessary or pursuant to requests by the chief executive officer or supervisory authorities such as the Financial Supervisory Service;
- day-to-day audits, performed by the standing member of Shinhan Bank's Audit Committee for material transactions or operations that are subject to approval by the heads of Shinhan Bank's operational departments or senior executives;
- real-time monitoring audits, performed by the computerized audit system to identify any irregular transactions and take any necessary actions; and
- self-audits as a self-check by each operational department to ensure its compliance with our business regulations and policies, which include daily audits, monthly audits and special audits.

In addition to these audits and compliance activities, Shinhan Bank's Risk Management Department designates operational risk management examiners to monitor the appropriateness of operational risk management frameworks and the functions and activities of the board of directors, relevant departments and business units, and conducts periodic checks on the operational risk and reports such findings. Shinhan Bank's Audit Department also reviews in advance proposed banking products or other business or service plans with a view to minimizing operational risk. General audits, special audits, day-to-day audits and real-time monitoring audits are performed by Shinhan Bank's examiners, and self-audits are performed by the self-auditors of the relevant operational departments.

As for Shinhan Securities, its audit department conducts an annual inspection as to whether the internal policy and procedures of Shinhan Securities relating to its overall operational risk management are being effectively complied. The inspection has a particular focus on the appropriateness of the scope of operational risks and the collection, maintenance and processing of relevant operating data. Shinhan Securities, through its operational risk management system, also conducts self-assessments of risks, collects loss data and manages key risk indicators. The operational risk management system is supervised by its audit department, compliance department and risk management department, as well as a risk management officer in each of Shinhan Securities' departments.

Shinhan Card's audit committee reviews whether the internal policy and procedures of Shinhan Card are effective and implements measures to improve such policies as needed. Shinhan Card's audit committee also contributes to work efficiency, financial risk minimization and management rationalization. Shinhan Card is developing an operational risk management system in accordance with the Financial Supervisory Service's oversight guidelines regarding operational risk measurement, which it plans to use to assess operational risk by department in order to identify operational risk factors and to assess and mitigate potential risks on a periodic basis.

Shinhan Life Insurance's Risk Management Department and Compliance Department reviews whether the internal policy and procedures of Shinhan Life Insurance are being effectively complied with. Shinhan Life Insurance implemented an operational risk management process in 2018 by setting up key risk indicators in each department and utilizes it to assess operational risk, collect data and manage key indicators. Furthermore, Shinhan Life Insurance established a standard roadmap to improve its operational risk assessment capabilities. Shinhan Life Insurance established an Operational Risk Management Team in an effort to improve its operational risk assessment capabilities and implement operational risk management systems. In order to reduce operational risk across products, projects, outsourcings and sales channels, risk assessments are conducted, and high risk areas are identified on a regular basis and then subject to heightened risk monitoring. In addition, Shinhan Life Insurance plans to advance its operational risk management system and to enhance operational risk management capabilities in additional areas by establishing an operational risk management system in response to the implementation of Basel III operational risk requirements.

In addition to internal audits and inspections, the Financial Supervisory Service conducts general annual audits of our and our subsidiaries' operations. The Financial Supervisory Service also performs special audits as

the need arises on particular aspects of our and our subsidiaries' operations such as risk management, credit monitoring and liquidity. In the ordinary course of these audits, the Financial Supervisory Service routinely issues warning notices where it determines that a regulated financial institution or such institution's employees have failed to comply with the applicable laws or rules, regulations and guidelines of the Financial Supervisory Service. We and our subsidiaries have in the past received, and expect in the future to receive, such notices and we have taken and will continue to take appropriate actions in response to such notices. For example, in October 2018, the Financial Supervisory Service requested Shinhan Bank to submit supporting documents in connection with allegations of inadequate compliance controls. In November 2018, the Financial Supervisory Service notified Shinhan Bank of an institutional caution for alleged deficiencies in its customer due diligence and imposed an administrative fine of W100 million citing negligence in carrying out its customer verification obligations. In December 2019, the Financial Supervisory Service notified Shinhan Bank of an institutional caution and imposed an administrative fine of W3 billion for alleged prohibited activities, including promotional activities for specified money trusts, investment solicitation for derivatives and management of trust properties. In 2021, the Korea Exchange imposed a total of three penalties on Shinhan Securities for regulatory violations, totaling \\$2.7 million in fines. In 2021, the Financial Supervisory Service imposed a total of eight penalties against Shinhan Securities for regulatory violations, totaling  $\Psi4,092$  million in fines, which include a fine of ₩1,800 million for certain employees' violation of conflict of interest obligations in connection with the Lime Asset incident and a fine of \$1,160 million for violation of rules against advertising certain money trust products. In 2022, the Korea Exchange imposed a total of four penalties on Shinhan Securities for regulatory violations, totaling \\$2.0 million in fines. In 2022, the Financial Supervisory Service imposed a total of four penalties against Shinhan Securities for regulatory violations, totaling \\$600.9 million in fines. In January 2020, the Financial Supervisory Service notified Shinhan Life Insurance of an institutional caution and imposed an administrative fine of W266 million for allegedly omitting certain information regarding the level of expenses deducted from premiums paid when selling savings insurance products over the telephone. In February 2021, the Financial Supervisory Service notified Shinhan Bank of an institutional warning and imposed an administrative fine of  $\Psi$ 2.1 billion for reasons including alleged violation of internal regulations and reporting procedures in connection with Shinhan Bank's designation as the primary bank for Seoul Metropolitan Government in 2018. In March 2021, the Financial Supervisory Service notified Shinhan Bank of an institutional caution and imposed an administrative fine of W31.2 million for alleged violation of the safety standard in operating its information system in respect of the electronic financial transaction and alleged negligence in notifying its customers of the errors occurred to the electronic financial transaction and measures taken to correct the errors. In January 2021, the Financial Services Commission imposed a fine of \\$28.8 million on Shinhan Card citing failure to discard personal information after transaction. For further details, see "Item 8.A. Consolidated Statements and Other Financial Information — Legal Proceedings."

We consider legal risk as a part of operational risk. The uncertainty of the enforceability of obligations of our customers and counterparties, including foreclosure on collateral, creates legal risk. Changes in laws and regulations could also adversely affect us. Legal risk is higher in new areas of business where the law is often untested in the courts although legal risk can also increase in our traditional business to the extent that the legal and regulatory landscape in Korea changes and many new laws and regulations governing the banking industry remain untested. We seek to minimize legal risk by using stringent legal documentation, employing procedures designed to ensure that transactions are properly authorized and consulting legal advisers. The Compliance Department operates Shinhan Financial Group and its subsidiaries comply with the relevant laws and regulations. The compliance system's main function is to monitor the degree of improvement in compliance with the relevant laws and regulations, maintain internal controls (including ensuring that each department has established proper internal policies and that it complies with those policies) and educate employees about observance of the relevant laws and regulations. The Compliance Department also supervises the management, execution and performance of self-audits.

# Upgrades to Risk Management Systems

Our recent material upgrades in relation to risk management systems are as follows.

## Shinhan Financial Group

In May 2015, we developed and implemented a credit review system to unify our corporate credit review and risk measurements, allowing us and our subsidiaries to utilize a uniform and consistent credit review system with respect to each borrower. In addition, in preparation of full implementation of Basel III requirements relating to liquidity coverage ratios for bank holding companies and to enhance our liquidity risk management capabilities, we have implemented a Basel III liquidity coverage ratio risk management system by which we calculate our liquidity coverage ratio each month.

# Shinhan Bank

In order to strengthen risk management of its overseas subsidiaries and effectively comply with local and domestic regulations, Shinhan Bank is in the process of laying out a global risk management system network, which records the risk data of its overseas subsidiaries. Shinhan Bank seeks to leverage the development of this system for further overseas expansion and stable growth of existing overseas subsidiaries. To date, Shinhan Bank has completed the development of such system for its subsidiaries in China, Japan, Vietnam, the United States, Canada, India, Europe and Mexico. Shinhan Bank also plans to expand the application of this system to its other overseas subsidiaries.

Shinhan Bank has also completed development of a system to calculate stressed VaR based on Basel II standards in order to prepare for stress situations such as the global financial crisis in 2008. Shinhan Bank has received approval for such system from the Financial Supervisory Service and has been implemented since 2012.

In 2012, Shinhan Bank developed a system for improving collection and recovery of bad assets through enhanced LGD data processing. In addition, in 2012, Shinhan Bank received approvals from the Financial Supervisory Service for upgrades to its credit evaluation modeling for risk assessment of small- to medium-sized enterprises that are not required to be audited by outside accounting firms and for SOHOs, which upgrades related to factoring in the credit profile of the head of such enterprises and SOHOs. In 2014, Shinhan Bank further upgraded the credit evaluation modeling for risk assessment of small- and medium-size enterprises that are not required to be audited by outside accounting firms by entirely revamping the modeling for enterprises subject to outside audits, enterprises that are not subject to outside auditors and enterprise heads. Such upgraded modeling was approved by the Financial Supervisory Service, and Shinhan Bank began implementation of the upgraded system since 2014. In 2014, Shinhan Bank reclassified its credit evaluation models for risk assessment of enterprises into the following four categories: (i) IFRS (enterprises subject to external audits under IFRS as adopted by Korea), (ii) GAAP (enterprises subject to external audits under Generally Accepted Accounting Principles), (iii) small- and medium-size enterprises and (iv) SOHO. Such reclassification was approved by the Financial Supervisory and the system in 2015.

In addition, in 2013, Shinhan Bank obtained approval from the Financial Supervisory Service to use an internal evaluation model with respect to Basel II credit risks related to Shinhan Bank's retail and SOHO exposures. In 2016, Shinhan Bank developed a new internal evaluation model and obtained approval from the Financial Supervisory Service to use the new model with respect to Basel II credit risks related to Shinhan Bank's retail exposures. In addition, Shinhan Bank received another approval in 2016 for LGD data processing using the AIRB approach in order to reflect changes in economic conditions such as prolonged recovery periods and low interest rates, and the newly approved LGD data processing will replace existing LGD data processing for both retail and SOHO exposures.

Shinhan Bank also upgraded the asset and liability management system in 2012 in order to timely comply with Basel III, IFRS and other regulatory requirements as well as to upgrade the quality of risk-related data. In

2014, Shinhan Bank upgraded the liquidity coverage ratio and net stable funding ratio systems under Basel III in order to facilitate daily measurement and efficient management.

Following the approval by the Financial Supervisory Service of the advanced measurement approach for risk management, Shinhan Bank has re-established the operational risk management system in order to further enhance its operational risk management capabilities.

## Shinhan Card

In 2012, Shinhan Card completed further upgrades to its credit risk measurement system in satisfaction of the Basel II standards, as well as other regulatory requirements and internal needs in order to address the ongoing volatility in the economic and regulatory environment. In December 2016, Shinhan Card obtained approval from the Financial Supervisory Service to use a new internal evaluation model with respect to Basel III credit risks related to its retail and SOHO exposures.

# Shinhan Securities

In 2016, Shinhan Securities established a Risk Engineering Team and updated its market risk management system to increase its value assessment capabilities for over-the-counter derivatives, strengthen its VaR risk analysis capabilities and improve various simulation functions. Beginning in 2017, the Risk Engineering Team conducts value assessment and reviews over-the-counter derivatives directly using various enhanced simulation functions such as updated stress tests in order to stabilize financial accounting prices and enhance the risk management of over-the-counter derivatives. In January 2019, the Risk Engineering Team was elevated to a department, becoming the Risk Engineering Department, expanding the scope of products reviewed by the department and strengthening its simulation analysis capabilities.

### Shinhan Life Insurance

In 2017, Shinhan Life Insurance updated its interest rate risk measurement system, called the ALM system, in anticipation of IFRS 17 and the K-ICS, a new insurance liability market valuation system designed to replace the existing risk based capital system. In 2018, the new asset liability management system implemented an interest rate risk management system based on the Europe Solvency II standard. The asset liability management system can measure both asset and liability based on marking to market valuation. Shinhan Life Insurance also updated its interest rate risk management system to control net income margin volatility resulting from market interest rate changes and has tailored its business scheme to this system in order to better manage risk and profits and match the duration of its assets and liabilities. In 2019, Shinhan Life Insurance further upgraded its insurance risk measurement system can more elaborately measure insurance risk associated with mortality, longevity, morbidity, disability, lapse and expenses. Shinhan Life Insurance measures its insurance risk using shock scenarios and parameters calibration based on internal statistical estimates.

# **Supervision and Regulation**

# Principal Regulations Applicable to Financial Holding Companies

# General

The Korean financial holding companies and their subsidiaries are regulated by the Financial Holding Companies Act (last amended on January 1, 2023, Law No. 19211). In addition, Korean financial holding companies and their subsidiaries are subject to the regulations and supervision of the Financial Services Commission and the Financial Supervisory Service.

Pursuant to the Financial Holding Companies Act, the Financial Services Commission regulates various activities of financial holding companies. For instance, it approves the application for setting up a new financial holding company and promulgates regulations on the capital adequacy of financial holding companies and their subsidiaries and other regulations relating to the supervision of financial holding companies.

The Financial Supervisory Service is subject to the instructions and directives of the Financial Services Commission and carries out supervision and examination of financial holding companies and their subsidiaries. In particular, the Financial Supervisory Service sets forth liquidity and capital adequacy requirements for financial holding companies and reporting requirements pursuant to the authority delegated to the Financial Supervisory Service under the Financial Services Commission regulations, pursuant to which financial holding companies are required to submit quarterly reports on business performance, financial status and other matters prescribed in the Presidential Decree of the Financial Holding Companies Act.

Under the Financial Holding Companies Act, the establishment of a financial holding company must be approved by the Financial Services Commission. A financial holding company is required to be mainly engaged in controlling its subsidiaries by holding the shares or equities of the subsidiaries in the amount of not less than 50% of aggregate amount of such financial holding company's assets based on the latest balance sheet. A financial holding company is prohibited from engaging in any profit-making businesses other than controlling the management of its subsidiaries and certain ancillary businesses as prescribed in the Presidential Decree of the Financial Holding Companies Act which includes the following businesses:

- financially supporting its subsidiaries and the subsidiaries of its subsidiaries (the "direct and indirect subsidiaries"), including lending properties with economic values such as monies and securities, guaranteeing obligation performance and other direct or indirect transactions involving transactional credit risk;
- raising capital necessary for the investment in subsidiaries or providing financial support to its direct and indirect subsidiaries;
- supporting the business of its direct and indirect subsidiaries for the joint development and marketing of new products;
- supporting the operations of its direct and indirect subsidiaries by providing access to data processing, legal and accounting resources; and
- pursuing any other activities exempted from authorization, permission or approval under the applicable laws and regulations.

The Financial Holding Companies Act requires every financial holding company (other than any financial holding company that is controlled by any other financial holding company) or its subsidiaries to obtain the prior approval from the Financial Services Commission before acquiring control of another company or to file with the Financial Services Commission a report within thirty days after acquiring such control. Permission to liquidate or to merge with any other company must be obtained in advance from the Financial Services Commission. A financial holding company must report to the Financial Services Commission regarding certain events including:

• when there is a change of its largest shareholder;

- when there is a change of principal shareholders of a bank holding company;
- when the shareholding of the largest shareholder or a principal shareholder as prescribed under the Financial Holding Companies Act or a person who is in a special relationship with such largest or principal shareholder (as defined under the Presidential Decree of the Financial Holding Companies Act) changes by 1% or more of the total issued and outstanding voting shares of the financial holding company;
- when there is a change of its name;
- · when there is a cause for dissolution; and
- when it or its subsidiary ceases to control any of its respective direct and indirect subsidiaries by disposing of the shares of such direct and indirect subsidiaries.

## **Capital Adequacy**

The Financial Holding Companies Act does not provide for a minimum paid-in capital of financial holding companies. All financial holding companies, however, are required to maintain a specified level of solvency. In addition, in its allocation of the net profit earned in a fiscal term, a financial holding company is required to set aside in its legal reserve an amount equal to at least 10% of the net income after tax each time it pays dividends on its net profits earned until its legal reserve reaches at least the aggregate amount of its paid-in capital.

A financial holding company controlling banks or other financial institutions conducting banking business as prescribed in the Financial Holding Company Act (hereinafter, the "bank holding company") is required to maintain a minimum consolidated equity capital ratio of 8.0%. "Consolidated equity capital ratio" is defined as the ratio of equity capital as a percentage of risk-weighted assets on a consolidated basis, determined in accordance with the Financial Services Commission requirements that have been formulated based on the Bank of International Settlements standards. "Equity capital," as applicable to bank holding companies, is defined as the sum of Tier I capital, Tier II capital, and Tier III capital less any deductible items, each as defined under the Regulation on the Supervision of Financial Holding Companies. "Risk-weighted assets" is defined as the sum of credit risk-weighted assets and market risk-weighted assets.

For regulatory reporting purposes, we maintain allowances for credit losses on the following loan classifications that classify corporate and retail loans as required by the Financial Services Commission. In making these classifications, we take into account a number of factors, including the financial position, profitability and transaction history of the borrower, the value of any collateral or guarantee taken as security for the extension of credit, probability of default and loss amount in the event of default. This classification method, and our related provisioning policy, is intended to reflect the borrower's capacity to repay. To the extent there is any conflict between the Financial Services Commission guidelines and our internal analysis in such classifications, we adopt whichever is more conservative.

The following table sets forth loan classifications according to the guidelines of the Financial Services Commission.

Loan Classification	Loan Characteristics
Normal	Loans extended to customers that, based on our consideration of their business, financial position and future cash flows, do not raise concerns regarding their ability to repay the loans.
Precautionary	Loans extended to customers that (i) based on our consideration of their business, financial position and future cash flows, show potential risks with respect to their ability to repay the loans, although showing no immediate default risk or (ii) are in arrears for one month or more but less than three months.
Substandard	(i) Loans extended to customers that, based on our consideration of their business, financial position and future cash flows, are judged to have incurred considerable default risks as their ability to repay has deteriorated; or
	(ii) the portion that we expect to collect of total loans (a) extended to customers that have been in arrears for three months or more, (b) extended to customers that have incurred serious default risks due to the occurrence of, among other things, final refusal to pay their debt instruments, entry into liquidation or bankruptcy proceedings or closure of their businesses, or (c) extended to customers who have outstanding loans that are classified as "doubtful" or "estimated loss."
Doubtful	Loans exceeding the amount that we expect to collect of total loans to customers that:
	(i) based on our consideration of their business, financial position and future cash flows, have incurred serious default risks due to noticeable deterioration in their ability to repay; or
	(ii) have been in arrears for three months or more but less than 12 months.
Estimated loss	Loans exceeding the amount that we expect to collect of total loans to customers that:
	(i) based on our consideration of their business, financial position and future cash flows, are judged to be accounted as a loss because the inability to repay became certain due to serious deterioration in their ability to repay;
	(ii) have been in arrears for 12 months or more; or
	(iii) have incurred serious risks of default in repayment due to the occurrence of, among other things, final refusal to pay their debt instruments, liquidation or bankruptcy proceedings or closure of their business.

In accordance with the Regulations for the Supervision of Financial Institutions, we establish regulatory reserve for loan loss in the amount of the difference between allowance for credit losses as calculated pursuant to our provisioning policy in accordance with IFRS and allowance for credit losses based on the loan classifications set forth above as required by the Financial Services Commission. In determining consolidated equity capital ratio, we deduct regulatory reserve for loan loss from equity capital.

# Liquidity

All financial holding companies are required to match the maturities of their assets to those of liabilities in accordance with the Financial Holding Companies Act in order to ensure liquidity. Financial holding companies are required to submit quarterly reports regarding their liquidity to the Financial Supervisory Service and must:

- maintain a Won liquidity ratio (defined as Won assets due within one month, including marketable securities, divided by Won liabilities due within one month) of not less than 100%;
- maintain a foreign currency liquidity ratio (defined as foreign currency liquid assets due within three months divided by foreign currency liabilities due within three months) of not less than 80% except for financial holding companies with a foreign currency liability to total assets ratio of less than 1%;
- maintain a ratio of foreign currency liquid assets due within seven days less foreign currency liabilities due within seven days divided by total foreign currency assets of not less than 0%, except for financial holding companies with a foreign currency liability to total assets ratio of less than 1%; and
- maintain a ratio of foreign currency liquid assets due within a month less foreign currency liabilities due within a month divided by total foreign currency assets of not less than negative 10% except for financial holding companies with a foreign currency liability to total assets ratio of less than 1%.

#### Financial Exposure to Any Single Customer and Major Shareholders

Subject to certain exceptions, the total sum of credit (as defined in the Presidential Decree of the Financial Holding Companies Act, the Bank Act, the Presidential Decree of the Financial Investment Services and Capital Markets Act, the Insurance Act, the Mutual Savings Bank Act and the Specialized Credit Financial Business Act, respectively) of a financial holding company and its direct and indirect subsidiaries which are banks, merchant banks or securities companies ("Financial Holding Company Total Credit") extended to a single group of companies that belong to the same conglomerate as defined in the Monopoly Regulation and Fair Trade Act will not be permitted to exceed 25% of the Net Total Equity Capital.

*"Net Total Equity Capital"* for the purpose of the calculation of financial exposure to any single customer and Major Shareholder (as defined below) as applicable to us and our subsidiaries is defined under the Presidential Decree of the Financial Holding Companies Act as

- (a) the sum of:
  - (i) in the case of a financial holding company, the shareholders' equity as defined under Article 24-3, Section 7(2) of the Presidential Decree of the Financial Holding Companies Act, which represents the difference between the total assets less total liabilities on the balance sheet as of the end of the most recent quarter;
  - (ii) in the case of a bank, the shareholders' equity as defined under Article 2, Section 1(5) of the Bank Act, which represents the sum of Tier I and Tier II capital amounts determined according to the standards set by the BIS;
  - (iii) in the case of a merchant bank, the capital amount as defined in Article 342, Section (1) of the Financial Investment Services and Capital Markets Act;
  - (iv) in the case of a financial investment company, the shareholders' equity as defined under Article 37, Section 3 of the Presidential Decree of the Financial Investment Services and Capital Markets Act, which represents the total shareholders' equity as adjusted as determined by the Financial Services Commission, such as the amount of increase or decrease in paid-in capital after the end of the most recent fiscal year;
  - (v) in the case of an insurance company, the shareholders' equity as defined under Article 2, Section 15 of the Insurance Act, which represents the sum of items designated by the Presidential Decree, such as paid-in-capital, capital surplus, earned surplus and any equivalent items, less the value of good will and other equivalent items;

- (vi) in the case of a mutual savings bank, the shareholders' equity as defined under Article 2, Section 4 of the Mutual Savings Bank Act, which represents the sum of Tier I and Tier II capital amounts determined in accordance with the standards set by the Bank for International Settlements; and
- (vii) in the case of a credit card company or a specialty credit provider, the shareholders' equity as defined under Article 2, Section 19 of the Specialized Credit Financial Business Act, which represents the sum of the items designated by the Presidential Decree, such as paid-in-capital, capital surplus, earned surplus and any equivalent items;
- (b) less the sum of:
  - (i) the amount of shares in direct and indirect subsidiaries held by the financial holding company;
  - (ii) the amount of shares in the direct and indirect subsidiaries that are cross-held by such subsidiaries; and
  - (iii) the amount of shares in the financial holding company held by its direct and indirect subsidiaries.

The Financial Holding Company Total Credit to a single individual or legal entity may not exceed 20% of the Net Total Equity Capital.

Furthermore, the total sum of credits (as defined under the Financial Holding Companies Act, the Banking Act and the Financial Investment Services and Capital Markets Act, respectively) of a bank holding company and its direct and indirect subsidiaries ("Bank Holding Company Total Credit") extended to a "Major Shareholder" (together with the persons who have special relationship with such Major Shareholder) (as defined below) generally may not exceed the smaller of (x) 25% of the Net Total Equity Capital and (y) the amount of the equity capital of the financial holding company multiplied by the shareholding ratio of such Major Shareholder, subject to certain exceptions.

# "Major Shareholder" is defined under the Financial Holding Companies Act as follows:

(a) a shareholder holding (together with persons who have a special relationship with such shareholder as defined in the Presidential Decree of the Financial Holding Companies Act) in excess of 10% (or in the case of a financial holding company controlling regional banks only, 15%) in the aggregate of the financial holding company's total issued and outstanding voting shares; or

(b) a shareholder holding (together with persons who have a special relationship with such shareholder as defined in the Presidential Decree of the Financial Holding Companies Act) more than 4% in the aggregate of the total issued and outstanding voting shares of the financial holding company controlling national banks (other than a financial holding company controlling regional banks only), excluding shares related to the shareholder is the largest shareholder or has actual control over the major business affairs of the financial holding company through, for example, appointment and dismissal of the officers pursuant to the Presidential Decree of the Financial Holding Companies Act.

In addition, the total sum of the Bank Holding Company Total Credit extended to all of a bank holding company's Major Shareholder may not exceed 25% of the Net Total Equity Capital. Furthermore, the bank holding company and its direct and indirect subsidiaries that intend to extend the Bank Holding Company Total Credit to the bank holding company's Major Shareholder not less than the lesser of (i) the amount equivalent to 0.1% of the Net Total Equity Capital or (ii) W5 billion, with respect to a single transaction, must obtain prior unanimous board resolutions and then, immediately after the completion of the transaction, must file a report with the Financial Services Commission and publicly disclose the filing of such report (for example, through a website).

### Restrictions on Transactions among Direct and Indirect Subsidiaries and Financial Holding Company

Generally, a direct or indirect subsidiary of a financial holding company may not extend credit to the financial holding company which directly or indirectly controls such subsidiary. In addition, a direct or indirect subsidiary of a financial holding company may not extend credit to any other single direct or indirect subsidiary of the financial holding company in excess of 10% of its stockholders' equity and to any other direct and indirect subsidiaries of the financial holding company in excess of 20% of its stockholders' equity in the aggregate. The direct or indirect subsidiaries of a financial holding company must obtain an appropriate level of collateral for the credits extended to the other direct and indirect subsidiaries unless otherwise approved by the Financial Services Commission. The appropriate level of collateral for each type of such collateral is as follows:

- (i) For deposits and installment savings, obligations of the Government or the Bank of Korea, obligations guaranteed by the Government or the Bank of Korea, obligations secured by securities issued or guaranteed by the Government or the Bank of Korea: 100% of the amount of the credit extended;
- (ii) (a) For obligations of local governments under the Local Autonomy Act, local public enterprises under the Local Public Enterprises Act, and investment institutions and other quasi-investment institutions under the Basic Act on the Management of Government-Invested Institution (hereinafter, the "public institutions and others"); (b) obligations guaranteed by the public institutions and others; and
   (c) obligations secured by the securities issued or guaranteed by public institutions and others: 110% of the amount of the credit extended; and
- (iii) For any property other than those set forth in the above (i) and (ii): 130% of the amount of the credit extended.

Subject to certain exceptions, a direct or indirect subsidiary of a financial holding company is prohibited from owning the shares of any other direct or indirect subsidiaries (other than those directly controlled by the direct and indirect subsidiaries in question) in common control by the financial holding company. However, a direct or indirect subsidiary of a financial holding company may invest as a limited partner in a private equity fund that is a direct or indirect subsidiary of the same financial holding company. The transfer of certain assets subject to or below the precautionary criteria between the financial holding company and its direct or indirect subsidiary or between the direct and indirect subsidiaries of a financial holding company is prohibited except for (i) the transfer to an asset-backed securitization company, typically a special purpose entity, or the entrustment with a trust company under the Mortgage-Backed Securitization Company Act, (iii) the transfer or in-kind contribution to a corporate restructuring vehicle under the Corporate Restructuring Investment Company Act, (iv) the acquisition by a corporate restructuring company under the Industrial Development Act.

## **Disclosure of Management Performance**

For the purpose of protecting the depositors and investors in the direct or indirect subsidiaries of the financial holding companies, the Financial Services Commission requires financial holding companies to disclose certain material matters including (i) financial condition and profit and loss of the financial holding company and its direct and indirect subsidiaries, (ii) how capital was raised by the financial holding company and its direct and indirect subsidiaries under the Financial Holding Companies Act or any corrective measures or sanctions under the Law on Improvement of Structure of Financial Industry or (iv) occurrence of any non-performing assets or financial incident which may have a material adverse effect.

# **Restrictions on Shareholdings in Other Companies**

Subject to certain exceptions, a bank holding company may not own more than 5% of the total issued and outstanding shares of another company (other than its direct and indirect subsidiaries). If the financial holding company owns shares of another company (other than its direct and indirect subsidiaries) which is not a finance-related company, the financial holding company is required to exercise its voting rights in the same manner and

same proportion as the other shareholders of the company exercise their voting rights in favor of or against any resolutions under consideration at the shareholders' meeting of the company.

# Restrictions on Shareholdings by Direct and Indirect Subsidiaries

Generally, a direct subsidiary of a financial holding company is prohibited from controlling any other company; provided that a direct subsidiary of a financial holding company may control (as an indirect subsidiary of the financial holding company): (i) subsidiaries in foreign jurisdiction related to the business of the subsidiary that are engaged in a financial business, (ii) certain financial institutions related to the business of the subsidiary which are engaged in the business that the direct subsidiary may conduct without any licenses or permits, (iii) certain financial institutions whose business is related to the business of the direct subsidiary as prescribed under the Presidential Decree of the Financial Holding Companies Act (for example, the companies which a bank subsidiary may control are limited to credit information companies, credit card companies, trust business companies, securities investment management companies, investment advisory companies, futures business companies, and asset management companies), (iv) certain financial institutions whose business is related to financial business as prescribed by the Ordinance of the Prime Minister, and (v) certain companies which are not financial institutions but whose business is related to the financial business of the financial holding company as prescribed by the Presidential Decree of the Financial Holding Companies Act (e.g. finance-related research company, finance-related information technology company, etc.). Acquisition by the direct subsidiaries of such indirect subsidiaries requires a prior permission from the Financial Services Commission or a report to be submitted to the Financial Services Commission, depending on the types of the indirect subsidiaries and the amount of total assets of the indirect subsidiaries.

An indirect subsidiary of a financial holding company is prohibited from controlling any other company, provided, however, that in the case where a company held control over another company at the time such company initially became an indirect subsidiary of a financial holding company, such indirect subsidiary shall be required to dispose of its interest in such other company within two years after becoming an indirect subsidiary of a financial holding company.

A subsidiary of a financial holding company may invest in a special purpose company as its largest shareholder for purposes of making investments under the Act on Private Investment in Social Infrastructure without being deemed as controlling such special purpose company.

In addition, a private equity fund established in accordance with the Financial Investment Services and Capital Markets Act is not considered to be a subsidiary of a financial holding company even if the financial holding company is the largest investor in the private equity fund unless the financial holding company is the asset management company for the private equity fund.

# Restrictions on Transactions Between a Financial Holding Company and its Major Shareholder

A bank holding company and its direct and indirect subsidiaries are prohibited from acquiring (including acquisition by a trust account of its subsidiary bank) shares issued by such bank holding company's Major Shareholder in excess of 1% of the Net Total Equity Capital. In addition, the financial holding company and its direct and indirect subsidiaries which intend to acquire shares issued by such Major Shareholder not less than the lesser of (i) the amount equivalent to 0.1% of the Net Total Equity Capital or (ii) W5 billion, with respect to a single transaction, must obtain prior unanimous board resolutions and then, immediately after the acquisition, must file a report with the Financial Services Commission and publicly disclose the filing of such report (for example, through a website).

### **Restrictions on Financial Holding Company Ownership**

Under the Financial Holding Companies Act, foreign financial institutions are permitted to establish financial holding companies in Korea. Pursuant to the Presidential Decree of the Financial Holding Companies

Act, a foreign financial institution can control a financial holding company if, subject to satisfying certain other conditions, it, together with its specially-related persons, holds 100% of the total shares in the financial holding company.

In addition, any single shareholder and persons who stand in a special relationship with such shareholder (as defined under the Presidential Decree to the Financial Holding Companies Act) may acquire beneficial ownership of up to 10% of the total issued and outstanding shares with voting rights of a financial holding company controlling national banks (or 15% in the case of a financial holding company controlling regional banks only). The Government and the Korea Deposit Insurance Corporation are not subject to such a ceiling.

However, "non-financial business group companies" (as defined below) may not acquire beneficial ownership of shares of a bank holding company in excess of 4% of such financial holding company's outstanding voting shares, provided that such non-financial business group companies may acquire beneficial ownership of up to 10% of such financial holding company's outstanding voting shares with the approval of the Financial Services Commission under the condition that such non-financial business group companies will not exercise voting rights in respect of such shares in excess of the 4% limit. In addition, any person (whether a Korean national or a foreigner), with the exception of non-financial business group companies described above, may also acquire in excess of 10% of total voting shares issued and outstanding of a financial holding company which controls national bank, provided that an approval from the Financial Services Commission is obtained in instances where the total holding exceeds 10% (or 15% in the case of a financial holding company controlling regional banks only), 25% or 33% of the total voting shares issued and outstanding of such bank holding company.

"Non-financial business group companies" are defined under the Financial Holding Companies Act as companies, which include:

- (i) any same shareholder group with aggregate net assets of all non-financial business companies belonging to such group of not less than 25% of the aggregate net assets of all members of such group;
- (ii) any same shareholder group with aggregate assets of all non-financial business companies belonging to such group of not less than ₩2 trillion;
- (iii) any mutual fund in which the same shareholder group identified in item (i) or (ii) above holds more than 4% of the total shares issued and outstanding of such mutual fund;
- (iv) any private equity fund (x) which has a partner with limited liability that falls under item (i), (ii) or (iii) above and holds equity equivalent to 10% or greater of the total amount invested by the private equity fund, (y) which has a partner with unlimited liability that falls under item (i), (ii) or (iii) above or (z) whose affiliates belonging to an enterprise group subject to limitation on mutual investment hold in aggregate equity equivalent to 30% or greater of the total amount invested by such private equity fund; or
- (v) any investment purpose company in which a private equity fund that falls under item (iv) above acquires and holds no less than 4% of such company's shares or equity or exercises de-facto influence on such company's significant managerial matters.

#### Sharing of Customer Information among Financial Holding Companies and their Subsidiaries

Under the Act on Use and Protection of Credit Information, any individual customer's credit information may only be disclosed or otherwise used by financial institutions to determine, establish or maintain existing commercial transactions with them and only after obtaining written consent to use information. In addition, under the Act on Real Name Financial Transactions and Confidentiality, an individual working at a financial institution may not provide or reveal information or data concerning the contents of financial transactions to other persons unless such individual receives a request or consent in writing from the holder of a title deed, except under certain exceptions stipulated in the Act. Under the Financial Holding Company Act, a financial holding company and its direct and indirect subsidiaries, however, may share certain credit information of individual customers among themselves for internal management purposes outlined in the Enforcement Decree of the Financial Holding Company Act (such as credit risk management, internal control and customer analysis) without the customers' written consent, provided they adhere to the methods and procedures for provision of such information set forth therein. A financial investment company subsidiary of a financial holding company with a dealing and/or brokerage license may provide the financial holding company and its other direct and indirect subsidiaries information relating to the aggregate amount of cash or securities that a customer of the financial investment company has deposited for internal management purposes outlined in the Enforcement Decree of the Financial Holding Company Act, provided they adhere to the methods and procedures for provision of such information set forth therein. Certain amendments to the Financial Holding Company Act, which became effective on November 29, 2014, limit the scope of credit information that may be shared without the customers' prior consent and require certain procedures for provision of customer information as prescribed by the Financial Services Commission. Beginning on November 29, 2014, notice must be given to customers at least once a year regarding (i) the provider of customer information, (ii) the recipient of customer information, (iii) the purpose of providing the information and (iv) the categories of the information provided.

# The Act on Corporate Governance of Financial Companies

The Act on Corporate Governance of Financial Companies came into effect as of August 1, 2016. The Act was enacted to address calls for strengthened regulations on corporate governance of financial companies and to serve as a uniform regulation on corporate governance matters applicable to all financial companies in place of the separate regulations for each sector that existed. The Act contains several key measures, including, but not limited, to (i) condition of eligibility of officers of financial companies and standards for determining whether financial companies' officers may hold concurrent positions in other companies, (ii) standards for composition and operation of board of directors, (iii) standards for establishment, composition and operation of committees of the board of directors, (iv) internal control and risk management, (v) requirements and procedures for the approval of a change of major shareholders and (vi) special regulations for rights of minority shareholders of financial companies.

# **Financial Investment Services and Capital Markets Act**

# General

The Financial Investment Services and Capital Markets Act categorizes capital markets-related business into six different functions, as follows:

- dealing (trading and underwriting of "financial investment products" (as defined below));
- brokerage (brokerage of financial investment products);
- collective investment (establishment of collective investment schemes and the management thereof);
- investment advice;
- · discretionary investment management; and
- trusts (together with the five businesses set forth above, the "Financial Investment Businesses").

Accordingly, all financial businesses relating to financial investment products are reclassified as one or more of the Financial Investment Businesses described above, and financial institutions are subject to the regulations applicable to their relevant Financial Investment Businesses, irrespective of the type of the financial institution it is. For example, under the Financial Investment Services and Capital Markets Act, derivative businesses conducted by securities companies and future companies will be subject to the same regulations under the Financial Investment Services and Capital Markets Act, at least in principle. The banking business and insurance business are not subject to the Financial Investment Services and Capital Markets Act and will continue to be regulated under separate laws; provided, however, that they may become subject to the Financial Investment Services and Capital Markets Act if their activities involve any financial investment businesses requiring a license based on the Financial Investment Services and Capital Markets Act.

# **Comprehensive Definition of Financial Investment Products**

In an effort to encompass the various types of securities and derivative products available in the capital markets, the Financial Investment Services and Capital Markets Act sets forth a comprehensive term "financial investment products," defined to mean all financial products with a risk of loss in the invested amount (in contrast to "deposits," which are not financial investment products for which the invested amount is protected or preserved). Financial investment products are classified into two major categories: (i) "securities" (relating to financial investment products where the risk of loss is limited to the invested amount) and (ii) "derivatives" (relating to financial investment products where the risk of loss may exceed the invested amount). As a result of the general and open-ended manner in which financial investment products are defined, any future financial product could potentially fall under the definition of financial investment products. Under the Financial Investment Services and Capital Markets Act, securities companies, asset management companies, futures companies and other entities engaging in any Financial Investment Business are classified as "Financial Investment Companies."

# License System

Financial Investment Companies are able to choose what Financial Investment Business to engage in (through the "check the box" method set forth in the relevant license application), by specifying the desired (i) Financial Investment Business, (ii) financial investment product and (iii) target customers to which financial investment products may be sold (namely, general investors or professional investors). Licenses will be issued under the specific business sub-categories described above. For example, it would be possible for a Financial Investment Company to obtain a license to engage in the Financial Investment Business of (i) dealing (ii) over-the-counter derivatives products (iii) only with professional investors.

# **Expanded Business Scope of Financial Investment Companies**

Under the previous regulatory regime in Korea, it was difficult for a financial institution to explore a new line of business or expand upon its existing line of business. For example, a financial institution licensed as a securities company generally could not engage in the asset management business. In contrast, under the Financial Investment Services and Capital Markets Act, pursuant to the integration of its current business involving financial investment products into a single Financial Investment Business, a licensed Financial Investment Company is permitted to engage in all types of Financial Investment Businesses, subject to compliance with the relevant regulations, for example, maintaining an adequate "Ethical Screens," to the extent required. As to incidental businesses (i.e., a financial related business which is not a Financial Investment Business), the Financial Investment Services and Capital Markets Act generally allows a Financial Investment Company to freely engage in such incidental businesses by shifting away from the previous system of permitting only the listed activities towards a more comprehensive system. In addition, a Financial Investment Company is permitted (i) to outsource marketing activities by contracting with "introducing brokers" that are individuals but not employees of the Financial Investment Company, (ii) to engage in foreign exchange business related to their Financial Investment Business and (iii) to participate in the settlement network, pursuant to an agreement among the settlement network participants.

### Improvement in Investor Protection Mechanism

While the Financial Investment Services and Capital Markets Act broadens the scope of financial businesses in which financial institutions are permitted to engage, a more rigorous investor-protection mechanism is imposed upon Financial Investment Companies dealing in financial investment products. The Financial Investment Services and Capital Markets Act makes a distinction between general investors and sophisticated investors and provides new or enhanced protections to general investors. For instance, the Financial Investment Services and Capital Markets Act expressly provides for strict know-your-customer rules for general investors and imposes an obligation on Financial Investment Companies that they should market financial investment products suitable to each general investor considering his or her personal attributes, including investment objective, net worth, and investment experience. Under the Financial Investment Services and Capital Markets Act, a Financial Investment Company can be held liable if a general investor proves (i) damages or losses relating to such general investor's investment in financial investment products solicited by such Financial Investment Company and (ii) absence of explanation, false explanation, or omission of material fact (without having to prove fault or causation). In case there are any conflicts of interest between the Financial Investment Companies and investors, the Financial Investment Services and Capital Markets Act expressly requires (i) disclosure of any conflict of interest to investors and (ii) mitigation of conflicts of interest to a comfortable level or abstention from the relevant transaction.

### Other Regulatory Changes Related to Securities and Investments

The Financial Investment Services and Capital Markets Act brought changes to various rules in securities regulations including those relating to public disclosure, insider trading and proxy contests, which had previously been governed by the Securities and Exchange Act. For example, the 5% and 10% reporting obligations under the Securities and Exchange Act have become more stringent under the Financial Investment Services and Capital Markets Act. For instance, the number of events requiring an investor to update its 5% report have increased under the Financial Investment Services and Capital Markets Act. Previously, only a change in the shareholding of 1% or more or in the purpose of shareholding (such as an intention to influence management) could trigger the obligation to update the 5% report. The Government has issued detailed regulations stipulating additional events requiring updates to 5% reports, such as the change in the type of holding and change in any major aspect of the relevant contract. As for the 10% report filing obligation, the initial filing is expected to be required to be made within five business days of the date of the event triggering the 10% reporting obligation, compared to 10 calendar days under the previous law. The due date for reporting a subsequent change after the initial 10% report filing has been reduced from the 10th day of the first month immediately following the month in which such change took place to five business days of the date of such change. Under the previous law, there had been a limitation on the type of investment vehicles that could be used in a collective investment scheme (namely, to trusts and corporations), the type of funds that could be used for collective investments, and the types of assets and investment securities a fund could invest in. However, the Financial Investment Services and Capital Markets Act significantly liberalizes these restrictions, permitting all legal entities, including limited liability companies or partnerships, to be used for the purpose of collective investments, allowing the formation of fund complexes and permitting investment funds to invest in a wide variety of different assets and investment instruments.

# **Principal Regulations Applicable to Banks**

# General

The banking system in Korea is governed by the Banking Act and the Bank of Korea Act of 1950, as amended (the "Bank of Korea Act"). In addition, Korean banks are subject to the regulations and supervision of the Bank of Korea, the Bank of Korea's Monetary Policy Committee, the Financial Services Commission and its executive body, the Financial Supervisory Service.

The Bank of Korea, established in June 1950 under the Bank of Korea Act, performs the customary functions of a central bank. It seeks to contribute to the sound development of the national economy by price stabilization through establishing and implementing efficient monetary and credit policies. The Bank of Korea acts under instructions of the Monetary Policy Committee, the supreme policy-making body of the Bank of Korea.

Under the Bank of Korea Act, the Monetary Policy Committee's primary responsibilities are to formulate monetary and credit policies and to determine the operations, management and administration of the Bank of Korea. The Financial Services Commission, established on April 1, 1998 as the Financial Supervisory Commission and later changed its name to the Financial Services Commission on March 3, 2008, regulates commercial banks pursuant to the Banking Act, including establishing guidelines on capital adequacy of commercial banks, and promulgates regulations relating to supervision of banks. Furthermore, pursuant to the Amendment to the Government Organization Act and the Banking Act on May 24, 1999, the Financial Services Commission, instead of the Ministry of Strategy and Finance, now regulates market entry into the banking business.

The Financial Supervisory Service is subject to the instructions and directives of the Financial Services Commission and carries out supervision and examination of commercial banks. In particular, the Financial Supervisory Service sets requirements both for the prudent control of liquidity and for capital adequacy and establishes reporting requirements pursuant to the authority delegated to it under the Financial Services Commission regulations, pursuant to which banks are required to submit annual reports on financial performance and shareholdings, regular reports on management strategy and non-performing loans, including write-offs, and management of problem companies and plans for the settlement of bad loans.

Under the Banking Act, approval to commence a commercial banking business or a long-term financing business must be obtained from the Financial Services Commission. Commercial banking business is defined as the lending of funds acquired predominantly from the acceptance of deposits for a period not exceeding one year or, subject to the limitation established by the Financial Services Commission, for a period between one year and three years. Long-term financing business is defined as the lending, for periods in excess of one year, of funds acquired predominantly from paid-in capital, reserves or other retained earnings, the acceptance of deposits with maturities of at least one year, or the issuance of bonds or other securities. A bank wishing to enter any business other than commercial banking and long-term financing businesses, such as the trust business, must obtain approval from the Financial Services Commission. Approval to merge with any other banking institution, to liquidate, to close a banking business or to transfer all or a part of a business must also be obtained from the Financial Services Commission.

If the Financial Services Commission deems a bank's financial condition to be unsound or if a bank fails to meet the applicable capital adequacy ratio set forth under Korean law, the Financial Services Commission may order, among others:

- capital increases or reductions;
- suspension of officers' performance of their duties and appointment of custodians;
- stock cancellations or consolidations;
- transfers of a part or all of business;
- sale of assets and bar on acquisition of high-risk assets;
- closures or downsizing of branch offices or workforce;
- mergers or becoming a subsidiary under the Financial Holding Companies Act of a financial holding company;
- acquisition of a bank by a third party;
- suspensions of a part or all of business operation (not more than six months in the case of suspension of all business operations); or
- assignments of contractual rights and obligations relating to financial transactions.

# **Capital Adequacy**

The Banking Act requires nationwide banks to maintain a minimum paid-in capital of \$100 billion and regional banks to maintain a minimum paid-in capital of \$25 billion.

In addition to minimum capital requirements, all banks including foreign bank branches in Korea are required to maintain a prescribed solvency position. A bank must also set aside as its legal reserve an amount equal to at least 10% of its net profits after tax each time it pays dividends on net profits earned until such time when the reserve equals the amount of its total paid-in capital.

Under the Banking Act, the capital of a bank is divided into two categories: Tier I and Tier II capital. Tier I capital (typically referred to as "Core Capital") consists of (i) the capital that can absorb losses incurred by a bank such as capital, capital surplus and earned surplus generated from the issuance of common shares (collectively, "Common Stock Capital"), and (ii) the capital that can absorb the losses of a bank after depletion of the Common Stock Capital such as capital and capital surplus generated from the issuance of Tier I capital instruments satisfying the requirements designated by the Financial Supervisory Service (collectively, "Other Core Capital"). Tier II capital (typically referred to as "Supplementary Capital") represents the capital which is equivalent to, but not included in, the Core Capital and can absorb losses incurred upon the liquidation of a bank such as capital and capital surplus generated from the issuance for bad debts set aside for loans classified as "normal" or "precautionary."

Under the Detailed Regulations on the Supervision of the Banking Business, Tier I capital instruments must satisfy, among others, the following requirements in order to be recognized as Other Core Capital:

- (i) the price for such instruments shall have been fully paid through the procedure for issuance, and the instruments shall be in a perpetual form with no cause triggering a step-up or redemption;
- (ii) such instruments shall be bound by a special agreement on being subordinate to depositors, general creditors and subordinated debt of the bank (referring to a special agreement under which subordinated creditors' right to claim payment shall take effect only after unsubordinated creditors' claims are fully paid, when bankruptcy or any similar incident occurs; hereinafter the same shall apply) but shall not fall within liabilities exceeding assets at the time when bankruptcy is declared under the Debtor Rehabilitation and Bankruptcy Act;
- (iii) the payment of dividends or interests shall be suspended from the date when the bank is designated as a "insolvent financial institution" under the Act on Structural Improvement of the Financial Industry of Korea or under the Depositor Protection act of Korea as applicable, or the Financial Supervisory Service takes measures under the Regulations on the Supervision of the Banking Business such as the managerial improvement recommendation, the managerial improvement request, the managerial improvement order and the emergency measures against the bank to the date when the abovementioned event is removed;
- (iv) the payment of dividends or interests shall not be determined in connection with the credit rating of the bank;
- (v) the dividends may only be paid out of distributable income;
- (vi) the bank shall be able to revoke in its sole discretion the payment of dividends or interests at any time;
- (vii) the cancellation of paying dividends must not impose restrictions on the bank except in relation to dividends to common stockholders;
- (viii) the revocation of the payment of dividends or interests shall not be deemed as the event of defaults, and the bank shall be able to use in its sole discretion the amount which was revoked to pay as dividends or interests to redeem any other debts of the bank then due and payable;

- (ix) such instruments shall not be redeemed within five years from the issuance date and the bank shall be able to determine in its sole discretion whether it redeems such instruments even after five years from the issuance date, and the instruments shall not be subject to any condition that arouse investors' expectation to have the instruments redeemed or any condition that imposes a burden of redemption upon the issuing bank in fact;
- (x) the requirements prescribed in Appendix 3-5 (Trigger Events for Contingent Capital Securities) of the Detailed Enforcement Rules of Regulation on Supervision of Banking Business shall be satisfied;
- (xi) the bank or the person who has de facto control over the bank shall not purchase capital instruments or provide a purchaser of such securities with funds for the purchase by providing a collateral or guarantee for payment or by lending a loan, shall not raise the priority of its claims, legally or economically, for the price paid for the securities, and shall not provide a collateral or guarantee to the purchasers of the securities directly or via a related company; and
- (xii) such capital instruments shall have no condition that hinders the issuing bank's procurement or expansion of capital in the future.

Under the Detailed Regulations on the Supervision of the Banking Business, Tier II capital instruments must satisfy, among others, the following requirements in order to be recognized as Supplementary Capital:

- the procedure for issuance shall have been completed, the price for such capital instruments shall have been fully paid, and the capital instruments shall be bound by a special agreement of subordination to deposits and ordinary debts;
- (ii) the maturity shall not be less than five years from the issuance date, and Tier II capital instruments shall not be redeemed within five years from the issuance date;
- (iii) there is no condition to promote the bank to redeem such capital instruments such as a step-up provision, and the bank shall be able to determine in its sole discretion whether to redeem such instruments prior to the maturity date, and the instruments shall not be subject to any condition that arouse investors' expectation to have the instruments redeemed or any condition that imposes a burden of redemption upon the issuing bank in fact;
- (iv) other than the case where the bank is subject to the bankruptcy or liquidation, the holder of Tier II capital instruments shall not have the right to require bank to pay the principal or interests of such instruments earlier than the original due date thereof;
- (v) the payment of dividends or interests shall not be determined in connection with the credit rating of the bank;
- (vi) the requirements prescribed in Appendix 3-5 (Trigger Events for Contingent Capital Securities) of the Detailed Enforcement Rules of Regulation on Supervision of Banking Business shall be satisfied;
- (vii) the bank or any person or entity over which the bank exercises substantial control shall not purchase the capital instruments issued by such bank nor provide, directly or indirectly, the funds to acquire the capital instruments by providing any collateral or guaranty or loan in favor of the person or entity which tries to acquire such instruments; and
- (viii) the bank shall not enhance, legally or economically, the payment priority of the capital instruments, nor provide, directly or indirectly through its affiliated company, any collateral or guaranty in favor of the person or entity which acquires such instruments.

All banks must meet standards regarding minimum ratios of Tier I and Tier II capital (less any capital deductions) to risk-weighted assets, determined in accordance with the Financial Services Commission requirements that have been formulated based on the BIS Standards. These standards were adopted and became effective in 1996. Under these regulations, all domestic banks and foreign bank branches are required to meet the minimum ratio of Tier I and Tier II capital (less any capital deductions) to risk-weighted assets of 8%.

Furthermore, as Basel III was adopted and is being implemented in stages in Korea since December 1, 2013, all banks in Korea are required to meet minimum ratios of common stock capital (less any capital deductions) and core capital (less any capital deductions) to risk-weighted assets as set out in the Regulation on the Supervision of the Banking Business. The required minimum ratio of common stock capital (less any capital deductions) to risk-weighted assets is 4.5%, and the required minimum ratio of core capital (less any capital deductions) to risk-weighted assets is 6.0%. In addition, additional capital conservation buffer requirements have been implemented in stages from January 1, 2016 to January 1, 2019. Under such requirements, all banks in Korea are required to maintain a capital conservation buffer of 0.625% from January 1, 2016, which was gradually increased to 1.25% on January 1, 2017, 1.875% on January 1, 2018 and 2.5% on January 1, 2019.

Under the Regulation on the Supervision of the Banking Business and the Detailed Regulations promulgated thereunder, Korean banks apply the following risk-weight ratios in respect of their home mortgage loans:

- (i) for those banks adopting a standardized approach for calculating credit risk-weighted assets, the risk-weight ratio of 35% (only in the case where the loan is fully secured by a first ranking mortgage) but, with respect to high risk home mortgage loans (even if such loans are fully secured by a first ranking mortgage) the risk-weight ratio of 50% and 70% for second-level high risk home mortgage loans; and
- (ii) for those banks adopting an internal ratings-based approach for calculating credit risk-weighted assets, a risk-weight ratio calculated with reference to the probability of default, loss given default and exposure at default, each as defined in the Detailed Regulations on the Supervision of the Banking Business.

In Korea, Basel II, a convention entered into by the Basel committee in June 2004 for the purpose of improving risk management and increasing capital adequacy of banks, was implemented in January 2008. Pursuant to Basel II, operational risk, such as inadequate procedure, loss risk by employees, internal system, occurrence of unexpected event, as well as credit risk and market risk, is taken into account in calculating the risk-weighted assets, in addition to maintaining the capital adequacy ratio of 8% for banks. Under Basel II, the capital requirements for credit risk can be calculated by the internal rating based (IRB) approach or the standardized approach.

Under the standardized approach, a home mortgage loan fully secured by a first ranking mortgage over the residential property is risk-weighted at 35%, but certain home mortgage loans with loan-to-value ratio exceeding 60% are risk weighted at 50% pursuant to an amendment of the Detailed Regulation on the Supervision of the Banking Business on December 31, 2018.

Under the Regulation on the Supervision of the Banking Business, banks shall set aside allowances for bad debts for each class of soundness in accordance with IFRS as adopted by Korea. If the amount for each class of soundness calculated in accordance with the following criteria exceeds the allowances for bad debts set aside, the excess amount shall, at the time of each settlement of accounts, be set aside as regulatory reserve for credit losses.

- 0.85% of normal credits (or 0.9% in the case of normal credits comprising loans to certain industries including construction, retail and wholesale sales, accommodations, restaurant, real estate and lease, 1.0% in the case of normal credits comprising loans to individuals and households, 2.5% in the case of normal credits comprising credit card loans and 1.1% in the case of normal credits comprising other credit card receivables);
- 7% of precautionary credits (or 10% in the case of precautionary credits comprising loans to individuals and households, 50% in the case of precautionary credits comprising credit card loans and 40% in the case of precautionary credits comprising other credit card receivables);
- 20% of substandard credits (or 10% in the case of substandard credits comprising assets for which the bank has the right to receive payment in priority pursuant to the Corporate Restructuring Promotion

Act of Korea or Paragraph 180, Subparagraph 2 of the Debtor Rehabilitation and Bankruptcy Act of Korea (the "Priority Assets"), 20% in the case of normal credits comprising loans to individuals and households, 65% in the case of substandard credits comprising credit card loans and 60% in the case of substandard credits comprising credit card loans and 60% in the case of substandard credits comprising credit card loans and 60% in the case of substandard credits comprising credit card loans and 60% in the case of substandard credits comprising credit card loans and 60% in the case of substandard credits comprising credit card loans and 60% in the case of substandard credits comprising credit card loans and 60% in the case of substandard credits comprising credit card loans and 60% in the case of substandard credits comprising credit card loans and 60% in the case of substandard credits comprising credit card loans and 60% in the case of substandard credits comprising credits card loans and 60% in the case of substandard credits comprising credits card loans and 60% in the case of substandard credits comprising credits card loans and 60% in the case of substandard credits comprising credits card loans and 60% in the case of substandard credits comprising credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans and 60% in the case of substandard credits card loans

- 50% of doubtful credits (or 25% in the case of doubtful credits comprising Priority Assets, 55% in the case of doubtful credits comprising loans to individuals and households and 75% in the case of doubtful credits comprising credit card loans and other credit card receivables); and
- 100% of estimated loss credits (or 50% in the case of estimated loss credits comprising of Priority Assets).

Furthermore, under the Regulation on the Supervision of the Banking Business, banks must maintain allowances for bad debts and regulatory reserve for credit losses in respect of their confirmed guarantees (including confirmed acceptances) and outstanding non-used credit lines in an aggregate amount calculated at the same rates applicable to normal, precautionary, substandard, doubtful and estimated loss credits comprising their outstanding loans and other credits as set forth above.

As of January 1, 2016, the Financial Services Commission implemented Basel III requirements relating to accumulation of additional capital for systemically important banks and bank holding companies and countercyclical capital buffer requirements. Each year, the Financial Services Commission may designate banks with significant influence (based on size and connectivity with other financial institutions) on the domestic financial system as a domestic systemically important bank and require the accumulation of additional capital in accordance with the highest of: (i) ratio of common equity capital to risk-weighted assets, ranging from 0.0% to 2.0%, depending on the systematic importance evaluation score, (ii) if the bank's holding company is a domestic systemically important bank holding company, the capital ratio corresponding to the additional capital required for the bank holding company under the Financial Holding Company Supervision Regulations, or (iii) if the bank is also a global systemically important bank, as defined by the Basel Committee, the capital ratio as required by the Basel Committee. Shinhan Financial Group and Shinhan Bank were selected as a domestic systemically important bank holding company and domestic systemically important bank, respectively, from 2016 through 2022. According to the instructions of the Financial Services Commission, domestic systemically important banks, including Shinhan Bank, have been required to maintain an additional capital buffer of 0.25% since January 1, 2016, with such buffer increased by 0.25% annually to reach 1.00% as of January 1, 2019. The Financial Services Commission may also, upon quarterly review, determine and require banks to accumulate a required level of countercyclical capital buffer within the range of 0% to 2.5% of risk-weighted assets, taking into account factors such as the degree of increase in credit relative to the gross domestic product. Since March 2016, the Financial Services Commission has maintained countercyclical capital buffer requirements at 0%. The Detailed Regulation on the Supervision of the Banking Business was also amended on June 30, 2018 to add "concentration of risk in the retail sector" as an additional criterion when the Financial Supervisory Service evaluates the risk management systems of Korean banks.

# Liquidity

All banks are required to match the maturities of their assets and liabilities in accordance with the Banking Act in order to ensure adequate liquidity. Banks may not invest in excess of an amount exceeding 100% of their Tier I and Tier II capital (less any capital deductions) in stocks and other securities with a period remaining to maturity of over three years. However, this restriction does not apply to government bonds or to Monetary Stabilization Bonds issued by the Bank of Korea.

The Financial Services Commission requires Korean banks to maintain a liquidity coverage ratio of at least 90.0% as of January 1, 2017, 95.0% as of January 1, 2018 and 100.0% as of January 1, 2019. The Financial Services Commission defines liquidity coverage ratio as high quality liquid assets that can be immediately converted into cash with little or no loss in value, as divided by the net amount of cash outflow for the next 30 day

period, under the stress level established according to the liquidity coverage ratio, pursuant to the Regulation on the Supervision of the Banking Business, which was amended as of June 28, 2016 to implement the liquidity coverage ratio requirements under Basel III.

With respect to foreign currency liquidity coverage ratio, the Regulation on the Supervision of the Banking Business requires that financial institutions dealing with foreign exchange affairs (i.e., banks) whose foreign-currency denominated liabilities are equal to or greater than US\$500 million or 5% of its total liabilities, as of the end of the immediately preceding half-year period, maintain a foreign currency liquidity coverage ratio of 60% or higher beginning January 1, 2017, 70% or higher beginning January 1, 2018 and 80% or higher beginning January 1, 2019. The term "foreign currency liquidity coverage ratio" means the ratio of high-liquidity assets to the net cash outflow in respect of foreign-currency denominated assets and liabilities for the next 30 days.

In April 2020, in response to the COVID-19 pandemic, the Financial Services Commission temporarily lowered the liquidity coverage ratio requirement from 100% to 85%. The Financial Services Commission subsequently decided to gradually restore this ratio on a quarterly basis from the third quarter of 2022, to a ratio of 90% in the third quarter of 2022, 92.5% in the fourth quarter of 2022, 95% in the first quarter of 2023, 97.5% in the second quarter of 2023 and 100% from the third quarter of 2023. However, in October 2022, the Financial Services Commission decided to apply the 92.5% ratio until the end of June 2023 in response to the increasing volatility and uncertainty in the short-term money market, as determined through a financial market inspection meeting.

The Monetary Policy Committee of the Bank of Korea is authorized to fix and alter minimum reserve requirements that banks must maintain against their deposit liabilities. The current minimum reserve ratio is 7.0% of average balances for Won-denominated demand deposits outstanding, 0.0% of average balances for Won-denominated employee asset establishment savings deposits, employee long-term savings deposits, employee house purchase savings deposits, long-term house purchase savings deposits, household long-term savings deposits and employee preferential savings deposits outstanding (with respect to employee-related deposits and household long-term savings deposits, only if such deposits were made prior to February 28, 2013) and 2.0% of average balances for Won-denominated time and savings deposits, mutual installments, housing installments and certificates of deposit outstanding. For foreign currency deposit liabilities, a 2.0% minimum reserve ratio is applied to time deposits with a maturity of one month or longer, certificates of deposit with a maturity of 30 days or longer, and savings deposits with a maturity of six months or longer and a 7.0% minimum reserve ratio is applied to other deposits, while a 1.0% minimum reserve ratio is applied for offshore accounts, immigrant accounts and resident accounts opened by financial institutions (excluding bank holding companies) and The Export-Import Bank of Korea as well as foreign currency certificates of deposit held by account holders of such offshore accounts, immigrant accounts and resident accounts opened by financial institutions (excluding bank holding companies) and The Export-Import Bank of Korea.

# Loan-to-Deposit Ratio

In December 2009, the Financial Supervisory Service announced that it would introduce a new set of regulations on the loan-to-deposit ratio by amending the Regulation on the Supervision of the Banking Business upon its determination that the overall liquidity of banks in Korea had become unstable due to the ongoing increase in the loan-to-deposit ratio resulting from banks expanding their asset size too competitively by granting mortgages on houses and loans to small- and medium-sized enterprises over the last couple of years. The Regulation on the Supervision of the Banking Business, which was amended as of August 19, 2010 and December 26, 2014 and took effect on January 1, 2014 and January 1, 2015, respectively, requires banks with Won-denominated loans of not less than  $\Psi$ 2 trillion in value as of the last month of the immediately preceding quarter to maintain a ratio of Won-denominated loans (excluding certain types of loans using funds borrowed from Korea Development Bank or the Government or loans made under certain operational rules of Korea Federation of Banks) to Won-denominated deposits (excluding certificates of deposit) and the balance of the covered bonds under the Act on Issuance of Covered Bonds, the maturity of which is not less than five years

(only in case when such financing from the issuance of covered bonds is used in Won currency and up to 1% of Won-denominated deposits) of no more than 100%. Since January 1, 2020, in calculating such loan to deposit ratio, retail loans and corporate loans are weighed differently, with retail loans subject to a multiple of 115% and corporate loans (excluding loans to SOHOs) subject to a multiple of 85%, thereby increasing the impact of retail loans and reducing the impact of corporate loans in calculating such ratio. In response to the COVID-19 pandemic, on April 20, 2020, the Financial Services Commission announced a series of measures to temporarily ease the regulations on loan-to-deposit ratio. In particular, the loan-to-deposit ratio maximum of 100% was temporarily increased to 105% and weighing of corporate loans to SOHOs extended since January 1, 2020 to December 2021 also became subject to a multiple of 85% provided such loans are not real estate related. On March 30, 2022, the Financial Services Commission announced plans to cease the temporary easement of regulations relating to the loan-to-deposit ratio as of June 30, 2022 and to gradually normalize the loan-to-deposit ratio back down to 100% beginning July 1, 2022. On October 27, 2022, the Financial Services Commission further announced measures to temporarily ease the loan-to-deposit ratio requirement from 100% to 105% in consideration of the increasing demand for corporate loans due to the contraction of the corporate bond market. This temporary increase will apply through April 2023, subject to further extension depending on the market conditions at the time of expiration of such measures. Shinhan Bank's loan-to-deposit ratio as of December 31, 2022 was 94.59%, based on monthly average balances.

# Financial Exposure to Any Single Customer and Major Shareholders

Under the Banking Act, the sum of material credit exposures by a bank, namely, the total sum of its credits to single individuals, legal entities or persons sharing credit risk with such individuals or legal entities such as companies belonging to the same enterprise groups as defined under the Monopoly Regulation and Fair Trade Act that exceed 10% of the sum of Tier I and Tier II capital (less any capital deductions), must not exceed five times the sum of Tier I and Tier II capital (less any capital deductions), subject to certain exceptions. Subject to certain exceptions, no bank is permitted to extend credit (including loans, guarantees, purchases of securities (only in the nature of a credit) and such other transactions which directly or indirectly create credit risk) in excess of 20% of the sum of Tier I and Tier II capital (less any capital deductions) to an individual or a legal entity, and no bank may grant credit in excess of 25% of the sum of Tier I and Tier II capital (less any capital deductions) to individuals, legal entities and companies that belong to the same enterprise group as defined in the Monopoly Regulation and Fair Trade Act.

Under the Banking Act, certain restrictions apply to extending credits to a major shareholder. The definition of a "major shareholder" is as follows:

- a shareholder holding (together with persons who have a special relationship with such shareholder as defined in the Presidential Decree of the Banking Act) in excess of 10% (or in the case of regional banks, 15%) in the aggregate of the bank's total issued and outstanding voting shares; or
- a shareholder holding (together with persons who have a special relationship with such shareholder as defined in the Presidential Decree of the Banking Act) more than 4% in the aggregate of the total issued and outstanding voting shares of a bank (other than a regional bank), where such shareholder is the largest shareholder or is able to actually control the major business affairs of the bank, for example, through appointment and dismissal of the chief executive officer or of the majority of the executives.

Under the Banking Act, banks are prohibited from extending credits in the amount greater than the lesser of (1) 25% of the sum of such bank's Tier I and Tier II capital (less any capital deductions) and (2) the relevant major shareholder's shareholding ratio multiplied by the sum of the bank's Tier I and Tier II capital (less any capital deductions) to a major shareholder (together with persons who have special relationship with such major shareholder as defined in the Presidential Decree of the Banking Act). Also, no bank is allowed to grant credit to its major shareholders in the aggregate in excess of 25% of its Tier I and Tier II capital (less any capital deductions).

When managing the credit risk of banks, among the methods for providing credit support by banks, a loan agreement, a purchase agreement for asset-backed commercial papers, purchase of subordinate beneficiary certificates, and assumption of liability by providing warranty against default under asset-backed securitization are examples of creating financial exposure to banks.

# Interest Rates

Korean banks remain dependent on the acceptance of deposits as their primary source of funds. Currently, there are no legal controls on interest rates on bank loans in Korea, except for the cap of 20.0% per annum on interest rates on loans to individuals or small corporations, as defined under the Framework Act on Small and Medium Enterprises under the Act on Registration of Credit Business, Etc. and Protection of Finance Users.

# Lending to Small- and Medium-sized Enterprises

When commercial banks (including Shinhan Bank) make Won-denominated loans to certain startup, venture, innovative and other strategic small- and medium-sized enterprises specially designated by the Bank of Korea as "priority borrowers," the Bank of Korea generally provides the underlying funding to these banks at concessionary rates for up to 50% of all such loans made to the priority borrowers subject to a monthly-adjusted limit prescribed by the Bank of Korea provided that if such loans to priority borrowers made by all commercial banks exceed the prescribed limit for a given month, the concessionary funding for the following month will be allocated to each commercial bank in proportion to such bank's lending to priority borrowers two months prior to the time of such allocation, which has the effect that, if a particular bank lags other banks in making loans to priority borrowers, the amount of funding such bank can receive from the Bank of Korea at concessionary rates will be proportionately reduced.

# **Disclosure of Management Performance**

For the purpose of enforcing mandatory disclosure of management performance so that the general public, especially depositors and stockholders, will be in a better position to monitor banks, the Financial Services Commission requires commercial banks to disclose certain matters as follows:

- loans bearing no profit made to a single business group in an amount exceeding 10% of the sum of the bank's Tier I and Tier II capital (less any capital deductions) as of the end of the previous month (where the loan exposure to such borrower is calculated pursuant to the criteria under the Detailed Regulations promulgated under the Regulation on the Supervision of the Banking Business), except where the loan exposure to a single business group is not more than W4 billion; and
- any loss due to court judgments or similar decisions in civil proceedings in an amount exceeding 1% of the sum of the bank's Tier I and Tier II capital (less any capital deductions) as of the end of the previous month, except where the loss is not more than ₩1 billion.

# **Restrictions on Lending**

According to the Banking Act, commercial banks are prohibited from making any of the following categories of loans:

- loans made directly or indirectly on the pledge of a bank's own shares;
- loans made directly or indirectly to enable a natural or a legal person to buy the bank's own shares;
- loans made to any of the bank's officers or employees other than de minimis loans of up to

   W20 million in the case of a general loan, (2) W50 million in the case of a general loan plus a
   housing loan, or (3) W60 million in the aggregate for general loans, housing loans and loans to pay
   damages arising from wrongful acts of employees in financial transactions;

- credit (including loans) secured by a pledge of shares of a subsidiary corporation of the bank or to enable a natural or juridical person to buy shares of a subsidiary corporation of the bank; and
- loans to any officers or employees of a subsidiary corporation of the bank, other than general loans of up to ₩20 million or general and housing loans of up to ₩50 million in the aggregate.

## **Recent Regulations Relating to Retail Household Loans**

The Financial Services Commission has implemented a number of changes in recent years to the regulations relating to retail household lending by banks. Under the currently applicable regulations:

- as to any new loans secured by houses (including apartments) located nationwide, the loan-to-value ratio (the aggregate principal amount of loans secured by such collateral over the appraised value of the collateral) shall not exceed 70%;
- as to any new loans secured by houses (including apartments) located in "speculative areas", "overheated speculative areas" or "adjustment targeted areas", in each case, as designated by the Government, the loan-to-value ratio should not exceed 50%, except that such maximum loan-to-value ratio is (x) 70% for low-income households that (i) have a combined (in case of married couple) annual income of no more than ₩90 million, (ii) do not currently own any housing and (iii) are using the loan to purchase low-price housing valued at ₩900 million or less (₩800 million or less in the case of houses located in "adjustment targeted areas") and (y) 80% for first-time homebuyers with a maximum residential mortgage loan amount of ₩600 million or less;
- as to any new loans secured by houses (including apartments) located nationwide to be extended to a household that already owns one or more houses, the maximum loan-to-value ratio must be adjusted to 10% lower than the applicable loan-to-value ratio described above;
- as to any new loans secured by houses (including apartments) located in "speculative areas", "overheated speculative areas" or "adjustment targeted areas", in each case as designated by the Government, to be extended to a household that already owns one or more houses, the loan to value ratio should not exceed 30% subject to certain exceptions under the applicable regulations;
- as to any new loans secured by houses (including apartments) located in "speculative areas", "overheated speculative areas" or "adjustment targeted areas", in each case, as designated by the Government, the borrower's debt-to-income ratio (calculated as (1) the aggregate annual total payment amount of (x) the principal of and interest on loans secured by such housing and existing mortgage and home equity loans and (y) the interest on other debts of the borrower over (2) the borrower's annual income) should not exceed 40% (50% for those that are located in "adjustment targeted areas"), except that such maximum debt-to-income ratio is 60% for (a) low-income households that (i) have a combined (in case of married couple) annual income of less than ₩90 million, (ii) do not currently own any housing and (iii) are using the loan to purchase low-price housing valued at ₩900 million or less (₩800 million or less in case of houses located in "adjustment targeted areas") and (b) first-time homebuyers;
- as to any new loans secured by apartments to be extended to a household that already owns one or more houses but wishes to purchase additional houses located in an unregulated Seoul metropolitan area, the maximum debt-to-income ratio must be adjusted to 10% lower than the applicable debt-to-income ratio described above; and
- as to any new loans extended to a household that already has an aggregate loan amount exceeding ₩100 million (including the loan application amount and the revolving amount in case of a revolving loan), such household's debt-service-ratio (calculated as (1) the aggregate annual total payment amount of the principal of and interest on financial liabilities divided by (2) the household's annual income) should not exceed 40% unless otherwise specified by the applicable regulations.

# **Restrictions on Investments in Property**

A bank may possess real estate property only to the extent necessary for conducting its business; provided that the aggregate value of such real estate property must not exceed 60% of the sum of its Tier I and Tier II capital (less any capital deductions). Any property acquired by a bank (1) through the exercise of its rights as a secured party or (2) the acquisition of which is prohibited by the Banking Act must be disposed of within three years, unless otherwise provided by the regulations thereunder.

### **Restrictions on Shareholdings in Other Companies**

Under the Banking Act, a bank may not own more than 15% of shares outstanding with voting rights of another company, except where, among other reasons:

- the company issuing such shares is engaged in a business that falls under the category of financial businesses set forth by the Financial Services Commission (including companies which business purpose is to own equity interests in private equity funds); or
- the acquisition of shares by the bank is necessary for corporate restructuring of such company and is approved by the Financial Services Commission.

In the above cases, a bank must satisfy either of the following requirements:

- the total investment in companies in which the bank owns more than 15% of the outstanding shares with voting rights does not exceed 20% of the sum of Tier I and Tier II capital (less any capital deductions); or
- the total investment in companies in which the bank owns more than 15% of the outstanding shares with voting rights does not exceed 30% of the sum of Tier I and Tier II capital (less any capital deductions) where the acquisition satisfies the requirements determined by the Financial Services Commission.

The Banking Act provides that a bank using its bank accounts and its trust accounts is not permitted to acquire the shares issued by the Major Shareholder of such bank in excess of an amount equal to 1% of the sum of Tier I and Tier II capital (less any capital deductions).

### **Restrictions on Bank Ownership**

Under the Banking Act, subject to certain exceptions, a single shareholder and persons who stand in a special relationship with such shareholder (as described in the Presidential Decree to the Banking Act) may acquire beneficial ownership of up to 10% of a national bank's total issued and outstanding shares with voting rights and up to 15% of a regional bank's total issued and outstanding shares with voting rights. The government, the Korea Deposit Insurance Corporation and financial holding companies qualifying under the Financial Holding Companies Act are not subject to such ceilings. However, non-financial business group companies namely, (1) any same shareholder group with an aggregate net assets of all non-financial companies belonging to such group of not less than 25% of the aggregate net assets of all corporations that are members of such group; (2) any group with aggregate assets of all non-financial companies belonging to such group of not less than  $\mathbb{W}^2$ trillion; (3) any mutual fund in which the same shareholder group, as described in items (1) and (2) above, owns more than 4% of the total shares issued and outstanding; (4) a private equity fund (under the Financial Investment Services and Capital Markets Act) where (i) the general partner of such private equity fund, (ii) the limited partner whose equity holding ratio in such private equity fund is 10% or more, or (iii) the limited partners, being member companies of a single group of companies that belong to the same conglomerate as defined in the Monopoly Regulation and Fair Trade Act, whose aggregate equity holding ratio in such private equity fund is 30% or more falls under either of item (1) to (3) above; or (5) a special purpose company of a private equity fund where a private equity fund, as described in item (4) above, owns 4% or more of the special

purpose company's issued and outstanding shares or has actual control over the major business affairs of the special purpose company through, for example, appointment and dismissal of the officers – may not acquire beneficial ownership of shares of a national bank in excess of 4% of such bank's outstanding voting shares, provided that such non-financial business group companies may acquire beneficial ownership of:

- up to 10% of a national bank's outstanding voting shares with the approval of the Financial Services Commission under the condition that such non-financial group companies will not exercise voting rights in respect of such shares in excess of the 4% limit; and
- in the event that a foreigner, as defined in the Foreign Investment Promotion Act, owns not less than 10% of a national bank's outstanding voting shares, up to 10% of such bank's outstanding voting shares without the approval of the Financial Services Commission, and in excess of 10%, 25% or 33% of such bank's outstanding voting shares, with the approval of the Financial Services Commission, up to the number of shares owned by such foreigner.

In addition, any person (whether a Korean national or a foreigner), with the exception of non-financial business group companies described above, may also acquire in excess of 10% of a national bank's total voting shares issued and outstanding, provided that an approval from the Financial Services Commission is obtained in instances where the total holding exceeds 10% (or 15% in the case of regional banks), 25% or 33% of the bank's total voting shares issued and outstanding.

#### **Deposit Insurance System**

The Depositor Protection Act provides, through a deposit insurance system, insurance for certain deposits of banks in Korea. Under the Depositor Protection Act, all banks governed by the Banking Act, including Shinhan Bank and Jeju Bank, are required to pay to the Korea Deposit Insurance Corporation an insurance premium on a quarterly basis at such rate as determined by the Presidential Decree to the Depositor Protection Act, which shall not exceed 0.5% of the bank's insurable deposits in any given year. The current insurance premium is 0.02% of insurable deposits for each quarter. If the Korea Deposit Insurance Corporation pays the insured amount, it will acquire the claims of the depositors within the payment amount. Under current rules, the Korea Deposit Insurance Corporation insures only up to a total of W50 million per an individual for deposits and interest in a single financial institution, regardless of when the deposits were made and the size of the deposits.

### The Financial Consumer Protection Act

The Financial Consumer Protection Act (the "FCPA") was enacted on March 24, 2020 and took effect beginning March 25, 2021. The FCPA unifies the systems for the protection of consumers of financial products, which had been dispersed in various laws, while tightening the existing consumer protection systems to strengthen the rights afforded to consumers of financial products. Banks under the Banking Act are financial instrument distributors subject to the FCPA, and deposit and loan products under the Banking Act are financial instruments subject to the FCPA.

Under the FCPA, a financial instrument distributor who intends to sell financial instruments shall comply with the following requirements: (i) confirmation of suitability and adequacy of financial instruments, (ii) compliance with the duty to explain, (iii) prohibition of unfair sales activities, (iv) prohibition of undue solicitation, and (v) prohibition of false or exaggerated advertising, etc. (collectively, the "Sales Principles"). If a financial instrument distributor breaches any of the Sales Principles, consumers may request the termination of such financial instrument within a period to be prescribed by a Presidential Decree and are entitled to unilaterally terminate the contract if the financial instrument distributor fails to present a justifiable reason for not accepting the consumer's request. Consumers who purchased a loan product, in particular, shall be entitled to withdraw from the contract within 14 days from the later of (i) the date of receipt of the proceeds pursuant to the contract and (ii) the execution date of the contract (or the date of receipt of the documents necessary for execution of the contract (if required under the FCPA), regardless of whether the financial instrument distributor breached any of

the Sales Principles. When a consumer files a lawsuit for damages against a financial instrument distributor for breach of the duty to explain, the financial instrument distributor (and not the consumer) shall bear the burden of proof to prove that no willful conduct or negligence was involved in the breach of such duty to explain. In the event of a dispute with a financial instrument distributor, consumers may apply for mediation to the Dispute Mediation Committee of the Financial Services Commission. If a financial instrument distributor files a lawsuit with a court while such mediation is in progress, the court may suspend the litigation proceedings. For certain small-sum cases, a financial instrument distributors must accept requests from its consumers to access information for purposes of litigation or mediation. In the event the Financial Services Commission determines that there is a clear risk that a financial product may cause significant damage to the properties of customers, the Financial Services Commission may prohibit or restrict the solicitation of, and execution of a contract for, such financial product.

# **Trust Business**

A bank that intends to enter into the trust business must obtain the approval of the Financial Services Commission. Trust activities of banks are governed by the Financial Investment Services and Capital Markets Act. Banks engaged in the banking business and trust business are subject to certain legal and accounting procedures requirements, including the following:

- under the Banking Act, the Financial Investment Services and Capital Markets Act and the Trust Act, assets accepted in trust by a bank in Korea must be segregated from its other assets in the accounts of such bank; accordingly, banks engaged in the banking and trust businesses must maintain two separate accounts, the "banking accounts" and the "trust accounts," and two separate sets of records which provide details of their banking and trust businesses, respectively; and
- assets comprising the trust accounts are not available to depositors or other general creditors of such bank in the event the trustee is liquidated or is wound up.

In the event that a bank qualifies and operates as a collective investment business entity, a trustee, a custodian or a general office administrator under the Financial Investment Services and Capital Markets Act, it is required to establish relevant operation and management systems to prevent potential conflicts of interest among the banking business, the collective investment business, the trustee or custodian business and general office administration. These measures include:

- prohibitions against officers, directors and employees of one particular business operation from serving as an officer, director and employee in another business operation, except where an officer or a director (1) serving in two or more business operations with no significant conflict of interest in accordance with the Presidential Decree on the Financial Investment Services and Capital Markets Act or (2) serving in a trustee business or a custodian business and simultaneously serving in a general office administrator business in accordance with the Financial Investment Services and Capital Markets Act;
- prohibitions against the joint use or sharing of computer equipment or office equipment; and
- prohibitions against the sharing of information by and among officers, directors and employees engaged in the different business operations.

A bank which qualifies and operates as a collective investment business entity may engage in the sale of beneficiary certificates of investment trusts which are managed by such bank. However, such bank is prohibited from engaging in the following activities:

- acting as trustee of an investment trust managed by such bank;
- purchasing with such bank's own funds beneficiary certificates of an investment trust managed by such bank;

- using in its sales activities of other collective investment securities information relating to the trust property of an investment trust managed by such bank;
- selling through other banks established under the Banking Act beneficiary certificates of an investment trust managed by such bank;
- · establishing a short-term financial collective investment vehicle; and
- establishing a mutual fund.

# Laws and Regulations Governing Other Business Activities

To enter the foreign exchange business, a bank must register with the Minister of the Ministry of Strategy and Finance. The foreign exchange business is governed by the Foreign Exchange Transaction Law. To enter the securities business, a bank must obtain the approval of the Financial Services Commission. The securities business is governed by regulations under the Financial Investment Services and Capital Markets Act. Pursuant to the above-mentioned laws, banks are permitted to engage in the foreign exchange business and the underwriting business for government and other public bonds.

In 2018, regulatory authorities are encouraging financial institutions to lower the ATM usage fees in order to decrease the financial expense burden on consumers. Further, in light of the increasing household debt, regulatory authorities are encouraging financial institutions to gradually increase the proportion of the principal of retail loans that are subject to the fixed interest rates from 14% in 2012 to 45% by 2017.

## **Principal Regulations Applicable to Credit Card Companies**

# General

Any person, including a bank, wishing to engage in the credit card business must obtain a license from the Financial Services Commission. In addition, in order to enter the credit card business, a bank must obtain a license from the Financial Services Commission (hereinafter, a bank which obtains such license is defined as "licensed bank engaged in the credit card business"). The credit card business is regulated and governed by the Specialized Credit Financial Business Act. Under the Specialized Credit Financial Business Act. Under the Specialized Credit Financial Business Act and regulations thereunder, a company in the same conglomerate group (as defined in the Monopoly Regulation and Fair Trade Act) may engage in the credit card business even though another company in the same conglomerate group is already engaged in such business, which was previously not permitted.

The Specialized Credit Financial Business Act establishes guidelines on capital adequacy and provides for other regulations relating to the supervision of credit card companies. The Specialized Credit Financial Business Act delegates regulatory authority over credit card companies to the Financial Services Commission and its executive body, the Financial Supervisory Service.

A licensed bank engaging in the credit card business is regulated by the Financial Services Commission and the Financial Supervisory Service.

The Financial Services Commission regulates credit card companies and licensed banks engaged in the credit card business by establishing guidelines or regulations on management of such companies. Moreover if the Financial Services Commission deems the financial condition of a credit card company or a licensed bank engaged in the credit card business to be unsound or such companies fail to satisfy the guidelines or regulations, the Financial Services Commission may take certain measures to improve the financial condition of such companies.

# **Restrictions on Scope of Business**

Under the Specialized Credit Financial Business Act, a credit card company may conduct only the following types of business: (i) credit card business as licensed or other specialized credit finance businesses as registered

pursuant to the Specialized Credit Financial Business Act; (ii) the businesses ancillary to the credit card business, (for example, providing cash advance loans to existing credit card holders, issuing and settling of debit cards and issuing, selling and settling of pre-paid cards); (iii) provision of unsecured or secured loans; (iv) provision of discount on notes; (v) purchase, management and collection of account receivables originated by companies in the course of providing goods and services; (vi) provision of payment guarantee; (vii) asset management business under the Asset Backed Securitization Act; (viii) credit investigation; and (ix) other incidental businesses related to the foregoing. Under the Specialized Credit Financial Business Act, a credit card company is scope of business includes "businesses that utilize existing manpower, assets or facilities in a credit card company, as designated by the Financial Services Commission." Under the current regulation established by the Financial Services Commission, a credit card company may engage in various types of business including, but not limited to, e-commerce, operation of insurance agency, delegation of card issuance, supply of payment settlement system, loan brokerage and brokerage of collective investment securities.

A credit card company's average balance of claim amounts arising from the advance of loans to credit card holders (excluding such claims arising from the re-advance of loans to credit card holders following a change in the maturity or interest rate of such loans as part of a debt restructuring) as of the end of each quarter may not exceed the sum of the following amounts:

- Average balance of claims during a quarter arising from the purchase of goods or services by credit card holders with credit cards; and
- Amount of debit card usage during a quarter by debit card members.

# **Capital Adequacy**

The Specialized Credit Financial Business Act provides for a minimum paid-in capital amount of: (i)  $\Psi$ 20 billion in the case of a specialized credit financial business company which wishes to engage in no more than two kinds of core businesses (i.e., credit card, installment finance, leasing and new technology business) and (ii)  $\Psi$ 40 billion in the case of an specialized credit financial business company, which wishes to engage in three or more kinds of core businesses.

Under the Specialized Credit Financial Business Act and regulations thereof, a credit card company must maintain a "capital adequacy ratio," defined as the ratio of adjusted equity capital to adjusted total asset, of 8% or more and a "delinquent claim ratio," defined as the ratio of delinquent claims to total claims as set forth under the regulations relating to the Specialized Credit Financial Business Act, of less than 10%.

Under the Specialized Credit Financial Business Act and regulations thereof, the minimum ratio of allowances for losses on loans, leased assets (except assets subject to an operating lease) and suspense receivables as of the date of accounting settlement (including semiannual preliminary accounts settlement) would be 0.5% of normal assets, 1% of precautionary assets and 20% of substandard assets, 75% of doubtful assets and 100% of estimated loss assets, and the minimum ratio of allowances for losses on card assets would be 1.1% (or 2.5%, in the case of card loan assets and revolving assets) of normal assets, 40% (or 50%, in the case of card loan assets and revolving assets) of substandard assets, 75% of doubtful assets, 60% (or 65%, in the case of card loan assets and revolving assets) of substandard assets. In addition, a credit card company has to reserve a certain amount calculated according to relevant regulations as loss allowances for unused credit limits.

# Liquidity

Under the Specialized Credit Financial Business Act and regulations thereunder, a credit card company must maintain a Won liquidity ratio (Won-denominated current assets/Won-denominated current liabilities) of 100% or more. In addition, once a credit card company is registered as a foreign exchange business institution with the Minister of the Ministry of Strategy and Finance, such credit card company is required to (1) maintain a foreign-currency liquidity ratio within three months (defined as foreign-currency liquid assets due within three

months divided by foreign-currency liabilities due within three months) of not less than 80%, (2) maintain a ratio of foreign-currency liquid assets due within seven days (defined as foreign-currency liquid assets due within seven days, divided by total foreign-currency assets) of not less than 0% and (3) maintain a ratio of foreign-currency liquid assets due within a month (defined as foreign-currency liquid assets due within a month less foreign-currency liabilities due within a month, divided by total foreign-currency assets) of not less than negative 10%. The Financial Services Commission requires a credit card company to submit quarterly reports with respect to the maintenance of these ratios.

# **Restrictions on Funding**

Under the Specialized Credit Financial Business Act, a credit card company may raise funds using only the following methods: (i) borrowing from financial institutions, (ii) issuing corporate debentures or notes, (iii) selling securities held by the credit card company, (iv) transferring claims held by the credit card company, (v) borrowing and issuing foreign currency securities after registering itself as a foreign exchange business institutions under the Foreign Exchange Transactions Law, (vi) transferring claims held by the credit card company in connection with its businesses, or (vii) issuing securities backed by the claims held by the credit card company relating to its businesses.

Furthermore, a credit card company may borrow funds from offshore or issue foreign currency denominated securities once it is registered as a foreign exchange business institution with the Minister of the Ministry of Strategy and Finance.

A credit card company must ensure that its total asset does not exceed eight times the amount of its equity capital. However, if the credit card company cannot comply with such limit due to the occurrence of unavoidable events such as drastic changes in the domestic and global financial markets, such limit of its total assets compared to the equity capital may be adjusted by a resolution of the Financial Services Commission. A non-credit card company must ensure that its total asset does not exceed ten times the amount of its equity capital.

## **Restrictions on Loans to Affiliate Companies**

Under the Specialized Credit Financial Business Act and regulations thereof, a credit card company may not provide loans exceeding 50% of its equity capital, in the aggregate, to its specially related persons (as defined under the relevant laws) including, but not limited to, its affiliates.

# **Restrictions on Assistance to Other Companies**

Under the Specialized Credit Financial Business Act, a credit card company may not engage in any of the following acts in conjunction with other financial institutions or companies: (i) holding voting shares under cross shareholding or providing credit for the purpose of avoiding the restrictions on loans to affiliate companies; (ii) acquiring shares under cross shareholding for the purpose of avoiding the limitation on purchase of its treasury shares under the Korean Commercial Code or the Financial Investment Services and Capital Markets Act; or (iii) other acts which are likely to have a material adverse effect on the interests of transaction parties as stipulated by the Presidential Decree to the Specialized Credit Financial Business Act, which are not yet provided.

A credit card company also may not extend credit for enabling another person to purchase the shares of such credit card company or to arrange financing for the purpose of avoiding the restrictions on loans to affiliate companies.

#### **Restrictions on Investment in Real Estate**

Under the Specialized Credit Financial Business Act and the regulations thereof, a credit card company may possess real estate only to the extent that such business conduct is designated by such laws and regulations, with certain exceptions such as for the purposes of factoring or leasing or as a result of enforcing its security rights, provided that the Financial Services Commission may limit the maximum amount a credit card company may invest in real estate investments for business purposes up to a percentage equal to or in excess of 100% of its equity capital.

### **Restrictions on Shareholding in Other Companies**

Under the Specialized Credit Financial Business Act and the Act on the Structural Improvement of the Financial Industry, a credit card company and its affiliate financial institutions (together a "group") are required to obtain prior approval of the Financial Services Commission if such credit card company, together with its affiliate financial institutions, (i) owns 20% or more of outstanding voting shares of a target company or (ii) owns 5% or more of outstanding voting shares of a target company, and shall be deemed to have control of the target company, including being the largest shareholder of such target company or otherwise.

# **Disclosure and Reports**

Pursuant to the Specialized Credit Financial Business Act and the regulations thereof, the ordinary disclosure requirement for a credit card company is to disclose any material matters relating to management performance, profits and losses, corporate governance, competence of the employees or risk management within three months from the end of each fiscal year and within two months from the end of the first half of the fiscal year. In addition, a credit card company is required to disclose on an on-going basis certain matters such as the occurrence of non-performing loans, a financial incident or losses exceeding certain amounts. In addition, under the regulations issued by the Financial Services Commission, a credit card company or a licensed bank engaging in the credit card business must submit such report as required by the Governor of the Financial Supervisory Service, with certain important matters being reported as frequently as each month. In addition, all companies engaged in the specialized credit financial business under the Specialized Credit Financial Business Act, including, without limitation, credit card companies, must file a report to the Financial Supervisory Service regarding the result of settlement of accounts within one month after the end of its fiscal year. Also, these companies are required to conduct a provisional settlement of accounts for each quarter and file a report to the Financial Supervisory Service within one month after the end of such quarter.

#### Risk of Loss Due to Lost, Stolen, Forged or Altered Credit Cards

Under the Specialized Credit Financial Business Act, upon notice from the holder of a credit card or a debit card of its loss or theft, a credit card company or a licensed bank engaged in the credit card business, as the case may be, is liable for any loss arising from the unauthorized use of credit cards or debit cards thereafter as well as any loss from unauthorized transactions made within 60 days prior to such notice. However, a credit card company or a licensed bank engaged in the credit card business, as the case may be, may transfer to the cardholder all or part of the risks of loss associated with unauthorized transactions made within 60 days prior to such notice, in accordance with the standard terms and conditions agreed between the credit card company or the licensed bank engaged in the credit card business, as the case may be, and the cardholder, provided that the loss or theft must be due to the cardholder's willful misconduct or negligence. Disclosure of a cardholder's password under duress or threat to the cardholder's or his/her family's life or health will not be deemed as the cardholder's willful misconduct or negligence.

Moreover, a credit card company or a licensed bank engaged in the credit card business, as the case may be, is also responsible for any losses resulting from the use of forged or altered credit cards, debit cards and pre-paid cards. However, a credit card company or a licensed bank engaged in the credit card business, as the case may

be, may transfer all or part of this risk of loss to holders of credit cards in the event of willful misconduct or gross negligence by holders of such cards if the terms and conditions of the written agreement entered between the credit card company or a licensed bank engaged in the credit card business, as the case may be, and holders of such cards specifically provide for such transfer. For these purposes, disclosure of a customer's password that is made intentionally or through gross negligence, or the transfer of or giving as collateral of the credit card or debit card, is considered willful misconduct or gross negligence.

In addition, the Specialized Credit Financial Business Act prohibits a credit card company from transferring to merchants the risk of loss arising from lost, stolen, forged or altered credit cards, debit cards or pre-paid cards; provided, however, that a credit card company may enter into an agreement with a merchant under which the merchant agrees to be responsible for such loss if caused by the merchant's gross negligence or willful misconduct.

Each credit card company or a licensed bank engaged in the credit card business must institute appropriate measures such as establishing reserves, purchasing insurance or joining a cooperative association in order to fulfill its obligations related to the risk of loss arising from unauthorized use due to lost, stolen, forged or altered credit cards, debit cards or pre-paid cards.

Under the Specialized Credit Financial Business Act, the Financial Services Commission may take necessary measures to maintain credit order and protect consumers by establishing standards to be complied with by credit card companies relating to:

- maximum limits for cash advances on credit cards;
- restrictions on debit cards with respect to per day or per transaction usage;
- aggregate issuance limits and maximum limits on the amount per card on pre-paid cards;
- calculation and determination of credit limits;
- determination of the amount limit of credit cards;
- provisions included in credit card agreements;
- management of credit card merchants;
- collection on claims; or
- classification of credit card holders for purposes of determining the fees applicable to such holders.

## Lending Ratio in Ancillary Business

Pursuant to the Presidential Decree of the Specialized Credit Financial Business Act, as amended in January 2020, a credit card company must maintain a quarterly average balance of receivables arising from cash advances to credit card holders (excluding cash advances incurred by re-lending to a credit card holder after modifying the terms and conditions, such as maturity or interest rate, of the original cash advance for debt rescheduling purposes) no greater than its aggregate quarterly average balance of receivables arising from credit card holders' purchase of goods and services (excluding the amount of receivables arising from the purchase of goods and services using an exclusive use card for business purposes) plus its aggregate quarterly amount of payments made by members using their debit cards.

## Issuance of New Cards and Solicitation of New Card Holders

The Presidential Decree of the Specialized Credit Financial Business Act establishes the conditions under which a credit card company or a licensed bank engaged in the credit card business may issue new cards and solicit new members. Specifically, new credit cards may be issued only to the following persons that meet all of

the following criteria: (i) age of 19 years or more as defined in the Korean Civil Code, or age of 18 years or more with evidence of employment as of the date of the credit card application; (ii) satisfaction of a minimum credit score as publicly announced by the Financial Services Commission, provided that the minimum personal credit score requirement will not apply in the case where (a) the credit card company can confirm through objective evidence that an applicant is sufficiently capable of paying for his or her credit card use or such applicant can provide objective evidence therefor, or (b) a credit card function is added to an existing debit card for added convenience to the card holder and the credit card function is subject to limits determined by the Financial Services Commission; (iii) satisfaction of the application scoring system for the relevant credit; and (iv) verification of personal identity.

In addition, a credit card company or a licensed bank engaged in the credit card business, as the case may be, may not engage in the following methods of soliciting credit card holders: (i) providing economic benefits or conditioning such benefits in excess of 10% of the annual credit card fee (in the case of no-annual fee credit cards, the average annual fees will be W10,000) in connection with issuance of credit cards; (ii) solicitation on streets and private roads as prescribed under the Road Act and Private Road Act, public place and corridors used by the general public; (iii) solicitation through visits, except those visits made upon prior consent and visits to a business area; (iv) solicitation through pyramid sales methods; and (v) solicitation through the Internet, as further discussed below.

In addition, a credit card company or a licensed bank engaged in the credit card business is required to check whether the credit card applicant has any delinquent debt owed to any other credit card company or other financial institutions which the applicant is unable to repay, and also require, in principle, with respect to solicitations made through the Internet, the certified electronic signature of the applicant. Moreover, persons who intend to engage in solicitation of credit card applicants must register with the Financial Services Commission, unless the solicitation is made by officers or employees of a credit card company or a company in business alliance with such credit card company.

#### **Compliance Rules on Collection of Receivable Claims**

Pursuant to the Specialized Credit Financial Business Act and its regulations, a credit card company or a licensed bank engaged in the credit card business are prohibited from collecting its claims by way of:

- exerting violence or threat of violence;
- informing a Related Party (a guarantor of the debtor, blood relative or fiancée of the debtor, a person living in the same household as the debtor or a person working in the same workplace as the debtor) of the debtor's liability without just cause;
- providing false information relating to the debtor's obligation to the debtor or his or her Related Party;
- threatening to sue or suing the debtor for fraud despite lack of affirmative evidence to establish that the debtor has submitted forged or false documentation with respect to his/her capacity to make payment;
- visiting or telephoning the debtor during late hours between 9:00 p.m. and 8:00 a.m.; and
- utilizing other uncustomary methods to collect the receivables thereby invading the privacy or the peacefulness in the workplace of the debtor or his or her Related Party.

#### **Principal Regulations Applicable to Financial Investment Companies**

## General

The securities business is regulated and governed by the Financial Investment Services and Capital Markets Act. Financial investment companies are under the regulation and supervision of the Financial Services Commission, the Financial Supervisory Service and the Securities and Futures Commission. Under the Financial Investment Services and Capital Markets Act, a financial investment company may engage in dealing, brokerage, collective investment, investment advice, discretionary investment management or trust businesses if it has obtained relevant licenses from the Financial Services Commission.

A financial investment company may also engage in certain businesses ancillary to the primary business or certain other additional businesses by submitting a report to the Financial Services Commission within two weeks from the commencement of the business without obtaining any separate license. Approval to merge with any other entity or to transfer all or substantially all of a business must also be obtained from the Financial Services Commission.

Under the Act on the Structural Improvement of the Financial Industry, if the Government deems a financial investment company's financial condition to be unsound or if a financial investment company fails to meet the applicable Net Operating Equity Ratio (as defined below), the government may order certain sanctions, including among others, sanctions against a financial investment company or its officers or employees, capital increase or reduction and a suspension or assignment of a part or all of business operation.

#### **Regulations on Financial Soundness** — Capital Adequacy

The Financial Investment Services and Capital Markets Act sets forth various types of brokerage and/or dealing business licenses based on (i) the scope of products and services that may be provided by each type of the brokerage and/or dealing licensee and (ii) the type of customers to which such products and services may be provided. For example, a financial investment company engaged in the brokerage, dealing and underwriting businesses with retail investors as well as professional investors in connection with all types of securities is required to have a minimum paid-in capital of \$53 billion in order to obtain a license for such brokerage, dealing and underwriting businesses.

Under the Financial Investment Service Regulations, as amended and effective as of January 31, 2019, the soundness requirement of financial investment companies changed from the previous net operating equity ratio requirement to a net equity ratio requirement. The net equity ratio is calculated according to the following formula:

Net Equity Ratio = (Net Operating Equity – Total Risk) / Equity Capital Maintenance Requirement for Each Service Unit

The terms "Net Operating Equity" and "Total Risk" for the purpose of the above-stated formula are defined and elaborated in the regulations of the Financial Services Commission. Generally, the Net Operating Equity, the Total Risk and the Equity Capital Maintenance Requirement for Each Service Unit are to be calculated according to the following formula:

Net Operating Equity = Net assets (total assets - total liabilities) - the total of items that may be deducted + the total of items that may be added;

Total Risk = market risk + counterparty risk + management risk; and

Equity Capital Maintenance Requirement for Each Service Unit = Mandatory Equity Capital to be Required for Each Licensed Service Unit × 70%

The regulations of the Financial Services Commission require, among other things, financial investment companies to maintain the net equity ratio at a level equal to or higher than 100% at the end of each quarter of the fiscal year.

In addition, all Korean companies, including financial investment companies, are required to set aside, as a legal reserve, 10% of the cash portion of the annual dividend or interim dividend in each fiscal year until the reserve reaches 50% of the stated capital.

Under the Financial Investment Services and Capital Markets Act and regulations thereunder, the minimum ratio of allowances for losses on loans and suspense receivables specified under such regulations is 0.5% of normal assets, 2% of precautionary assets, 20% of substandard assets, 75% of doubtful assets and 100% of estimated loss assets.

#### **Other Provisions on Financial Soundness**

The Financial Investment Services and Capital Markets Act, the Presidential Decree of the Financial Investment Services and Capital Markets Act and the regulations of the Financial Services Commission also include certain provisions which are designed to regulate certain types of activities relating to the management of the assets of a securities company, subject to certain exceptions. Such provisions include:

- restrictions on the holdings by a securities company of securities issued by another company which is the largest shareholder or the major shareholder (each as defined under the Financial Investment Services and Capital Markets Act) of such securities company; and
- restrictions on providing money or credit to the largest shareholder (including specially-related persons
  of such shareholder), major shareholders, officers and specially-related persons of the securities
  company.

#### **Principal Regulations Applicable to Insurance Companies**

## General

Insurance companies are regulated and governed by the Insurance Business Act (the "Insurance Business Act"). In addition, insurance companies in Korea are under the regulation and supervision of the Financial Services Commission and its governing entity, the Financial Supervisory Service.

Under the Insurance Business Act, approval to commence an insurance business must be obtained from the Financial Services Commission based on the type of insurance businesses, which are classified as life insurance business and third type insurance business. Life insurance business means an insurance business which deals with life insurance policies or pension insurance policies (including retirement insurance policies). Non-life insurance business means an insurance business which deals with fire insurance policies, guaranty insurance policies, reinsurance policies, liability insurance policies or other insurance policies prescribed under the Presidential Decree of the Insurance Business Act. Third type insurance business means an insurance business which deals with injury insurance policies, health insurance policies or nursing care insurance policies. Under the Insurance Business Act, insurance companies are not allowed to engage in both a life insurance business and a non-life insurance business, subject to certain exceptions.

If the Government deems an insurance company's financial condition to be unsound or if an insurance company fails to properly manage the business as set forth under relevant Korean law, the government may order certain sanctions including, among others, sanctions against an insurance company or its officers or employees, capital increase or reduction and a suspension or assignment of a part or all of business operation.

## Capital Adequacy

The Insurance Business Act requires a minimum paid-in capital of W30 billion for an insurance company; provided, that, the insurance company which intends to engage in only certain types of insurance policies may have a lower paid-in capital pursuant to the Presidential Decree of the Insurance Business Act.

In addition to the minimum capital requirement, an insurance company is required to maintain a Solvency Margin Ratio of 100% or more. "Solvency Margin Ratio" is the ratio of the Solvency Margin to the Standard

Amount of the Solvency Margin. Solvency Margin is the aggregate amount of net assets and amounts that are liabilities in the balance sheet but are usable to cover loss risk (e.g., the amount of subordinated liabilities), less the amount that the Governor of the Financial Supervisory Service deems unusable to compensate for losses incurred by unexpected risks of an insurance company, among assets or capital in the balance sheet, such as stock discounts and treasury stocks. The Standard Amount of Solvency Margin for life insurance companies is defined under the regulation of the Financial Services Commission.

On January 1, 2023, the Financial Supervisory Service introduced the K-ICS, a new regulatory solvency regime for insurance companies, based on the International Capital Standard developed by the International Association of Insurance Supervisors, which is similar in substance to the Solvency II Directive of the European Union. Under the K-ICS, at the time of computation of the Solvency Margin, insurance contract liabilities are expected to be measured based on market value, rather than book value, and at the time of computation of the Standard Amount of the Solvency Margin, risks associated with termination, business expenses, longevity, catastrophes and asset concentration risks are added, which would require a number of insurance companies in Korea with a large portfolio of high guaranteed rate of return products to obtain additional capital to meet their capital adequacy requirements. However, the Financial Supervisory Service has allowed for deduction from available capital on a gradual basis and for gradual recognition of risks in relation to required capital for up to 10 years. Even if the Solvency Margin Ratio under the K-ICS is less than 100%, corrective measures will be withheld in case the Solvency Margin Ratio under the prior risk-based capital regime exceeds 100% for up to five years, to ease the burden on insurance companies.

Under the Insurance Business Act, the Presidential Decree and other regulations thereunder, for each accounting period, insurance companies are required to appropriate policy reserve that is earmarked for future payments of insurance money, refund and dividends to policyholders (hereinafter collectively referred to as "Insurance Money") for each insurance contract. However, if an insurance company has reinsured a portion of its insurance contracts with a creditworthy reinsurance company in order to lower its overall risk, in principle, the insurance company is not required to appropriate policy reserve for the reinsured contracts. Instead, the reinsurance company is required to appropriate such policy reserve for the reinsured contracts. The Insurance Business Act was amended on January 24, 2011 to classify the insurance products into two categories: (i) reportable insurance products and (ii) voluntary insurance products. Under this amendment, only the changes to the terms and conditions of the reportable insurance products can be sold without prior approval from the Financial Supervisory Service. The policy reserve needs to be appropriated in accordance with the policy reserve calculation method for each insurance product as stipulated in amended Insurance Business Act.

The policy reserve amount consists of the following: (i) insurance contract liabilities (the sum of (a) the amount reserved by applying current estimates of future cash flow in order to pay the insurance proceeds, etc. for which an event of payment under the insurance policy has occurred as of the end of each fiscal year and (b) the amount reserved by applying current estimates of future cash flow in order to pay the insurance proceeds, etc. in the future although an event of payment under the insurance policy has not occurred as of the end of each fiscal year), (ii) investment contract liabilities (amounts reserved by insurance companies for the payment of insurance proceeds, etc. in the future for insurance contracts classified as investment contracts among insurance contracts) and (iii) amounts reserved by applying current estimates on future cash flows in the manner prescribed by the Financial Services Commission.

Pursuant to the regulations established by the Financial Services Commission, insurance companies are required to maintain allowances for outstanding loans, accounts receivables and other credits (including accrued income, payment on account, and bills receivables or dishonored) in an aggregate amount covering not less than 0.5% of normal credits, 2% of precautionary credits, 20% of substandard credits, 50% of doubtful credits and 100% of estimated loss credits, provided that the minimum ratio of allowances for certain type of outstanding loans by insurance companies to individuals and households (including, retail loans, housing loans, and other forms of retail loans extended to individuals not registered for business), is increased to 1% of normal credits, 10% of

precautionary credits and 55% of doubtful credits. Furthermore, the regulations on insurance companies became more stringent in September 2010 by adding a requirement that insurance companies maintain allowance for bad debts in connection with real estate project financing loans in excess of 0.9% of normal credits and 7% of precautionary credits.

#### Variable Insurance and Bancassurance Agents

Variable insurance is regulated pursuant to the Insurance Business Act and the Financial Investment Services and Capital Markets Act. In order for an insurance company to sell variable insurance to a policyholder and operate such variable insurance, the insurance company must obtain a license with respect to collective investment business from the Financial Services Commission and register as a selling company with the Financial Services Commission. In this case, according to the Financial Investment Services and Capital Markets Act, an insurance company will be regulated as an investment trust and assets acquired in connection with variable insurance must be held by a trust company that is registered with the Financial Services Commission pursuant to the Financial Investment Services and Capital Markets Act.

According to the Financial Investment Services and Capital Markets Act, insurance companies may operate variable insurance through (i) mandating all of the management and the management instruction business to another asset management company, (ii) operating by way of discretionary investment all of the assets constituting the investment advisory assets out of the investment trust assets, or (iii) operating all of the investment trust assets into other collective investment securities, thereby allowing all of the particular variable insurance assets to be outsourced.

The Insurance Business Act permits banks, securities companies, credit card companies and other financial institutions to register as insurance agents or insurance brokers and engage in the insurance business (the "Bancassurance Agents"), who are currently permitted to sell all types of life and non-life insurance products, except for protection type insurance products, such as whole life insurance, critical illness insurance and automobile insurance.

## **Restrictions on Investment of Assets**

According to the Insurance Business Act, insurance companies are prohibited from making any of the following investment of assets:

- owning any real estate (excluding any real estate owned as a result of enforcing their own security interest) other than real estate for conducting its business as designated by the Presidential Decree. In any case, the total amount of real estate owned by an insurance company must not exceed 25% of its Total Assets, provided that investment in real estate for a separate account is limited to 15% of the assets of such separate account;
- loans made for the purpose of speculation in commodities or securities;
- loans made directly or indirectly to enable a natural or legal person to buy their own shares;
- loans made directly or indirectly to finance political campaigns and other similar activities; and
- loans made to any of the insurance company's officers or employees other than loans based on insurance policy or de minimis loans of up to (1) ₩20 million in the case of a general loan,
  (2) ₩50 million in the case of a general loan plus a housing loan, or (3) ₩60 million in the aggregate for general loans and housing loans.

In addition, insurance companies are not allowed to exceed 50% of its Total Assets with respect to holding foreign currency under the Foreign Exchange Transaction Act or owning offshore real estate.

### **Regulations on Class Actions Regarding Securities**

The Law on Class Actions Regarding Securities was enacted as of January 20, 2004 and last amended on May 28, 2013. The Law on Class Actions Regarding Securities governs class actions suits instituted by one or more representative plaintiff(s) on behalf of 50 or more persons who claim to have been damaged in a capital markets transaction involving securities issued by a listed company in Korea.

Applicable causes of action with respect to such suits include:

- claims for damages caused by misleading information contained in a securities statement;
- claims for damages caused by the filing of a misleading business report, semi-annual report, or quarterly report;
- claims for damages caused by insider trading or market manipulation; and
- · claims instituted against auditors for damages caused by accounting irregularities.

Any such class action may be instituted upon approval from the presiding court and the outcome of such class action will have a binding effect on all potential plaintiffs who have not joined the action, with the exception of those who have filed an opt out notice with such court.

#### **U.S. Regulations**

As a substantial majority of our and our subsidiaries' operations are in Korea, we are primarily subject to the regulations and supervision of the Financial Services Commission and the Financial Supervisory Service. Our subsidiaries, however, have limited operations in the United States, and we own a bank in the United States. Therefore, we and our U.S. operations are subject to U.S. supervision, regulation and enforcement by relevant authorities in the United States with regard to our U.S. operations.

## U.S. Banking Regulations

Our operations in the United States are subject to a variety of regulatory regimes. Shinhan Bank maintains an uninsured branch in New York, which is licensed by the New York State Department of Financial Services (the "Department") and registered with the banking authority of Korea. Shinhan Bank's New York branch is subject to regulation and examination by the Department under its licensing authority. In addition, the Board of Governors of the Federal Reserve System (the "Federal Reserve Board") exercises examination and regulatory authority over Shinhan Bank's U.S. branch. We also own a non-member state chartered bank, Shinhan Bank America, which is regulated by the Department, as its chartering authority, and by the Federal Deposit Insurance Corporation ("FDIC"), as its primary federal banking regulator and as the insurer of its deposits. Our U.S. branch and U.S. bank subsidiary are subject to restrictions on their respective activities, as well as prudential restrictions, such as limits on extensions of credit to a single borrower, and restrictions on transactions with affiliates, among other things. We are also a financial holding company and a bank holding company under U.S. banking laws and our U.S. operations are subject to regulation, supervision and enforcement by the Federal Reserve Board.

#### Shinhan Bank's U.S. Branch

The Department, as the licensing authority of Shinhan Bank's U.S. branch, has the authority, in certain circumstances, to take possession of the business and property of Shinhan Bank located in New York. Such circumstances generally include violations of law, unsafe business practices and insolvency. If the Department exercised this authority over the New York branch of Shinhan Bank, all assets of Shinhan Bank located in New York would generally be applied first to satisfy creditors of the New York branch. Any remaining assets would be applied to satisfy creditors of other U.S. offices of Shinhan Bank, after which any residual assets of the New York branch would be returned to the principal office of Shinhan Bank, and made available for application pursuant to any Korean insolvency proceeding.

## Financial Holding Company

In addition to the direct regulation of Shinhan Bank's U.S. branch by the Department and the Federal Reserve Board, because we operate a U.S. branch and have a subsidiary bank in the U.S., our nonbanking activities in the United States are subject to regulation by the Federal Reserve Board pursuant to the International Banking Act of 1978, the Bank Holding Company Act of 1956 (the "BHC Act"), and other laws. We have elected to be a "financial holding company" under the BHC Act. Financial holding companies may engage in a broader spectrum of activities than bank holding companies or foreign banking organizations that are not financial holding companies, including underwriting and dealing in securities. To maintain our financial holding company status and engage in activities permissible for a financial holding company, (i) we and our U.S. subsidiary bank located in New York are required to be "well capitalized" and "well managed," (ii) our U.S. branch is required to meet certain examination ratings, and (iii) our subsidiary bank in New York is required to maintain a rating of at least "satisfactory" under the Community Reinvestment Act of 1977 (the "CRA").

A major focus of U.S. governmental policy relating to financial institutions in recent years has been aimed at fighting money laundering and terrorist financing. Regulations applicable to us and our subsidiaries impose obligations to maintain effective policies, procedures and controls to detect, prevent and report money laundering and terrorist financing and to verify the identities of clients. Failure of a financial institution to maintain and implement adequate programs to combat money laundering and terrorist financing could have serious consequences for the firm, both in legal terms and in terms of our reputation.

The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), which was enacted on July 21, 2010 in response to the financial crisis, impacts the financial services industry by addressing, among other issues, systemic risk oversight, bank capital standards, the liquidation of failing systemically important institutions, over-the-counter and cleared derivatives, the ability of banking entities, including non-U.S. banks with branches in the U.S., like us, to engage in proprietary trading activities and invest in hedge funds and private equity funds (the so-called Volcker rule), consumer and investor protection, hedge fund registration, securitization, investment advisors, shareholder "say on pay," the role of credit-rating agencies, and more. The Dodd-Frank Act requires various federal banking and financial regulatory authorities to adopt a broad range of implementing rules and regulations. Such authorities have significant discretion in drafting the implementing rules and regulations.

The Dodd-Frank Act provides regulators with tools to impose greater capital, leverage and liquidity requirements and other prudential standards, particularly for financial institutions that pose significant systemic risk. Pursuant to the Dodd-Frank Act, the Federal Reserve Board has implemented rules that establish enhanced prudential standards for the U.S. operations of foreign banking organizations ("FBOs") such as us. In imposing such heightened prudential standards on non-U.S. banks such as us, the Federal Reserve Board is directed to take into account the principle of national treatment and equality of competitive opportunity, and the extent to which the foreign bank holding company is subject to comparable home country standards.

On May 24, 2018, the Economic Growth, Regulatory Relief and Consumer Protection Act (the "Reform Act") was signed into law. Among other regulatory changes, the Reform Act amends various sections of the Dodd-Frank Act, including by raising the asset threshold for automatic application of enhanced prudential standards to FBOs under the Dodd-Frank Act from \$50 billion in total global consolidated assets to \$250 billion. The bill exempted FBOs with total global consolidated assets of less than \$100 billion from these enhanced prudential standards effective immediately upon enactment of the bill. In October 2019, the Federal Reserve Board issued a final rule to implement the Reform Act's changes to the application of enhanced prudential standards with respect to U.S. bank holding companies and FBOs (the "EPS Tailoring Rule"). The EPS Tailoring Rule delineates three categories of enhanced prudential standards ("EPS categories") applicable to FBOs based on an FBO's asset size and other factors such as the degree of the cross-jurisdictional activity, reliance on short-term wholesale funding, nonbank assets, and off-balance sheet exposures of an FBO's U.S. operations. The EPS Tailoring Rule generally determines the stringency of enhanced prudential standards applicable to FBOs based

on the risk profile of the FBO's U.S. operations, rather than its global footprint, with most enhanced prudential standards applying only to FBOs with combined U.S. assets of at least \$100 billion. FBOs with global assets of \$100 billion or more and a relatively limited U.S. presence, such as us, are subject to certain minimum standards under the EPS Tailoring Rule, with the Federal Reserve Board relying primarily on compliance with comparable home-country prudential standards with respect to such FBOs.

If our size or risk profile were to increase, our combined U.S. operations may be subject to certain further enhanced prudential standards. In particular, enhanced prudential standards applicable to FBOs require an FBO with both significant total global consolidated assets and significant U.S. assets (excluding the total assets of each U.S. branch and agency) to establish a U.S. top-tier intermediate holding company ("IHC") over all U.S. bank and nonbank subsidiaries, and generally subject such an FBO's IHC to the same capital adequacy standards, including minimum risk based capital and leverage requirements, liquidity, liquidity risk management, stress testing and single counterparty credit limits as those applicable to U.S. bank holding companies in the same EPS category under the EPS Tailoring Rule. In addition, certain enhanced prudential standards will apply to the combined U.S. operations of an FBO whether or not the FBO is required to establish a U.S. IHC. We continue to assess the full impact of these enhanced prudential requirements and the EPS Tailoring Rule on our business.

In addition, as an FBO with more than \$250 billion in total global consolidated assets that does not otherwise meet certain category thresholds identified in the EPS Tailoring Rule, we are currently required to submit periodically to the Federal Reserve Board and FDIC a resolution plan for the orderly resolution of our U.S. operations under the U.S. Bankruptcy Code or other applicable insolvency laws in a rapid and orderly fashion in the event of future material financial distress or failure. If the Federal Reserve Board and the FDIC jointly determine that the resolution plan is not credible and the deficiencies are not cured in a timely manner, they may jointly impose more stringent capital, leverage or liquidity requirements or restrictions on our growth, activities or operations. If we were to fail to address the deficiencies in the resolution plan when required, we could eventually be required to divest certain assets or operations.

In October 2019, the Federal Reserve Board and FDIC issued a final rule addressing the applicability of resolution planning requirements for FBOs (the "FBO Resolution Plan Rule"). The FBO Resolution Plan Rule applies reduced resolution plan filing requirements to FBOs that have \$250 billion or more in total global consolidated assets and that do not otherwise meet certain category thresholds identified in the EPS Tailoring Rule, such as us, requiring such FBOs to submit a reduced content resolution plan every three years.

In July 2019, U.S. federal regulatory agencies adopted amendments to the Volcker Rule regulations to implement the Volcker Rule amendments included in the Reform Act, and also in 2019 such U.S. federal regulatory agencies adopted certain targeted amendments to the Volcker Rule regulations to simplify and tailor certain compliance requirements relating to the Volcker Rule. In June 2020, U.S. federal regulatory agencies adopted additional revisions to the Volcker Rule's restrictions on banking entities sponsoring and investing in certain covered hedge funds and private equity funds, including by adopting new exemptions allowing banking entities to sponsor and invest without limit in credit funds, venture capital funds, customer facilitation funds and family wealth management vehicles (the "Covered Fund Amendments"). The Covered Fund Amendments also loosen certain other restrictions on extraterritorial fund activities and direct parallel or co-investments made alongside covered funds. The Covered Fund Amendments therefore should expand the ability of banking entities to invest in and sponsor private funds. The ultimate consequences of the Reform Act on the Fund and its activities remain uncertain, and it remains unclear whether any particular other legislative or regulatory proposals will be enacted or adopted.

#### Shinhan Bank America

Shinhan Bank America, a state chartered bank that is located in New York and is not a member of the Federal Reserve Board, is subject to extensive regulation and examination by the Department, as its chartering authority, and by the FDIC, as the insurer of its deposits and as its primary federal banking regulator. The federal

and state laws and regulations which are applicable to banks regulate, among other things, the activities in which they may engage and the locations at which they may engage in them, their investments, their reserves against deposits, the timing of the availability of deposited funds and transactions with affiliates. Shinhan Bank America must file reports with the Department and the FDIC concerning its activities and financial condition, in addition to obtaining regulatory approvals prior to entering into certain transactions, such as establishing branches and mergers with, or acquisitions of, other depository institutions. The Department and the FDIC periodically examine the bank to test Shinhan Bank America's safety and soundness and its compliance with various regulatory requirements. This comprehensive regulatory and supervisory framework restricts the activities in which a bank can engage and is intended primarily for the protection of the FDIC insurance fund and the bank's depositors. Regulatory authorities have extensive discretion in connection with their supervisory and enforcement activities and examination policies, which include setting policies with respect to the classification of assets and the establishment of adequate loan loss reserves. Any change in such regulations, whether by the Department, the FDIC or as a result of the enactment of legislation, could have a material adverse impact on Shinhan Bank America and its operations.

*Capital Requirements*. The FDIC imposes capital adequacy standards on state-chartered banks like Shinhan Bank America. The "prompt corrective action" framework under the Federal Deposit Insurance Corporation Improvement Act of 1991 ("FDICIA"), provides, among other things, for expanded regulation of insured depository institutions, including banks, and their parent holding companies. As required by FDICIA, the federal banking agencies have established five capital tiers ranging from "well capitalized" to "critically undercapitalized" for insured depository institutions. In order for our U.S. bank subsidiary to be classified as "well capitalized," which is necessary in order for us to maintain our financial holding company status, it must maintain a minimum 5% Tier I leverage ratio, a 6.5% common equity Tier I capital ratio, a 8% Tier I risk-based capital ratio.

In order for Shinhan Bank America to be classified as "adequately capitalized" under FDICIA's prompt corrective action standards, which is necessary in order for Shinhan Bank America to avoid certain restrictions under FDICIA, it must maintain a minimum 4% Tier I leverage ratio, a 4.5% common equity Tier I capital ratio, a 6% Tier I risk-based capital ratio and a 8% total risk-based capital ratio.

As of December 31, 2022, Shinhan Bank America exceeded all of the capital ratio standards for a well-capitalized bank with a Tier I leverage ratio of 11.32%, a common equity Tier I risk-based capital ratio of 16.13%, a Tier I risk-based capital ratio of 16.13% and a total risk-based capital ratio of 16.99%.

Activities and Investments of New York-Chartered Banks. Shinhan Bank America derives its lending, investment and other authority primarily from the applicable provisions of New York State Banking Law and the regulations of the Department, as well as FDIC regulations and other federal laws and regulations. See "— Activities and Investments of FDIC-Insured State-Chartered Banks" below. These New York laws and regulations authorize Shinhan Bank America to invest in real estate mortgages, consumer and commercial loans, certain types of debt securities, including certain corporate debt securities and obligations of federal, State and local governments and agencies, and certain other assets. A bank's aggregate lending powers are not subject to percentage of asset limitations, but, as discussed below, there are limits on the amount of credit exposure that a bank may have to a single borrower or group of related borrowers. A New York-chartered bank may also exercise trust powers upon approval of the Department. Shinhan Bank America does not currently have trust powers.

With certain limited exceptions, Shinhan Bank America may not make loans or extend credit for commercial, corporate or business purposes (including lease financing) to a single borrower, the aggregate amount of which would be in excess of 15% of Shinhan Bank America's net worth, on an unsecured basis, and 25% of the net worth if the excess is collateralized by readily marketable collateral or collateral otherwise having a value equal to the amount by which the loan exceeds 15% of Shinhan Bank America's net worth. In calculating the amount of outstanding loans or credit to a particular borrower for this purpose, Shinhan Bank America must include its credit exposure arising from derivative transactions with the borrower.

Activities and Investments of FDIC-Insured State-Chartered Banks. The activities and equity investments of FDIC-insured, state-chartered banks are generally limited to those that are permissible for national banks. Under regulations dealing with equity investments, an insured state bank generally may not directly or indirectly acquire or retain any equity investment of a type, or in an amount, that is not permissible for a national bank. An insured state bank may, among other things, (i) acquire or retain a majority interest in a subsidiary that is engaged in activities that are permissible for the bank itself to engage in, (ii) invest as a limited partner in a partnership the sole purpose of which is direct or indirect investment in the acquisition, rehabilitation or new construction of a qualified housing project, provided that such limited partnership investments may not exceed 2% of the bank's total assets, and (iii) acquire up to 10% of the voting stock of a company that solely provides or reinsures directors', trustees' and officers' liability insurance coverage or bankers' blanket bond group insurance coverage for insured depository institutions. In addition, an FDIC-insured state-chartered bank may not directly, or indirectly through a subsidiary, engage as "principal" in any activity that is not permissible for a national bank unless the FDIC has determined that such activities would pose no significant risk to the insurance fund of which it is a member and the bank is in compliance with applicable regulatory capital requirements.

*Regulatory Enforcement Authority*. Applicable banking laws include substantial enforcement powers available to federal banking regulators. This enforcement authority includes, among other things, the ability to assess civil money penalties, to issue cease-and-desist or removal orders and to initiate injunctive actions against banking organizations and institution-affiliated parties, as defined. In general, these enforcement actions may be initiated for violations of laws and regulations and unsafe or unsound practices. Other actions or inactions may provide the basis for enforcement action, including misleading or untimely reports filed with regulatory authorities. On June 12, 2017, Shinhan Bank America entered into a consent order with the FDIC with respect to certain weaknesses relating to its anti-money laundering compliance program. Shinhan Bank America has taken corrective measures and provides periodic reports to the FDIC with regard to such matters.

Under the New York State Banking Law, the Department may issue an order to a New York-chartered banking institution to appear and explain an apparent violation of law, to discontinue unauthorized or unsafe practices and to keep prescribed books and accounts. Upon a finding by the Department that any director, trustee or officer of any banking organization has violated any law, or has continued unauthorized or unsafe practices in conducting the business of the banking organization after having been notified by the Department to discontinue such practices, such director, trustee or officer may be removed from office by the Department after notice and an opportunity to be heard. The Department also may take possession of a banking organization under specified statutory criteria.

Prompt Corrective Action. Section 38 of the Federal Deposit Insurance Act provides the federal banking regulators with broad power to take "prompt corrective action" to resolve the problems of undercapitalized institutions. The extent of the regulators' powers depends on whether the institution in question is "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized" or "critically undercapitalized." A bank is deemed to be (i) "well capitalized" if it has total risk-based capital ratio of 10.0% or greater, has a Tier I risk-based capital ratio of 8.0% or greater, has a common equity Tier I capital ratio of 6.5% or greater, has a Tier I leverage capital ratio of 5.0% or greater, and is not subject to specified requirements to meet and maintain a specific capital level for any capital measure, (ii) "adequately capitalized" if it has a total risk-based capital ratio of 8.0% or greater, has a Tier I risk-based capital ratio of 6.0% or greater, has a common equity Tier I capital ratio of 4.5% or greater, has a Tier I leverage capital ratio of 4.0% or greater and does not meet the definition of "well capitalized," (iii) "undercapitalized" if it has a total risk-based capital ratio that is less than 8.0%, has a Tier I risk-based capital ratio that is less than 6.0%, has a common equity Tier I capital ratio of less than 4.5%, or has a Tier I leverage capital ratio that is less than 4.0%, (iv) "significantly undercapitalized" if it has a total risk-based capital ratio that is less than 6.0%, has a Tier I risk-based capital ratio that is less than 4.0%, has a common equity Tier I capital ratio that is less than 3.0%, or has or a Tier I leverage capital ratio that is less than 3.0%, and (v) "critically undercapitalized" if it has a ratio of tangible equity to total assets that is equal to or less than 2.0%. The regulations also provide that a federal banking regulator may, after notice and an opportunity for a hearing, reclassify a "well capitalized" institution as "adequately capitalized" and may require

an "adequately capitalized" institution or an "undercapitalized" institution to comply with supervisory actions as if it were in the next lower category if the institution is in an unsafe or unsound condition or engaging in an unsafe or unsound practice. The federal banking regulator may not, however, reclassify a "significantly undercapitalized" institution as "critically undercapitalized."

An institution generally must file a written capital restoration plan which meets specified requirements, as well as a performance guaranty by each company that controls the institution, with an appropriate federal banking regulator within 45 days of the date that the institution receives notice or is deemed to have notice that it is "undercapitalized," "significantly undercapitalized" or "critically undercapitalized." Immediately upon becoming undercapitalized, an institution becomes subject to statutory provisions, which, among other things, set forth various mandatory and discretionary restrictions on the operations of such an institution.

*FDIC Insurance*. Shinhan Bank America's deposits are insured by the FDIC. As insurer, the FDIC is authorized to conduct examinations of, and to require reporting by, FDIC-insured institutions. It also may prohibit any FDIC-insured institution from engaging in any activity the FDIC determines by regulation or order to pose a serious threat to the FDIC.

During the 2008-2009 financial crisis, there were many failures and near-failures among financial institutions. The FDIC insurance fund reserve ratio, representing the ratio of the fund to the level of insured deposits, declined due to losses caused by bank failures and the FDIC then increased its deposit insurance premiums on remaining institutions in order to replenish the insurance fund. The Dodd-Frank Act requires the FDIC to maintain the ratio of the FDIC insurance fund to estimated total insured deposits ("Reserve Ratio") at 1.35%. If bank failures in the future are more costly than the FDIC currently anticipates, then the FDIC may be required to continue to impose higher insurance premiums. Any such increase would increase our non-interest expense. Thus, despite the prudent steps Shinhan Bank America may take to avoid the mistakes made by other banks, its costs of operations may increase as a result of those mistakes by others.

Extraordinary growth in insured deposits during the first and second quarters of 2020 caused the Reserve Ratio to decline below the statutory minimum of 1.35%, resulting in the FDIC establishing a restoration plan on September 15, 2020 which contemplates the Reserve Ratio returning to 1.35% within 8 years. In October 2022, the FDIC adopted a final rule, applicable to all insured depository institutions, to increase the initial base deposit insurance assessment rates uniformly by 2%, beginning in the first quarterly assessment period of 2023. The rate increase is intended to increase the likelihood that the Reserve Ratio reaches the statutory minimum of 1.35% by September 30, 2028. The new assessment rates will remain in effect unless and until the Reserve Ratio meets or exceeds the FIDC's long-term goal of a 2% Reserve Ratio. Progressively lower assessment rate schedules will take effect when the Reserve Ratio reaches 2%, and again when it reaches 2.5%.

As a result of the Dodd-Frank Act, the increase in the standard FDIC insurance limit from US\$100,000 to US\$250,000 was made permanent. The Dodd-Frank Act also removed the prohibition on banks paying interest on demand deposits.

The FDIC may terminate the deposit insurance of any insured depository institution, including Shinhan Bank America, if it determines, after a hearing, that the institution has engaged or is engaging in unsafe or unsound practices, is in an unsafe or unsound condition to continue operations, or has violated any applicable law, regulation, order or any condition imposed by an agreement with the FDIC. It also may suspend deposit insurance temporarily during the hearing process for the permanent termination of insurance, if the institution has no tangible capital. If insurance of accounts is terminated, the accounts at the institution at the time of the termination, less subsequent withdrawals, shall continue to be insured for a period of six months to two years, as determined by the FDIC. Management is aware of no existing circumstances that would result in termination of Shinhan Bank America's deposit insurance.

*Brokered Deposits.* Under federal law and applicable regulations, (i) a well-capitalized bank may solicit and accept, renew or roll over any brokered deposit without restriction, (ii) an adequately capitalized bank may not

accept, renew or roll over any brokered deposit unless it has applied for and been granted a waiver of this prohibition by the FDIC and (iii) an undercapitalized bank may not (x) accept, renew or roll over any brokered deposit or (y) solicit deposits by offering an effective yield that exceeds by more than 75 basis points the prevailing effective yields on insured deposits of comparable maturity in such institution's normal market area or in the market area in which such deposits are being solicited. The term "undercapitalized insured depository institution" is defined to mean any insured depository institution that fails to meet the minimum regulatory capital requirement prescribed by its appropriate federal banking agency. The FDIC may, on a case-by-case basis and upon application by an adequately capitalized insured deposits does not constitute an unsafe or unsound practice with respect to such institution. In January 2021, the FDIC adopted rules on aspects of FDIC's brokered deposit and interest rate regulations. The impact of these rules on Shinhan Bank America's operations in the future is uncertain. Shinhan Bank America had an aggregate amount of US\$10 million of brokered deposits outstanding as of December 31, 2022.

*Community Reinvestment and Consumer Protection Laws*. In connection with its lending activities, Shinhan Bank America is subject to a variety of federal laws designed to protect borrowers and promote lending to various sectors of the economy and population. Included among these are the Home Mortgage Disclosure Act, Real Estate Settlement Procedures Act, Truth-in-Lending Act, Equal Credit Opportunity Act, Fair Credit Reporting Act and CRA.

The CRA requires FDIC insured banks to define the assessment areas that they serve, identify the credit needs of those assessment areas and take actions that respond to the credit needs of the community. The FDIC must conduct regular CRA examinations of Shinhan Bank America and assign it a CRA rating of "outstanding," "satisfactory," "needs improvement" or "unsatisfactory." Shinhan Bank America is also subject to provisions of the New York State Banking Law which impose similar obligations to serve the credit needs of its assessment areas. The Department and the FDIC each periodically assess a bank's compliance, and makes the assessment available to the public. Federal and New York State laws both require consideration of these ratings when reviewing a bank's application to engage in certain transactions, including mergers, asset purchases and the establishment of branch offices. A negative assessment may serve as a basis for the denial of any such application. Shinhan Bank America has received "satisfactory" ratings from both the Department and the FDIC in its most recent CRA performance evaluation.

In May 2022, the FDIC and other federal regulatory agencies proposed comprehensive amendments to the CRA regulatory framework. Among other things, the proposed amendments are intended to reflect changes in the banking industry, including the expanded role of mobile and online bank and to tailor performance standards to account for differences in bank size, business models and local conditions. It remains unclear whether the FDIC or other regulatory agencies will adopt final rules amending the CRA. If such rules were to be adopted, we cannot predict at this time the extent to which the scope of such final rules would resemble the proposed rules or the CRA regulations that are currently in effect. It also remains unclear whether any other particular legislative or regulatory proposals will be enacted or adopted concerning CRA requirements applicable to us. To the extent any such final amendments to CRA requirements applicable to us are adopted, such regulatory developments may impact the ability of Shinhan Bank America to achieve "satisfactory" CRA performance ratings.

The Dodd-Frank Act created the Consumer Financial Protection Bureau (the "Bureau") with broad authority to regulate and enforce consumer protection laws. The Bureau has the authority to adopt regulations under numerous existing federal consumer protection statutes. The Bureau may also decide that a particular consumer financial product or service, or the manner in which it is offered, is an unfair, deceptive, or abusive act or practice. If the Bureau so decides, it has the authority to outlaw such act or practice.

*Limitations on Dividends*. The payment of dividends by Shinhan Bank America is subject to various regulatory requirements. Under New York State Banking Law, a New York-chartered stock bank may declare and pay dividends out of its net profits, unless there is an impairment of capital, but approval of the

Superintendent of Banks is required if the total of all dividends declared in a calendar year would exceed the total of its net profits for that year combined with its retained net profits of the preceding two years, subject to certain adjustments.

Assessments. Banking institutions are required to pay assessments to both the FDIC and the Department to fund the operations of those agencies. The assessments are based upon the amount of Shinhan Bank America's total assets. Shinhan Bank America must also pay an examination fee to the Department when it conducts an examination.

*Transactions with Related Parties*. Shinhan Bank America's authority to engage in transactions with related parties or "affiliates" (i.e., any entity that controls or is under common control with an institution) is limited by Sections 23A and 23B of the Federal Reserve Act. Section 23A limits the aggregate amount of transactions with any individual affiliate to 10% of the capital and surplus of the institution and also limits the aggregate amount of transactions with all affiliates to 20% of the institution's capital and surplus. The term "affiliate" includes, for this purpose, us and any company that we control other than Shinhan Bank America and its subsidiaries.

Loans to affiliates must be secured by collateral with a value that depends on the nature of the collateral. The purchase of low quality assets from affiliates is generally prohibited. Loans and asset purchases with affiliates must be on terms and under circumstances, including credit standards, that are substantially the same or at least as favorable to the institution as those prevailing at the time for comparable transactions with nonaffiliated companies. In the absence of comparable transactions, such transactions may only occur under terms and circumstances, including credit standards that in good faith would be offered to or would apply to nonaffiliated companies. Shinhan Bank America's authority to extend credit to executive officers, directors and 10% shareholders, as well as entities controlled by such persons, is governed by Regulation O of the Federal Reserve Board. Regulation O generally requires such loans to be made on terms substantially similar to those offered to unaffiliated individuals (except for preferential loans made in accordance with broad based employee benefit plans), places limits on the amount of loans Shinhan Bank America may make to such persons based, in part, on Shinhan Bank America's capital position, and requires certain approval procedures to be followed.

*Standards for Safety and Soundness.* FDIC regulations require that Shinhan Bank America adopt procedures and systems designed to foster safe and sound operations in the areas of internal controls, information systems, internal audit systems, loan documentation, credit underwriting, interest rate risk exposure, asset growth, asset quality, earnings and compensation, fees and benefits. Among other things, these regulations prohibit compensation and benefits and arrangements that are excessive or that could lead to a material financial loss. If Shinhan Bank America fails to meet any of these standards, it will be required to submit to the FDIC a plan specifying the steps that will be taken to cure the deficiency. If it fails to submit an acceptable plan or fails to implement the plan, the FDIC will require it to correct the deficiency and until corrected, may impose restrictions on it.

The FDIC has also adopted regulations that require Shinhan Bank America to adopt written loan policies and procedures that are consistent with safe and sound operation, are appropriate for its size, and must be reviewed by its board of directors annually. Shinhan Bank America has adopted such policies and procedures, the material provisions of which are discussed above as part of the discussion of our lending operations.

## U.S. Regulation of Other U.S. Operations

In the United States, Shinhan Securities America Inc., our U.S.-registered broker-dealer subsidiary, is subject to regulations that cover all aspects of the securities business, including, sales methods, trade practices among broker-dealers, use and safekeeping of clients' funds and securities, capital structure; record-keeping, the financing of clients' purchases, and the conduct of directors, officers and employees.

Shinhan Securities America Inc. is regulated by a number of different government agencies and selfregulatory organizations, including the SEC and the Financial Industry Regulatory Authority ("FINRA"). Our U.S. subsidiaries are also regulated by some or all of the NYSE, the Municipal Securities Rulemaking Board, the U.S. Department of the Treasury, the Federal Reserve Board and the Commodities Futures Trading Commission. In addition, the U.S. states, provinces and territories have local securities commissions that regulate and monitor activities in the interest of investor protection. These regulators have a variety of sanctions available, including the authority to conduct administrative proceedings that can result in censure, fines, the issuance of cease-and-desist orders or the suspension or expulsion of the broker-dealer or its directors, officers or employees.

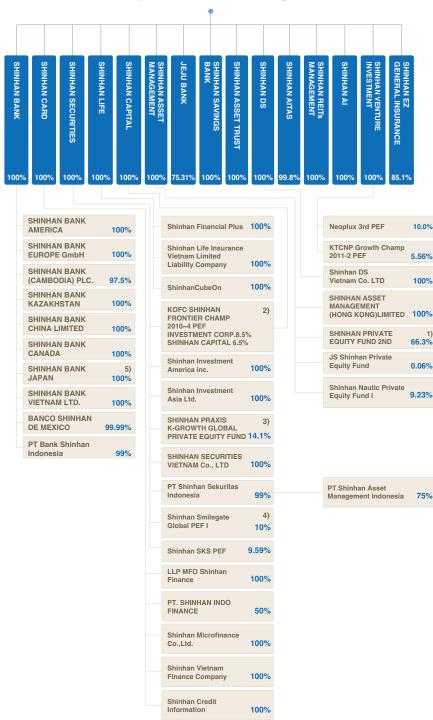
FINRA is dedicated to investor protection and market integrity through effective and efficient regulation and complementary compliance and technology-based services. FINRA covers a broad spectrum of securities businesses, including, registering and educating industry participants, examining securities firms, writing rules, enforcing those rules and the federal securities laws, informing and educating the investing public, providing trade reporting and other industry utilities, and administering a dispute resolution forum for investors and registered firms. It also performs market regulation under contract for the NASDAQ Stock Market, the American Stock Exchange and the Chicago Climate Exchange.

Many of the provisions of the Dodd-Frank Act discussed above will affect the operation of Shinhan Securities America, as well as our U.S. banking operations. Again, the impact of this statute on our operations will depend on the final regulations ultimately adopted by various agencies and oversight boards in coming years.

Shinhan Bank America may be impacted by provisions of the Coronavirus Aid, Relief, and Economic Security Act, or CARES Act, or other legislation or regulations adopted in response to the COVID-19 pandemic, which may contain certain temporary regulatory forbearance measures applicable during the COVID-19 pandemic.

## **ITEM 4.C. Organizational Structure**

We currently have 16 direct and 35 indirect subsidiaries. The following diagram provides an overview of our organizational structure, including our significant subsidiaries and our ownership of such subsidiaries as of the date of this annual report:



# Shinhan Financial Group

- 1) We and our subsidiaries currently own 96.74% in the aggregate.
- 2) We and our subsidiaries currently own 34.6% in the aggregate.
- 3) We and our subsidiaries currently own 18.9% in the aggregate.
- 4) We and our subsidiaries currently own 14.21% in the aggregate.
- 5) SBJ BANK own 100% in the aggregate.

All of our subsidiaries are incorporated in Korea, except for the following:

- Shinhan Bank America (incorporated in the United States);
- Shinhan Bank Canada (incorporated in Canada);
- Shinhan Bank (China) Limited (incorporated in the People's Republic of China);
- Shinhan Bank Europe GmbH (incorporated in Germany);
- Shinhan Bank Kazakhstan Limited (incorporated in Kazakhstan);
- Shinhan Bank Japan (incorporated in Japan);
- Shinhan Bank (Cambodia) PLC (incorporated in Cambodia);
- Shinhan Bank Vietnam Ltd. (incorporated in Vietnam);
- PT Bank Shinhan Indonesia (incorporated in Indonesia);
- Banco Shinhan de Mexico (incorporated in Mexico);
- LLP MFO Shinhan Finance (incorporated in Kazakhstan);
- PT Shinhan Indo Finance (incorporated in Indonesia);
- Shinhan Microfinance Co., Ltd. (incorporated in Myanmar);
- Shinhan Vietnam Finance Company Ltd. (incorporated in Vietnam);
- Shinhan Investment America Inc. (incorporated in the United States);
- Shinhan Investment Asia Ltd. (incorporated in Hong Kong);
- Shinhan Securities Vietnam Co., Ltd. (incorporated in Vietnam);
- PT Shinhan Sekuritas Indonesia (incorporated in Indonesia);
- Shinhan Asset Management Indonesia (incorporated in Indonesia);
- Shinhan Asset Management (Hong Kong) Limited (incorporated in Hong Kong);
- Shinhan DS Vietnam Co. Limited (incorporated in Vietnam); and
- SBJ DNX (incorporated in Japan).

## **ITEM 4.D. Properties**

The following table provides information regarding certain of our properties in Korea.

			rea re meters)
Type of Facility	Location	Building	Site (If Different)
Registered office and corporate headquarters	20, Sejong-daero 9-gil, Jung-gu, Seoul, Korea 04513	59,519	5,418
Shinhan Card headquarters	100, Eulji-ro, Jung-gu, Seoul, Korea 04551	65,774	4,634
Shinhan Centennial Building	29, Namdaemun-ro 10-gil, Jung-gu, Seoul, Korea 04540	19,697	1,389

		Area (In square meters)		
Type of Facility	Location	Building	Site (If Different)	
Shinhan Bank Gwanggyo Branch	54, Cheonggyecheon-ro, Jung-gu, Seoul, Korea 04540	16,727	6,783	
Shinhan Myongdong Branch	43, Myeongdong-gil, Jung-gu, Seoul, Korea 04534	8,936	1,017	
Shinhan Youngdungpo Branch	27, Yeongjung-ro, Yeoungdeungpo-gu, Seoul, Korea 07301	6,171	1,983	
Shinhan Back Office Support Center	1311, Jungang-ro, Ilsandong-gu, Goyang-si, Gyeonggi-do, Korea 10401	25,238	5,856	
Shinhan Bank Back Office and Call Center	251, Yeoksam-ro, Gangnam-gu, Seoul, Korea 06225	40,806	7,964	
Shinhan Bank Back Office and Storage Center	1221, 1sunwhan-ro, Sangdang-gu, Cheongju-Si, Chungcheongbuk-do, Korea 28777	6,019	5,376	
Shinhan Card Yoksam-Dong Building	176, Yeoksam-ro, Gangnam-gu, Seoul, Korea 06248	7,348	1,185	
Shinhan Data Center	67, Digital Valley-ro, Suji-gu, Yongin-si, Gyeonggi-do, Korea 16878	45,277	9,114	

Our subsidiaries own or lease various land and buildings for their branches and sales offices.

As of December 31, 2022, Shinhan Bank had a countrywide network of 721 branches. Approximately 20% of these facilities were housed in buildings owned by us, while the remaining branches were leased properties. Lease terms are generally between two to three years and generally do not exceed five years. As of December 31, 2022, Jeju Bank had 31 branches of which we own 12 of the buildings in which the facilities are located, representing 38.7% of its total branches. Lease terms are generally between one to two years and seldom exceed five years.

As of December 31, 2022, Shinhan Card had 29 branches, including its headquarters, all but three of which were leased. Lease terms are generally between one to two years. As of December 31, 2022, Shinhan Securities had a nationwide network of 80 branches of which we own five of the buildings. As of December 31, 2022, Shinhan Life Insurance had 218 branches, which we lease for a term of generally one to two years.

The net book value of all the properties owned by us on December 31, 2022 was ₩2,803 billion. We do not own any material properties outside of Korea.

# **ITEM 4A. UNRESOLVED STAFF COMMENTS**

We do not have any unresolved comments from the staff of the U.S. Securities and Exchange Commission regarding our periodic reports under the Securities Exchange Act of 1934, as amended.

# ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and notes thereto included in this annual report. The following discussion is based on our consolidated financial statements, which have been prepared in accordance with IFRS.

## **ITEM 5.A. Operating Results**

#### Overview

We are one of the leading financial institutions in Korea in terms of total assets, revenues, profitability and capital adequacy, among others. Incorporated on September 1, 2001, we are the first privately-held financial holding company to be established in Korea. Since inception, we have developed and introduced a wide range of financial products and services in Korea and aimed to deliver comprehensive financial solutions to clients through a convenient one-portal network. According to reports by the Financial Supervisory Service, we are the second largest financial services provider in Korea (as measured by consolidated total assets as of December 31, 2022) and operate the second largest banking business (as measured by total credit purchase volume in 2022) in Korea.

Most of our assets are located in, and we generate most of our income from, Korea. Accordingly, our business and profitability are largely dependent on the general economic and social conditions in Korea, including interest rates, inflation, exports, personal expenditures and consumption, unemployment, demand for business products and services, debt service burden of households and businesses, the general availability of credit, the asset value of real estate and securities and other factors affecting the financial well-being of our corporate and retail customers. The Korean economy is closely integrated with, and is significantly affected by, developments in the global economy and financial markets. In recent years, the global economy and financial markets experienced adverse conditions and volatility, which also had an adverse impact on the Korean economy and in turn on our business and profitability. See "Item 3.D. Risk Factors — Risks Relating to Our Overall Business — Difficult conditions and turbulence in the Korean and global economy and financial markets may adversely affect our business, asset quality, capital adequacy and earnings."

We derive most of our income from interest earned on our corporate and retail loans, net of funding costs (which primarily consist of interest payable on customer deposits). Net interest income is largely a function of the average volume of loans and the net interest spread thereon.

In 2021, the average volume of retail loans increased by 8.9% from 2020, primarily as a result of continued increase in home rental long-term deposit loans. In 2021, the average volume of corporate loans increased by 10.2% from 2020, primarily as a result of policies to support small and medium sized enterprises amidst the prolonged COVID-19 pandemic.

In 2022, the average volume of retail loans increased by 4.0% from 2021, primarily as a result of an increase in home mortgage loans. In 2022, the average volume of corporate loans increased by 12.1% from 2021, primarily as a result of the policies to support small- and medium-sized enterprises amidst the prolonged COVID-19 pandemic as discussed above.

From 2020 to 2021, both the average yield on interest-earning assets and the average rate on interest-bearing liabilities decreased primarily due to a decrease in the weighted average base interest from 0.71% in 2020 to 0.61% in 2021 resulting from decreases in the base interest rate set by the Bank of Korea. The average balance increased for both interest-earning assets and interest-bearing liabilities. Shinhan Bank's net interest income increased by 11.5% from \$5,928 billion in 2020 to \$6,611 billion in 2021. Net interest income after provision for loan losses amounted to \$5,284 billion and \$6,265 billion in 2020 and 2021, respectively. Shinhan Bank's operating income increased by 23.1% from \$2,914 billion in 2020 to \$3,587 billion in 2021.

From 2021 to 2022, both the average yield on interest-earning assets and the average rate on interest-bearing liabilities increased primarily as a result of the continuous rise in benchmark interest rates set by the Bank of Korea during 2022. The average balance increased for both interest-earning assets and interest-bearing liabilities. Shinhan Bank's net interest income increased by 24.1% from W6,611 billion in 2021 to W8,205 billion in 2022. Net interest income after provision for loan losses amounted to W6,265 billion and W7,626 billion in 2021 and 2022, respectively. Shinhan Bank's operating income increased by 16.1% from W3,587 billion in 2021 to W4,163 billion in 2022.

As for Shinhan Card, its operating revenue is largely dependent on transaction volume and less sensitive to interest rate movements than our banking business, since merchant fees (representing a fixed percentage of a credit card purchase amount) provide a stable source of income and our credit card business enjoys more diversified sources of funding, including commercial paper, corporate debentures (which have maturities longer than most bank deposit products) and asset-backed securitizations. The credit card transaction volume is largely dependent on the overall trends of the general Korean economy, such as general consumer spending patterns in Korea. Shinhan Card's operating revenues increased by 6.6% from ₩4,091 billion in 2020 to ₩4,360 billion in 2021, largely due to an increase in gains on hedging items as well as a decrease in losses on hedging items resulting from the change in foreign currency exchange rates. In addition, fees and commission income increased by 9.4% from ₩1,479 billion in 2020 to ₩1,618 billion in 2021, primarily as a result of an increase in fees and commission income from lease operations and, to a lesser extent, an increase in fees income on credit cards, which was offset in part by a decrease in fees expense on credit cards. Shinhan Card's operating revenues increased by 9.2% from \\$4,360 billion in 2021 to \$\$4,760 billion in 2022, largely due to an increase in the average balance of operating leased assets resulting from the expansion of operating assets. In addition, fees and commission income increased by 8.7% from \1,618 billion in 2021 to \1,758 billion in 2022, primarily as a result of an increase in the average balance of operating leased assets resulting from the expansion of operating assets.

The following provides a discussion of the major trends surrounding the general economy and the financial services sector in Korea in 2022 and our current outlook for 2023 as they relate to our core businesses. The following discussion represents the subjective view of our management and may significantly differ from the actual results for 2023.

#### Trends in the Korean Economy

The global economy experienced a slowdown in growth in 2022, and despite some indications that energy supply and demand is stabilizing and the pace of inflation is slowing down in certain countries, concerns of prolonged global downturn remain. We expect continued volatility in the international financial market, as the U.S. Federal Reserve Board's target interest rate is expected to be higher than originally estimated after the announcement of the unemployment rate and price indicators in the U.S. that exceeded market expectations. Rapidly shifting U.S. dollar exchange rate and long-term market interest rates are also contributing to increasing volatility in the market. Major factors that are expected to affect the global economy and international financial markets include rate of global inflation, changes in monetary policy in major economies, relative strength of the U.S. dollar, the recovery of the Chinese economy, and other geopolitical risks. In addition, the recent collapse of major financial institutions such as Silicon Valley Bank and Credit Suisse has caused rising preference for safer assets and has increased skepticism about the viability of additional interest rates increases by the U.S. Federal Reserve Board.

The Korean economy's growth has slowed down in 2022, more so in comparison to some other major countries. This was largely due to slowdown in the IT sector leading to a decline in exports, and the recovery of consumption has also been sluggish. While the employment rate has remained relatively stable, its recovery from the effects of COVID-19 has been rather slow. Global economic slowdown has been negatively affecting Korea's exports, and domestic consumption is also expected to remain sluggish primarily to due rising inflation and interest rates. Interest rate fluctuations have been inflicting particularly negative impact on private consumption, capital expenditure and investment, leading to a decrease in asset prices. In response to these market changes, the Government has been adopting various stabilizing measures, many of which are deregulatory. The Government and the Bank of Korea also implemented emergency measures in response to the corporate debt liquidity issues that occurred in the second half of 2022 in the aftermath of a default in the bonds issued by Gangwon Jungdo Development Corp. In 2023, it is expected that the Korean economy will continue its sluggish growth trend due to the global economic slowdown and rising interest rates.

While the U.S. Federal Reserve Board's quantitative tightening will continue to pressure the Government and Bank of Korea, domestic market conditions and concerns regarding exodus of foreign capital may make it difficult for the Bank of Korea to increase the base rates further in Korea. The Government is expected to prioritize price stability and to continue its tightening stance for a significant period of time, as the inflation rate is expected to remain higher than policy target levels and economic conditions remain uncertain. In February 2023, the Monetary Policy Committee of Korea announced that the base interest would remain at the current level of 3.50% after a series of raises since August 2021. Interest rate movements are uncertain and will depend, in part, on domestic and international economic conditions, employment rate, and price trends.

# Recent Developments and Outlook for the Korean Financial Sector

#### Commercial Banking

Since the financial crisis in 2008, the asset size of Korean commercial banks has consistently grown year over year, including in 2022. Asset quality of commercial banks in Korea continued to improve, primarily as a result of Korean commercial banks' risk management efforts and the Government-led financial support programs recently introduced in response to the COVID-19 pandemic such as loan rescheduling and principal and interest payment deferral programs. Corporate loans increased amidst such Government-led financial support programs and increases in Government expenditures and fiscal stimulus measures. Although household loans decreased as a result of the Government-led household loans management measures and increases in the base interest rate set by the Bank of Korea, net income for Korean commercial banks generally increased in 2022 compared to 2021, primarily due to relatively higher growth in corporate loan assets and improvement in net interest margin following interest rate increases.

In 2023, asset growth for commercial banks in Korea is expected to slow due to a variety of factors, including the Russia-Ukraine conflict and the subsequent economic slowdown and global inflation, volatility in the base interest rate and the continued strengthening of the Government's policies to curb growth of household debt, including tightened regulation on mortgage as well as credit loans. In response to this market volatility and increased risk of defaults on loan payments, particularly by small- and medium-sized enterprises, Korean commercial banks have generally increased their loan loss provisions in 2022 compared to 2021. If such trend of increasing loan loss provisions continues, it may have adverse effects on Korean commercial banks' asset quality and capacity to supply new loans. For further details, see "Item 3.D. Risk Factors — Risks Relating to Our Banking Business — We have significant exposure to small- and medium-sized enterprises, and financial difficulties experienced by such enterprises may result in a deterioration of our asset quality."

In addition, as the demand for consumer protection in investment products increases, the banks' organization and key performance indicators are expected to be readjusted, and fees and commission income generally is expected to decrease. Competition between banks and fintech firms is expected to further intensify due to the accelerated transition to digital and contactless financial services. The resulting competition is expected to go beyond traditional price-based competition, requiring banks to focus on recruiting talented and innovative individuals and also on offering customized products and services based on big data analysis and integrating financial services with customers' daily life patterns in order to attract high net-worth individuals and younger customers. The Government's policies focusing on protection of consumers and encouraging inclusive financial policies are also expected to lead to further competition among banks for relevant businesses, such as businesses to support the middle class, socially disadvantaged classes, small businesses and startups. Environmental, social, and governance (ESG) issues, as well as the opportunities and risks associated with them, are becoming increasingly important to commercial banks. We believe that strengthening risk management capabilities will become increasingly important and have a more direct impact on the financial performance of commercial banks in Korea.

## Credit Cards

In 2022, the prolonged impact of COVID-19 increased uncertainty in the Korean credit card industry, and a series of challenges contributed to the market's volatility, including increased "untact" (non-face-to-face) consumption, uncertain economic forecasts, a complex regulatory environment, and growing competition with fintech companies. Although the scale and profitability of Korean credit card businesses have generally increased

steadily in recent years, the potential for additional quantitative growth may be limited given the ratio of credit card payment has already reached approximately 80% of total retail consumption.

In 2023, credit card companies will need to manage emerging issues in traditional financial services business, which includes efficient financing and household debt risk management, as well as to effectively respond to increasingly stringent regulatory environments, which include lower maximum interests on loans, reduced merchant fees and tightened debt-to-service ratio regulations on financial products. The competition in credit lending is likely to further intensify with the rise of loan brokerage platforms, launch of refinancing platforms, and aggressive marketing by internet-only banks. Additionally, the role of digital platforms is expected to grow in importance as integrated financial services such as open banking and MyData have become prevalent, requiring credit card companies to develop customer-friendly digital platforms. As a result, credit card companies will need to enhance their core financial services business capabilities, while also evolving and innovating their digital business in order to satisfy the demanding needs of credit card customers.

## Securities

In 2022, securities companies continued their efforts to diversify revenue sources other than traditional brokerage services, expanding into investment banking and sales and trading in an effort to reduce the impact of stock price fluctuations on the profitability of securities companies. Competition has particularly intensified as entry barriers into the securities industry is relatively low and there are a limited number of factors allowing companies to differentiate its services with other financial companies. Despite the introduction of new net capital ratio requirements in 2016, which regulate minimum equity capital requirements for each authorized business unit separately and were intended to loosen restrictions on businesses, management of traditional net capital ratios remains important as it directly affects credit rating. In addition, introducing leverage ratio regulations, for example, the application of the BIS capital adequacy ratio, is expected to give larger securities firms an advantage over their smaller competitors as larger securities firms will have larger capital buffers compared to small and medium-sized firms.

In 2023, securities companies are expected to face a difficult business environment as a result of the market uncertainty and fierce competition. Increasing volatilities in financial indices and interest rates are expected to weaken financial market sentiments, and competition with fintech companies and other securities companies is expected to intensify. The brokerage services industry is also implementing systematic changes in response to the Government's strengthening financial consumer protection measures. Competition for expanding ICT infrastructure is expected to intensify further in order to develop future growth opportunities created by the increase in digital service users and tech-savvy young customers. As more securities companies enter the wealth management and corporate and investment banking markets, more companies are expected to combine and integrate their banking and financial investment services. Moreover, fintech companies such as KakaoPay and Toss have entered the online brokerage and asset management markets through the launch of KakaoPay Securities Corp. and Toss Securities, respectively, in February 2021, further intensifying competition within the segment. Accordingly, securities companies will need to diversify and strengthen their investment banking divisions in order to mitigate the rising volatility and consequent fluctuations in the brokerage market. Specifically, acquisition finance and structured finance have recently grown and have become a new focus for securities companies as a result of the Government's policies to develop corporate finance industry.

#### Life Insurance

In 2022, the life insurance industry's overall revenue continued to decline due to interest rate volatility, competition against tech companies who have been expanding into the life insurance market, slowing growth of the Korean economy, aging population and low birthrates.

In 2023, the life insurance industry's overall profitability is expected to continue to decline as the factors mentioned above continue to persist, and it is expected that risk management and underwriting (risk takeover) capability will become an increasingly important factor in life insurance companies' ability to strategically reduce business expenses. In addition, the demands for health insurance products and retirement pension

insurance have increased steadily, and as a result it is expected that sales channels, products, and digital-based competitiveness will become more important in the future. As the line between financial and non-financial sectors become blurry and the life insurance market matures, we expect overall growth potential for the industry to be limited and the importance of developing differentiated products and services tailored to customers' individualized needs and expanding digital-based customer services to become increasingly important. In addition, the K-ICS will require insurance companies to apply market price valuation to their assets and liabilities in calculating capital requirement ratios in line with the new IFRS 17 accounting standards, thereby posing further challenges which may result in increased volatility for life insurance companies in Korea. See "Item 3.D. Risk Factors — Risks Related to Our Other Businesses — Prolonged periods of declining or low interest rates or changes in related accounting standards may reduce or turn negative our investment margin on savings insurance products and result in an increase in the valuation of our liabilities associated with these products."

#### Specialized Credit

The specialized credit business cannot accept customer deposits and generally involves providing a combination of four types of financing: equipment and facilities leasing, installment finance, new technology finance and credit card services, and sources funding primarily by issuing debentures and commercial papers. The specialized credit business generally targets customers with higher risk profile in return for higher return compared to customers of commercial banks, which makes risk management (including customer screening) a particularly key factor for commercial success of this business.

Due, in part, to the variety of services being offered and the broad range of potential customers, specialized credit providers often find it relatively easy to develop new customer segments and provide niche offerings. In September 2015, the National Assembly of Korea passed an amendment to the Credit Finance Business Act, which, among other things, reduced entry barriers into the credit finance industry by lowering the minimum capital requirements for new entrants. Due to the relatively low barriers of entry, however, competition is intense and has further intensified as commercial banks have been offering automobile loan offerings as well as medium-interest loan products and peer-to-peer companies and lenders have been expanding their credit loan businesses as well. Although the size of the overall industry has increased primarily due to recent increases in automobile financing (installment, lease and auto loan) and investments in, and loans to, tech companies, overall profitability has declined in recent years and competition has been further intensifying.

#### Asset Management

In 2023, diversification of investment strategies is expected to continue due to increased difficulty in generating profits from traditional assets as a result of increased interest rate volatility and uncertainties in global markets. In particular, direct investment and demand for alternative investment opportunities, such as real estate and alternative assets, is expected grow as investors seek to offset increases in base interest rates with high-yield investment products. In addition, it is expected that interest in retirement pension-linked products will continue to grow, as will online sales. Such growth in alternative investments is expected to offer new opportunities; however, increasing market volatility due to governments' monetary policies, prolonged impact of COVID-19 situation, stricter regulation on private equity activities and increased risk of class action suits from investors may pose additional risks.

The total amount of assets under management by Shinhan Asset Management, increased by 74.5% to \$101.4 trillion as of December 31, 2022 from \$58.1 trillion as of December 31, 2021. The total amount of fund assets under management increased by 75.1% to \$101.4 trillion as of December 31, 2022 from \$57.9 trillion as of December 31, 2021. The total amount of discretionary investment contracts increased by 95% to \$43.6 trillion as of December 31, 2022 from \$22.3 trillion as of December 31, 2021. Operating profit decreased by 34% to \$28.6 billion in 2022 from \$43.3 billion in 2021 and net profit decreased by 38.2% to \$19.9 billion in 2022 from \$32.2 billion in 2021 due primarily to due to the sluggish capital market.

As estimated returns on investments in the Korean market are expected to remain low due to slowing growth of the Korean economy, demand for investments in overseas markets and non-financial assets is expected to

increase. Demand for long-term investment products in the public fund market, such as individual annuity funds and retirement pension funds, is expected to continue to rise. Demand from investors looking to invest in ESG products is expected to continue to be strong as new ESG products are introduced into the market and gradually attract interest from retail investors.

#### **Interest Rates**

Interest rate movements, in terms of magnitude and timing as well as their relative impact on our assets and liabilities, have a significant impact on our net interest margins and profitability, particularly with respect to its financial products that are sensitive to such movements. For example, if the interest rates applicable to Shinhan Bank's loans (which are recorded as our assets) decrease at a faster pace or by a wider margin, or increase at a slower pace or by a thinner margin, compared to the interest rates applicable to its deposits (which are recorded as our liabilities), Shinhan Bank's net interest margin will shrink and its profitability will be negatively affected. In addition, the relative size and composition of Shinhan Bank's variable rate loans and deposits (as compared to our fixed rate loans and deposits) may also impact Shinhan Bank's net interest margin. Furthermore, the difference in the average repricing frequency of Shinhan Bank's interest-earning assets (primarily loans) compared to its interest-bearing liabilities (primarily deposits) may also impact its net interest margin. For example, since Shinhan Bank's deposits currently have a longer term, on average, than that of its loans, its deposits are on average less sensitive to movements in the base interest rates on which its deposits and loans tend to be pegged, and therefore, an increase in the base interest rates tends to increase its net interest margin while a decrease in the base interest rates tends to have the opposite effect. Since Shinhan Bank is one of our principal operating subsidiaries, its net interest margin and profitability have a substantial effect on our overall net interest margin and profitability. While we continually manage our assets and liabilities to minimize our exposure to the interest rate volatility, such efforts by us may not mitigate the impact of interest rate volatility in a timely or effective manner.

The interest rate charged to customers by our banking subsidiaries is based, in part, on the "cost of funds index," or COFIX, which is published by the Korean Federation of Banks. COFIX is computed based on the weighted average interest of select funding products (including time deposits, housing and other installment savings deposits, repos, discounted bills and senior non-convertible financial debentures) of eight major Korean banks (comprised of Shinhan Bank, Kookmin Bank, Woori Bank, KEB Hana Bank, Nonghyup Bank, Industrial Bank of Korea, Citibank Korea and Standard Chartered Bank Korea). Each bank then independently determines the interest rate applicable to its respective customers by adding a spread to the COFIX based on the difference between the COFIX and such bank's general funding costs, administration fees, the customer's credit score, the maturity of the loan and other customer-specific premiums and discounts based on the customer relationship with such bank. These interest rates are typically adjusted on a monthly basis.

	Corporate Bond Rates <sup>(1)</sup>	Treasury Bond Rates <sup>(2)</sup>	Certificate of Deposit Rates <sup>(3)</sup>	COFIX Balance- Based <sup>(4)</sup>	New COFIX Balance-Based <sup>(5)</sup>	COFIX New Borrowing-Based <sup>(6)</sup>
June 30, 2018	2.77	2.12	1.65	1.83		1.82
December 31, 2018	2.29	1.82	1.93	1.95		1.96
June 30, 2019	1.80	1.47	1.78	2.00		1.85
December 31, 2019	1.78	1.36	1.53	1.81	1.55	1.63
June 30, 2020	1.57	0.85	0.79	1.55	1.26	1.06
December 31, 2020	1.39	0.97	0.66	1.21	0.96	0.90
June 30, 2021	1.81	1.45	0.67	1.02	0.81	0.82
December 31, 2021	2.41	1.80	1.28	1.19	0.94	1.55
June 30, 2022	4.36	3.55	2.02	1.68	1.31	1.98
December 31, 2022	4.67	3.73	3.98	3.19	2.65	4.34

The following table shows certain benchmark Won-denominated borrowing interest rates as of the dates indicated.

Source: Korea Financial Investment Association Bond Information Service

#### Notes:

- (1) Measured by the yield on three-year AA- rated corporate bonds.
- (2) Measured by the yield on three-year treasury bonds.
- (3) Measured by the yield on certificates of deposit (with maturity of 91 days).
- (4) Measured based on the weighted average of the borrowing rates for the monthly ending balances of the funding made by the commercial banks that are subject of the COFIX reporting.
- (5) New COFIX on Outstanding Balance (the "New COFIX") is a new benchmark COFIX introduced since July 2019. The New COFIX also takes into account other deposits such as inter-bank time deposits and non-resident deposits and other funding sources such as subordinated bonds and convertible bonds in calculating the weighted average of the borrowing rates for the monthly ending balances of the funding made by the commercial banks that are subject of the COFIX reporting.
- (6) Measured based on the weighted average of the borrowing rates for new funding for each month made by the commercial banks that are subject of the COFIX reporting.

#### Average Balance Sheet and Volume and Rate Analysis

#### Average Balances and Related Interest

The following table shows our average balances and interest rates, as well as the net interest spread, net interest margin and asset liability ratio, for the years ended December 31, 2020, 2021 and 2022.

	For the Year Ended December 31,								
		2020			2021			2022	
	Average Balance <sup>(1)</sup>	Interest Income/ Expense	Yield / Rate	Average Balance <sup>(1)</sup>	Interest Income/ Expense	Yield / Rate	Average Balance <sup>(1)</sup>	Interest Income/ Expense	Yield / Rate
			(I	n billions of	Won, excep	ot percentage	s)		
Assets:									
Interest-earning assets									
Due from banks <sup>(2)</sup> Loans <sup>(3)</sup>	₩ 12,099	₩ 142	1.17%	₩ 10,476	₩ 87	0.83%	₩ 12,854	₩ 274	2.13%
Retail loans	139,099	4,446	3.20	151,535	4,560	3.01	157,570	6,130	3.89
Corporate loans Securities purchased with	174,937	5,272	3.01	192,743	5,331	2.77	216,119	7,989	3.70
agreements to resell	3,751	35	0.94	3,685	31	0.85	3,669	72	1.96
Other corporate loans	171,186	5,237	3.06	189,058	5,300	2.80	212,450	7,917	3.73
Public and other loans	3,596	103	2.85	3,627	97	2.68	3,617	133	3.67
Loans to banks	,			6,019		0.76	6,097	155	2.54
Credit card loans	23,307	1,875	8.04	24,641	1,891	7.67	27,369	1,979	7.23
Total loans	346,536	11,772	3.40	378,565	11,925	3.15	410,772	16,386	3.99
Securities <sup>(4)</sup>	155,860	2,778	1.78	165,970	2,648	1.60	174,284	3,355	1.92
Other interest-earning assets	—	82	_	_	64	—	—	94	—
Total interest-earning assets	₩514,495	₩14,774	2.87%	₩555,011	₩14,724	2.65%	₩597,910	₩20,109	3.36%
Non-interest-earning assets									
Cash and due from banks	,			₩ 17,291			₩ 18,362		
Derivative assets	3,892			4,073			6,137		
Property and equipment and									
intangible assets				9,488			9,736		
Other non-interest-earning assets	36,016			39,693			44,235		
Total non-interest-earning assets	₩ 64,019			₩ 70,545			₩ 78,470		
Total assets	₩578,514	₩14,774		₩625,556	₩14,724		₩676,380	₩20,109	

				For the Yea	r Ended D	ecember 31,			
		2020			2021			2022	
	Average Balance <sup>(1)</sup>	Interest Income/ Expense	Yield / Rate	Average Balance <sup>(1)</sup>	Interest Income/ Expense	Yield / Rate	Average Balance <sup>(1)</sup>	Interest Income/ Expense	Yield / Rate
			(In	n billions of	Won, excep	ot percentage	s)		
Liabilities:									
Interest-bearing liabilities Deposits									
Deposits Demand deposits	₩ 50.751	₩ 167	0 33%	₩ 65,907	₩ 209	0 32%	₩ 68,656	₩ 322	0.47%
Savings deposits		293	0.32	106,172			108,419	431	0.40
Time deposits	154,516	2,262		153,718			174,029	3,551	2.04
Other deposits		121	1.42	11,180	102	0.91	17,169	339	1.97
Total interest-bearing									
deposits	305,223	2,843	0.93	336,977	2,174	0.65	368,273	4,643	1.26
Financial liabilities designated at									
FVTPL	—	_	_	_	—	_	30	1	4.34
Borrowings									
Securities sold with agreements	10.022	71	0.71	10.005	(0)	0.57	10.076	200	1.01
to repurchases	10,032 28,288	71 356	0.71 1.26	10,905 31,018			10,876 39,270	208 731	1.91 1.86
Total interest-bearing	20,200	550	1.20	51,018	209	0.87	59,270	/31	1.60
borrowings	38,320	427	1.11	41,923	331	0.79	50,146	939	1.87
Debt securities issued	74,435	1,554		77,137	1,390		80,637	1,901	2.36
Other interest-bearing liabilities	4,207	67	1.60	5,805	60	1.04	6,373	161	2.53
Total interest-bearing liabilities	₩422,185	₩ 4,891	1.16%	₩461,842	₩ 3,955	0.86%	₩505,459	₩ 7,645	1.51%
Non-interest-bearing liabilities									
Non-interest-bearing deposits	₩ 3,908			₩ 4,818			₩ 5,390		
Derivatives liabilities				3,512			6,967		
Insurance liabilities	52,682			53,847			54,567		
Other non-interest-bearing liabilities	52.225			53,245			53,511		
Total non-interest-bearing liabilities				₩115,422			<u>→</u> 120.435		
C									
Total liabilities	₩534,527	₩ 4,891		₩577,264	₩ 3,955		₩625,894	₩ 7,645	
Total equity attributable to equity holder									
of the Group				46,040			48,127		
Non-controlling interests	2,073			2,252			2,359		
Total liabilities and equity	₩578,514	₩ 4,891		₩625,556	₩ 3,955		₩676,380	₩ 7,645	
Net interest spread <sup>(5)</sup>			1.71%			1.79%			1.85%
Net interest margin <sup>(6)</sup>			1.92%			1.94%			2.08%
Average asset liability ratio <sup>(7)</sup>			121.86%			120.17%			118.29%

Notes:

(1) Average balances are based on (a) daily balances for Shinhan Bank and (b) quarterly balances for other subsidiaries.

(2) Due from banks as of December 31, 2020, 2021 and 2022, consists of due from banks at amortized cost and due from banks at fair value through profit or loss.

(3) Non-accruing loans are included in the respective average loan balances. Income on such non-accruing loans is no longer recognized from the date the loan is placed on nonaccrual status. We reclassify loans as accruing when interest (including default interest) and principal payments are current. Loans as of December 31, 2020, 2021 and 2022, consist of loans at amortized cost and loans at fair value through profit or loss.

(4) Average balance and yield on securities are based on book value. Securities as of December 31, 2020, 2021 and 2022, consist of securities at fair value through profit or loss, securities at fair value through other comprehensive income and securities at amortized cost.

(5) Represents the difference between the average rate of interest earned on interest-earning assets and the average rate of interest paid on interest-bearing liabilities.

(6) Represents the ratio of net interest income to average interest-earning assets.

(7) Represents the ratio of average interest-earning assets to average interest-bearing liabilities.

## Analysis of Changes in Net Interest Income — Volume and Rate Analysis

The following table provides an analysis of changes in interest income, interest expense and net interest income between changes in volume and changes in rates for (i) 2022 compared to 2021 and (ii) 2021 compared to 2020. Volume and rate variances have been calculated on the movement in average balances and the change in the interest rates on average interest-earning assets and average interest-bearing liabilities in proportion to absolute volume and rate change. The variance caused by the change in both volume and rate has been allocated in proportion to the absolute volume and rate change.

	From 2021 to 2022 Interest Increase (Decrease) Due to Change in			
	Volume	Rate	Change	
		(In billions of Won	l)	
Increase (decrease) in interest income				
Due from banks	₩ 24	₩ 163	₩ 187	
Loans:				
Retail loans	188	1,382	1,570	
Corporate loans	704	1,954	2,658	
Public and other loans		36	36	
Loans to banks	1	108	109	
Credit card loans	201	(113)	88	
Total loans	1,094	3,367	4,461	
Securities	138	569	707	
Other interest-earning assets		30	30	
Total interest income	₩1,256	₩4,129	₩5,385	
Increase (decrease) in interest expense				
Deposits:				
Demand deposits	₩ 9	₩ 104	₩ 113	
Savings deposits	5	183	188	
Time deposits	239	1,692	1,931	
Other deposits	74	163	237	
Total interest-bearing deposits	327	2,142	2,469	
Financial liabilities designated at FVTPL	1		1	
Borrowings	76	532	608	
Debt securities issued	66	445	511	
Other interest-bearing liabilities	6	95	101	
Total interest expense	476	3,214	3,690	
Net increase (decrease) in net interest income	₩ 780	₩ 915	₩1,695	

	From 2020 to 2021 Interest Increase (Decrease) Due to Change in				
	Volume	Rate	Change		
	(	In billions of Won)			
Increase (decrease) in interest income					
Due from banks	₩ (17)	₩ (38)	₩ (55)		
Loans:					
Retail loans	383	(269)	114		
Corporate loans	512	(453)	59		
Public and other loans	1	(7)	(6)		
Loans to banks	5	(35)	(30)		
Credit card loans	105	(89)	16		
Total loans	1,006	(853)	153		
Securities	173	(303)	(130)		
Other interest-earning assets		(18)	(18)		
Total interest income	₩1,162	₩(1,212)	₩ (50)		
Increase (decrease) in interest expense					
Deposits:					
Demand deposits	₩ 48	₩ (6)	₩ 42		
Savings deposits	42	(92)	(50)		
Time deposits	(12)	(630)	(642)		
Other deposits	32	(51)	(19)		
Total interest-bearing deposits	110	(779)	(669)		
Borrowings	37	(133)	(96)		
Debt securities issued	55	(219)	(164)		
Other interest-bearing liabilities	9	(16)	(7)		
Total interest expense	₩ 211	₩(1,147)	₩(936)		
Net increase (decrease) in net interest income	₩ 951	₩ (65)	₩ 886		

# Profitability Ratios and Other Data

	Year Ended December 31,		
	2020	2021	2022
	(Р	ercentages	)
Net income attributable to the Group as a percentage of:			
Average total assets <sup>(1)</sup>	0.60%	0.66%	0.70%
Average total Group stockholders' equity <sup>(1)</sup>	7.95	8.52	9.83
Dividend payout ratio <sup>(2)</sup>	25.42	28.28	26.4
Net interest spread <sup>(3)</sup>	1.71	1.80	1.85
Net interest margin <sup>(4)</sup>	1.92	1.94	2.08
Efficiency ratio <sup>(5)</sup>	89.33	86.77	88.49
Cost-to-income ratio <sup>(6)</sup>	45.20	45.25	45.53
Cost-to-average assets ratio <sup>(1)(7)</sup>	6.88	5.85	7.22
Equity to average asset ratio <sup>(1)(8)</sup>	7.60	7.72	7.12

Notes:

 Average total assets (including average interest-earning assets), liabilities (including average interestbearing liabilities) and stockholder's equity are based on (a) daily balances for Shinhan Bank and (b) quarterly balances for other subsidiaries.

- (2) Represents the ratio of total dividends declared on common and preferred stock and hybrid bonds as a percentage of net income attributable to the Group.
- (3) Represents the difference between the yield on average interest-earning assets and the cost of average interest-bearing liabilities.
- (4) Represents the ratio of net interest income to average interest-earning assets.
- (5) Represents the ratio of non-interest expense to the sum of net interest income and non-interest income. Efficiency ratio is used as a measure of efficiency for banks and financial institutions. Efficiency ratio may be reconciled to comparable line items in our income statements for the periods indicated as follows:

	Year Ended December 31,				
	2020	2021	2022		
	(In billions o	f Won, except p	ercentages)		
Non-interest expense (A)	₩39,788	₩36,606	₩48,805		
Divided by					
The sum of net interest income and non-interest					
income (B)	44,542	42,189	55,155		
Net interest income	9,883	10,769	12,464		
Non-interest income	34,659	31,420	42,691		
Efficiency ratio ((A) as a percentage of (B))	89.33%	86.77%	88.49%		

- (6) Represents the ratio of general and administrative expenses to the operating income before general and administrative expenses and provision for credit loss allowance.
- (7) Represents the ratio of non-interest expense to average total assets.
- (8) Represents the ratio of average stockholders' equity to average total assets.

#### **Results of Operations**

## 2022 Compared to 2021

The following table sets forth, for the periods indicated, the principal components of our operating income.

	Year Ended December 31,				
	2021 2022		% Change		
	(In billions of Won, except percentages				
Net interest income	₩10,769	₩12,464	15.7%		
Net fees and commission income	2,675	2,526	(5.6)		
Net other operating income (expense)	(7,492)	(9,102)	21.5		
Operating income	₩ 5,952	₩ 5,888	(1.1)%		

## Net Interest Income

The following table shows, for the periods indicated, the principal components of our net interest income.

	Year Ended December 31,				
	2021	2022	% Change		
	(In billions o	f Won, except p	percentages)		
Interest income:					
Cash and deposits at amortized cost	₩ 86	₩ 273	217.4%		
Deposits at fair value through profit or loss	1	1	—		
Securities at fair value through profit or loss	660	871	32.0		
Securities at fair value through other					
comprehensive income	896	1,209	34.9		
Securities at amortized cost	1,092	1,275	16.8		
Loans at amortized cost	11,890	16,317	37.2		
Loans at fair value through profit or loss	35	69	97.1		
Others	64	94	46.9		
Total interest income	₩14,724	₩20,109	36.6%		
Interest expense:					
Deposits	₩ 2,174	₩ 4,643	113.6%		
Financial liabilities designated at FVTPL		1	N/M		
Borrowings	331	939	183.7		
Debt securities issued	1,390	1,901	36.8		
Others	60	161	168.3		
Total interest expense	₩ 3,955	₩ 7,645	93.3%		
Net interest income	₩10,769	₩12,464	15.7%		
Net interest margin <sup>(1)</sup>	1.94%	2.08%			

Note:

(1) Represents the ratio of net interest income to average interest-earning assets. See "— Average Balance Sheet and Volume and Rate Analysis — Average Balances and Related Interest."

Interest income. Interest income increased by 36.6% to \$20,109 billion in 2022 from \$14,724 billion in 2021, due primarily to a 37.2% increase in interest income on loans at amortized cost to \$16,317 billion in 2022 from \$11,890 billion in 2021, largely as a result of an increase in the weighted average base interest rate to 2.03% in 2022 from 0.61% in 2021 resulting from increases in the base interest rate set by the Bank of Korea, as well as an increase in the average balance of loans. The average lending rate on loans increased to 3.99% in 2022 from 3.15% in 2021, principally due to an increase in average lending rates for retail loans resulting from the higher average market interest rate for 2022 compared to 2021 as discussed above. The average balance of loans at amortized cost increased by 8.5% to \$410,772 billion in 2022 from \$378,565 billion in 2021, principally due to increase of retail loans and corporate loans as further described below.

More specifically, the increase in interest income was due to the following:

a 34.4% increase in interest on retail loans to ₩6,130 billion in 2022 from ₩4,560 billion in 2021, primarily due to an increase in the average lending rate for retail loans to 3.89% in 2022 from 3.01% in 2021 as well as a 4.0% increase in the average balance of retail loans to ₩157,570 billion in 2022 from ₩151,535 billion in 2021. The average lending rate for retail loans increased primarily as a result of the general increase in market interest rates largely driven by increases in the base interest rate set by the Bank of Korea in 2022 as discussed above. The base interest rate set by the Bank of Korea affects the market interest rate for certificates of deposit, which in turn largely determines our lending rates for

a substantial majority of the our retail loans. The average balance of retail loans increased primarily as a result of new loans placed during 2022 despite the growth rates of new loans declining in the second half of the year as compared to the same period of the previous year.

a 49.9% increase in interest on corporate loans to \U00c07,989 billion in 2022 from \U00c05,331 billion in 2021, primarily due to an increase in the average lending rate for corporate loans to 3.70% in 2022 from 2.77% in 2021, as well as a 12.1% increase to the average balance of corporate loans to \U00c0216,119 billion in 2022 from \U00c0192,743 billion in 2021. The average lending rate for corporate loans increased primarily as a result of the general increase in market interest rates largely driven by the increases in the base interest rate set by the Bank of Korea in 2022 as discussed above. The average balance of corporate loans increased principally due to the policies to support small- and medium-sized enterprises amidst the prolonged COVID-19 pandemic and their efforts to secure funds.

Interest expense. Interest expense increased by 93.3% from \$3,955 billion in 2021 to \$7,645 billion in 2022, due primarily to a 113.6% increase in interest expense on deposits from \$2,174 billion in 2021 to \$4,643 billion in 2022, as well as a 183.7% increase in interest expense on borrowings from \$331 billion in 2021 to \$939 billion in 2022.

The increase in interest expense on deposits was due to an increase in the average interest rate of total interest-bearing deposits from 0.65% in 2021 to 1.26% in 2022, and a 9.3% increase in the average balance of deposits from \$336,977 billion in 2021 to \$368,273 billion in 2022. The increase in the average rate of interest paid on deposits was mainly due to an increase in the average rate of interest paid on time deposits from 1.05% in 2021 to 2.04% in 2022 as well as an increase in the average rate of interest paid on savings deposits from 0.23% in 2021 to 0.40% in 2022. The average rate of interest paid on time deposits increased largely as a result of increase in the weighted average base interest rate from 0.61% in 2021 to 2.03% in 2022 resulting from increases in the base interest rate set by the Bank of Korea. The increase in the average balance of deposits was primarily due to a 13.2% increase in the average balance of time deposits, which was largely a result of an increase in benchmark interest rates during 2022 that results in an increase in deposit rates and, in turn, deposit amounts.

The increase in interest expense on borrowings was due primarily to an increase in the average interest rate of borrowing from 0.79% in 2021 to 1.87% in 2022, and a 19.6% increase in the average balance of borrowings from  $\Psi$ 41,923 billion in 2021 to  $\Psi$ 50,146 billion in 2022. The average interest rate of borrowings increased principally as a result of higher average market interest rates for 2022 compared to 2021 as described above.

*Net interest margin.* Net interest margin represents the ratio of net interest income to the average balance of interest-earning assets. Our overall net interest margin increased by 14 basis points from 1.94% in 2021 to 2.08% in 2022, largely due an increase in net interest income based on increase in the weighted average base interest rate from to 2.03% in 2022 from 0.61% in 2021 resulting from increases in the base interest rate set by the Bank of Korea, which outpaced an increase in the average volume of interest-earning assets.

Net interest spread, which represents the difference between the average rate of interest earned on interestearning assets and the average rate of interest paid on interest-bearing liabilities, increased by 6 basis points from 1.79% in 2021 to 1.85% in 2022 due to a 65 basis point increase in the average rate of interest on interest-bearing liabilities from 0.86% in 2021 to 1.51% in 2022 and a 71 basis point increase in the average rate of interest on interest-earning assets from 2.65% in 2021 to 3.36% in 2022. The average rate of interest on interest-bearing liabilities increased primarily due to a 61 basis point increase in the average interest rate on deposits. The average rate of interest on interest-earning assets increased primarily due to an 84 basis point increase in the average interest rates on loans, which was mainly due to the increased average interest rate on corporate loans. The average rate of corporate loans increased largely as a result of the increases in the base interest rate as discussed above.

## Fees and Commission Income (Expense), Net

The following table shows, for the periods indicated, the principal components of our net fees and commission income.

	Year Ended December 31,				
	2021	2022	% Change		
	(In billions	of Won, except	percentages)		
Fees and commission income:					
Credit placement fees	<b>₩</b> 71	₩ 68	(4.2)%		
Commission received as electronic charge receipt	149	148	(0.7)		
Brokerage fees	577	342	(40.7)		
Commission received as agency	147	136	(7.5)		
Investment banking fees	189	233	23.3		
Commission received in foreign exchange activities	272	295	8.5		
Asset management fees	310	308	(0.6)		
Credit card fees	1,175	1,202	2.3		
Operating lease fees	365	478	31.0		
Others	885	901	1.8		
Total fees and commission income	₩4,140	₩4,111	(0.7)%		
Fees and commission expense:					
Credit-related fees	₩ 39	₩ 37	(5.1)%		
Credit card fees	837	896	7.0		
Others	589	652	10.7		
Total fees and commission expense	₩1,465	₩1,585	8.2%		
Net fees and commission income	₩2,675	₩2,526	(5.6)%		

Net fees and commission income decreased by 5.6% from \$2,675 billion in 2021 to \$2,526 billion in 2022 primarily due to decreases in brokerage fees and an increase in credit card fee expenses, which was partially offset by an increase in operating lease fees.

Brokerage fees decreased by 40.7% from \$577 billion in 2021 to \$342 billion in 2022 as a result of a decrease in daily average stock trading volume resulting from the stock market slump in Korea during the current period. Fee expense on credit card increased principally due to the expansion of overseas credit card business of Shinhan Card. The decrease in net fees and commission income was partially offset by an increase in operating lease fees income resulting from an increase in the average balance of operating leased assets of Shinhan Card due to the expansion of operating leases.

## Other Operating Income (Expense), Net

The following table shows, for the periods indicated, the principal components of our net operating expense.

	Year Ended December 31,			
	2021	2022	% Change	
	(In billions of Won, except percentag			
Net insurance expenses	₩ (775)	₩ (827)	6.7%	
Dividend income	125	143	14.4	
Net gain (loss) on financial instruments at fair value through profit or				
loss	1,104	(304)	N/M	
Net gain on financial instruments at fair value through profit or loss				
(overlay approach)	43	313	627.9	
Net gain (loss) on financial instruments designated at fair value through				
profit or loss	(88)	577	N/M	
Net foreign currency transaction gain	223	180	(19.3)	
Net gain on disposal of financial asset at fair value through other				
comprehensive income	86	(127)	N/M	
Provision for credit loss allowance	(975)	(1,292)	32.5	
General and administrative expenses	(5,744)	(6,014)	4.7	
Other operating expenses, net	(1,491)	(1,751)	17.4	
Net other operating expenses	₩(7,492)	₩(9,102)	21.5%	

#### N/M = not meaningful

Net other operating expenses increased by 21.5% from \$7,492 billion in 2021 to \$9,102 billion in 2022, primarily as a result of recognizing net loss on financial instruments at fair value through profit or loss of \$304 billion in 2022 compared to net gain on financial instruments at fair value through profit or loss of \$1,104 billion in 2021 and an increase in general and administrative expense by 4.7% from \$5,744 billion in 2021 to \$6,014 billion in 2022. Net loss on financial instruments at fair value through profit or loss was recognized primarily due to an increase in losses on sales and valuation of debt securities because of the rise in the benchmark interest rates. General and administrative expense increased primarily due to increases in salary, recruitment of new employees, management performance bonus payments and an increase in advertising expenses.

#### Provision for Credit Loss Allowance on Financial Assets

The following table sets forth for the periods indicated the provisions for credit loss allowance by type of financial asset.

	Year Ended December 31,			
	2021	2022	% Change	
	(In billions	of Won, except <b>j</b>	percentages)	
Loans:				
Retail	₩164	₩ 425	159.1%	
Corporate	330	248	(24.8)	
Credit card	415	565	36.1	
Others	(2)	6	N/M	
Subtotal	907	1,244	37.2	
Securities <sup>(1)</sup>	26	(4)	N/M	
Others	42	52	23.8	
Total provision for credit loss allowance on financial assets	₩975	₩1,292	32.5%	

# *N/M* = not meaningful *Note:*

(1) Consist of securities at amortized cost and securities at fair value through other comprehensive income.

Provision for credit loss allowance increased by 32.5% from \$975 billion in 2021 to \$1,292 billion in 2022 principally due to a 37.2% increase in credit loss allowance on loans from \$907 billion in 2021 to \$1,244 billion in 2022. Our credit loss allowance for loans increased primarily due to an increase in allowance for credit losses on retail loans. Provision for credit loss allowance for retail loans increased in 2022 primarily due to a revised method in evaluating forward-looking information to estimate provision for credit loss allowance for prolonged COVID-19 and economic uncertainties (such as adding "Worst" scenario in addition to "Upside", "Central" and "Downside" scenarios).

## Income Tax Expense

Income tax expense increased by 9.9% from \$1,471 billion in 2021 to \$1,617 billion in 2022 primarily as a result of an increase in profit before income taxes by 13.7% to \$6,349 billion in 2022 from \$5,584 billion in 2021. Our effective rate of income tax decreased to 25.5% in 2022 from 26.4% in 2021.

## Net Income for the Period

As a result of the foregoing, our net income for the period increased by 15.0% from \$4,113 billion in 2021 to \$4,732 billion in 2022.

## Other Comprehensive Income (loss) for the Period

	Year Ended December 31,		
	2021	2022	% Change
	(In billions o	of Won, except p	ercentages)
Items that are or may be reclassified to profit or loss:			
Net loss on financial assets at fair value through other comprehensive			
income	₩ (880)	₩(2,448)	178.2%
Net loss on financial instruments at fair value through profit or loss			
(overlay approach)	(20)	(220)	1,000.0
Equity in other comprehensive income (loss) of associates	3	(16)	N/M
Foreign currency translation adjustments for foreign operations	252	14	(94.4)
Net change in unrealized fair value of cash flow hedges	22	(70)	N/M
Other comprehensive loss of separate account	(41)	(113)	175.6
	(664)	(2,853)	329.7
Items that will not be reclassified to profit or loss:			
Remeasurements of the defined benefit liability	43	252	486.0
Valuation gain on financial assets at fair value through other			
comprehensive income	35	5	(85.7)
Loss on disposal of financial assets at fair value through other			
comprehensive income	(29)	2	N/M
Changes in own credit risk on financial liabilities designated at fair			
value through profit of loss	(3)	(4)	33.3
	46	255	454.3
Total other comprehensive loss, net of income tax	₩ (618)	₩(2,598)	320.4%

## N/M = not meaningful

Other comprehensive loss increased by 320.4% from ₩618 billion in 2021 to ₩2,598 billion in 2022, primarily due to an increase in net loss on financial asset at fair value through other comprehensive income by 178.2% from ₩880 billion in 2021 to ₩2,448 billion in 2022, which was partially offset by an increase in remeasurements of defined benefit liabilities. Net loss on financial assets at fair value through other comprehensive income increased, primarily due to fluctuations in interest rates and stock prices. Remeasurements of defined benefit liabilities increased by 486.0% from ₩43 billion in 2021 to ₩252 billion in 2022, primarily due to an increase in actuarial gain resulting from changes in financial assumptions.

## 2021 Compared to 2020

The following table sets forth, for the periods indicated, the principal components of our operating income.

	Year Ended December 31,			
	2020	2021	% Change	
	(In billions of Won, except percentages			
Net interest income	₩ 9,883	₩10,769	9.0%	
Net fees and commission income	2,383	2,675	12.3	
Net other operating income (expense)	(7,336)	(7,492)	2.1	
Operating income	₩ 4,930	₩ 5,952	20.7%	

# Net Interest Income

The following table shows, for the periods indicated, the principal components of our net interest income.

	Year Ended December 31,				
	2020		20	)21	% Change
	(In billions of Won, except percentages)				ercentages)
Interest income:					
Cash and deposits at amortized cost	₩	128	₩	86	(32.8)%
Deposits at fair value through profit or loss		14		1	(92.9)
Securities at fair value through profit or loss	743		660		(11.2)
Securities at fair value through other comprehensive income	958		896		(6.5)
Securities at amortized cost	1,077		1,092		1.4
Loans at amortized cost	11,698		11,890		1.6
Loans at fair value through profit or loss	74		35		(52.7)
Others	82		64		(22.0)
Total interest income	₩14,774		₩14,724		(0.3)%
Interest expense:					
Deposits	₩ 2,843		₩ 2,174		(23.5)%
Borrowings	427		331		(22.5)
Debt securities issued	1,554		1	1,390	(10.6)
Others	67		60		(10.4)
Total interest expense	₩	4,891	₩ 3	3,955	(19.1)%
Net interest income	₩	9,883	₩1(	0,769	9.0%
Net interest margin <sup>(1)</sup>		1.92%		1.94%	

## Note:

(1) Represents the ratio of net interest income to average interest-earning assets. See "— Average Balance Sheet and Volume and Rate Analysis — Average Balances and Related Interest."

Interest income. Interest income decreased by 0.3% from \$14,774 billion in 2020 to \$14,724 billion in 2021 primarily due to a decrease in interest on securities and, to a lesser extent, a decrease in interest due from banks. Interest on securities decreased by 4.7% from \$2,778 billion in 2020 to \$2,648 billion in 2021 primarily as a result of decreases in the weighted average base interest rate from 0.71% in 2020 to 0.61% in 2021 resulting from decreases in the base interest rate set by the Bank of Korea, despite an increase in the average balances of securities. The average lending rate on the securities decreased to 1.60% in 2021 from 1.78% in 2020, principally due to a decrease in average lending rates for securities resulting from the lower average market interest rate for 2021 compared to 2020 as discussed above. The average balance of the securities increased by 6.5% to \$165,970 billion in 2021 from \$155,860 billion in 2020, principally due to increases in the average balances of government bonds. Interest due from banks decreased by 38.7% from \$142 billion in 2020 to \$87 billion in 2021 primarily due to a decrease in the average lending rates of securities decreased by 38.7% from \$142 billion in 2020 to \$87 billion in 2021 primarily due to a decrease in the average lending rates of billion in 2020, principally due to increase in the average balances of government bonds. Interest due from banks decreased by 38.7% from \$142 billion in 2020 to \$87 billion in 2021 primarily due to a decrease in the average lending rates of due from banks.

More specifically, the decrease in interest income was due to the following:

- Interest income on securities at fair value through profit or loss decreased by 11.2% from \\$\\$743 billion in 2020 to \\$660 billion in 2021, primarily due to a decrease in the average lending rate for securities at fair value through profit or loss from 1.40% in 2020 to 1.14% in 2021, despite a 8.9% increase in the average balance of securities at fair value through profit or loss from \$\$\\$57,859 billion in 2021. The average lending rate for securities at fair value through profit or loss decreased primarily as a result of decreases in the weighted average base interest rate resulting from decreases in the base interest rate set by the Bank of Korea in August and November. The base interest rate set by the Bank of Korea greatly influences the market interest rates of financial instruments, and which determines the interest rate of our securities at fair value through profit or loss. The average balance of securities at fair value through profit or loss.
- Interest income on securities at fair value through other comprehensive income decreased by 6.5% from ₩958 billion in 2020 to ₩896 billion in 2021, primarily due to a decrease in the average lending rate for securities at fair value through other comprehensive income from 1.70% in 2020 to 1.51% in 2021, despite a 5.6% increase in the average balance of securities at fair value through other comprehensive income from 1.70% in 2021. The average lending rate for securities at fair value through other comprehensive income decreased primarily as a result of decreases in the weighted average base interest rate resulting from decreases in the base interest rate set by the Bank of Korea, despite increases in the base interest rate by the Bank of Korea in August and November. The average balance of securities at fair value through other comprehensive income increased principally as a result of increases in the average balances of government bonds.

Interest expense. Interest expense decreased by 19.1% from \$4,891 billion in 2020 to \$3,955 billion in 2021, due primarily to a 23.5% decrease in interest expense on deposits from \$2,843 billion in 2020 to \$2,174 billion in 2021, as well as a 10.6% decrease in interest expense on debt securities issued from \$1,554 billion in 2020 to \$1,390 billion in 2021.

The decrease in interest expense on deposits was due to a decrease in the average interest rate of total interest-bearing deposits from 0.93% in 2020 to 0.65% in 2021, despite a 10.4% increase in the average balance of deposits from \$305,223 billion in 2020 to \$336,977 billion in 2021. The decrease in the average rate of interest paid on deposits was mainly due to a decrease in the average rate of interest paid on time deposits from 1.46% in 2020 to 0.23% in 2021 as well as a decrease in the average rate of interest paid on savings deposits from 0.32% in 2020 to 0.23% in 2021. The average rate of interest paid on time deposits and savings deposits

decreased largely as a result of decrease in the weighted average base interest rate from 0.71% in 2020 to 0.61% in 2021 resulting from decreases in the base interest rate set by the Bank of Korea. The increase in the average balance of deposits was primarily due to a 16.1% increase in the average balance of savings deposits, which was largely a result of policies to increase liquidity including funding supports of government and local government due to prolonged COVID-19.

The decrease in interest expense on debt securities issued was due primarily to a decrease in the average interest rate of debt securities issued from 2.09% in 2020 to 1.80% in 2021, which was partially offset by a 3.6% increase in the average balance of debt securities issued from  $\Psi74,435$  billion in 2020 to  $\Psi77,137$  billion in 2021. The average interest rate of debt securities issued decreased principally as a result of decrease in the weighted average base interest rate from 0.71% in 2020 to 0.61% in 2021 resulting from decreases in the base interest rate set by the Bank of Korea.

*Net interest margin.* Net interest margin represents the ratio of net interest income to the average balance of interest-earning assets. Our overall net interest margin increased by 2 basis points from 1.92% in 2020 to 1.94% in 2021, largely due to increases in the average volume of interest-earning assets, despite a decrease in the weighted average base interest rate from 0.71% in 2020 to 0.61% in 2021 resulting from decreases in the base interest rate set by the Bank of Korea.

Net interest spread, which represents the difference between the average rate of interest earned on interestearning assets and the average rate of interest paid on interest-bearing liabilities, increased by 8 basis points from 1.71% in 2020 to 1.79% in 2021 due to a 30 basis point decrease in the average rate of interest on interestbearing liabilities from 1.16% in 2020 to 0.86% in 2021 and a 22 basis point decrease in the average rate of interest on interest-earning assets from 2.87% in 2020 to 2.65% in 2021. The average rate of interest on interestbearing liabilities decreased primarily due to a 28 basis point decrease in the average interest rate on deposits. The average rate of interest on interest-earning assets decreased primarily due to a 25 basis point decrease in the average interest rates on loans, which was mainly due to the reduced average interest rate on corporate loans. The average volume of interest-earning assets increased by 7.9% from \$514,495 billion in 2020 to \$555,011 billion in 2021 largely as a result of an increase in the volume of retail and corporate loans. The average volume of interest-bearing liabilities increased by 9.2% from \$422,185 billion in 2020 to \$461,842 billion in 2021 largely due to policies to increase liquidity including funding supports of government and local government due to prolonged COVID-19.

## Fees and Commission Income (Expense), Net

The following table shows, for the periods indicated, the principal components of our net fees and commission income.

	Year Ended December 31,					
	2020	2021	% Change			
	(In billions of Won, except percentag					
Fees and commission income:						
Credit placement fees	₩ 95	₩ 71	(25.3)%			
Commission received as electronic charge receipt	143	149	4.2			
Brokerage fees	546	577	5.7			
Commission received as agency	145	147	1.4			
Investment banking fees	161	189	17.4			
Commission received in foreign exchange activities	239	272	13.8			
Asset management fees	255	310	21.6			
Credit card fees	1,170	1,175	0.4			
Operating lease fees	245	365	49.0			
Others	815	885	8.6			
Total fees and commission income	₩3,814	₩4,140	8.5%			
Fees and commission expense:						
Credit-related fees	₩ 46	₩ 39	(15.2)%			
Credit card fees	849	837	(1.4)			
Others	536	589	9.9			
Total fees and commission expense	₩1,431	₩1,465	2.4%			
Net fees and commission income	₩2,383	₩2,675	12.3%			

Net fees and commission income increased by 12.3% from \$2,383 billion in 2020 to \$2,675 billion in 2021 primarily due to increases in operating lease fees income, asset management fees income, commission received in foreign exchange activities, brokerage fees income, which was partially offset by a decrease in credit placement fees income.

Operating lease fees income increased by 49.0% from  $\Psi$ 245 billion in 2020 to  $\Psi$ 365 billion in 2021 primarily due to the expansion of operations, such as purchasing operating assets including leases classified as operating leases. Asset management fees income increased by 21.6% from  $\Psi$ 255 billion in 2020 to  $\Psi$ 310 billion in 2021, primarily due to an increases in management fees received from real estate related trust accounts of Asia Trust Co., Ltd. and an increase in both money market trust and pension trust of Shinhan Bank. Commission received in foreign exchange activities increased by 13.8% from  $\Psi$ 239 billion in 2020 to  $\Psi$ 272 billion in 2021, largely due to an increase in fees and commission income of Shinhan Securities resulting from an increase in overseas stock transactions due to the increase in interest in overseas stocks. Brokerage fees income increased by 5.7% from  $\Psi$ 546 billion in 2020 to  $\Psi$ 577 billion in 2021 primarily due to an increase in daily average stock trading volume resulting from the booming stock market in Korea during the current period.

## Other Operating Income (Expense), Net

The following table shows, for the periods indicated, the principal components of our net operating expense.

	Year Ended December 31,				
	2020	2021	% Change		
	(In billions o	f Won, except p	ercentages)		
Net insurance expenses	₩ (604)	₩ (775)	28.3%		
Dividend income	98	125	27.6		
Net gain on financial instruments at fair value through profit or loss	273	1,104	304.4		
Net gain (loss) on financial instruments at fair value through profit or loss					
(overlay approach)	(136)	43	N/M		
Net gain (loss) on financial instruments designated at fair value through					
profit or loss	198	(88)	N/M		
Net foreign currency transaction gain	527	223	(57.7)		
Net gain on disposal of financial asset at fair value through other					
comprehensive income	274	86	(68.6)		
Provision for credit loss allowance	(1,382)	(975)	(29.5)		
General and administrative expenses	(5,213)	(5,744)	10.2		
Other operating expenses, net	(1,371)	(1,491)	8.8		
Net other operating expenses	₩(7,336)	₩(7,492)	2.1%		

#### N/M = not meaningful

Net other operating expenses increased by 2.1% from \$7,336 billion in 2020 to \$7,492 billion in 2021, primarily due to an increase in general and administrative expense by 10.2% from \$5,213 billion in 2020 to \$5,744 billion in 2021 and a decrease in net foreign currency transaction gain by 57.7% from \$527 billion in 2020 to \$223 billion in 2021. Also, we recognized net loss on financial instruments designated at fair value through profit or loss of \$88 billion in 2020. The increase in net other operating expenses was partially offset by a 304.4% increase in net gain on financial instruments at fair value through profit or loss of \$1,104 billion in 2021.

## Provision for Credit Loss Allowance on Financial Assets

The following table sets forth for the periods indicated the provisions for credit loss allowance by type of financial asset.

Year Ended December 31,						
2020		2020 2021		% Change		
(In bil	percentages)					
₩ 2	00	₩	164	(18.0)%		
6	26		330	(47.3)		
4	52		415	(8.2)		
	13		(2)	N/M		
1,2	91		907	(29.7)		
	5		26	420.0		
	86		42	(51.2)		
₩ 1,3	82	₩	975	(29.5)%		
	2020 (In bill ₩ 2 6 4 1,2	2020 (In billions of ₩ 200 626 452	$     \hline         2020 22         (In billions of Won                  \                   $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		

N/M = not meaningful

#### Note:

(1) Consist of securities at amortized cost and securities at fair value through other comprehensive income.

Provision for credit loss allowance decreased by 29.5% from \$1,382 billion in 2020 to \$975 billion in 2021 principally due to a 29.7% decrease in credit loss allowance on loans from \$1,291 billion in 2020 to \$907 billion in 2021. Our credit loss allowance for loans decreased primarily due to a decrease in allowance for credit losses on corporate loans. Provision for credit loss allowance for corporate loans remained relatively low in 2021 primarily due to a significant increase in provision for credit loss allowance in 2020 mainly as the Group re-estimated the probability of default reflecting forward-looking information and increased the number of borrowers subject to individual assessment of probability of default as part of the Group's proactive measures in responding to changes in the financial environment, such as the spread of COVID-19, as well as a decrease in the proportion of unsecured corporate loans which are generally subject to higher loss given default rates compared to secured corporate loans. Provision for credit loss allowance for others decreased mainly due to a decrease in the aggregate amount of lines of unutilized credit resulting from a decrease in the volume of retail loans.

## Income Tax Expense

Income tax expense increased by 17.1% from \$1,256 billion in 2020 to \$1,471 billion in 2021 primarily as a result of an increase in profit before income taxes by 17.5% to \$5,584 billion in 2021 from \$4,754 billion in 2020. There was no change in our effective rate of income tax of 26.4% in 2021 compared to 2020.

#### Net Income for the Period

As a result of the foregoing, our net income for the period increased by 17.6% from \$3,498 billion in 2020 to \$4,113 billion in 2021.

Oti	her Comprel	hensive Incor	ne (loss) f	or the Per	riod
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	Year	Ended Decemb	er 31,
	2020	2021	% Change
	(In billions o	f Won, except	percentages)
Items that are or may be reclassified to profit or loss:			
Net loss on financial assets at fair value through other comprehensive			
income	₩ (87)	<b>₩</b> (880)	911.5%
Net gain (loss) on financial instruments at fair value through profit or			
loss (overlay approach)	90	(20)	N/M
Equity in other comprehensive income (loss) of associates	(3)	3	N/M
Foreign currency translation adjustments for foreign operations	(162)	252	N/M
Net change in unrealized fair value of cash flow hedges	(14)	22	N/M
Other comprehensive income (loss) of separate account	4	(41)	N/M
	(172)	(664)	286.0
Items that will not be reclassified to profit or loss:			
Remeasurements of the defined benefit liability	16	43	168.8
Valuation gain on financial assets at fair value through other	_		
comprehensive income	7	35	400.0
Loss on disposal of financial assets at fair value through other		(20)	2.6
comprehensive income	(28)	(29)	3.6
Changes in own credit risk on financial liabilities designated at fair	2		
value through profit of loss	3	(3)	N/M
	(2)	46	N/M
Total other comprehensive loss, net of income tax	$\overline{\mathbf{W}}(174)$	<b>₩</b> (618)	255.2%
	₩(174)	<b>W</b> (018)	233.270

N/M = not meaningful

Other comprehensive loss increased by 255.2% from \$174 billion in 2020 to \$618 billion in 2021, primarily due to an increase in net loss on financial asset at fair value through other comprehensive income by 911.5% from \$87 billion in 2020 to \$880 billion in 2021, which was partially offset as we recognized gain on foreign currency translation adjustments for foreign operations of \$252 billion in 2020. Net loss on financial assets at fair value through other comprehensive income increased, primarily due to fluctuations in interest rates and stock prices. We recognized gain on foreign currency translation adjustments for foreign currency translation adjustments for \$322 billion in 2020. Net loss on financial assets at fair value through other comprehensive income increased, primarily due to fluctuations in interest rates and stock prices. We recognized gain on foreign currency translation adjustments for foreign operations of \$252 billion in 2021 compared to loss on foreign currency translation adjustments for foreign operations of \$252 billion in 2021 compared to loss on foreign currency translation adjustments for foreign operations of \$252 billion in 2021 compared to loss on foreign currency translation adjustments for foreign operations of \$252 billion in 2021, primarily due to an increase in foreign currency exchange rates amid weaker valuation of the Won.

### **Results by Principal Business Segment**

As of December 31, 2022, we were organized into six major business segments as follows:

- commercial banking services, which are principally provided by Shinhan Bank:
- credit card services, which are principally provided by Shinhan Card;
- securities brokerage services, which are provided by Shinhan Securities;
- life insurance services, which are provided by Shinhan Life Insurance;
- · specialized credit services, which are provided by Shinhan Capital; and
- other services that do not belong to above business segments.

We report our segment information in accordance with the provisions of IFRS 8 (Operating Segments). We categorize our operating segments according to a business based approach. See Note 7 of the notes to our consolidated financial statements included in this annual report.

# **Operating Income by Principal Business Segment**

The table below provides the income statement data for our principal business segments for the periods indicated.

	Year E	nded Decem	% Ch	ange	
	2020 2021		2022	2020/2021	2021/2022
	(	In billions of	Won, excep	t percentages	)
Banking	₩2,802	₩3,478	₩4,060	24.1%	16.7%
Credit card	887	1,021	880	15.1	(13.8)
Securities	373	577	121	54.7	(79.0)
Life insurance	568	552	614	(2.8)	11.2
Specialized credit	179	341	349	90.5	2.3
Others	158	260	163	64.6	(37.3)
Consolidation adjustment <sup>(1)</sup>	(37)	(277)	(299)	648.6	7.9
Total operating income	₩4,930	₩5,952	₩5,888	20.7%	(1.1)%

*N/M* = not meaningful Note:

(1) Consolidation adjustment consists of adjustments for inter-segment transactions.

## **Banking Services**

The banking services segment offers commercial banking and related services and includes: (i) retail banking, which consists of banking and other services provided primarily through the retail branches of Shinhan Bank and Jeju Bank to individuals and households; (ii) corporate banking, which consists of corporate banking products and services provided through Shinhan Bank's corporate banking branches to its corporate customers, most of which are small- and medium-sized enterprises and large corporations, including members of the *chaebol* groups; (iii) international banking, which primarily consists of the operations of Shinhan Bank's overseas subsidiaries and branches; and (iv) other banking, which primarily consists of treasury business for our banking business (including internal asset and liability management and other non-deposit funding activities), securities investing and trading and derivatives trading, as well as administration of our overall banking operations.

The table below provides the income statement data for our banking services segment for the periods indicated.

	Year H	Inded Decemb	% Ch	ange							
	2020	0 2021 2022		2021 2022		2020 2021 2022		2020 2021 2022		2020/2021	2021/2022
		(In billions of	percentages)								
Income statement data											
Net interest income (expense)	₩ 6,038	₩ 6,738	₩ 8,359	11.6%	24.1%						
Net fees and commission income (expense)	822	818	801	(0.5)	(2.1)						
Net other income (expense)	(4,058)	(4,078)	(5,100)	0.5	25.1						
Operating income (expense)	₩ 2,802	₩ 3,478	₩ 4,060	24.1%	16.7%						

## Comparison of 2022 to 2021

Operating income for banking services increased by 16.7% from \$3,478 billion in 2021 to \$4,060 billion in 2022.

Net interest income increased by 24.1% from  $\oplus 6,738$  billion in 2021 to  $\oplus 8,359$  billion in 2022 primarily due to increases in net interest income for retail banking and corporate banking services. More specifically:

- Net interest income for retail banking increased by 68.9% from ₩2,799 billion in 2021 to ₩4,727 billion in 2022 primarily due to an increase in the average volume of retail loans to ₩157,570 billion in 2022 from ₩151,535 billion in 2021 as well as an increase in net interest margin. The average volume of retail loans increased largely due to an increase in home mortgage loans. The increase in our net interest margin was largely due to an increase in the weighted average base interest rate to 2.03% in 2022 from 0.61% in 2021 resulting from increases in the base interest rate set by the Bank of Korea.
- Net interest income for corporate banking increased by 36.0% from ₩2,515 billion in 2021 to ₩3,421 billion in 2022 primarily due to a 12.4% increase in the average balance of corporate loans to ₩187,318 billion in 2022 from ₩166,696 billion in 2021, as well as an increase in the average lending rate for corporate loans to 3.50% in 2022 from 2.55% in 2021. The average volume of corporate loans increased largely as a result of the policies to support small- and medium-sized enterprises amidst the prolonged COVID-19 pandemic as discussed above. The average lending rate for corporate loans increased primarily as a result of the general increase in market interest rates largely driven by the increases in the base interest rate by the Bank of Korea in 2022 as discussed above.
- Net interest income for international banking increased by 22.9% from ₩865 billion in 2021 to ₩1,063 billion in 2022 primarily due to an increase in the average balance of loans extended by our overseas subsidiaries, especially in Japan and Vietnam and the strengthening of the Vietnamese Dong against the Korean ₩on.

For other banking, net interest expense was \#852 billion in 2022 compared to net interest income of \#559 billion in 2021, primarily due to an increase in interest expenses related to the borrowings and the debt securities issued.

Net fees and commission income decreased by 2.1% from \$818 billion in 2021 to \$801 billion in 2022 primarily due to an increase in net fees and commissions for retail banking services, which was offset in part by an increase in net fees and commissions for other banking services. Net fees and commissions for retail banking services decreased despite an increase in the overall volume of transactions, primarily due to an increase in the proportion of online banking transactions, for which the Bank generally charges lower fees and commissions. Net fees and commission income for other banking increased primarily due to an increase in commission received as electronic charge receipt regarding the retirement pensions.

Net other expense increased by 25.1% from W4,078 billion in 2021 to W5,100 billion in 2022 primarily due to an increase in net other expense for other banking and retail banking services. Net other expense for other banking services increased mainly due to an increase in advertising expenses from a new platform business, a delivery app. The increase in net other expense for retail banking services was principally due to a decrease in net income related to specified money trust of individual customers.

## Comparison of 2021 to 2020

Operating income for banking services increased by 24.1% from \$2,802 billion in 2020 to \$3,478 billion in 2021.

Net interest income increased by 11.6% from  $\oplus 6,038$  billion in 2020 to  $\oplus 6,738$  billion in 2021 primarily due to increases in net interest income for retail banking and corporate banking services. More specifically:

- Net interest income for retail banking increased by 15.2% from ₩2,429 billion in 2020 to ₩2,799 billion in 2021 primarily due to an increase in Shinhan Bank's net interest margin. The increase in our net interest margin was largely due to an increase in the average volume of retail loans as well as an increase in our net interest margin. The average volume of retail loans increased largely due to an increase in home mortgage loans. The increase in the Shinhan Bank's net interest margin was largely due to the increase in average volume of interest-earning assets as described above outpacing the decrease in yield rate of interest-earning assets.
- Net interest income for corporate banking increased by 9.6% from ₩2,295 billion in 2020 to ₩2,515 billion in 2021 primarily due to increase in the average balance of corporate loans, notwithstanding a decrease in the average lending rate for corporate loans as discussed above. The average volume of corporate loans increased largely as a result of policies to support small and medium sized enterprises amidst the prolonged COVID-19 pandemic as discussed above.
- Net interest income for international banking increased by 11.9% from ₩773 billion in 2020 to ₩865 billion in 2021 primarily due to an increase in the average balance of loans extended by the Shinhan Bank's overseas subsidiaries, especially in China and Vietnam.
- Net interest income for other banking services increased by 3.3% from ₩541 billion in 2020 to ₩559 billion in 2021, primarily due to an increase in interest income on securities by the Securities Management department of Shinhan Bank.

Net fees and commission income decreased by 0.5% from \$822 billion in 2020 to \$818 billion in 2021 primarily due to a decrease in net fees and commissions for retail banking services, which was offset in part by an increase in net fees and commissions for corporate banking services. Net fees and commissions for retail banking services decreased principally as the Shinhan Bank generally charges lower fees and commissions, despite an increase in the proportion of online banking transactions. The increase in net fees and commissions for corporate banking services was mainly due to an increase in brokerage fees.

Net other expense increased by 0.5% from  $\Psi4,058$  billion in 2020 to  $\Psi4,078$  billion in 2021 primarily due to an increase in net other expense for others banking services, which was partially offset by a decrease in net other expense for corporate banking services. Net other expense for other banking services increased mainly due to a decrease in net foreign currency transaction gain. The decrease in net other expense for corporate banking services was principally due to an increase in gains on sale and valuation of equity securities at fair value through profit or loss.

### **Credit Card Services**

The credit card services segment consists of the credit card business of Shinhan Card, including its installment finance and automobile leasing businesses.

	Year I	Ended Deceml	% Ch	ange			
	2020	2020 2021 2022		2021 2022 2020/2		2020/2021	2021/2022
		percentages)					
Income statement data							
Net interest income (expense)	₩ 1,755	₩ 1,799	₩ 1,798	2.5%	(0.1)%		
Net fees and commission income (expense)	483	635	702	31.5	10.6		
Net other income (expense)	(1,351)	(1,413)	(1,620)	4.6	14.6		
Operating income (expense)	₩ 887	₩ 1,021	₩ 880	15.1%	(13.8)%		

## Comparison of 2022 to 2021

Operating income for the credit card business decreased by 13.8% from \$1,021 billion in 2021 to \$880 billion in 2022.

Net interest income decreased by 0.1% from \$1,799 billion in 2021 to \$1,798 billion in 2022 primarily due to an increase in interest expenses on debt securities issued and borrowings. The increase in interest expenses on debt securities issued was mainly attributable to the rising interest rates as compared to the prior year, and interest expense on borrowings increased primarily due to an increase in issuances of money-market securities, particularly commercial paper. The decrease in net interest income was partially offset by an increase in interest income on loans at amortized cost including credit card loans, resulting from the increase in loans due to the business expansion and a decrease in early prepayment of credit card loans.

Net fees and commission income increased by 10.6% from  $\forall 635$  billion in 2021 to  $\forall 702$  billion in 2022 primarily as a result of an increase in fees and commission income from lease operations and, to a lesser extent, an increase in fees income on credit cards. Fees and commission income from lease operations were primarily due an increase in the average balance of operating leased assets resulting from the expansion of operating assets. The increase in fees income on credit cards was mainly due to increases in credit card usage resulting from an increase in the number of credit card members. The increase in net fees and commission income was partially offset by an increase in fee expense on credit cards. Fee expense on credit cards increased principally due to the expansion of overseas credit card business.

Net other expense increased by 14.6% from \$1,413 billion in 2021 to \$1,620 billion in 2022, primarily due to an increase in bad debt expenses resulting from high delinquency roll rate and, to a lesser extent, an increase in other operating losses resulting from increases in loss on hedging items and depreciation expenses on lease assets. Such increases in net other expense were offset by an increase in gains on valuation and sale of financial instruments at fair value through profit or loss, and a decrease in termination benefits.

## Comparison of 2021 to 2020

Operating income for the credit card business increased by 15.1% from \$887 billion in 2020 to \$1,021 billion in 2021.

Net interest income increased by 2.5% from \$1,755 billion in 2020 to \$1,799 billion in 2021 primarily due to an increase in interest income on loans measured at amortized cost and a decrease in interest expense on debt securities issued. Interest income on loans at amortized cost increased principally due to an increase in interest income on loans resulting from our acquisition of assets of Shinhan Capital and, to a lesser extent, an increase in interest income on credit card loans. The decrease in interest expense on debt securities issued was mainly attributable to a decreased interest expense resulting from amortization of discount on asset-backed securities. The increase in net interest income was partially offset by an increase in interest expense on borrowings. Interest expense on borrowings increased primarily due to an increase in issuances of money-market securities, particularly commercial paper.

Net fees and commission income increased by 31.5% from ₩483 billion in 2020 to ₩635 billion in 2021 primarily as a result of an increase in fees and commission income from lease operations and, to a lesser extent, an increase in fees income on credit cards and a decrease in fees expense on credit cards. Fees and commission income from lease operations were primarily due an increase in the average balance of operating leased assets resulting from an expansion of operating assets. The increase in fees income on credit cards was mainly due to an overall increase in assets associated with credit cards. Fees expense on credit cards decreased principally due to lower fees expense on credit card recruitments resulting from the recruitment channels diversified, focusing on online recruitment.

Net other expense increased by 4.6% from \$1,351 billion in 2020 to \$1,413 billion in 2021, primarily due to net loss on foreign currency transaction came to \$188 billion in 2021 resulting from an increase in foreign currency exchange rates amid weaker valuation of the Won, compared to net gain on foreign currency transaction of \$159 billion in 2020. Such change was offset by an increase in gains on hedging items as well as a decrease in losses on hedging items resulting from the change in foreign currency exchange rates. The increase in net other operating expense was enhanced by an increase in general and administrative expenses increased mainly as a result of the voluntary retirement implemented during 2021, and an increase in advertising expenses resulting from the launch of new product services.

#### Securities Brokerage Services

Securities brokerage services segment primarily reflects securities brokerage and dealing services on behalf of customers, which is conducted by Shinhan Securities, our principal securities brokerage subsidiary.

	Year Ended December 31,					% Change				
	2020		2020 202		2021		2022		2020/2021	2021/2022
	(In billions of Won, except					percentages)				
Income statement data										
Net interest income (expense)	₩	517	₩	517	₩	428	—	(17.2)%		
Net fees and commission income (expense)		544		602		485	10.7%	(19.4)		
Net other income (expense)		(688)		(542)		(792)	(21.2)	46.1		
Operating income (expense)	₩	373	₩	577	₩	121	54.7%	(79.0)%		

#### Comparison of 2022 to 2021

Operating income for securities brokerage services decreased by 79.0% from \$577 billion in 2021 to \$121 billion in 2022.

Net interest income decreased by 17.2% from \$517 billion in 2021 to \$428 billion in 2022, due to increases in interest expenses on borrowings and debt securities issued resulting from the increase in interest rates as compared to the prior year and increases in average balances of debt securities issued and asset-backed bonds. Such increases in interest expenses were partially offset by increase in interest income recognized primarily on loans at amortized cost, cash and due from banks at amortized cost, and securities at fair value through profit or loss. Interest income on loans at amortized cost increased due to an increase in the average balance of foreign currency facility loans, attributable to relatively weakening of the Korean Won and new loans outpacing repayments and sales of loans. Interest income on cash and due from banks at amortized cost increased due to an increase in performance guarantee deposits and the increase in interest rates. Interest income on securities at fair value through profit or loss increased primarily due to an increase in the proportion of government bonds and financial institution bonds whose value are less sensitive to interest rates as compared to corporate bonds in a rising interest rate environment.

Net fees and commission income decreased by 19.4% from W602 billion in 2021 to W485 billion in 2022 primarily due to a decrease in fees and commission income on brokerage as a result of a decrease in daily average stock trading volume resulting from the stock market slump in Korea during the current period. The decrease in net fees and commission income was partially offset by a decrease in the corresponding trading commission expenses as fees and commission income on brokerage decreased. Also, to a lesser extent, fees and commission expenses on legal and advisory services decreased year-over-year given high legal fees recognized in relation to certain financial products such as Lime funds during 2021.

Net other expense increased by 46.1% from \$542 billion in 2021 to \$792 billion in 2022 due primarily as a result of recognizing net loss on financial instruments at fair value through profit or loss of \$551 billion in 2022 compared to net gain on financial instruments at fair value through profit or loss of \$369 billion in 2021. In addition, net other expense further increased due to an increase in net loss on foreign currency translation resulting from the strengthening of the U.S. dollar and the weakening of the Japanese yen, Euro, and Chinese yuan, against the Korean won as well as an increase in loss on foreign currency transaction of spot exchange. The increase in net other expense was partially offset by a decrease in bad debt expenses due to a decrease in allowance for credit losses on loans at amortized cost.

#### Comparison of 2021 to 2020

Operating income for securities brokerage services increased by 54.7% from \$373 billion in 2020 to \$577 billion in 2021.

There is no change in net interest income of  $\Psi$ 517 billion, as a decrease in interest income was offset by an increase in interest expense. More specifically, there was a decrease in interest income on securities measured at fair value through profit or loss and, to a lesser extent, a decrease in interest income on loans measured at fair value through profit or loss, which was partially offset by a decrease in interest expense on borrowings as well as a decrease in interest expense on bonds. The decrease in interest income on securities measured at fair value through profit or loss was primarily due to a decrease in interest income from special purpose bonds as a result of a decrease in the average balance of special purpose bonds and a decrease in interest rate. The interest income on loans measured at fair value through profit or loss decreased mainly due to a decrease in both the average balance of domestic currency facility loan and foreign currency facility loan, attributed to the increase in sell-down speed in the market, which is common for sell-down to be within six months. The interest expense decreased primarily due to the decrease in interest expense on borrowings was primarily due to a decrease in the average balance of other borrowings, resulting from the repayment of short-term borrowings lent in 2020 due to the liquidity crisis caused by COVID-19, and, to a lesser extent, the decrease in interest expense on bonds resulting from a decrease in short-term bond interest rate.

Net fees and commission income increased by 10.7% from \$544 billion in 2020 to \$602 billion in 2021 primarily due to an increase in fees and commission income on brokerage as a result of an increase in daily

average stock trading volume resulting from the booming stock market in Korea during the current period, and, to a lesser extent, an increase in fees and commission income on underwriting and mergers and acquisitions advisory services resulting from the increased number of cases of underwriting and mergers and acquisitions advisory. Fees and commission income also increased due to the significant increase in overseas stock transactions due to the increase in interest in overseas stocks. The increase in net fees and commission income was partially offset by an increase in the corresponding trading commissions as fees and commission income on brokerage increased. Also, to a lesser extent, fees and commission expenses on legal and advisory services increased due to the expansion of input personnel.

Net other expense decreased by 21.2% from W688 billion in 2020 to W542 billion in 2021 due primarily to net gain on financial instruments at fair value through profit or loss of W369 billion in 2021 compared to net loss on financial instruments at fair value through profit or loss of W383 billion in 2020. The decrease in net other operating expense was partially offset as we recognized net loss on financial instruments designated at fair value through profit or loss of W88 billion in 2021 compared to net gain on financial instruments designated at fair value through profit or loss of W198 billion in 2020. Also, the decrease in net other operating expense was offset in part as we recognized net loss on foreign currency transaction of W108 billion in 2021 attributed to an increase in losses on foreign currency transaction of customer deposits in foreign currency resulting from an increase in foreign currency exchange rates amid weaker valuation of the Won, compared to net gain on foreign currency transaction of W115 billion in 2020.

## Life Insurance Services

Life insurance services segment consists of life insurance services provided by Shinhan Life Insurance.

	Year I	Ended Decemb	% Change		
	2020 2021 202		2022	2020/2021	2021/2022
		(In billions of	percentages)		
Income statement data					
Net interest income (expense)	₩ 1,609	₩ 1,620	₩ 1,648	0.7%	1.7%
Net fees and commission income (expense)	162	171	107	5.6	(37.4)
Net other income (expense)	(1,203)	(1,239)	(1,141)	3.0	(7.9)
Operating income (expense)	₩ 568	₩ 552	₩ 614	(2.8)%	11.2%

#### Comparison of 2022 to 2021

Operating income for life insurance services increased by 11.2% from \$552 billion in 2021 to \$614 billion in 2022.

Net interest income increased by 1.7% from \$1,620 billion in 2021 to \$1,648 billion in 2022 due primarily to an increase in interest income on securities at amortized cost, partially offset by a decrease in interest income on securities at fair value through other comprehensive income. Interest income on securities at amortized cost increased primarily due to an increase in the average balance of government bonds and assetbacked bonds and the increases in interest rate in 2022. Interest income on securities at fair value through other comprehensive income decreased due to a decrease in the average balance of government bonds measured at fair value through other comprehensive income as they were replaced by government bonds measured at amortized cost.

Net fees and commission income decreased by 37.4% from \$171 billion in 2021 to \$107 billion in 2022 due to an increase in fees and commission expense and a decrease in fees and commission income. The increase in fees and commission expense was mainly due to an increase in separate account fees, which resulted from loss on disposal of bonds, which were disposed in order to obtain liquidity for retirement pension, being compensated in general accounts in fees. To a lesser extent, fees and commission income decreased due to a decrease in the number of annuity payments for variable insurance and the fees resulting therefrom.

Net other expense decreased by 7.9% from  $\mathbb{W}1,239$  billion in 2021 to  $\mathbb{W}1,141$  billion in 2022 primarily due to a decrease in general and administrative expense in 2022 compared to 2021. There was a temporary increase of termination benefits in the previous year due to the voluntary retirement implemented in December, 2021 which normalized during 2022 and resulted in the decrease in general and administrative expense in 2022 compared to 2021.

# Comparison of 2021 to 2020

Operating income for life insurance services decreased by 2.8% from ₩568 billion in 2020 to ₩552 billion in 2021.

Net interest income increased by 0.7% from \$1,609 billion in 2020 to \$1,620 billion in 2021 due primarily to an increase in interest income on securities at amortized cost, which was offset in part by a decrease in interest income on deposits at fair value through profit or loss and a decrease in interest income on securities at fair value through profit or loss. Interest income on securities at amortized cost increased primarily due to an increase in the average balance of securities at amortized cost as a result of an increase in the proportion of longterm government bonds with high interest rate sensitivity into securities at amortized cost resulting from an increase in the interest rate in 2021. The decrease in interest income on deposits at fair value through profit or loss was principally due to a decrease in the average balance of deposits at fair value through profit or loss as a result of most structured deposits repaid in 2021 resulting from the exercise of call options by the issuer of structured deposits. Interest income on securities at fair value through profit or loss decreased mainly due to a decrease in the average balance of securities at fair value through profit or loss attributable to a decrease in financial institution bonds repaid as the issuer of financial institution bonds exercised call options.

Net fees and commission income increased by 5.6% from \$162 billion in 2020 to \$171 billion in 2021 due primarily to a decrease in fees and commission expense, which was partially offset by a decrease in fees and commission income. Fees and commission expense increased principally due to a decrease in separate account fees due to economic fluctuations. To a lesser extent, the decrease in fees and commission expense was due to a decrease in fees on trust accounts. The account of fees on trust accounts was no longer used since a merger of our two life insurance companies, Shinhan Life Insurance and Orange Life Insurance. The decrease in fees and commission income was mainly due to a decrease in fees on separate accounts resulting from a decrease in payment cases related to separate accounts due to the merger.

Net other expense increased by 3.0% from \$1,203 billion in 2020 to \$1,239 billion in 2021 primarily due to a decrease in gains on hedging items as well as an increase in losses on hedging items. The decrease in gains on hedging items and the increase in losses on hedging items were primarily due to an increase in foreign currency exchange rates amid weaker valuation of the Won. The increase of net other operating expense was enhanced by an increase in general and administrative expenses increased mainly as a result of the voluntary retirement implemented in December 2021. The increase of net other operating expense was partially offset as we recognized net gain on foreign currency transaction of \$239 billion in 2021 compared to net loss on foreign currency transaction of \$79 billion in 2020, as a result of an increase in foreign currency exchange rates amid weaker valuation of the Won.

## Specialized Credit Services

The specialized credit services segment consists of the specialized credit business of Shinhan Capital, including facilities leasing, installment finance, new technology finance businesses.

	Year Ended December 31,					% Change				
	2020		2020		2020 2021		2022		2020/2021	2021/2022
	(In billions of Won, except				except	percentages)				
Income statement data										
Net interest income (expense)	₩	159	₩	232	₩	260	45.9%	12.1%		
Net fees and commission income (expense)		21		29		31	38.1	6.9		
Net other income (expense)		(1)		80		58	N/M	(27.5)		
Operating income (expense)	₩	179	₩	341	₩	349	90.5%	2.3%		

N/M = not meaningful

## Comparison of 2022 to 2021

Operating income for the specialized credit business increased by 2.3% from \$341 billion in 2021 to \$349 billion in 2022.

Net interest income increased by 12.1% from  $\Psi$ 232 billion in 2021 to  $\Psi$ 260 billion in 2022 primarily reflecting the changes in loans measured at amortized cost. Interest income on loans denominated in Korean won increased resulting from an increase in the average balance of loans for working capital as a result of an increase in interest-earning financial assets related to corporate finance. Interest-earning financial assets related to corporate finance. Interest-earning financial assets related to corporate finance. Interest-earning financial assets related to corporate finance increased as the Shinhan Capital's identity as a specialized credit company composed of investment banking and corporate finance, has been solidified since 2020. The increase in interest income was partially offset by an increase in interest expense on long-term borrowings and debt securities issued resulting from increases in their average balances. Due to its nature as a capital company that does not provide deposit services, Shinhan Capital raises its capital through debt or equity financing when assets increase. However, net interest income increased year over year due to an increase in interest margin and continued asset growth.

Net fees and commission income increased by 6.9% from  $\Psi 29$  billion in 2021 to  $\Psi 31$  billion in 2022 primarily as a result of an increase in commission received as agency and an increase in investment banking fees. The increase in commission received as agency was principally due to an increase in management fees and performance fees earned by us acting as the general partner, primarily driven by the growth trend centered on corporate finance and investment banking. Investment banking fees increased mainly as a result of an increase in underwriting fees reflecting the expansion of business operations centered on corporate finance and investment banking.

Net other income decreased by 27.5% from ₩80 billion in 2021 to ₩58 billion in 2022, primarily due to a decrease in net gain on financial instruments at fair value through profit or loss and, to a lesser extent, an increase in net loss on foreign currency translation, which was offset in part by a decrease in provision for credit loss allowance. Net gain on financial instruments at fair value through profit or loss decreased mainly due to a decrease in gain on valuation of puttable financial instruments. Net loss on foreign currency translation increased as a result of weaker valuation of the Korean won. Provision for credit loss allowance decreased despite an additional provision for credit loss allowance reflecting the adverse impact of prolonged COVID-19 and economic uncertainty on our asset portfolio in 2022, principally due to an increase in reversal of provision for credit loss allowance resulting from the redemption of large loans, including loans for aircrafts, in 2022.

## Comparison of 2021 to 2020

Operating income for the specialized credit business increased by 90.5% from \$179 billion in 2020 to \$341 billion in 2021.

Net interest income increased by 45.9% from \$159 billion in 2020 to \$232 billion in 2021 primarily reflecting the changes in loans measured at amortized cost. Interest income on loans denominated in Korean won increased resulting from an increase in the average balance of loans for working capital as a result of an increase in interest-earning financial assets related to corporate finance. Interest-earning financial assets related to corporate finance increased as the Shinhan Capital's identity as a specialized credit company composed of investment banking and corporate finance, has been solidified since 2020. The increase in interest income on loans measured at amortized cost was partially offset by a decrease in interest income on loans for installment credit principally resulting from a decrease in the average balance of loans for auto and retail installment credit as a result of no additional new loans for installment credit in Shinhan Capital since transferring such assets to Shinhan Card in October, 2020.

Net fees and commission income increased by 38.1% from  $\Psi21$  billion in 2020 to  $\Psi29$  billion in 2021 primarily as a result of an increase in commission received as agency and an increase in investment banking fees. The increase in commission received as agency was principally due to an increase in management fees and performance fees earned by us as acting the general partner based on the growth trend centered on corporate finance and investment banking. Investment banking fees increased mainly as a result of an increase in underwriting fees reflecting the expansion of business operations centered on corporate finance and investment banking.

Net other income was \$80 billion in 2021 compared to net other expense of \$1 billion in 2020, primarily due to an increase in net gain on financial instruments at fair value through profit or loss and, to a lesser extent, a decrease in provision for credit loss allowance, which was offset in part by an increase in general and administrative expenses. Net gain on financial instruments at fair value through profit or loss increased mainly due to an increase in gain on valuation of puttable financial instruments. Despite an additional provision for credit loss allowance reflecting the adverse impact of COVID-19 on our asset portfolio in 2021, provision for credit loss allowance decreased principally due to an increase in reversal of provision for credit loss allowance resulting from the redemption of large loans, including loans for aircrafts, in 2021. General and administrative expenses increased mainly as a result of the expansion of experienced employees hiring and new hiring, salaries increase, the voluntary retirement first implemented, and in-house welfare fund contribution increase.

## **Others**

Other segment primarily reflects all other activities of Shinhan Financial Group, as the holding company, and our other subsidiaries, including the results of operations of Shinhan Credit Information, Shinhan Asset Management, Shinhan Savings Bank, Shinhan Asset Trust Co., Ltd. Shinhan REITs Management and back-office functions maintained at the holding company.

	Year Ended December 31,					% Change		
	2020		2021		2022		2020/2021	2021/2022
	(In billions of Won, except					, except ]	percentages)	
Income statement data								
Net interest income (expense)	₩	8	₩	69	₩	155	762.5%	124.6%
Net fees and commission income (expense)		347		415		394	19.6	(5.1)
Net other income (expense)		(197)		(224)		(386)	13.7	72.3
Operating income (expense)	₩	158	₩	260	₩	163	64.6%	(37.3)%

N/M = not meaningful

## Comparison of 2022 to 2021

Operating income for others decreased by 37.3% from \260 billion in 2021 to \163 billion in 2022.

Net interest income increased by 124.6% from W69 billion in 2021 to W155 billion in 2022 primarily due to an increase in net interest income of Shinhan Savings Bank and, to a lesser extent, an increase in net interest income of consolidated structured entities. Net interest income of Shinhan Savings Bank increased mainly due to an increase in interest income on loans at amortized cost as a result of an increase in the average balance of retail loans. The increase in net interest income of consolidated structured entities was principally due to an increase in interest income of consolidated structured entities was principally due to an increase in interest income of consolidated structured entities was principally due to an increase in interest income on loans measured at amortized cost.

Net fees and commission income decreased by 5.1% from \$415 billion in 2021 to \$394 billion in 2022 primarily due to Shinhan Credit Information whose net fee and commission income since the second half of the current year was included in the operating result of the credit card segment as it became a wholly-owned subsidiary of Shinhan Card in July 2022. To a lesser extent, net fee and commission income decreased due to the acquisition of Shinhan EZ General Insurance. Shinhan EZ General Insurance does not provide any services where fees or commissions are charged, thus only fees and commission expense were incurred, resulting in a decrease in net fees and commission income.

Net other expense increased by 72.3% from W224 billion in 2021 to W386 billion in 2022, primarily due to an increase in net other operating expense of our holding company and, to a lesser extent, a decrease in net other operating income of consolidated structured entities. The increase in net other operating expense of our holding company was mainly due to an increase in net loss on valuation of financial instruments at fair value through profit or loss, resulting from inflation and rising interest rates. Net other operating income of consolidated structured entities decreased due to a decrease in net gain on foreign currency translation as a result of the weakening of the Korean won.

#### Comparison of 2021 to 2020

Operating income for others increased by 64.6% from ₩158 billion in 2020 to ₩260 billion in 2021.

Net interest income was increased by 762.5% from \$8 billion in 2020 to \$69 billion in 2021 primarily due to an increase in net interest income of Shinhan Financial Group and, to a lesser extent, an increase in net interest income of consolidated structured entities. Net interest income of Shinhan Financial Group increased mainly reflecting a decrease in interest expense as a result of a decrease in interest rate, despite an increase in the average balance of debt securities issued. The increase in net interest income of consolidated structured entities was principally due to an increase in interest income on loans measured at amortized cost.

Net fees and commission income increased by 19.6% from ₩347 billion in 2020 to ₩415 billion in 2021 primarily due to an increase in income of Asia Trust Co., Ltd. resulting from the Group's strengthening the non-banking portfolio through real estate business line. The increased income from Asia Trust Co., Ltd. was mainly due to the increased number of land trusts managed by Asia Trust Co., Ltd.

Net other expense increased by 13.7% from \$197 billion in 2020 to \$224 billion in 2021, primarily due to an increase in net other operating expense of our holding company, which was partially offset by an increase in net other operating income of consolidated structured entities. The increase in net other operating expense of our holding company was mainly due to a decrease in net gain on financial instruments at fair value through profit or loss. Net other operating income of consolidated structured entities increased as we recognized net gain on foreign currency transaction of \$34 billion in 2021 compared to net loss on foreign currency transaction of \$12 billion in 2020.

# **Financial Condition**

## Assets

The following table sets forth, as of the dates indicated, the principal components of our assets.

	As of December 31,			% Change	
	2020	2021	2022	2020/2021	2021/2022
		(In billions of	Won, except pe	rcentages)	
Cash and due from banks at amortized cost	₩ 33,411	₩ 28,453	₩ 29,532	(14.8)%	3.8%
Financial assets at fair value through profit or					
loss	59,091	62,404	56,644	5.6	(9.2)
Derivative assets	5,634	3,799	6,462	(32.6)	70.1
Securities at fair value through other comprehensive					
income	58,316	64,838	63,662	11.2	(1.8)
Securities at amortized cost	47,283	49,930	57,971	5.6	16.1
Loans at amortized cost	356,222	389,137	412,292	9.2	6.0
Property and equipment, net	3,990	4,046	4,011	1.4	(0.9)
Intangible assets	5,481	5,645	5,808	3.0	2.9
Investments in associates	2,658	2,914	2,904	9.6	(0.3)
Current tax receivables	52	15	26	(71.2)	73.3
Deferred tax assets	215	135	1,052	(37.2)	679.3
Investment property	615	675	363	9.8	(46.2)
Net defined benefit assets	18	142	620	688.9	336.6
Other assets	32,194	35,975	34,508	11.7	(4.1)
Assets held for sale	54	44	29	(18.5)	(34.1)
Total assets	₩605,234	₩648,152	₩675,884	%	4.3%

## 2022 Compared to 2021

Our assets increased by 4.3% from \$648,152 billion as of December 31, 2021 to \$675,884 billion as of December 31, 2022, principally due to increases in loans at amortized cost, securities at amortized cost, derivative assets, and cash and due from banks at amortized cost.

Our loans at amortized cost increased by 6.0% to  $\Psi412,292$  billion as of December 31, 2022 from  $\Psi389,137$  billion as of December 31, 2021, due primarily to an increase in corporate loans and, to a lesser extent an increase in retail loans.

Our securities at amortized cost increased by 16.1% to \$57,971 billion as of December 31, 2022 from \$49,930 billion as of December 31, 2021, due primarily to an increase in the balance of debt securities measured amortized cost, such as government bonds, financial institutions bond and corporate bonds.

Our derivative assets increased by 70.1% to \$6,462 billion as of December 31, 2022 from \$3,799 billion as of December 31, 2021, due primarily to an increase in foreign currency derivatives assets.

Our cash and due from banks at amortized cost increased by 3.8% to \$29,532 billion as of December 31, 2022 from \$28,453 billion as of December 31, 2021, due primarily to an increase in the balance of deposits denominated in foreign currency.

### 2021 Compared to 2020

Our assets increased by 7.1% from W605,234 billion as of December 31, 2020 to W648,152 billion as of December 31, 2022, principally due to increases in loans at amortized cost, securities at fair value through other comprehensive income, other assets and financial assets at fair value through profit or loss.

Our loans at amortized cost increased by 9.2% to \$389,137 billion as of December 31, 2021 from \$356,222 billion as of December 31, 2020, due primarily to an increase in corporate loans and, to a lesser extent an increase in retail loans.

Our securities at fair value through other comprehensive income increased by 11.2% to \$64,838 billion as of December 31, 2021 from \$58,316 billion as of December 31, 2020, due primarily to an increase in the balance of debt securities measured at fair value through other comprehensive income, such as government bonds, public bonds and corporate bonds.

Our Other assets increased by 11.7% to \$35,975 billion as of December 31, 2021 from \$32,194 billion as of December 31, 2020, due primarily to an increase in domestic exchange settlements debits.

Our Financial assets at fair value through profit or loss increased by 5.6% to W62,404 billion as of December 31, 2021 from W59,091 billion as of December 31, 2020, due primarily to an increase in the balance of debt securities measured at fair value through profit or loss, such as beneficiary certificates, equity investment with put option, CMA and corporate bonds.

# Liabilities and Equity

The following table sets forth, as of the dates indicated, the principal components of our liabilities.

	As of December 31,			% Change	
	2020	2021	2022	2020/2021	2021/2022
		(In billions of	Won, except pe	rcentages)	
Deposits	₩326,417	₩364,897	₩383,011	11.8%	5.0%
Financial liabilities at fair value through profit or					
loss	1,437	1,369	1,146	(4.7)	(16.3)
Financial liabilities designated at fair value through					
profit or loss	8,456	8,024	8,367	(5.1)	4.3
Derivative liabilities	5,017	3,587	7,705	(28.5)	114.8
Borrowings	41,594	43,167	49,279	3.8	14.2
Debt securities issued	75,134	80,149	77,289	6.7	(3.6)
Net defined benefit liabilities	63	51	15	(19.0)	(70.6)
Provisions	805	1,167	1,266	45.0	8.5
Current tax payable	390	703	702	80.3	(0.1)
Deferred tax liabilities	580	176	170	(69.7)	(3.4)
Liabilities under insurance contracts	53,459	54,333	54,315	1.6	—
Other liabilities	45,525	40,991	41,489	(10.0)	1.2
Total liabilities	558,877	598,614	624,754	7.1	4.4
Total equity attributable to equity holders of the					
Group	44,070	47,291	48,439	7.3	2.4
Non-controlling interests	2,287	2,247	2,691	(1.8)	19.8
Total equity	46,357	49,538	51,130	6.9	3.2
Total liabilities and equity	₩605,234	₩648,152	₩675,884	%	4.3%

## 2022 Compared to 2021

Our total liabilities increased by 4.4% from \$598,614 billion as of December 31, 2021 to \$624,754 billion as of December 31, 2022, primarily due to an increase in deposits (which principally consist of customer deposits) and an increase in borrowings and, to a lesser extent, an increase in derivative liabilities.

Our deposits increased by 5.0% from ₩364,897 billion as of December 31, 2021 to ₩383,011 billion as of December 31, 2022, primarily due to an increase in time and savings deposits and demand deposits.

Our borrowings increased by 14.2% from \$43,167 billion as of December 31, 2021 to \$49,279 billion as of December 31, 2022 primarily as a result of an increase in borrowings denominated in Korean \$00 including borrowings from the Bank of Korea.

Our derivative liabilities increased by 114.8% from ₩3,587 billion as of December 31, 2021 to ₩7,705 billion as of December 31, 2022, primarily due to an increase in foreign currency derivative liabilities.

Total equity increased by 3.2% from \$49,538 billion as of December 31, 2021 to \$51,130 billion as of December 31, 2022, largely due to an increase in retained earnings and an increase resulting from additional hybrid bonds issued by the Group.

#### 2021 Compared to 2020

Our total liabilities increased by 7.1% from \\$558,877 billion as of December 31, 2020 to \\$598,614 billion As of December 31, 2022, primarily due to an increase in deposits (which principally consist of customer deposits) and an increase in debt securities issued and, to a lesser extent, an increase in borrowings.

Our deposits increased by 11.8% from ₩326,417 billion as of December 31, 2020 to ₩364,897 billion As of December 31, 2022, primarily due to an increase in time and savings deposits largely resulting from policies to increase liquidity including funding supports of government and local government due to prolonged COVID-19.

Our debt securities issued increased by 6.7% from \$75,134 billion as of December 31, 2020 to \$80,149 billion As of December 31, 2022, primarily due to an increase in debt securities issued denominated in Korean won.

Our borrowings increased by 3.8% from ₩41,594 billion as of December 31, 2020 to ₩43,167 billion as of December 31, 2021 primarily as a result of an increase in borrowings denominated in Korean won including borrowings from the Bank of Korea and other borrowings.

Total equity increased by 6.9% from W46,357 billion as of December 31, 2020 to W49,538 billion As of December 31, 2022, largely due to an increase in retained earnings and an increase resulting from additional hybrid bonds issued by the Group.

#### **ITEM 5.B. Liquidity and Capital Resources**

We are exposed to liquidity risk arising from the funding of our lending, trading and investment activities and in the management of trading positions. The goal of liquidity management is for us to be able, even under adverse conditions, to meet all of our liability repayments on time and fund all investment opportunities. For an explanation of how we manage our liquidity risk, see "Item 4.B. Business Overview — Risk Management — Market Risk Management — Market Risk Management for Non-trading Activities — Liquidity Risk Management." In our opinion, the working capital is sufficient for our present requirements.

	As of December 31, 2022
	(In billions of Won)
Deposits	₩383,011
Long-term debt	77,369
Call money	1,276
Borrowings from the Bank of Korea	5,100
Other short-term borrowings	34,002
Asset securitizations	9,545
Stockholders' equity <sup>(1)</sup>	18,519
Total	₩528,822

The following table sets forth our capital resources as of December 31, 2022.

### Note:

(1) Includes capital stock, share premium, and hybrid bonds issued.

We obtain funding from a variety of sources, both domestic and foreign. Our principal source of funding is customer deposits obtained from our banking operations, and we from time to time issue equity and debt securities. In addition, our subsidiaries acquire funding through call money, borrowings from the Bank of Korea, other short-term borrowings, corporate debentures, other long-term debt and asset-backed securitizations.

Our primary funding strategy has been to achieve low-cost funding by increasing the average balances of low-cost retail customer deposits. Customer deposits accounted 70.9% of our total funding as of December 31, 2020, 72.0% of our total funding as of December 31, 2021 and 72.4% of our total funding as of December 31, 2022. Historically, except in limited circumstances, largely due to the lack of alternative investment opportunities for individuals and households in Korea, especially in light of a low interest rate environment and volatile stock market conditions, a substantial portion of such customer deposits were rolled over upon maturity and accordingly provided a stable source of funding for our banking subsidiaries. However, in the face of attractive alternative investment opportunities such as during a bullish run of the stock market, customers may transfer a significant amount of bank deposits to alternative investment products in search of higher returns, which may result in temporary difficulties in finding sufficient funding on commercial terms favorable to us. In addition, in recent years, we have faced increasing pricing competition from our competitors with respect to our deposit products. If we do not continue to offer competitive interest rates to our deposit customers, we may lose their business, which has traditionally provided a stable and low-cost source of funding. Even if we are able to match our competitors' pricing, doing so may result in an increase in our funding costs, which may have an adverse impact on our results of operations.

While our banking subsidiaries generally have not faced, and currently are not facing, liquidity difficulties in any material respect, if we or our banking subsidiaries are unable to obtain the funding we need on terms commercially acceptable to us for an extended period of time for reasons of Won devaluation or otherwise, we may not be able to ensure our financial viability, meet regulatory requirements, implement our strategies or compete effectively. See "Item 3.D. Risk Factors — Risks Related to Our Overall Business — Changes in interest rates, foreign exchange rates, bond and equity prices, and other market factors have affected and will continue to affect our business, results of operations and financial condition."

As of December 31, 2020, 2021 and 2022, \$6,816 billion, \$7,610 billion and \$7,308 billion, or 2.1%, 2.1% and 2.0%, respectively, of Shinhan Bank's total deposits were deposits made by litigants in connection with legal proceedings in Korean courts. Court deposits carry interest rates which are generally lower than market rates.

In addition, we obtain funding through borrowings and the issuances of debt and equity securities, primarily through Shinhan Bank. Our borrowings consist mainly of borrowings from financial institutions, the Government and Government-affiliated funds. Call money, which is available in both Won and foreign currencies, is obtained from the domestic call loan market, a short-term loan market for loans with maturities of less than one month. As for our long-term debt, it is principally in the form of corporate debt securities issued by Shinhan Bank. Since 1999, Shinhan Bank has actively issued and continues to issue long-term debt securities with maturities of over one year in the Korean fixed-income market. Shinhan Bank and we have maintained one of the highest credit ratings in the domestic fixed-income market since their inception in 1999 and 2001, respectively. As Shinhan Bank maintains one of the highest debt ratings in the fixed-income market in Korea, we believe that Shinhan Bank will be able to obtain replacement funding through the issuance of long-term debt securities. Shinhan Bank's interest rates on long-term debt securities are in general 20 to 30 basis points higher than the interest rates offered on their deposits. However, since long-term debt is not subject to premiums paid for deposit insurance and the Bank of Korea reserves, we estimate that our funding costs on long-term debt securities are generally on par with our funding costs on deposits. In addition, our company, as well as Shinhan Bank may also issue longterm debt securities denominated in foreign currencies in overseas markets. Our company and Shinhan Bank each have a global medium term notes program under which foreign currency-denominated notes may be issued with an aggregate program limit of US\$5 billion and US\$8 billion, respectively. As of December 31, 2020, 2021 and 2022, our long-term debt amounted to \\$75,089 billion, \\$78,023 billion and \\$77,369 billion, respectively.

We also have funding requirements for our credit card activities. We obtain funding for our credit card activities from a variety of sources, primarily in Korea. The principal sources of funding for Shinhan Card are debentures, commercial papers (including call money), borrowings from the holding company and third-parties, which amounted to  $\Psi21,503$  billion,  $\Psi5,680$  billion,  $\Psi2,225$  billion and  $\Psi1,232$  billion, or 70.2%, 18.5%, 7.3%, and 4.0%, respectively, of the funding for our credit card activities, as of December 31, 2022. Unlike other credit card companies, Shinhan Card has the benefit of obtaining funding at favorable rates through loans from Shinhan Financial Group, which currently maintains the highest credit rating assigned by local rating agencies. Shinhan Card aims to further diversify its funding sources and more actively tap the domestic and international capital markets to ensure access to liquidity as needed.

Credit ratings affect the cost and other terms upon which we and our subsidiaries are able to obtain funding. Domestic and international rating agencies regularly evaluate us, and our subsidiaries and their ratings of our and our subsidiaries' long-term debt are based on a number of factors, including our financial strength as well as conditions affecting the financial services industry generally.

There can be no assurance that we or our subsidiaries will maintain our current credit ratings if, among other reasons, the global or Korean economy were to face another downturn, there are any changes in our corporate governance or our businesses significantly deteriorate. Our failure to maintain current credit ratings and outlooks could increase the cost of our funding, limit our access to capital markets and other borrowings, and require us to post additional collateral in financial transactions, any of which could adversely affect our liquidity, net interest margins and profitability.

Secondary funding sources also include call money, borrowings from the Bank of Korea and other shortterm borrowings which amounted to \$31,471 billion, \$35,372 billion and \$40,378 billion, as of December 31, 2020, 2021 and 2022, respectively, each representing 6.8%, 7.0% and 7.6% respectively, of our total funding as of such dates.

We may also from time to time obtain funding through issuance of equity securities. For example, On September 29, 2020, partly in response to the prolonged COVID-19 pandemic and to increase our loss absorption capacity, we issued 39,130,000 common shares to two private equity funds, thereby increasing our paid-in capital by \$195.7 billion. As a result of such offering, which was substantially fully subscribed and resulted in a capital increase of approximately 7.5%, we raised approximately \$1,158 billion (before underwriting commissions and other offering expenses).

In addition, we obtain funding through issuance of hybrid bonds. The total of our hybrid bonds issued were  $\Psi$ 4,197 billion. In 2022, the additional hybrid bonds of  $\Psi$ 997 billion were newly issued to improve the capital adequacy ratio by expanding the capital.

In limited situations, we may also issue convertible and/or preferred shares. For example, in August 2003, in order to partly fund our acquisition of Chohung Bank, we raised a total of  $\Psi$ 2,552 billion through domestic private placements of redeemable preferred shares and redeemable convertible preferred shares to domestic financial institutions and governmental entities in Korea, all of which shares have since been redeemed or converted. In addition, in January 2007, partly to fund the acquisition of LG Card, we raised a total of  $\Psi$ 3,750 billion through domestic private placements of redeemable preferred shares and redeemable preferred shares and redeemable convertible preferred shares, all of which have been redeemed as of the date hereof. In April 2011, we issued redeemable preferred shares to fund redemption of such securities, and in April 2016, we redeemed the redeemable preferred shares issued in April 2011. In February 2019, we raised a total of  $\Psi$ 750 billion through domestic private placements of our preferred shares, see "Item 10.B. Memorandum and Articles of Incorporation — Description of Preferred Stock."

Pursuant to laws and regulations in Korea, we may redeem our preferred stock to the extent of our retained earnings of the previous fiscal year, net of certain reserves. At this time, we expect that cash from our future operations would be adequate to provide us with sufficient capital resources to enable us to redeem our preferred stock on or prior to their scheduled maturities. In the event there is a short-term shortage of liquidity to make the required cash payments for redemption as a result of, among other things, failure to receive dividend payments from our operating subsidiaries on time or as a result of significant expenditures resulting from future acquisitions, we plan to raise cash liquidity through the issuance of long-term debt in the Korean fixed-income market in advance of the scheduled maturity on our preferred stock. To the extent we need to obtain additional liquidity, we plan to do so through the issuance of long-term corporate debentures or further preferred stock and/ or the use of our other secondary funding sources.

We generally may not acquire our own shares except in certain limited circumstances such as a capital reduction. However, pursuant to the Financial Investment Services and Capital Markets Act and regulations under the Financial Holding Companies Act, we may purchase our own shares on the KRX KOSPI Market of the Korea Exchange or through a tender offer, or retrieve our own shares from a trust company upon termination of a trust agreement subject to the restrictions that (1) the aggregate purchase price of such shares may not exceed the total amount available for distribution of dividends at the end of the preceding fiscal year less the amounts of dividends and reserves for such fiscal year, subtracted by the sum of (a) the purchase price of treasury stock acquired if any treasury stock has been purchased after the end of the preceding fiscal year pursuant to the Commercial Act or the Financial Investment Services and Capital Markets Act, (b) the amount subject to a trust contract, and (c) the amount of dividends approved at the ordinary general shareholders' meeting after the end of the preceding fiscal year and the amount of retained earnings reserve required under the Commercial Act; plus if any treasury stock has been disposed of after the end of the preceding fiscal year, the acquisition cost of such treasury stock, and (2) the purchase of such shares shall meet the requisite ratio under the Financial Holding Companies Act and regulations thereunder. In addition, pursuant to the Financial Investment Services and Capital Markets Act, in certain limited circumstances, dissenting holders of shares have the right to require us to purchase their shares.

### **Contractual Obligations, Commitments and Guarantees**

In the ordinary course of our business, we have certain contractual cash obligations and commitments which extend for several years. As we are able to obtain liquidity and funding through various sources as described in "— Liquidity and Capital Resources" above, we do not believe that these contractual cash obligations and commitments will have a material effect on our liquidity or capital resources.

## **Contractual Cash Obligations**

	As of December 31, 2022 Payments Due by Period <sup>(1)</sup>						
	Less than 1 Month	1-3 Months	3-6 Months	6-12 Months	1-5 Years	More than 5 Years	Total
			(In	n billions of Wo	n)		
Deposits	₩210,900	₩42,662	₩41,865	₩71,259	₩21,142	₩ 2,627	₩390,455
Borrowings	11,960	4,760	4,798	7,251	12,298	9,024	50,091
Debt securities issued	4,564	8,369	9,646	16,486	37,535	5,157	81,757
Lease liability	32	37	52	91	336	75	623
Total	₩227,456	₩55,828	₩56,361	₩95,087	₩71,311	₩16,883	₩522,926

The following table sets forth our contractual cash obligations as of December 31, 2022.

Note:

(1) Reflects all estimated contractual interest payments due on our interest-bearing deposits, borrowings, debt securities issued and lease liability, and the estimated contractual interest payments on borrowings and debt securities that are on a floating rate basis as of December 31, 2022 were computed as if the interest rate used on the last applicable date (for example, the interest payment date for such floating rate loans immediately preceding the determination date) were the interest rate applicable throughout the remainder of the term.

### **Commitments and Guarantees**

In the normal course of business, we and our subsidiaries make various commitments and guarantees to meet the financing needs of our customers. Commitments and guarantees are usually in the form of, among others, commitments to extend credit, commercial letters of credit, standby letter of credit and performance guarantees. The contractual amount of these financial instruments represents the maximum possible loss amount if the counterparty draws down the commitment or we should fulfill our obligation under the guarantee and the counterparty fails to perform under the contract. See "Item 4.B. Business Overview — Description of Assets and Liabilities — Credit-Related Commitments and Guarantees."

The following table sets forth our commitments and guarantees as of December 31, 2022. These commitments, apart from certain guarantees and acceptances, are not included within our consolidated statements of financial position.

	As of December 31, 2022 Commitment Expiration by Period				
	Less than 1 Year	1-5 Years	More than 5 Years	Total	
		(In billion	s of Won)		
Commitments to extend credit <sup>(1)</sup>	₩ 76,350	₩15,414	₩16,084	₩107,848	
Commercial letters of credit <sup>(2)</sup>	3,033	105		3,138	
Financial guarantees <sup>(3)</sup>	2,963	1,214	6	4,183	
Performance guarantees <sup>(4)</sup>	5,409	3,272	41	8,722	
Liquidity facilities to SPEs <sup>(5)</sup>	1,102	677	154	1,933	
Acceptances <sup>(6)</sup>	654	5		659	
Endorsed bills <sup>(7)</sup>	7,057	1	_	7,058	
Unused credit limits on credit cards	90,533		_	90,533	
Other	2,030	1,378	3,047	6,455	
Total	₩189,131	₩22,066	₩19,332	₩230,529	

## Notes:

- (1) Commitments to extend credit represent unfunded portions of authorizations to extend credit in the form of loans. The commitments expire on fixed dates and a customer is required to comply with predetermined conditions to draw funds under the commitments. Commitments to extend credit, including credit lines, are in general subject to provisions that allow us to withdraw such commitments in the event there are material adverse changes affecting an obligor.
- (2) Commercial letters of credit are undertakings on behalf of customers authorizing third parties to draw drafts on us up to a stipulated amount under specific terms and conditions. These are generally short-term and collateralized by the underlying shipments of goods to which they relate.
- (3) Financial guarantees are contracts that require us to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the terms of a debt instrument. Financial guarantee liabilities are recognized initially at their fair value, and the initial fair value is amortized over the life of the financial guarantee. The financial guarantee liability is subsequently carried at the higher of this amortized amount and the present value of any expected payment when a payment under the guarantee has become probable. Financial guarantees are included within other liabilities.
- (4) Performance guarantees are issued to guarantee customers' tender bids on construction or similar projects or to guarantee completion of such projects in accordance with contractual terms. They are also issued to support a customer's obligation to supply products, commodities, maintenance or other services to third parties.
- (5) Liquidity facilities to SPEs represent irrevocable commitments to provide contingent credit lines including commercial paper purchase agreements to special purpose entities for which we serve as the administrator.
- (6) Acceptances represent guarantees by us to pay a bill of exchange drawn on a customer. We expect most acceptances to be presented, but reimbursement by the customer is normally immediate.
- (7) Endorsed bills represent notes transferred to third parties by us. We are obligated to fulfill the duty of payment if the person primarily liable does not honor the bill on the due date.

See also Note 43 of the notes to our consolidated financial statements included in this annual report.

## **Capital Adequacy**

The Financial Services Commission regulations require that capital ratios be computed based on our consolidated financial statements under IFRS and regulatory guidelines. The following table sets forth a summary of our capital and capital adequacy ratios as of December 31, 2020, 2021 and 2022 based on Basel III.

	As of December 31,			
	2020	2021	2022	
	(In million	ns of Won, except per	centages)	
Tier I Capital:				
Tier I CE Capital	₩ 32,461,864	₩ 35,469,554	₩ 37,287,768	
Paid-in capital	2,882,231	2,882,231	2,882,231	
Capital reserve	10,692,543	10,692,438	10,692,438	
Retained earnings	27,777,169	30,541,300	33,342,633	
subsidiaries	66,966	50,475	52,851	
Others	(8,957,045)	(8,696,890)	(9,682,385)	
Additional Tier I Capital	3,805,372	4,965,931	6,018,792	
Total Tier I Capital	₩ 36,267,236	₩ 40,435,485	₩ 43,306,561	
Tier II Capital:				
Allowances for credit losses	700,892	743,451	962,384	
Subordinated debt	70,000	—	—	
Others	2,670,949	2,684,500	2,752,016	
Total Tier II capital	₩ 3,441,841	₩ 3,427,951	₩ 3,714,400	
Total Capital	₩ 39,709,077	₩ 43,863,436	₩ 47,020,961	
Risk-weighted assets				
Credit risk	₩220,626,623	₩235,174,053	₩254,233,024	
Market risk	11,768,520	14,042,483	13,927,045	
Operational risk	19,926,283	21,475,647	23,382,529	
Total risk-weighted assets	₩252,321,426	₩270,692,183	₩291,542,598	
Capital adequacy ratio	15.74%	6 16.20%	6 16.13%	
Tier I capital adequacy ratio	14.37%	6 14.94%	14.85%	
Common equity capital adequacy ratio	12.87%	6 13.10%	12.79%	

	As of December 31,			
	2020	2021	2022	
_	(P	ercentages)		
Group BIS ratio <sup>(1)</sup>	15.74%	16.20%	16.13%	
Total capital adequacy ratio of Shinhan Bank	18.47	18.18	17.77	
Adjusted equity capital ratio of Shinhan Card <sup>(2)</sup>	19.91	18.85	18.61	
Solvency ratio for Shinhan Life Insurance <sup>(3)</sup>	249.5	284.6	266.0	

Notes:

 Under the guidelines of the Financial Services Commission applicable to financial holding companies, the minimum requisite capital ratio applicable to us is the Bank for International Settlement ("BIS") ratio of 8%. This computation is based on our consolidated financial statements in accordance with IFRS. See "Item 4.B. Business Overview — Supervision and Regulation — Principal Regulations Applicable to Financial Holding Companies — Capital Adequacy."

(2) Represents the ratio of total adjusted shareholders' equity to total adjusted assets and is computed in accordance with the guidelines issued by the Financial Services Commission for credit card companies.

Under these guidelines, a credit card company is required to maintain a minimum adjusted equity capital ratio of 8%. This computation is based on the consolidated financial statements of the credit card company prepared in accordance with IFRS. See "Item 4.B. Business Overview — Supervision and Regulation — Principal Regulations Applicable to Credit Card Companies — Capital Adequacy."

(3) Solvency ratio is the ratio of the solvency margin to the standard amount of solvency margin as defined and computed in accordance with the guidelines issued by the Financial Services Commission for life insurance companies. Under these guidelines, Shinhan Life Insurance is required to maintain a minimum solvency ratio of 100%. See "Item 4.B. Business Overview — Supervision and Regulation — Principal Regulations Applicable to Insurance Companies — Capital Adequacy."

### ITEM 5.C. Research and Development, Patents and Licenses, etc.

Not applicable.

## **ITEM 5.D. Trend Information**

These matters are discussed under Items 4.B., 5.A. and 5.B. above where relevant.

#### **ITEM 5.E. Critical Accounting Estimates**

Not applicable.

## ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

#### **ITEM 6.A. Directors and Senior Management**

## **Executive Directors**

Our executive director is as follows:

Name	Date of Birth	Position	Executive Director Since	Date Term Ends <sup>(1)</sup>
Jin Okdong	Feb. 21, 1961	Chief Executive Officer	March 23, 2023	March 2026

Note:

(1) The date on which the term will end will be the date of the general shareholders' meeting in the relevant year.

Jin Okdong is our Chief Executive Officer. Prior to being elected to his current position on March 23, 2023, Mr. Jin served as the chief executive officer of Shinhan Bank from 2019 to 2023. Mr. Jin served as the deputy president of Shinhan Financial Group from 2017 to 2018, the deputy president of Shinhan Bank in 2017 and the chief executive officer of Shinhan Bank Japan from 2015 to 2016. Mr. Jin received a master's degree in business administration from Chung Ang University.

## **Non-Executive and Outside Directors**

Non-executive directors are directors who are not our employees and do not hold executive officer positions with us. Outside directors are non-executive directors who also satisfy the requirements set forth under the Financial Investment Services and Capital Markets Act to be independent of our major shareholders, affiliates and management. Our non-executive directors are selected based on the candidates' talents and skills in diverse areas, such as law, finance, economics, management and accounting. Currently, 10 non-executive directors are in office, all of whom were nominated by our board of directors and approved at a general meeting of shareholders.

Our non-executive and outside directors are as follows:

Name	Date of Birth	Position	Director Since	Date Term Ends <sup>(1)</sup>
Bae Hoon	Mar. 30, 1953	Outside Director	March 25, 2021	March 2024
Sung Jae-ho	Mar. 18, 1960	Outside Director	March 27, 2019	March 2024
Lee Yong Guk	May 11, 1964	Outside Director	March 25, 2021	March 2024
<i>Lee Yoon-jae</i>	Nov. 3, 1950	Outside Director	March 27, 2019	March 2024
Kim Jo Seol	Dec. 5, 1957	Outside Director	March 24, 2022	March 2024
Choi Jae Boong	Feb. 18, 1965	Outside Director	March 25, 2021	March 2024
<i>Kwak Su Keun</i>	Aug. 16, 1953	Outside Director	March 25, 2021	March 2024
Yoon Jaewon	Aug. 29, 1970	Outside Director	March 26, 2020	March 2024
Jin Hyun-duk	Sep. 10, 1955	Outside Director	March 26, 2020	March 2024

Note:

(1) The date on which each term will end will be the date of the general shareholders' meeting in the relevant year.

*Bae Hoon* has been our outside director since March 25, 2021. Mr. Bae is a Korean lawyer and Certified Public Accountant in Japan and currently serves as a representative attorney at Orbis Legal Profession Corporation. Mr. Bae received a master's degree in business administration from Kobe University.

*Sung Jae-ho* has been our outside director since March 27, 2019. Mr. Sung is currently a professor at Sung Kyun Kwan University School of Law. Mr. Sung previously served as a policy advisor of the Ministry of Unification in 2009 and the Ministry of Foreign Affairs and Trade in 2002. Mr. Sung also served as an outside director of NICE Holdings from 2018 to 2019 and Shinhan Card from 2015 to 2019, and chairman of Korea Council of International Law. Mr. Sung received a Ph.D. in law from Sung Kyun Kwan University.

*Lee Yong Guk* has been our outside director since March 25, 2021. Mr. Lee is a clinical professor at Seoul National University, School of Law. Mr. Lee was previously an attorney at Cleary Gottlieb Steen & Hamilton LLP for 27 years. Mr. Lee received a J.D. from Harvard University Law School.

*Lee Yoon-jae* has been our outside director since March 27, 2019. Mr. Lee served as an outside director for various Korean companies, such as LG, KT&G and S-Oil from 2006 to 2015. In addition, he held the chief executive officer position at KorEI from 2001 to 2010. Mr. Lee received a master's degree in business administration from Stanford Graduate School of Business.

*Kim Jo Seol* has been newly appointed as our outside director since March 24, 2022. Ms. Kim is a Korean-Japanese professor who teaches economics at Osaka University of Commerce and economist with a high awareness of Northeast Asian economics. Ms Kim received a Ph.D. in economics from Osaka City University.

*Choi Jae Boong* has been our outside director since March 25, 2021. Mr. Choi currently serves as a professor of mechanical engineering at Sung Kyun Kwan University, College of Engineering and director of Human-centered Convergence Design BK(Brain Korea)21+ Project, which is a human resource development program initiated by the Government. Mr. Choi received a Ph.D. in mechanical engineering from University of Waterloo.

*Kwak Su Keun* has been our outside director since March 25, 2021. Mr. Kwak currently serves as an honorary professor of accounting at Seoul National University, Business School and chair of Corporate Governance Advisory Board at Korea Listed Companies Association. Mr. Kwak received a Ph.D in business administration from University of North Carolina Chapel Hill.

*Yoon Jaewon* has been our outside director since March 26, 2020. Ms. Yoon is currently a professor at Hongik University College of Business Administration and member of the committee for National Tax Service as well as the committee on national accounting policy of the Ministry of Economy and Finance and Korea Custom Service. Ms. Yoon previously served as a non-executive judge at the Tax Tribunal from 2013 to 2019. Ms. Yoon received a Ph.D in accounting from Korea University.

*Jin Hyun-duk* has been our outside director since March 26, 2020. Mr. Jin currently serves as the chief executive officer of Phoedra Co., Ltd. since 1988 and councilor of the Korea Educational Foundation. Mr. Jin was previously a professor at Sakushin-gakuin University and Utsunomiya University. Mr. Jin received a master's degree in business administration from Keio Business School.

Any director wishing to enter into a transaction with Shinhan Financial Group or any of its subsidiaries in his or her personal capacity is required to obtain the prior approval of our board of directors. The director having an interest in the transaction may not vote at the meeting of our board of directors at which the relevant transaction is subject to vote for approval.

# **Executive Officers**

In addition to the executive directors who are also our executive officers, we currently have the following executive officers.

Name	Date of Birth	Position	In Charge of
Jang Dong-ki	Jan. 2, 1964	Deputy President	Global Markets & Securities Business Group
Wang Ho-min	Mar. 4, 1964	Deputy President and Chief Compliance Officer	Compliance Team
Lee Een-kyoon	Apr. 1, 1967	Deputy President and Chief Operation Officer	Shinhan Leadership Center Management Support Team ICT Planning Team
Ahn Jun Sik	May 1, 1965	Deputy President and Chief Public Relations Officer	Brand PR Division
Kim Soung Jo	Jan. 18, 1967	Deputy President	Group Audit
Bang Dong-kwon	Feb. 10, 1966	Deputy President and Chief Risk Officer	Risk Management Team Risk Model Validation Team Credit Review Team
Lee Taekyung	May. 30, 1966	Deputy President and Chief Financial Officer	Finance Management Team Investor Relations Team Accounting Division
Kim Myoung Hee	Jan. 16, 1968	Deputy President and Chief Digital Officer	Digital Planning Team
Koh Seogheon	Sept. 27, 1968	Deputy President and Chief Strategy & Sustainability Officer	Strategic Planning Team ESG Planning Team
Kim Tae Youn	Jul. 7, 1968	Executive Director and Head of Global and New Business Division	Global and New Business Division

None of the executive officers have any significant activities outside Shinhan Financial Group.

*Jang Dong-ki* has been our deputy president since January 1, 2018. Mr. Jang previously served as Chief Financial Officer of Shinhan Financial Group, the head of finance management team, managing director and the head of the capital market and trading division of Shinhan Bank. Mr. Jang received a bachelor's degree in economics from Seoul National University.

*Wang Ho-min* has been our deputy president and chief compliance officer since January 1, 2019. Mr. Wang previously served as the branch manager of Southern Jam-sil branch, Seoul Southern District Court branch and the head of corporate culture development team. Mr. Wang received a bachelor's degree in law from Hankuk University of Foreign Studies.

*Lee Een-kyoon* has been our deputy president and chief operation officer since January 1, 2019. Mr. Lee previously served as the head of management support team and the head of secretary's office of Shinhan Bank. Mr. Lee received a bachelor's degree in English literature from Hanyang University.

*Ahn Jun Sik* has been our deputy president and chief public relations officer since January 1, 2021. Mr. Ahn previously served as the head of Seocho Division at Shinhan Bank. Mr. Ahn received a bachelor's degree in economics from Pusan National University.

*Kim Soung Jo* has been our deputy president since January 1, 2021. Mr. Kim previously served as the head of audit team at Shinhan Financial Group. Mr. Kim received a bachelor's degree in economics from Seoul National University.

*Bang Dong-kwon* has been our chief risk officer since January 1, 2020. Mr. Bang previously served as the head of risk management department of Shinhan Bank. Mr. Bang received a bachelor's degree in English language and literature from Sung Kyun Kwan University.

*Lee Taekyung* has been our deputy president and chief financial officer since January 1, 2022. Mr. Lee previously served as the CEO of Shinhan Bank Vietnam and the CEO of Shinhan Bank Cambodia. Mr. Lee received a bachelor's degree in economics from Seoul National University.

*Kim Myoung Hee* has been our deputy president and chief digital officer since January 1, 2022. Before joining Shinhan Financial Group, Ms. Kim was the CEO, Hancom MDS Inc. Ms. Kim received a Ph.D. in Knowledge Consulting from Dankook University and master's degree in Management Information System from Sogang University.

*Koh Seogheon* has been our executive director and chief strategy & sustainability officer since January 1, 2022. Mr. Koh previously served as the head of business management division and strategic planning team of Shinhan Financial Group. Mr. Koh received a bachelor's degree in economics from Seoul National University.

*Kim TaeYoun* has been our executive director and head of accounting division since January 1, 2022. Mr. Kim previously served as the managing director of finance management team of Shinhan Financial Group. Mr. Kim received a bachelor's degree in economics from Yonsei University.

There are no family relationships among our directors and/or executive officers.

## **ITEM 6.B.** Compensation

The aggregate remuneration and benefits-in-kind paid by us to our chairman, our executive directors, our non-executive directors and our executive officers for the year ended December 31, 2022 was W6.3 billion, consisting of W4.5 billion in salaries and wages and W1.8 billion in bonus payments.

We do not offer any service contracts to outside directors upon their retirement, but we may offer such service contracts to certain members of our senior management upon termination of their employment with us. We do not pay any severance payment to outside directors upon their retirement, but we pay fixed sums of severance payment to members of our senior management pursuant to our internal guidelines on severance payments. In 2022, we accrued W0.2 billion for retirement bonus.

Prior to April 1, 2010, we granted stock options to our chairman, our president and chief executive officer and other directors and executive officers. Effective April 1, 2010, we ceased granting stock options. On March 18, 2015, the exercise period for all outstanding stock options expired, except for a limited number of stock options for which exercise of such stock options (and hence the expiration of the exercise period as well) were suspended by a resolution of the board of directors in December 2010. In May 2017 and September 2017, by a resolution of the board of directors, we lifted such suspension for a portion of the stock options. As of December 31, 2022, we have no stock options that remain unexercisable. We did not record any accrued expense for stock options in 2022.

During the period from March 20, 2007 to December 31, 2013, we granted "performance units" to certain high-ranking officers of select group companies. These performance units are performance-based cash compensation, the per-unit value of which is initially determined at the time of grant subject to adjustment after a fixed number of years based on the operating and financial performance of the relevant group company over the same or another fixed term, at the end of which a cash amount equal to the adjusted number of the performance units is paid out. For performance units granted prior to April 1, 2010, the performance review period was three years, and the payout was made at the end of the three-year term. For performance units granted on or after April 1, 2010 until December 31, 2013, the applicable performance review period is generally four years (and to a limited extent, five years), and the payment is made at the end of such four- or five-year term. We ceased granting performance units since January 1, 2014.

Since April 1, 2010, we have also granted "performance shares" to certain high-ranking officers of select group companies. The performance shares are conceptually similar to the performance units granted since April 1, 2010, in that the number of performance shares is based on the operating and financial performance of the relevant group company, except that the number of performance shares granted is adjusted on the basis of movements in the market price of our shares. The aggregate amount of performance shares granted to a given grantee is generally equal to the expected incentive compensation payable to such grantee for three years (in the case of performance shares granted prior to January 1, 2014) and one year (in the case of performance shares granted based on the expected performance of the grantee's company and the expected price movements of our shares over the applicable adjustment period, which is generally four years (and to a limited extent, five years). The performance shares are paid out in cash at the end of the applicable adjustment period (even if employment is terminated prior to such date), and the grantee is contractually and in accordance with our internal regulations required to use the payout solely to purchase our shares in the market at the then-prevailing market price (in the case of performance shares granted prior to January 1, 2014).

Neither performance units nor performance shares have been granted to outside directors. In 2022, we recognized no accrued expenses for performance units and  $\mathbb{W}12.7$  billion as accrued expenses for performance shares.

Under the Financial Supervisory Service's standards for preparing corporate disclosure forms, which standards were amended in December 2016, we are required to disclose in our Korean annual report the individual annual compensation (including stock options) paid by us to our directors and statutory auditors if the individual annual compensation for such persons is \\$500 million or greater.

In 2022, Cho Yong-byoung, our former Chief Executive Officer, received \\$\\$851 million, consisting of salaries and wages. In addition, in 2022, Mr. Cho was granted 26,747 performance shares. The exercisability of these performance shares will be determined based on a review of our business performance and share price movements during four years, beginning with the fiscal year in which such shares were granted.

The Group determines annual incentive compensation by conducting performance evaluations. Performance measures include quantitative measures, such as total shareholder return, profitability, risk-adjusted return, nonperforming loan ratios before sales and write-offs and efficiency ratios, as well as qualitative measures such

as the achievement of pre-established strategic initiatives. The Group determines long-term incentive compensation by conducting performance evaluations over a four-year period. Performance measures include quantitative measures, such as the relative stock price performance, net profit, adjusted ROE and non-performing loans ratio. The maximum number of performance shares that may be granted to directors of the board of the Group in respect of the fiscal year 2023 has been set at 30,000 shares in the aggregate.

# **ITEM 6.C. Board Practices**

## **Board of Directors**

Our board of directors, which currently consists of one executive director, one non-executive director and 9 outside directors, has the ultimate responsibility for the management of our affairs.

Our Articles of Incorporation provide for no less than three but no more than fifteen directors, the number of outside directors must be more than 50% of the total number of directors, and we must maintain at least three outside directors. All directors are elected for a term not exceeding three years as determined by the shareholders' meeting, except that outside directors are elected for a term not exceeding two years, provided that the term of re-election shall not exceed one year and the term cannot be extended in exceeds of six years. The aggregate term served as an outside director of us or any of our subsidiaries shall not exceed nine years.

Terms are renewable and are subject to the Korean Commercial Code, the Financial Holding Companies Act, the Act on Corporate Governance of Financial Companies and related regulations. See "Item 6.A. Directors and Senior Management" above for information concerning the terms of office of our directors and executive officers.

Our board of directors meets on a regular basis to discuss and resolve material corporate matters. Additional extraordinary meetings may also be convened at the request of the chairman and chief executive officer or a director designated by the board.

Currently, there are no outstanding service contracts between any of our directors or executive officers and us or any of our subsidiaries providing for benefits upon termination of employment by such director or executive officer.

### **Committees of the Board of Directors**

We currently have seven management committees that serve under the board:

- the Risk Management Committee;
- the Audit Committee;
- the Remuneration Committee;
- the Committee for Recommending Candidates for Independent Directors and Members of Audit Committee;
- the Committee for Recommending Candidates for CEO;
- the Environment, Social and Governance (ESG) Strategy Committee; and
- the Subsidiary's CEO Recommendation Committee.

Each committee member is appointed by the board of directors, except for members of the Audit Committee, who are elected at the general meeting of shareholders.

#### **Risk Management Committee**

The Risk Management Committee currently consists of three outside directors, namely Lee Yong Guk (Chair), Sung Jae-ho and Choi Jae Boong. The committee oversees and makes determinations on all issues relating to our comprehensive risk management function. In order to ensure our stable financial condition and to maximize our profits, the committee monitors our overall risk exposure and reviews our compliance with risk policies and risk limits. In addition, the committee reviews risk and control strategies and policies, evaluates whether each risk is at an adequate level, establishes or abolishes risk management divisions, reviews risk-based capital allocations, and reviews the plans and evaluation of internal control. The committee holds regular meetings every quarter.

#### Audit Committee

The Audit Committee currently consists of three outside directors, namely Yoon Jaewon (Chair), Kwak Su Keun, Bae Hoon. The committee oversees our financial reporting and approves the appointment of and interaction with our independent auditors and our internal audit-related officers. The committee also reviews our financial information, audit examinations, key financial statement issues and the administration of our financial affairs by the board of directors. In connection with the general meetings of stockholders, the committee examines the agenda for, and financial statements and other reports to be submitted by, the board of directors for each general meeting of shareholders. The committee holds regular meetings every quarter.

### **Remuneration Committee**

The Remuneration Committee currently consists of four outside directors, namely Sung Jae-ho (Chair), Kwak Su Keun, Kim Jo Seol, Lee Yoon-jae. At least one-half of the members of this committee must be outside directors and currently all members of Remuneration Committee are outside directors. This committee is responsible for reviewing and approving the management's evaluation and compensation programs. The committee meetings are called by the chairman of this committee, who must be an outside director.

#### Committee for Recommending Candidates for Independent Directors and Members of Audit Committee

The Committee for recommending candidates for independent directors and members of audit committee currently consists of five outside directors, namely Choi Jae Boong (Chair), Kim Jo Seol, Yoon Jaewon, Jin Hyun-duk and Lee Yong Guk. Members of this committee will be appointed by our board of directors only to the extent necessary to recommend and nominate candidates for our outside director positions, audit committee members and related matters. However, when the procedure for final recommendation of outside director and audit committee member candidates commences, all outside directors are called to participate in the committee and in this case, all outside directors are deemed as enrolled. The committee meetings are called by the chairman of this committee, who must be an outside director. This committee is responsible and authorized for: (i) establishment, review and reinforcement of policies for outside director and audit committee member selection, (ii) recommendation of outside director and audit committee member selection, (ii) continual recruitment and screening of potential outside director candidates.

#### Committee for Recommending Candidates for CEO

The Committee for recommending candidates for Chief Executive Officer (CEO) was established in March 2012 and currently consists of six directors, namely Sung Jae-ho (Chair), Jin Hyun-duk, Lee Yoon-jae, Bae Hoon, Lee Yong Guk and Choi Jae Boong. However, when the meeting for final selection of candidates for Chief Executive Officer, all outside directors are called to participate in the committee and in this case, all outside directors are deemed as enrolled. This committee is responsible for matters concerning the recommendation of candidates for the CEO including establishing and reviewing our management succession plan and its operation,

setting and evaluating the qualifications and criteria for the CEO and CEO candidate pool and other matters necessary for improving our overall corporate governance structure. The chair of the committee must be an outside director, and the incumbent CEO may be restricted from participating and voting on matters related to the CEO selection.

#### Environmental, Social and Governance (ESG) Strategy Committee

The ESG Strategy Committee was established in March 2015 and currently consists of five directors, namely Kwak Su Keun (Chair), Kim Jo Seol, Yoon Jaewon, Lee Yong Guk and Jin Okdong. This committee is responsible for setting the corporate policy for sustainable management, corporate disclosure of sustainability report and discussing specific business agenda in relation to socially responsible management and other matters such as corporate strategy toward climate change.

#### Subsidiary's CEO Recommendation Committee

The Subsidiary's CEO Recommendation Committee was established in March 2021 and currently consists of five directors, namely Jin Okdong (Chair), Kwak Su Keun, Lee Yoon-jae, Bae Hoon, Sung Jae-ho. This committee is responsible for matters concerning the evaluation of subsidiary management leadership, establishment of subsidiary CEO qualifications, verification and recommendation of subsidiary CEO candidates and other matters deemed necessary by the committee.

### **ITEM 6.D. Employees**

At the holding company level, we had 152, 165 and 171 regular employees as of December 31, 2020, 2021 and 2022, respectively, almost all of whom are employed within Korea. Our subsidiaries had 21,500, 21,365 and 22,700 regular employees as of December 31, 2020, 2021 and 2022, respectively, almost all of whom are employed within Korea. In addition, we had seven, three and five non-regular employees at the holding company level as of December 31, 2020, 2021 and 2022, respectively, and 2,041 non-regular employees at the subsidiary level as of December 31, 2020, 2021 and 2022, respectively. Of the total number of regular and non-regular employees at both the holding company and subsidiaries, approximately 1.07% were managerial or executive employees.

8,799 employees of Shinhan Bank and 311 employees of Jeju Bank were members of the Korean Financial Industry Union as of December 31, 2022. 2,107 employees of Shinhan Card were members of the Korean Federation of Clerical and Financial Labor Union as of December 31, 2022. 2,687 employees of Shinhan Securities, 1,221 employees of Shinhan Life Insurance and 210 employees of Shinhan AITAS were members of the Korea Finance & Service Workers' Union as of December 31, 2022.

Under Korean law, we may not terminate full time employees except under limited circumstances.

Since our acquisition of Chohung Bank in 2003, we have not experienced any general employee work stoppages and consider our employee relations to be good.

Under the Korean National Pension Law, we annually contribute an amount equal to 4.5% of employee wages, and each employee contributes 4.5% of his or her wages, to the National Pension Management Corporation. In addition, pursuant to the Employee Retirement Security Act, we operate a retirement pension system under which we make annual contributions to pension funds managed by financial institutions (which replaced our former retirement pension system under which we managed the pension fund in-house) that provide employees both regular pension payments and a lump sum payment upon termination of employees from the risk of default on their pension payments as the pension funds are deposited with large financial institutions; (2) offer of varied forms of payment, i.e., regular pension payments and a lump sum payments and a lump sum payment, upon termination

of employment; (3) offer to employees the option to make investment decisions for his or her individual pension account and (4) elimination of the ability of employees to cash in his or her retirement fund prematurely, thereby guaranteeing such employee a lump sum payment upon termination of employment. Under this retirement pension system, we and our subsidiaries can opt for either a defined benefit plan or a defined contribution plan, or a combination of both. Under the defined benefit plan, the amount of pension payable upon an employee's retirement is fixed in advance, and the employer is responsible for making the requisite payments to the pension fund and making investment decisions in relation to the fund assets. Under the defined contribution plan, the employee sets aside a fixed percentage or amount of his salaries to the pension fund and exercises investment decisions for his or her individual pension account. As of December 31, 2020, 2021 and 2022, we recognized liabilities (asset) for defined benefit obligations of W44 billion, W(91) billion and W(605) billion, respectively. See Note 25 of the notes to our consolidated financial statements included in this annual report.

## **ITEM 6.E. Share Ownership**

As of March 15, 2023, the persons who are currently our directors or executive officers, as a group, beneficially held an aggregate of 84,784 shares of our common stock, representing approximately 0.02% of our outstanding common stock as of such date. None of these persons individually held more than 1% of our outstanding common stock as of such date.

Members of the employee stock ownership association have certain pre-emptive rights in relation to our shares that are publicly offered under the Financial Investment Services and Capital Markets Act. As of December 31, 2022, the employee stock ownership association owned 26,121,183 shares of our common stock.

Prior to April 1, 2010, we granted stock options to our chairman, our president and chief executive officer and other directors and executive officers. Effective April 1, 2010, we ceased granting stock options. On March 18, 2015, the exercise period for all outstanding stock options expired, except for a limited number of stock options for which exercise of such stock options (and hence the expiration of the exercise period as well) were suspended by a resolution of the board of directors in December 2010. In May 2017 and September 2017, by a resolution of the board of directors, we lifted such suspension for a portion of the stock options. As of December 31, 2022, there were no unexercisable stock options.

On February 1, 2019, we acquired a 59.15% interest in Orange Life Insurance. On January 28, 2020, we acquired the remaining interests in Orange Life Insurance by effecting a comprehensive stock exchange under Articles 360-2 of the Korean Commercial Code. As part of the comprehensive stock exchange, we transferred 980,780 shares of our common stock to Orange Life Insurance in exchange for 1,485,697 treasury shares of Orange Life Insurance held by Orange Life Insurance in accordance with the exchange ratio for the comprehensive stock exchange. Pursuant to paragraph (2) of Article 342-2 of the Korean Commercial Code, Orange Life Insurance was required to dispose of these shares of our common stock to Orange Life Insurance in exchange for 8,353,891 shares of Orange Life Insurance which were purchased by Orange Life Insurance as a result of the exercise of appraisal rights by dissenting shareholders of Orange Life Insurance was required to dispose of these shares of Orange Life Insurance was required to dispose of these shares of Orange Life Insurance as a result of the exercise of appraisal rights by dissenting shareholders of Orange Life Insurance was required to dispose of these shares of our common stock within three years from the acquisition date. The acquisition date of these shares of our common stock within three years from the acquisition date. The acquisition date of 2.2 of the Financial Holding Company Act, Orange Life Insurance was required to dispose of these shares of common stock was December 30, 2020. Orange Life Insurance disposed all of such shares as of January 28, 2021. Orange Life Insurance was subsequently merged with and into Shinhan Life Insurance in July 2021.

On September 29, 2020, we acquired a 96.8% interest in Neoplux, a venture capital company formerly under the Doosan Group. On December 30, 2020, we acquired the remaining interest in Neoplux by effecting a small-scale stock exchange under Article 360-10 of the Korean Commercial Code. As part of the small-scale stock exchange, we transferred 7,153 shares of our common stock to Neoplux in exchange for 80,090 treasury shares of Neoplux held by Neoplux in accordance with the exchange ratio for the small-scale stock exchange.

Pursuant to paragraph (2) of Article 342-2 of the Korean Commercial Code, Neoplux was required to dispose of these shares of our common stock within six months from the acquisition date. In addition, we also transferred 1,755 shares of our common stock to Neoplux in exchange for 19,653 shares of Neoplux which were purchased by Neoplux as a result of the exercise of appraisal rights by dissenting shareholders of Neoplux. Pursuant to paragraph (1) of Article 62-2 of the Financial Holding Company Act, Neoplux was required to dispose of these shares of our common stock within three years from the acquisition date. The acquisition date of these shares of common stock was December 30, 2020. Neoplux subsequently changed its name to Shinhan Venture Investment on January 11, 2021 and disposed all of such shares as of March 8, 2021.

On September 29, 2020, partly in response to the prolonged COVID-19 pandemic and to increase our loss absorption capacity, we issued 39,130,000 common shares to two private equity funds, thereby increasing our paid-in capital by \$195.7 billion.

### ITEM 6.F. Disclosure of a Registrant's Action to Recover Erroneously Awarded Compensation

Not Applicable.

### ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

## **ITEM 7.A. Major Shareholders**

The following table sets forth certain information relating to the beneficial ownership of our common shares as of December 31, 2022.

Name of Shareholder	Number of Common Shares Beneficially Owned	Beneficial Ownership (%)
National Pension Service	40,476,692	7.96%
BlackRock Fund Advisors <sup>(1)</sup>	30,250,549	5.95%
Shinhan Financial Group Employee Stock Ownership Association	26,121,183	5.13%
Centennial Investment Limited	20,239,539	3.98%
BNP Paribas SA	18,690,310	3.67%
Supreme, L.P.	18,690,000	3.67%
Citibank, N.A. (ADR Department)	15,254,583	3.00%
The Government of Singapore	13,078,530	2.57%
КТ	10,877,651	2.14%
Vanguard Total International Stock Index	6,602,322	1.30%
Norges Bank	5,168,159	1.02%
Others	303,335,351	59.62%
Total	508,784,869	100.00%

Note:

(1) Based on Form SC 13G filed by BlackRock, Inc. on February 13, 2023.

As of December 31, 2022, the number of treasury shares held by us is 6,352 common shares, which do not have voting rights. Other than those listed above, no other person or entity known by us, jointly or severally, directly or indirectly own more than 1% of our issued and outstanding voting securities or otherwise exercise control or could exercise control over us. None of our shareholders have different voting rights.

As of the date hereof, our total authorized share capital is 1,000,000,000 shares, par value \\$5,000 per share.

As of December 31, 2022, the latest date on which we closed our shareholders' registry, 606 shareholders of record were notated as U.S. persons, holding in the aggregate 23.89% of our then total outstanding shares

(including Citibank, N.A., as the depositary for our American depositary shares, each representing one share of our common stock effective October 15, 2012, prior to which each American depositary share represented two common shares).

#### **ITEM 7.B. Related Party Transactions**

Since the beginning of the preceding three financial years, none of our directors or officers has or had any transactions with us that are or were unusual in their nature or conditions or significant to our business, other than as set forth below and also described in Note 45 of the notes to our consolidated financial statements included in this annual report.

In December 2001, BNP Paribas acquired 4.00% of our common stock in return for an investment of approximately \$155 billion in cash pursuant to an alliance agreement. Under the terms of the alliance agreement, for so long as BNP Paribas does not sell or otherwise transfer (except to any of its wholly-owned subsidiaries) any portion of its ownership interest in our common stock and maintains, after any issuances of new shares by us from time to time, its shareholding percentage of not less than 3.5% of our issued common stock, we are required to call a meeting of our shareholders to recommend that one nominee of BNP Paribas be elected to our board of directors. In addition, under the alliance agreement, BNP Paribas has the right to subscribe for new issuances of our common shares in the event that such new issuances would result in the dilution of the shareholding percentage of BNP Paribas below 3.5%. As of December 31, 2022, BNP Paribas held 18,690,310 shares, or 3.67% of our total common stock.

As of December 31, 2020, 2021 and 2022, we had principal loans outstanding to our directors, executive officers and their affiliates in the principal amount of \$5.1 billion, \$6.1 billion and \$6.6 billion, which were made in the ordinary course of business on substantially the same terms, including interest rate and collateral, as those prevailing at the time for comparable transactions with other persons, and did not involve more than the normal risk of collectability or present other unfavorable features.

#### **ITEM 7.C. Interests of Experts and Counsel**

Not applicable.

### ITEM 8. FINANCIAL INFORMATION

# ITEM 8.A. Consolidated Statements and Other Financial Information

See "Item 18. Financial Statements" and our consolidated financial statements included in this annual report.

### Legal Proceedings

We and our subsidiaries are involved in various legal actions and regulatory proceedings arising from the normal course of business. As of December 31, 2022, we and our subsidiaries were defendants in pending lawsuits (including regulatory proceedings) in the aggregate claim amount of \$531 billion, for which we recorded a provision of \$29 billion. We also recorded additional \$4 billion for insurance contract liabilities (reserve for claims) for litigations, etc.

In October 2018, the Financial Supervisory Service requested Shinhan Bank to submit supporting documents in connection with allegations of inadequate compliance controls. In November 2018, the Financial Supervisory Service notified Shinhan Bank of an institutional caution for alleged deficiencies in its customer due diligence and imposed an administrative fine of W100 million citing negligence in carrying out its customer verification obligations. In December 2019, the Financial Supervisory Service notified Shinhan Bank of an institutional caution for alleged prohibited activities, including

promotional activities for specified money trusts, investment solicitation for derivatives and management of trust properties. In 2021, the Korea Exchange imposed a total of three penalties on Shinhan Securities for regulatory violations, totaling \\$2.7 million in fines. In 2021, the Financial Supervisory Service imposed a total of eight penalties against Shinhan Securities for regulatory violations, totaling ₩4,092 million in fines, which include a fine of  $\Psi$ 1,800 million for certain employees' violation of conflict of interest obligations in connection with the Lime Asset incident and a fine of \U1,160 million for violation of rules against advertising certain money trust products. In 2022, the Korea Exchange imposed a total of four penalties on Shinhan Securities for regulatory violations, totaling \\$2.0 million in fines. In 2022, the Financial Supervisory Service imposed a total of four penalties against Shinhan Securities for regulatory violations, totaling \\$600.9 million in fines. In January 2020, the Financial Supervisory Service notified Shinhan Life Insurance of an institutional caution and imposed an administrative fine of  $\mathbf{W}$ 266 million for allegedly omitting certain information regarding the level of expenses deducted from premiums paid when selling savings insurance products over the telephone. In February 2021, the Financial Supervisory Service notified Shinhan Bank of an institutional warning and imposed an administrative fine of W2.1 billion for reasons including alleged violation of internal regulations and reporting procedures in connection with Shinhan Bank's designation as the primary bank for Seoul Metropolitan Government in 2018. In March 2021, the Financial Supervisory Service notified Shinhan Bank of an institutional caution and imposed an administrative fine of \\$31.2 million for alleged violation of the safety standard in operating its information system in respect of the electronic financial transaction and alleged negligence in notifying its customers of the errors occurred to the electronic financial transaction and measures taken to correct the errors. In January 2021, the Financial Services Commission imposed a fine of \\$28.8 million on Shinhan Card citing failure to discard personal information after transaction.

On September 17, 2018, the Prosecutors' Office indicted our former Chief Executive Officer, who previously served as Shinhan Bank's president, chief executive officer and executive director from March 2015 through March 2017, for allegedly influencing the hiring process of new employees in an illegal manner while he occupied such position at Shinhan Bank. On June 30, 2022, he was acquitted by the Supreme Court of such allegations. We believe that we have robust and fair internal procedures for hiring new employees. As part of Shinhan Bank's efforts to enhance fairness and transparency of its hiring practices, Shinhan Bank has adopted the model hiring procedures promulgated by the Korea Federation of Banks, and beginning in 2018 has established a hiring committee consisting of third-party human resources experts and internal compliance officers.

In August 2019, the Financial Supervisory Service launched an investigation into Lime Asset, Korea's largest hedge fund managing approximately ₩4.1 trillion in assets as of December 31, 2020, including with regards to allegations that Lime Asset had concealed the fact that it had changed the multi-manager trade finance fund's investment method and concealed losses in their trade finance funds. Beginning in October 2019, Lime Asset suspended withdrawals from certain of its funds, freezing approximately ₩1.7 trillion in total as of the end of 2019, according to the Financial Supervisory Service. According to Financial Supervisory Service investigations, Lime Asset's ₩211 billion trade finance fund was found to have been associated with a debacle involving the IIG, a New York-based investment adviser charged with securities fraud and running a Ponzi scheme. On November 26, 2019, the SEC revoked the registration of IIG for allegedly overvaluing defaulted loans in the fund's portfolio to conceal losses in its flagship hedge fund and selling at least \$60 million in fake loan assets to clients. According to the Financial Supervisory Service, Lime Asset signed a contract with a Singaporean commodity trader, which took over Lime Asset's ownership stake in an IIG fund in June 2019, with the Singaporean entity issuing promissory notes to Lime Asset, so where Singaporean entity issuing promissory notes to Lime Asset, and Lime Asset did not properly disclose to its investors such change in the fund's investment target from the IIG fund to promissory notes.

Certain investors in funds of Lime Asset have filed dispute mediation claims to the Financial Supervisory Service and criminal and civil claims against Lime Asset, as well as against financial institutions that have sold such products, claiming they learned of the change in the trade finance fund's investment method and losses only in October 2019 and that they were also misguided and not fully informed of the risks associated with these funds when investing in such products. The Financial Supervisory Service conducted a comprehensive audit in November and December 2019. In February 2020, the Prosecutors' Office of Korea announced that they had launched an investigation into Lime Asset as well as Shinhan Securities and also searched Shinhan Bank's headquarters on July 1, 2020 in connection with this matter. In November 2020, the Financial Supervisory Service imposed a partial business suspension on Shinhan Securities and suspension from duties and a cautionary warning to its two former CEOs. On December 5, 2021, the Supreme Court concluded that a former employee of Shinhan Securities was partially guilty on charges of conspiring to conceal from investors Lime Asset's losses and change in investment target and imposed a sentence of eight years' imprisonment and a \#300 million fine. On December 10, 2021, the Financial Supervisory Service imposed a partial business suspension and a fine of ₩4 billion on Shinhan Securities, and a cautionary warning on two former employees of Shinhan Securities in connection with alleged violations of the Capital Markets Act and the Act on Real Name Financial Transactions and Confidentiality. On February 14, 2023, a fine of \U00e41.8 billion on Shinhan Securities was confirmed. On March 15, 2023, Seoul Southern District Court imposed a fine of \\$50 million on Shinhan Securities for violation of the Financial Investment Services and Capital Markets Act of Korea in failing to properly monitor its employees involved in the sale of Lime Asset products. On April 22, 2021, the sanctions committee of the Financial Supervisory Service recommended a partial business suspension and fine of \\$8.7 billion on Shinhan Bank, a cautionary warning to the CEO of Shinhan Bank, an institutional caution and fine of \\$50 million on Shinhan Financial Group and a caution to the CEO of Shinhan Financial Group in connection with Shinhan Bank's alleged improper solicitation of troubled Lime Asset funds and management's oversight in risk management. On July 11, 2022, the partial business suspension and the fine of \\$5.7 billion on Shinhan Bank and a cautionary warning to the CEO of Shinhan Bank were confirmed. The fine on Shinhan Financial Group recommended by the sanctions committee will be deliberated at the Securities and Futures Commission of the Financial Services Commission and will be confirmed if approved at a regular meeting of the Financial Services Commission.

In May 2020, Shinhan Securities announced that its board of directors has resolved to compensate certain investors for amounts ranging between 30% to 70% (in the case of retail investors) and 20% to 50% (in the case of institutional investors) of the amount of such investor's investment in Lime Asset products. In June 2020, Shinhan Bank announced that its board of directors has resolved to make prepayments to investors in certain Lime Asset funds that have reached maturity in an amount equal to 50% of such investor's investment in the relevant product. On June 30, 2020, the Financial Dispute Mediation Committee of the Financial Supervisory Service recommended through a non-binding ruling for brokerages, including Shinhan Securities, to return 100% of the amount of investors' investment in certain of Lime Asset products sold after November 2018 in the aggregate of approximately \\$161 billion. In August 2020, the board of directors of Shinhan Securities resolved to accept the non-binding ruling for certain Lime Asset's trade finance funds sold around November 2018. With these resolutions by the board of directors of Shinhan Securities, the total amount of compensation to investors of Lime Asset funds that Shinhan Securities has agreed to pay has reached \#42.46 billion. On April 19, 2021, the Financial Dispute Mediation Committee of the Financial Supervisory Service recommended through a non-binding ruling that Shinhan Bank compensate investors in such Lime Asset funds in amounts ranging from 40% to 80% of the losses incurred by the investors by way of making prepayments, with adjustments to be made depending on particular facts, such as the nature of the investor (e.g., whether retail or institutional investor, the age and experience level of the investor, etc.) and adequacy of documentation. In 2022, in accordance with such compensation guideline recommended by the Financial Dispute Mediation Committee, Shinhan Bank completed its voluntary settlement process with substantially all of such investors in Lime Asset funds.

In June 2020, the Financial Supervisory Service launched an investigation into Discovery Asset Management Co., Ltd. ("**Discovery Asset**"), which operated funds that invested in certain funds in the U.S. managed by Direct Lending Investment, LLC ("**DLI**"). In April 2019, the U.S. Securities and Exchange Commission obtained a preliminary injunction and order appointing a receiver to freeze DLI's funds based on the complaint that DLI fabricated values of its assets under management and reported returns. In response, Discovery Asset suspended withdrawals from funds under its management, thereby freezing approximately **W**256 billion in total of its investors' funds as of April 2019. While neither Shinhan Bank nor Shinhan Securities was involved in sale of such DLI-related funds structured by Discovery Asset, Shinhan Bank and Shinhan Securities did sell other Discovery Asset funds (affected by such suspension of withdrawal) to investors in Korea. Between 2017 and 2019, Shinhan

Bank and Shinhan Securities sold approximately \$93.6 billion and \$50.8 billion, respectively, of such Discovery Asset products (unrelated to DLI funds), of which only Shinhan Bank has recovered approximately \$45.1 billion from Discovery Asset. In 2022, Shinhan Bank completed its voluntary settlement process with substantially all of such investors in Discovery Asset funds, and Shinhan Securities is in discussion with the investors to settle these amounts based on mutually agreeable terms.

From May 2017 to December 2018, Shinhan Securities sold approximately \$390.7 billion of certain German Heritage DLS Products. As of December 31, 2022, the principal amount of German Heritage DLS Products that have become eligible for payment but for which payment has been delayed is \$379.9 billion. The German Heritage DLS Products are derivative-linked trust products where performance is based on underlying Singapore funds that invest in Germany's monument status building development projects. Since July 2019, maturity payments have been delayed on the German Heritage DLS Products as recovery on the underlying funds has been delayed. In March 2020, Shinhan Securities announced that its board of directors has resolved to make prepayments to investors who have consented to the extension of maturity in an amount equal to 50% of the amount of such investor's investments in the German Heritage DLS Products. As of December 31, 2022, Shinhan Securities recognized \$343.8 billion in non-operating expenses as provisions for potential future compensation in connection with the sale of German Heritage DLS Products.

The prepayments made or to be made by Shinhan Bank and Shinhan Securities to investors of Lime Asset funds, Discovery Asset funds and German Heritage DLS Products, respectively, as explained above, have been or will be, as the case may be, settled at the time of recovery of the underlying funds. If the amount recovered on the underlying fund is less than the amount prepaid to investors, Shinhan Bank and Shinhan Securities may not be able to recover from investors the amount of the prepaid amount that is in excess of the recovered amount and accordingly suffer losses. Depending on the performance of such underlying funds, we may record provisions for credit loss allowance to account for expected future losses.

During the fiscal year 2022, Shinhan Bank and Shinhan Securities recorded \$54.6 billion and ₩116.2 billion, respectively, for credit loss allowance to account for expected future losses associated with financial products, including Lime Asset, Discovery Asset and German Heritage DLS Products. Depending on a variety of factors, including those outside the control of Shinhan Bank or Shinhan Securities, such as the performance of the underlying funds and progression of discussions with investors, Shinhan Bank or Shinhan Securities may record additional provisions for credit loss allowance to account for expected future losses from these or other financial products, and there is no guarantee that such amounts, if any, will not be significant. In response to increased incidents involving alleged improper sales of financial products such as those involving Lime Asset products, Discovery Asset products and German Heritage DLS Products, we have taken additional measures to improve our risk management systems and internal controls to prevent similar incidents. Shinhan Bank and Shinhan Securities have each updated their internal controls and performance evaluation systems and have made improvements to various stages of the sales cycle for financial products. For example, Shinhan Bank and Shinhan Securities have both upgraded their product review departments (which were initially under the investment products and services divisions) to independent divisions, thereby facilitating independent review and thorough assessment of the merits of financial products prior to such products being sold through sales channels. In addition, we have modified the composition of key performance indicators used as a basis for personnel evaluations and promotions to move away from simply increasing the volume of sales, thereby further incentivizing employees to adhere to prudent sales practices and avoid speculative or high risk sales.

In June 2022, Shinhan Bank voluntarily reported to the Financial Supervisory Service certain overseas wire transfers made in 2020 and 2021 which Shinhan Bank had detected as unusual based on its internal monitoring system. After similar activities were also reported by another major Korean bank, the Financial Supervisory Service launched an investigation in August 2022 into wire transfers made under similar circumstances across all major banks in Korea, including Shinhan Bank. In an interim report released in September 2022, the Financial Supervisory Service reported that approximately more than US\$7.2 billion of suspicious overseas wire transfers were made through 12 banks, of which approximately US\$2.36 billion had been wired through Shinhan Bank and

that at least some of these transfers were allegedly related to cryptocurrency arbitrage transactions. The Financial Supervisory Service and the Seoul Central District Prosecutor's Office are currently investigating these wire transfers and the parties involved, including in relation to any violation of certain monitoring and reporting obligations under the Foreign Exchange Transactions Act of Korea and the Act on Reporting and Use of Certain Financial Transaction Information of Korea. In December 2022, the Financial Supervisory Service made a recommendation to improve Shinhan Bank's fraud detection system, including allocating sufficient staff and establishing a computer system dedicated to identifying digital asset-related transactions and assessing risks related to digital asset management. Such investigations are ongoing, and it is difficult to predict the results of these proceedings and the potential impact they may have on us.

As of the date hereof, our management believes that these proceedings will not have a material adverse effect on our financial condition, equity or results of operations. However, although we plan to rigorously defend our positions in the lawsuits or other regulatory proceedings against us, it is difficult to predict the final outcome of these proceedings and the potential impact these proceedings and related events may have on our financial condition, equity or results of operations. The total amount in dispute may increase during the course of litigation, and other lawsuits may be brought against us based on similar allegations. Accordingly, we cannot assure you that these proceedings and related events will not have an adverse effect on our business, financial condition and results of operations. For further details of these and other litigations, see Note 43 of the notes to our consolidated financial statements.

#### **Dividend Policy**

For a detailed description on the dividend policy, please see "Item 10.B. Memorandum and Articles of Incorporation — Description of Share Capital — Dividends."

#### **ITEM 8.B. Significant Changes**

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

## **ITEM 9.** THE OFFER AND LISTING

## **ITEM 9.A. Offer and Listing Details**

## Market Prices of Common Stock and American Depositary Shares

The principal trading market for our common shares is the KRX KOSPI Market Division of the Korea Exchange, where our common shares were listed on September 10, 2001. Our American depositary shares have been listed on the New York Stock Exchange since September 16, 2003 and are identified by the symbol "SHG."

The table below sets forth, for the periods indicated, the high and low closing prices and the average daily volume of trading activity on the Korea Exchange for our common stock since 2017, and their high and low closing prices and the average daily volume of trading activity on the New York Stock Exchange for our American depositary shares since 2017.

	Korea Exchange			New York Stock Exchange		
	Closing Price per Common Stock		Average Daily Trading Volume	Closing Price per ADS		Average Daily Trading Volume
	High	Low	(Shares)	High	Low	(ADSs)
2018	53,400	39,050	1,024,181	50.35	34.78	101,168
2019	48,000	38,350	987,989	40.54	32.23	85,258
2020	42,750	22,200	2,366,124	37.45	17.37	144,214
2021	43,000	30,650	1,784,390	39.07	27.67	112,478
First Quarter	37,450	30,650	2,987,958	33.54	27.67	126,331
Second Quarter	43,000	36,350	1,570,402	39.07	32.94	124,956
Third Quarter	40,400	37,100	1,339,266	35.67	31.66	97,602
Fourth Quarter	40,700	34,650	1,290,183	34.67	29.14	101,702
2022	43,200	33,400	1,303,530	34.60	23.00	154,790
First Quarter	41,500	36,400	1,531,090	34.32	29.41	162,315
Second Quarter	43,200	37,050	1,287,123	34.60	28.56	123,982
Third Quarter	37,900	33,400	1,259,431	28.92	23.00	178,305
Fourth Quarter	38,500	34,500	1,148,202	29.67	23.59	153,817
October	37,050	34,500	1,262,222	25.79	23.59	206,267
November	38,100	35,550	1,117,029	29.02	24.79	153,786
December	38,500	35,200	1,077,698	29.67	27.93	101,400
<b>2023</b> (through April 17)	44,900	34,300	1,607,873	36.62	25.59	153,715
January	44,900	34,300	1,915,676	36.62	27.48	117,425
February	42,450	37,900	1,546,140	35.09	29.23	132,916
March	37,700	34,450	1,670,581	29.74	25.59	197,504
April (through April 17)	35,500	34,300	1,082,793	27.11	26.14	165,100

Source: Korea Exchange; New York Stock Exchange.

# **ITEM 9.B. Plan of Distribution**

Not applicable.

## **ITEM 9.C. Markets**

## The Korea Exchange

Pursuant to the Korea Stock and Futures Exchange Act, as of January 27, 2005, the Korea Stock Exchange, which began its operations in 1956, the KRX KOSDAQ, which began its operation on July 1, 1996, and the Korea Futures Exchange (as an exchange operating futures market and options market), which began its operation on February 1, 1999, were unified to form the Korea Exchange.

The Korea Exchange was established in a form of a limited liability stock company in accordance with the Korean Commercial Code with the minimum paid-in capital of  $\Psi$ 100 billion in accordance with the Financial Investment Services and Capital Markets Act. Historically, the Korea Exchange was the only exchange authorized under the Financial Investment Services and Capital Markets Act. On May 28, 2013, however, the Financial Investment Services and Capital Markets Act was amended to implement a license system under which a license may be granted to an exchange upon satisfaction of certain requirements. In addition, the Financial

Services Commission has authorized the establishment of alternative trading systems that engage in the trading of listed beneficial certificates, among other things, for a multiple number of parties through electronic means. Notwithstanding the foregoing regulatory developments, the Korea Exchange is presently the only duly licensed exchange in Korea and there have been no definitive developments regarding newly licensed exchanges or alternative trading systems in Korea. The Korea Exchange operates and supervises four market divisions, the KRX KOSPI Market Division, the KRX KOSDAQ Market Division, the KRX Futures Market Division and the KRX KONEX Market Division. It has its principal office in Busan.

As of December 29, 2022, the aggregate market value of equity securities listed on the KOSPI was approximately \$1,767 trillion. The average daily trading volume of equity securities for 2022 was approximately 595 million shares with an average transaction value of \$9,008 billion.

Even though the Financial Investment Services and Capital Markets Act prescribed that the Korea Exchange be established in a form of a limited liability stock company, the Korea Exchange is expected to play a public role as a public organization. In order to safeguard against a possible conflict, the Financial Investment Services and Capital Markets Act has placed restrictions on the ownership and operation of the Korea Exchange and any newly established exchanges approved by the Financial Services Commission as follows:

- Any person's ownership of shares in the Korea Exchange is limited to 5% or less except for an investment trust company or investment company established under the Financial Investment Services and Capital Markets Act, or the Government. However, more than 5% ownership in Korea Exchange is permitted if necessary for forming a strategic alliance with a foreign stock or futures exchange and such amount of ownership is approved by the Financial Services Commission on grounds that such ownership may contribute to the efficiency and soundness of capital markets and the distribution of shares held by shareholders;
- The number of outside directors on the board of directors of the Korea Exchange shall be more than half of the total number of directors;
- Any amendment to the Articles of Incorporation, transfer or consolidation of business, spin off, stock swap in its entirety or transfer of shares in its entirety of the Korea Exchange will receive prior approval from the Financial Services Commission; and
- In the event the Financial Services Commission determines that the chief executive officer of the Korea Exchange is not appropriate for the position, the Financial Services Commission can request the Korea Exchange upon reasonable cause, within one month from the chief executive officer's election, to dismiss the chief executive officer. Subsequently, the chief executive officer will be suspended from performing his duties and the Korea Exchange will elect a new chief executive officer within two months from the request.

The Korea Exchange has the power in some circumstances to suspend trading in the shares of a given company or to de-list a security. The Korea Exchange also restricts share price movements. All listed companies are required to file accounting reports annually, semiannually and quarterly and to release immediately all information that may affect trading in a security.

The Government has in the past exerted, and continues to exert, substantial influence over many aspects of the private sector of the Korean economy and its actions may depress or boost the stock market. In the past, the Government has informally both encouraged and restricted the declaration and payment of dividends, induced mergers to reduce what it considers excess capacity in a particular industry and induced private companies to offer publicly their securities.

The Korea Exchange publishes the Korea Composite Stock Price Index ("KOSPI") every ten seconds, which is an index of all equity securities listed on the Korea Exchange. Historical movements in KOSPI are set out in the following.

	Opening <sup>(1)</sup>	High	Low	Closing
2001	503.31	715.93	463.54	693.70
2002	698.00	943.54	576.49	627.55
2003	633.03	824.26	512.30	810.71
2004	821.26	939.52	713.99	895.92
2005	893.71	1,383.14	866.17	1,379.37
2006	1,389.27	1,464.70	1,192.09	1,434.46
2007	1,435.26	2,085.45	1,345.08	1,897.13
2008	1,853.45	1,901.13	892.16	1,124.47
2009	1,157.40	1,723.17	992.69	1,682.77
2010	1,696.14	2,051.00	1,552.79	2,051.00
2011	2,070.08	2,228.96	1,652.71	1,825.74
2012	1,826.37	2,049.28	1,769.31	1,997.05
2013	2,031.10	2,059.58	1,780.63	2,011.34
2014	1,967.19	2,082.61	1,886.85	1,915.59
2015	1,926.44	2,173.41	1,829.81	1,961.31
2016	1,918.76	2,068.72	1,835.28	2,026.46
2017	2,026.16	2,557.97	2,026.16	2,467.49
2018	2,479.65	2,598.19	1,996.05	2,041.04
2019	2,010.00	2,248.63	1,909.71	2,197.67
2020	2,175.17	2,873.47	1,457.64	2,873.47
2021	2,944.45	3,305.21	2,839.01	2,977.65
2022	2,988.77	2,989.24	2,155.49	2,236.40
2023 (through April 18)	2,225.67	2,575.91	2,218.68	2,567.34

Source: Korea Exchange

Note:

(1) The figures represent the daily closing price of the first trading day of the respective year.

Shares are quoted "ex-dividend" on the first trading day of the relevant company's accounting period. "Ex-dividend" refers to a share no longer carrying the right to receive the following dividend payment because the settlement date occurs after the record date for determining which shareholders are entitled to receive dividends. "Ex-rights" refers to shares no longer carrying the right to participate in the following rights offering or bonus issuance because the settlement date occurs after the record date for determining which shareholders are entitled to new shares. The calendar year is the accounting period for the majority of listed companies, this may account for the drop in KOSPI between its closing level at the end of one calendar year and its opening level at the beginning of the following calendar year.

With certain exceptions, principally to take account of a share being quoted "ex-dividend" and "ex-rights," permitted upward and downward movements in share prices of any category of shares on any day are limited under the rules of the Korea Exchange to 30% of the previous day's closing price of the shares, rounded down as set out below:

Previous Day's Closing Price	Rounded Down to Won
Less than 2,000	1
2,000 to less than 5,000	5
5,000 to less than 20,000	10
20,000 to less than 50,000	50
50,000 to less than 200,000	100
200,000 to less than 500,000	500
500,000 or more	1,000

As a consequence, if a particular closing price is the same as the price set by the fluctuation limit, the closing price may not reflect the price at which persons would have been prepared, or would be prepared to continue, if so permitted, to buy and sell shares. Orders are executed on an auction system with priority rules to deal with competing bids and offers.

Due to deregulation of restrictions on brokerage commission rates, the brokerage commission rate on equity securities transactions may be determined by the parties, subject to commission schedules being filed with the Korea Exchange by the financial investment companies with brokerage licenses.

The number of companies listed on the KRX KOSPI Market, the corresponding total market capitalization at the end of the periods indicated and the average daily trading volume for those periods are set forth in the following table.

		Total Market Capitalization		Average Daily Trading Volume, Value			
Year	Number of Listed Companies	(Millions of Won)	$(Thousands of Dollars)^{(1)}$	Thousands of Shares	(Millions of Won)	(Thousands of Dollars) <sup>(1)</sup>	
2000	704	₩ 188,041,490	\$ 148,414,751	306,163	₩ 2,602,211	\$ 2,053,837	
2001	689	255,850,070	194,784,979	473,241	1,997,420	1,520,685	
2002	683	258,680,756	218,056,778	857,245	3,041,598	2,563,937	
2003	684	355,362,626	298,123,008	542,010	2,216,636	1,859,594	
2004	683	412,588,139	398,597,371	372,895	2,232,109	2,156,419	
2005	702	655,074,595	648,588,708	467,629	3,157,662	3,126,398	
2006	731	704,587,508	757,620,976	279,096	3,435,180	3,693,742	
2007	746	951,917,907	1,017,223,666	363,846	5,540,151	5,920,229	
2008	765	576,927,703	457,153,489	355,440	5,190,180	4,112,663	
2009	770	887,935,183	763,060,356	485,657	5,795,552	4,980,495	
2010	777	1,141,885,458	1,009,981,831	380,859	5,619,768	4,970,607	
2011	791	1,041,999,162	899,438,206	353,760	6,863,146	5,924,166	
2012	784	1,154,294,167	1,085,638,395	486,480	4,823,643	4,536,739	
2013	777	1,185,973,724	1,123,826,139	328,325	3,993,422	3,784,158	
2014	773	1,192,252,867	1,092,907,569	278,082	3,983,580	3,651,646	
2015	770	1,242,832,089	1,062,885,563	455,256	5,351,734	4,576,870	
2016	779	1,308,440,374	1,087,015,348	376,773	4,523,044	3,757,617	
2017	774	1,605,820,912	1,504,422,814	340,457	5,325,760	4,989,470	
2018	788	1,343,971,858	1,207,630,387	397,972	6,548,622	5,884,286	
2019	799	1,475,909,366	1,277,290,667	470,723	4,989,807	4,318,309	
2020	795	1,980,543,162	1,823,536,656	895,256	12,200,417	11,233,235	
2021	818	2,203,366,546	1,853,749,408	1,039,479	15,424,224	12,976,800	
2022	820	1,767,235,221	1,402,345,041	595,197	9,008,398	7,148,387	
2023 (through April 18)	824	2,029,777,854	1,610,679,141	577,293	8,935,088	7,090,214	

Source: Korea Exchange

Note:

(1) Converted at the Noon Buying Rate at the end of the periods indicated.

The Korean securities markets are principally regulated by the Financial Services Commission and the Financial Investment Services and Capital Markets Act. The law imposes restrictions on insider trading and price manipulation, requires specified information to be made available by listed companies to investors and establishes rules regarding margin trading, proxy solicitation, takeover bids, acquisition of treasury shares and reporting requirements for shareholders holding substantial interests.

#### Protection of Customer's Interest in Case of Insolvency of Financial Investment Companies

Under Korean law, the relationship between a customer and a financial investment company in connection with a securities sell or buy order is deemed to be consignment and the securities acquired by a consignment agent (i.e., the securities company) through such sell or buy order are regarded as belonging to the customer in so far as the customer and the consignment agent's creditors are concerned. Therefore, in the event of a bankruptcy or reorganization procedure involving a financial investment company, the customer of the financial investment company is entitled to the proceeds of the securities sold by the financial investment company. In addition, the Financial Investment Services and Capital Markets Act recognizes the ownership of a customer in securities held by a financial investment company in such customer's account.

When a customer places a sell order with a financial investment company which is not a member of the Korea Exchange and this financial investment company places a sell order with another financial investment company which is a member of the Korea Exchange, the customer is still entitled to the proceeds of the securities sold received by the non-member company from the member company regardless of the bankruptcy or reorganization of the non-member company places a buy order with a member company, the customer has the legal right to the securities received by the non-member company from the member company from the member company because the purchased securities are regarded as belonging to the customer in so far as the customer and the non-member company's creditors are concerned.

In addition, under the Financial Investment Services and Capital Markets Act, the Korea Exchange is obliged to indemnify any loss or damage incurred by a counterparty as a result of a breach by its members. If a financial investment company which is a member of the Korea Exchange breaches its obligation in connection with a buy order, the Korea Exchange is obliged to pay the purchase price on behalf of the breaching member. Therefore, the customer can acquire the securities that have been ordered to be purchased by the breaching member.

As the cash deposited with a financial investment company is regarded as belonging to the financial investment company, which is liable to return the same at the request of its customer, the customer cannot take back deposited cash from the financial investment company if a bankruptcy or reorganization procedure is instituted against the financial investment company and, therefore, can suffer from loss or damage as a result. However, the Depositor Protection Act provides that the Korea Deposit Insurance Corporation will, upon the request of the investors, pay each investor up to  $\Psi$ 50 million per financial institution in case of the financial investment company's bankruptcy, liquidation, cancellation of securities business license or other insolvency events. The premiums related to this insurance are paid by financial investment company with a dealing or brokerage license is required to deposit the cash received from its customers with the Korea Securities Finance Corporation, a special entity established pursuant to the Financial Investment of cash deposits by securities companies with the Korea Securities Finance Corporation is prohibited. In addition, in the event of bankruptcy or dissolution of the financial investment company, the cash so deposited shall be withdrawn and paid to the customer prior to payment to other creditors of the financial investment company.

#### **Restrictions Applicable to ADSs**

No Korean governmental approval is necessary for the sale and purchase of our ADSs in the secondary market outside Korea or for the withdrawal of shares of our common stock underlying the ADSs and the delivery inside Korea of shares in connection with the withdrawal, provided that a foreigner who intends to acquire the shares must obtain an investment registration card from the Financial Supervisory Service as described below. The acquisition of the shares by a foreigner must be immediately reported to the governor of the Financial Services Commission, either by the foreigner or by his standing proxy in Korea.

Persons who have acquired shares of our common stock as a result of the withdrawal of shares underlying our ADSs may exercise their preemptive rights for new shares, participate in free distributions and receive dividends on shares without any further Korean governmental approval.

Under current Korean laws and regulations, the depositary is required to obtain our prior consent for the number of shares of our common stock to be deposited in any given proposed deposit that exceeds the difference between:

- the aggregate number of shares of our common stock deposited by us for the issuance of our ADSs (including deposits in connection with the initial issuance and all subsequent offerings of our ADSs and stock dividends or other distributions related to these ADSs); and
- (2) the number of shares of our common stock on deposit with the depositary at the time of such proposed deposit. We have agreed to grant such consent to the extent that the total number of shares on deposit with the depositary would not exceed 40,432,628 at any time.

#### **Reporting Requirements for Holders of Substantial Interests**

Under the Financial Investment Services and Capital Markets Act, any person whose direct or beneficial ownership of our common stock with voting rights, whether in the form of shares of common stock or ADSs, certificates representing the rights to subscribe for shares and equity-related debt securities including convertible bonds and bonds with warrants (which we refer to collectively as "Equity Securities"), together with the Equity Securities beneficially owned by certain related persons or by any person acting in concert with the person, accounts for 5% or more of the total outstanding shares (including Equity Securities of us held by such persons) is required to report the status of the holdings and the purpose of the holdings (for example, whether intending to seek management control) to the Financial Services Commission and the Korea Exchange within five business days after reaching the 5% ownership level. In addition, any change in the ownership interest subsequent to the report that equals or exceeds 1% of the total outstanding Equity Securities or change in the purpose of the holdings is required to be reported to the Financial Services Commission and the Korea Exchange within five business days from the date of the change, provided that (i) if the investment is for passive investment purposes the change must be reported by the 10th day of the month following an amendment event and (ii) if the investment is for general investment purposes (i.e., an investment that is not intended for active management participation, but with a intention to actively exercise its rights as a shareholder with respect to the matters such as a distribution policies of the issuer) the change must be reported within 10 business days following an amendment event. For institutional investors as prescribed by the Financial Services Commission, (i) if the investment is for portfolio investment purposes, the change must be reported by the 10th day of the following quarter in which the change occurred and (ii) if the investment is for general investment purposes, the change must be reported by the 10th day of the month following an amendment event).

Violation of these reporting requirements may subject a person to criminal sanctions such as administrative sanctions, fines, imprisonment and/or a loss of voting rights with respect to the portion of ownership of Equity Securities exceeding 5% of the total outstanding shares. In addition, the Financial Services Commission may order the disposal of the unreported Equity Securities. Any persons who reports management control as the purpose for its holdings is prohibited from acquiring additional shares or from exercising voting rights during the following five days following the reporting date.

In addition to the reporting requirements described above, any person whose direct or beneficial ownership of our stock accounts for 10% or more of the total issued and outstanding shares (which we refer to as a "major stockholder") must report the status of his/her shareholding to the Korea Securities Futures Commission and the Korea Exchange within five days after he/she becomes a major stockholder. In addition, any change in the ownership interest subsequent to the report must be reported to the Korea Securities Futures Commission and the Korea Exchange within five days after the change occurred, provided that the obligation to report such change shall be exempt if the number shares that changed in ownership is less than 1,000 shares and the aggregate

amount of such shares that changed in ownership is less than \$10 million. Violation of these reporting requirements may subject a person to criminal sanctions such as fines or imprisonment. Any single stockholder or persons who have a special relationship with such stockholder that jointly acquire more than 10% (4% in case of non-financial business group companies) of the voting stock of a Korean financial holding company who controls national banks will be subject to reporting or approval requirements pursuant to the Financial Holding Company Act. See "Item 4.B. Business Overview — Supervision and Regulation — Principal Regulations Applicable to Financial Holding Companies — Restrictions on Financial Holding Company Ownership."

## **Restrictions Applicable to Shares**

Under the Foreign Exchange Transaction Laws and Financial Services Commission regulations, as amended (collectively, the "Investment Rules"), foreigners may invest, with limited exceptions and subject to procedural requirements, in all shares of Korean companies, whether listed on the Stock Market Division of the Korea Exchange or on the KOSDAQ Market Division of the Korea Exchange, unless prohibited by specific laws. Foreign investors may trade shares listed on the Stock Market Division of the Korea Exchange or on the KOSDAQ Market Division of the Korea Exchange only through the Stock Market Division of the Korea Exchange or the Korea Exchange or the KOSDAQ Market Division of the Korea Exchange, except in limited circumstances, including:

- odd-lot trading of shares;
- acquisition of shares (which we refer to as "Converted Shares") by exercise of warrants, conversion
  rights or exchange rights under bonds with warrants, convertible bonds or exchangeable bonds or
  withdrawal rights under depositary receipts issued outside of Korea by a Korean company;
- acquisition of shares as a result of inheritance, donation, bequest or exercise of stockholders' rights, including preemptive rights or rights to participate in free distributions and receive dividends;
- over-the-counter transactions between foreigners of a class of shares for which the ceiling on aggregate acquisition by foreigners, as explained below, has been reached or exceeded subject to certain exceptions; and
- sale and purchase of shares at fair value between foreigners who are part of an investor group comprised of foreign companies investing under the control of a common investment manager pursuant to applicable laws or contract.

For over-the-counter transactions of shares between foreigners outside the Stock Market Division of the Korea Exchange or the KOSDAQ Market Division of the Korea Exchange for shares with respect to which the limit on aggregate foreign ownership has been reached or exceeded, a securities company licensed in Korea must act as an intermediary. Odd-lot trading of shares outside the Stock Market Division of the Korea Exchange or the KOSDAQ Market Division of the Korea Exchange must involve a licensed securities company in Korea as the other party. Foreign investors are prohibited from engaging in margin transactions with respect to shares that are subject to a foreign ownership limit.

The Investment Rules require a foreign investor who wishes to invest in shares on the Stock Market Division of the Korea Exchange or the KOSDAQ Market Division of the Korea Exchange (including Converted Shares and shares being issued for initial listing on the Stock Market Division of the Korea Exchange or on KOSDAQ Market Division of the Korea Exchange) to register its identity with the Financial Supervisory Service prior to making any such investment. The registration requirement does not, however, apply to foreign investors who acquire Converted Shares with the intention of selling such Converted Shares within three months from the date of acquisition. Upon registration, the Financial Supervisory Service will issue to the foreign investor an investment registration card, which must be presented each time the foreign investor opens a brokerage account with a securities company. Foreigners eligible to obtain an investment registration card include foreign nationals who have not been residing in Korea for a consecutive period of six months or more, foreign governments, foreign municipal authorities, foreign public institutions, international financial institutions or similar international organizations, corporations incorporated under foreign laws and any person in any additional category designated by decree of the Ministry of Strategy and Finance under the Korean Securities and Exchange Act. All Korean offices of a foreign corporation as a group are treated as a separate foreigner from the offices of the corporation outside Korea for the purpose of investment registration. However, a foreign corporation or depositary issuing depositary receipts may obtain one or more investment registration cards in its name in certain circumstances as described in the relevant regulations.

Upon a foreign investor's purchase of shares through the Stock Market Division of the Korea Exchange or the KOSDAQ Market Division of the Korea Exchange, no separate report by the investor is required because the investment registration card system is designed to control and oversee foreign investment through a computer system. However, a foreign investor's acquisition or sale of shares outside the Stock Market Division of the Korea Exchange or the KOSDAQ Market Division of the Korea Exchange (as discussed above) must be reported by the foreign investor or his standing proxy to the governor of the Financial Supervisory Service at the time of each such acquisition or sale. A foreign investor must ensure that any acquisition or sale by it of shares outside the Stock Market Division of the Korea Exchange or the KOSDAQ Market Division of the Korea Exchange in the case of trades in connection with a tender offer, odd-lot trading of shares, trades of a class of shares for which the aggregate foreign ownership limit has been reached or exceeded, is reported to the governor of the Financial Supervisory Service by himself or his standing proxy, or, in the case of sale and purchase of shares at fair value between foreigners, who are part of an investor group comprised of foreign companies investing under the control of a common investment manager pursuant to applicable laws or contract. A foreign investor may appoint a standing proxy from among the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), securities companies (including domestic branches of foreign securities companies), asset management companies, futures trading companies and internationally recognized custodians which will act as a standing proxy to exercise stockholders' rights or perform any matters related to the foregoing activities if the foreign investor does not perform these activities himself. Generally, a foreign investor may not permit any person, other than its standing proxy, to exercise rights relating to his shares or perform any tasks related thereto on his behalf. However, a foreign investor may be exempted from complying with these standing proxy rules with the approval of the governor of the Financial Supervisory Service in cases deemed inevitable by reason of conflict between laws of Korea and the home country of the foreign investor.

Certificates evidencing shares of Korean companies must be kept in custody with an eligible custodian in Korea. Only foreign exchange banks (including domestic branches of foreign banks), securities companies (including domestic branches of foreign securities companies), the Korea Securities Depository, asset management companies, futures trading companies and internationally recognized custodians are eligible to act as a custodian of shares for a non-resident or foreign investor. A foreign investor must ensure that his custodian deposits his shares with the Korea Securities Depository. However, a foreign investor may be exempted from complying with this deposit requirement with the approval of the governor of the Financial Supervisory Service in circumstances where compliance with that requirement is made impracticable, including cases where compliance would contravene the laws of the home country of such foreign investor.

Under the Investment Rules, with certain exceptions, foreign investors may acquire shares of a Korean company without being subject to any foreign investment ceiling. As one such exception, designated public corporations are subject to a 40% ceiling on the acquisition of shares by foreigners in the aggregate. Designated public corporations may set a ceiling on the acquisition of shares by a single person in their articles of incorporation. Furthermore, an investment by a foreign investor in 10% or more of the issued and outstanding shares with voting rights of a Korean company is defined as a foreign direct investment under the Foreign Investment Promotion Act of Korea. Generally, a foreign direct investment must be reported to the Ministry of Commerce, Industry and Energy of Korea. The acquisition of shares of a Korean company by a foreign investor may also be subject to certain foreign or other shareholding restrictions in the event that the restrictions are prescribed in a specific law that regulates the business of the Korean company. For a description of such restrictions applicable to Korean banks, see "Item 4.B. Business Overview — Supervision and Regulation — Principal Regulations Applicable to Banks — Restrictions on Bank Ownership."

#### **ITEM 9.D. Selling Shareholders**

Not applicable.

## **ITEM 9.E. Dilution**

Not applicable.

## ITEM 9.F. Expenses of the Issue

Not applicable.

# **ITEM 10.** ADDITIONAL INFORMATION

#### **ITEM 10.A. Share Capital**

Not applicable.

### **ITEM 10.B.** Memorandum and Articles of Incorporation

We are a financial holding company established under the Financial Holding Company Act. As set forth in our Articles of Incorporation, our objects and purposes as a financial holding company are, among others, to operate and manage financial companies or companies engaged in similar lines of business, to provide financial support to, or investments in, our subsidiaries and to develop and jointly sell products with our subsidiaries. We are registered with the commercial registry office of Seoul Central District Court.

Our articles of incorporation, which was last amended on March 23, 2023, is annexed to this annual report as Exhibit 1.1.

## **Description of Share Capital**

This section provides information relating to our capital stock, including brief summaries of material provisions of our Articles of Incorporation, the Korean Commercial Code, the Financial Investment Services and Capital Markets Act, the Financial Holding Companies Act and certain related laws of Korea, all as currently in effect. The following summaries are intended to provide only summaries and are subject to the full text of the Articles of Incorporation and the applicable provisions of the Financial Investment Services and Capital Markets Act, the Korean Commercial Code, and certain other related laws of Korea.

## General

As of December 31, 2022 and as of the date hereof, our authorized share capital is 1,000,000,000 shares. Our Articles of Incorporation provide that we are authorized to issue shares of preferred stock up to one-half of all of the issued and outstanding shares. Furthermore, through an amendment of the Articles of Incorporation, we have created new classes of shares in addition to the common shares and the preferred shares. As of December 31, 2022, the number of our issued and outstanding common shares was 508,784,869.

On January 25, 2007, we issued 28,990,000 Series 10 redeemable preferred shares and 14,721,000 Series 11 redeemable convertible preferred shares as part of our funding for the acquisition of LG Card, all of which were redeemed on January 25, 2012. On April 21, 2011, as part of funding for partial redemption of the Series 10 redeemable preferred stock and the Series 11 redeemable convertible preferred stock, we issued 11,100,000 shares of the Series 12 non-voting redeemable preferred stock, all of which were redeemed on April 21, 2016. On May 1, 2019, as part of funding for the acquisition of Orange Life Insurance, we issued 17,482,000 shares of non-voting convertible preferred stock through third-party allotment at a price of W42,900. In addition, we issued 8,232,906 shares of common stock in relation to a comprehensive stock exchange between Shinhan Financial Group and Orange Life Insurance on January 28, 2020. See "— Description of Preferred Stock."

From April 29, 2020 to May 28, 2020, we acquired 5,035,658 treasury shares which we retired entirely on June 1, 2020. On September 29, 2020, partly in response to the prolonged COVID-19 pandemic and to increase our loss absorption capacity, we issued 39,130,000 common shares to two private equity funds, thereby increasing our paid-in capital by \$195.7 billion. On December 30, 2020, as part of the small-scale stock exchange for the acquisition of the remaining interest in Neoplux, we issued 72,719 shares of common stocks.

All of the issued and outstanding shares are fully-paid and non-assessable, and are in registered form. As of December 31, 2022, our authorized but unissued share capital was 473,733,131 shares. We may issue the unissued shares without further shareholder approval but subject to a board resolution as provided in the Articles of Incorporation. See "— Distribution of Free Shares." Share certificates are issued in denominations of one, five, ten, 50, 100, 500, 1,000 and 10,000 shares. The par value of our common shares per share is ₩5,000.

#### Dividends

Dividends are distributed to shareholders in proportion to the number of shares of the relevant class of capital stock owned by each shareholder following approval by the shareholders at an annual general meeting of shareholders. We pay full annual dividends on newly issued shares (such as the common shares representing the American depositary shares ("ADSs")) for the year in which the new shares are issued. We declare our dividend annually at the annual general meeting of shareholders which is held within three months after the end of the fiscal year. Once declared, the annual dividend must be paid to the stockholders of record as of the end of the preceding fiscal year within one month after the annual general meeting unless otherwise resolved thereby. Annual dividends may be distributed either in (i) cash or (ii) shares provided that shares must be distributed at par value and, if the market price of the shares is less than their par value, dividends in shares may not exceed one-half of the total annual dividends (including dividends in shares). In addition to the annual dividend, we may also distribute cash dividends to the stockholders of record as of the end of March, June and September of each year upon a resolution by the board of directors. Under the Korean Commercial Code we do not have an obligation to pay any annual dividend unclaimed for five years from the scheduled payment date.

In addition, under the Financial Investment Services and Capital Markets Act and our Articles of Incorporation, we may pay quarterly dividends to our shareholders of record as of the end of March, June and September of each year upon the resolution of the board of directors. The quarterly dividend, if any, will be paid to the shareholders in cash. Our Articles of Incorporation stipulates that any quarterly dividends shall not exceed the net assets as of the end of the immediately preceding fiscal year, after deducting (i) the paid-in capital as of the end of the immediately preceding fiscal year, (ii) the aggregate amount of the capital reserves and earned surplus reserves, accumulated up to the end of the immediately preceding fiscal year, (iii) unrealized profits as prescribed under the Enforcement Decree of the Commercial Code, (iv) the amount resolved to be distributed as dividends at the Ordinary General Meeting of Shareholders held in respect of the immediately preceding fiscal year, (v) voluntary reserves accumulated for specific purposes in accordance with the relevant provisions of these Articles of Incorporation or by the resolution of the General Meetings of Shareholders as of the end of the immediately preceding fiscal year, (vi) earned surplus reserves that account for at least 10% of the net profits of the relevant fiscal year until such reserves equal the aggregate amount of its stated capital and (vii) the aggregate amount of quarterly dividends paid during the current fiscal year, if any.

The table below sets forth the cash dividend per share of common stock and the cash dividend per share of preferred stock declared by us in respect of the years ended December 31, 2020, 2021 and 2022.

## Dividends

	Year Ended December 31,		
	2020 2021		2022
	(In Won and US\$)		
Cash dividends per share of common stock:			
In Korean Won			
In U.S. Dollars <sup>(1)</sup>	\$ 1.38	\$ 1.65	\$ 1.64
Cash dividends per share of preferred stock:			
In Korean Won	₩ 1,716	₩ 1,960	₩ 2,065
In U.S. Dollars <sup>(1)</sup>	\$ 1.58	\$ 1.65	\$ 1.64

## N/A = not available

Note:

(1) Won amounts for 2020, 2021 and 2022 are expressed in U.S. Dollar at the rate of ₩1,086.1, ₩1,188.6 and ₩1,260.2, respectively, to US\$1.00, the Noon Buying Rate in effect on December 31, 2020, 2021 and 2022, respectively, for the convenience of readers. No representation is made that the Won or U.S. Dollar amounts referred to above could have been or could be converted into U.S. Dollars or Won, as the case may be, at any particular rate or at all.

Under the Financial Holding Companies Act and the regulations thereunder, a financial holding company may not pay an annual dividend unless it has set aside as its legal reserve an amount equal to at least one-tenth of its net income after tax and shall set aside such amount as its legal reserve until its legal reserve reaches at least the aggregate amount of its stated capital.

Other than as set forth above and the dividend rights granted to preferred shareholders as further described in "— Description of Preferred Stock," our articles of incorporation do not provide special rights to our common or preferred shareholders to share in our profits. For information regarding Korean taxes on dividends, see "Item 10.E. Taxation — Korean Taxation."

#### **Distribution of Free Shares**

In addition to permitting dividends in the form of shares to be paid out of retained or current earnings, the Korean Commercial Code permits a company to distribute to its shareholders, in the form of free shares, an amount transferred from the capital surplus or legal reserve to stated capital. These free shares must be distributed to all of the shareholders pro rata. Our Articles of Incorporation require the same types of preferred shares to be distributed to the holders of preferred shares in case of distribution of free shares. For information regarding the treatment under Korean tax laws of free share distributions, see "Item 10.E. Taxation — Korean Taxation — Taxation of Dividends on Shares of Common Stock or American Depositary Shares."

## Preemptive Rights and Issuance of Additional Shares

Unless otherwise provided in the Korean Commercial Code, a company may issue authorized but unissued shares at such times and upon such terms as the board of directors of the company may determine. The company must offer the new shares on uniform terms to all shareholders who have preemptive rights and who are listed on the shareholders' register as of the record date. Our shareholders are entitled to subscribe for any newly issued shares in proportion to their existing shareholdings. However, as provided in the Articles of Incorporation, we may issue new shares by resolution of board of directors to persons other than existing shareholders if those shares are (1) publicly offered (where the number of such shares so offered may not exceed 50% of our total number of issued and outstanding shares); (2) preferentially allocated to the members of the ESOA pursuant to relevant provisions of the Financial Investment Services and Capital Markets Act; (3) issued for the purpose of issuing depositary receipts pursuant to relevant provisions of the Financial Investment Services and Capital Investment Services a

Markets Act (where the number of such shares so issued may not exceed 50% of our total number of issued and outstanding shares); (4) issued to directors or employees as a result of exercise of stock options we granted to them pursuant to the Korean Commercial Code; (5) issued to a financial investment company, a private equity fund or a special purpose company under the Financial Investment Services and Capital Markets Act; or (6) issued to any specified foreign investors, foreign or domestic financial institutions or alliance companies for operational needs such as introduction of advanced financial technology, improvement of its or subsidiaries' financial structure and funding or strategic alliance (where such number of shares so issued may not exceed 50% of our total number of issued and outstanding shares). Under the Korean Commercial Code, a company may vary, without stockholders' approval, the terms of such preemptive rights for different classes of shares. Public notice of the preemptive rights to new shares and the transferability thereof must be given not less than two weeks (excluding the period during which the shareholders' register is closed) prior to the record date. We will notify the shareholders who are entitled to subscribe for newly issued shares of the deadline for subscription at least two weeks prior to the deadline. If a shareholder fails to subscribe on or before such deadline, the shareholder's preemptive rights will lapse. Our board of directors may determine how to distribute shares in respect of which preemptive rights have not been exercised or where fractions of shares occur. Under the Financial Investment Services and Capital Markets Act, if a listed company intends to issue new shares by way of allotment to shareholders, it must issue a certificate of preemptive right to the newly issued shares. Furthermore, the company must list the newly issued shares on the Korea Exchange for a certain period of time or designate a securities company to broker and/or deal in such newly issued shares in order to ensure that they are properly distributed. In the event certain shareholder forfeit their right to subscribe to newly issued shares, the company may allot the forfeited shares to a third party under certain conditions, including in relation to the purchase price of such shares, although in principle, the company must withdraw the forfeited shares. Under the Korean Commercial Code, when a company issues new shares by way of allotment to a third party, such company must notify its stockholders or make public notice of the conditions and other details of such new shares not less than two weeks prior to the relevant subscription payment date. Under the Financial Investment Services and Capital Markets Act, however, a listed company may substitute such notification or public notice by disclosing the material fact in a report publicly filed with the listing authorities.

Under the Financial Investment Services and Capital Markets Act, members of a company's employee stock ownership association, whether or not they are shareholders, have a preemptive right, subject to certain exceptions, to subscribe for up to 20% of the shares publicly offered pursuant to the Financial Investment Services and Capital Markets Act. However, this right is exercisable only to the extent that the total number of shares so acquired and held by such members does not exceed 20% of the total number of shares to be newly issued and shares then outstanding. As of December 31, 2022, the employee stock ownership association owned 26,121,183 shares, or 5.13%, of our common stock.

#### **General Meeting of Shareholders**

There are two types of general meetings of shareholders: annual general meetings and extraordinary general meetings. We are required to convene our annual general meeting within three months after the end of each fiscal year. Subject to a board resolution or court approval, an extraordinary general meeting of shareholders may be held when necessary or at the request of our Audit Committee. In addition, under the Korean Commercial Code, an extraordinary general meeting of shareholders may be held at the request of the shareholders holding shares for at least six months of an aggregate of 1.5% or more of the outstanding shares with voting rights of the listed company, subject to a board resolution or court approval. Furthermore, under the Act on the Corporate Governance of Financial Companies of Korea and its sub-regulations, an extraordinary general meeting of shareholders holding company (i) whose total assets at the end of the latest fiscal year is W5 trillion or more and (ii) who is in control of two or more subsidiaries, each with total assets of W2 trillion or more) or more of the outstanding shares of the company, subject to a board resolution shares of the company, subject to a board resolution shares of the company, is a extraordinary general meeting of 1.5% (0.75% in the case of a financial holding company (i) whose total assets at the end of the latest fiscal year is W5 trillion or more and (ii) who is in control of two or more subsidiaries, each with total assets of W2 trillion or more of the outstanding shares of the company, subject to a board resolution or court approval. Meeting agendas are determined by the board of directors or proposed by holders of an aggregate of 3% or more of the outstanding shares with voting rights by way of a written proposal to the board of directors at

least six weeks prior to the meeting. In addition, under the Korean Commercial Code, the meeting agenda may be proposed by the shareholders holding shares for at least six months of an aggregate of 1% (0.5% in the case of a listed company whose capital at the end of the latest operating year is \$100 billion or more) or more of the outstanding shares of the listed company. Furthermore, under the Act on the Corporate Governance of Financial Companies and its sub-regulations, the meeting agenda may be proposed by the shareholders holding shares for at least six months of an aggregate of 0.1%. Written notices stating the date, place and agenda of the meeting must be given to the shareholders at least two weeks prior to the date of the general meeting of shareholders; provided, that, notice may be given to holders of 1% or less of the total number of issued and outstanding shares which are entitled to vote, by placing at least two public notices at least two weeks in advance of the meeting in at least two daily newspapers or by using an electronic method defined under the Korean Commercial Code and related regulations at least two weeks in advance of the meeting. Currently, we use *The Korea Economic Daily* and *Maeil Business Newspaper* for the publication of such notices. Shareholders who are not on the shareholders, and they are not entitled to attend or vote at such meeting.

The general meeting of shareholders is held at our executive office (which is our registered executive office) or, if necessary, may be held anywhere in the vicinity of our executive office.

## **Voting Rights**

Holders of common shares are entitled to one vote for each share. However, voting rights with respect to common shares that we hold and common shares that are held by a corporate shareholder, more than one-tenth of the outstanding capital stock of which is directly or indirectly owned by such shareholder, may not be exercised. Unless stated otherwise in a company's Articles of Incorporation, the Korean Commercial Code permits holders of an aggregate of 3% (1%, in case of a company whose total assets as at the end of the latest fiscal year is  $\Psi$ 2 trillion or more) or more of the outstanding shares with voting rights to request cumulative voting when electing two or more directors. Our Articles of Incorporation currently do not prohibit cumulative voting. If a listed company's total assets amounted to  $\mathbb{W}$  2 trillion or more as of the end of the latest fiscal year, the company is required to establish and maintain an audit committee, whose members must be composed of directors of such company as appointed at a shareholders meeting. At least one member of the audit committee must be an outside director of such company. For a large listed company with total assets of  $W^2$  trillion or more as of the end of the latest fiscal year and a listed company with total assets of \#100 billion or more as of the end of the latest fiscal year that has established an audit committee instead of a full-time auditor, the company is required that at least one director (or more than two directors, if specified in the articles of incorporation) who will serve as an audit committee member must be appointed separately from the other directors at the general meeting of shareholders. If the aggregate number of voting shares held by any shareholder exceeds 3% of the total number of issued and outstanding voting shares, then the shareholder may not exercise its voting rights with respect to the shares it holds in excess of such 3% threshold to elect or remove a member of the audit committee. In case the shareholder is the company's largest shareholder, the shareholder and its specially related persons (as defined under the relevant laws) may not exercise their voting rights with respect to the shares they collectively hold in excess of the 3% threshold to elect or remove the audit committee member who is not an outside director of the company. If the listed company's total assets amounted to W100 billion or above but below W2 trillion as of the end of the latest fiscal year, the company is required to appoint at least one standing director or one director to its audit committee through a shareholders' meeting. If the aggregate number of voting shares held by any shareholder of such company exceeds 3% of the total number of issued and outstanding voting shares, then the shareholder may not exercise its voting rights with respect to the shares it holds in excess of the 3% threshold to elect or remove the company's statutory auditor.

The Korean Commercial Code and our Articles of Incorporation provide that an ordinary resolution may be adopted if approval is obtained from the holders of at least a majority of those common shares present or represented at such meeting and such majority also represents at least one-fourth of the total of our issued and outstanding common shares. Holders of non-voting shares (other than enfranchised non-voting shares) are not entitled to vote on any resolution or to receive notice of any general meeting of shareholders unless the agenda of the meeting includes consideration of a resolution on which such holders are entitled to vote. The Korean Commercial Code provides that a company's articles of incorporation may prescribe conditions for enfranchisement of non-voting shares. For example, if our general shareholders' meeting resolves not to pay to holders of preferred shares the annual dividend as determined by the board of directors at the time of issuance of such shares, the holders of preferred shares will be entitled to exercise voting rights from the general shareholders' meeting immediately following the meeting adopting such resolution until the end of the meeting to declare to pay such dividend with respect to the preferred shares. Holders of such enfranchised preferred shares the same rights as holders of common shares to request, receive notice of, attend and vote at a general meeting of shareholders.

The Korean Commercial Code provides that to amend the Articles of Incorporation (which is also required for any change to the authorized share capital of the company) and in certain other instances, including removal of a director of a company, dissolution, merger or consolidation of a company, transfer of the whole or a significant part of the business of a company, acquisition of all of the business of any other company or issuance of new shares at a price lower than their par value, a special resolution must be adopted by the approval of the holders of at least two-thirds of those shares present or represented at such meeting and such special majority must also represent at least one-third of the total issued and outstanding shares with voting rights of the company.

In addition, in the case of amendments to the Articles of Incorporation or any merger or consolidation of a company or in certain other cases which affect the rights or interest of the shareholders of the preferred shares, a resolution must be adopted by a separate meeting of shareholders of the preferred shares. Such a resolution may be adopted if the approval is obtained from shareholders of at least two-thirds of the preferred shares present or represented at such meeting and such preferred shares also represent at least one-third of the total issued and outstanding preferred shares of the company.

A shareholder may exercise his voting rights by proxy given to another shareholder. If a particular shareholder intends to obtain proxy from another shareholder, a reference document specified by the Financial Supervisory Service must be sent to the shareholder giving proxy, with a copy furnished to the company's executive office or the branch office, transfer agent and the Financial Services Commission. The proxy must present the power of attorney prior to the start of the general meeting of shareholders.

## **Rights of Dissenting Shareholders**

Pursuant to the Financial Investment Services and Capital Markets Act, in certain limited circumstances (including, without limitation, if we transfer all or any significant part of our business or if we merge or consolidate with another company), dissenting holders of shares have the right to require us to purchase their shares. Pursuant to the Financial Holding Companies Act, the Financial Investment Services and Capital Markets Act and the Korean Commercial Code, if a financial holding company acquires a new direct or indirect subsidiary through the exchange or transfer of shares except in limited circumstances, the dissenting holders of such shares have the right to require us to purchase their shares. To exercise such a right, shareholders must submit to us a written notice of their intention to dissent prior to the general meeting of shareholders. Within 20 days (or 10 days under certain circumstances according to the Financial Holding Companies Act) after the date on which the relevant resolution is passed at such meeting, such dissenting shareholders must request in writing that we purchase their shares. We are obligated to purchase the shares of dissenting shareholders within one month after the end of such request period at a price to be determined by negotiation between the shareholder and us. If we cannot agree on a price with the shareholder through such negotiations, the purchase price will be the arithmetic mean of (1) the weighted average of the daily closing share prices on the KRX KOSPI Market of the Korea Exchange for two months prior to the date of the adoption of the relevant board of directors' resolution, (2) the weighted average of the daily closing share prices on the KRX KOSPI Market of the Korea Exchange for one month prior to the date of the adoption of the relevant board of directors' resolution and (3) the weighted average of the daily closing share prices on the KRX KOSPI Market of the Korea Exchange for one week prior to the date of the adoption of the relevant board of directors' resolution. If we or the dissenting shareholder who requested purchase of their shares do not accept such purchase price, we or the shareholder may request to the court to adjust such purchase price.

#### **Register of Shareholders and Record Dates**

We maintain the register of our shareholders at our transfer agent's office in Seoul, Korea. The Korea Securities Depository as our transfer agent, registers transfers of shares on the register of shareholders upon presentation of the share certificates.

The record date for annual dividends is December 31. For the purpose of determining the holders of shares entitled to annual dividends, the register of shareholders may be closed for the period from January 1 of each year up to January 15 of such year. Further, the Korean Commercial Code and the Articles of Incorporation permit us upon at least two weeks' public notice to set a record date and/or close the register of shareholders for not more than three months for the purpose of determining the shareholders entitled to certain rights pertaining to the shares. The trading of shares and the delivery of certificates in respect thereof may continue while the register of shareholders is closed.

#### **Other Shareholder Rights**

Our articles of incorporation do not have sinking fund provisions or provisions creating liability to further capital calls. Other than to amend our articles of incorporation in accordance with the Korean Commercial Code, no particular action is necessary to change the rights of holders of our capital stock. In addition, our articles of incorporation do not have specific provisions for governing changes in capital or which would have an effect of delaying, deferring or preventing a change in control of us and that would operate only with respect to a merger, acquisition or corporate restructuring involving us or any of our subsidiaries.

## Directors

Under the Korean Commercial Code and our articles of incorporation, any director wishing to enter into a transaction with us or our subsidiaries in his or her personal capacity is required to obtain the prior approval of the board of directors, and any director having an interest in the transaction may not vote at the meeting of the board of directors to approve the transaction.

Neither our articles of incorporation nor applicable Korean laws have provisions relating to (i) the directors' power, in the absence of an independent quorum, to vote compensation to themselves or any members of their body (ii) borrowing powers exercisable by the directors and how such borrowing powers can be varied; (iii) retirement or non-retirement of directors under an age limit requirement; or (iv) the number of shares required for a director's qualification.

#### **Description of Preferred Stock**

On January 25, 2007, as part of funding our acquisition of LG Card, we issued 28,990,000 Series 10 non-voting redeemable preferred shares. On January 25, 2012, we redeemed all of the Series 10 preferred shares.

On January 25, 2007, as part of funding our acquisition of LG Card, we issued 14,721,000 Series 11 non-voting redeemable convertible preferred shares. On January 25, 2012, we redeemed all of the Series 11 preferred shares.

On April 21, 2011, as part of funding for preferred stocks due to be redeemed in January 2012, we issued 11,100,000 Series 12 non-voting redeemable preferred shares for the subscription price of \$100,000 per share, or \$1,110 billion in the aggregate. On April 21, 2016, we redeemed all of the Series 12 redeemable preferred shares.

On May 1, 2019, as part of funding for the acquisition of Orange Life Insurance, we issued 17,482,000 shares of non-voting convertible preferred stock through third-party allotment at a price of W42,900.

#### **Annual Report**

Under the Financial Investment Services and Capital Markets Act, we must file with the Financial Services Commission and the Korea Exchange an annual business report (containing audit report and audited annual nonconsolidated and consolidated financial statements) within 90 days after the end of our fiscal year as well as a semiannual business report within 45 days after the end of the first six months of our fiscal year and quarterly business reports within 45 days after the end of the first three months and nine months of our fiscal year, respectively (in each case, containing review report and reviewed interim nonconsolidated and consolidated financial statements). Copies of such reports are available for public inspection at the websites of the Financial Services Commission and the Korea Exchange.

#### **Transfer of Shares**

Under the Korean Commercial Code, the transfer of shares is effected by the delivery of share certificates. In order to exercise shareholders' rights, the transferee must have his name and address registered on the registry of shareholders. For this purpose, shareholders are required to file with us their name, address and seal. Nonresident shareholders must notify us of the name of their proxy in Korea to which our notice can be sent. Under the Financial Services Commission regulations, nonresident shareholders may appoint a standing proxy and may not allow any person other than the standing proxy to exercise rights regarding the acquired share or perform any task related thereto on his behalf, subject to certain exceptions. Under current Korean regulations, the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a dealing, brokerage or collective investment license and internationally recognized custodians are authorized to act as standing proxy and provide related services. Certain foreign exchange controls and securities regulations apply to the transfer of shares by nonresidents or non-Koreans. See "Item 10.D. Exchange Controls." As to the ceiling on the aggregate shareholdings of a single shareholder and persons who have a special relationship with such shareholder, please see "Item 4.B. Business Overview — Supervision and Regulation — Principal Regulations Applicable to Financial Holding Companies — Restrictions on Financial Holding Company Ownership."

#### **Acquisition of Treasury Shares**

Under the Korean Commercial Code, we may acquire our own shares upon resolution of the general meeting of the shareholders or resolution of the board of directors pursuant to Article 165-3 of the Financial Investment Services and Capital Markets Act by either (i) purchasing them on a stock exchange or (ii) purchasing a number of shares, other than the redeemable shares as set forth in Article 345, Paragraph (1) of the Korean Commercial Code, from each shareholder in proportion to its existing shareholding ratio through the methods set forth in the Presidential Decree, provided that the total purchase price does not exceed the amount of our profit that may be distributed as dividends in respect of the immediately preceding fiscal year. In addition, pursuant to the Financial Investment Services and Capital Markets Act and regulations under the Financial Holding Companies Act, we may purchase our own shares on the KRX KOSPI Market of the Korea Exchange, through a tender offer, or through a trust agreement with a trust company, or retrieve our own shares from a trust company upon termination of a trust agreement, subject to the restrictions that (1) the aggregate purchase price of such shares may not exceed the total amount available for distribution of dividends at the end of the preceding fiscal year less the amounts of dividends and reserves for such fiscal year, subtracted by the sum of (a) the purchase price of treasury stock acquired if any treasury stock has been purchased after the end of the preceding fiscal year pursuant to the Commercial Act or the Financial Investment Services and Capital Markets Act, (b) the amount subject to trust agreements, and (c) the amount of dividends approved at the ordinary general shareholders' meeting after the end of the preceding fiscal year and the amount of retained earnings reserve required under the Commercial Act; plus if any treasury stock has been disposed of after the end of the preceding

fiscal year, the acquisition cost of such treasury stock and (2) the purchase of such shares shall meet the requisite capital ratio under the Financial Holding Companies Act and the guidelines issued by the Financial Services Commission. In general, under the Financial Holding Companies Act, our subsidiaries are not permitted to acquire our shares.

## **Liquidation Rights**

In the event we are liquidated, the assets remaining after the payment of all debts, liquidation expenses and taxes will be distributed to shareholders in proportion to the number of shares held by such shareholders. Holders of preferred shares may have preferences over holders of common shares in liquidation.

## **ITEM 10.C. Material Contracts**

None.

## **ITEM 10.D. Exchange Controls**

### General

The Foreign Exchange Transaction Act of Korea the related Presidential Decree and the regulations under such Act and Decree (collectively the "Foreign Exchange Transaction Laws") herein, regulate investment in Korean securities by nonresidents and issuance of securities by Korean companies outside Korea. Under the Foreign Exchange Transaction Laws, nonresidents may invest in Korean securities only to the extent specifically allowed by these laws or otherwise permitted by the Ministry of Strategy and Finance of Korea. The Financial Services Commission has also adopted, pursuant to its authority under the Financial Investment Services and Capital Markets Act, regulations that restrict investment by foreigners in Korean securities and regulate issuance of securities by Korean companies outside Korea.

Under the Foreign Exchange Transaction Laws, (1) if the Government determines that it is inevitable due to the outbreak of natural calamities, wars, conflict of arms or grave and sudden changes in domestic or foreign economic circumstances or other situations equivalent thereto, the Ministry of Strategy and Finance may temporarily suspend payment, receipt or the whole or part of transactions to which the Foreign Exchange Transaction Laws apply, or impose an obligation to safe keep, deposit or sell means of payment in or to certain Korean governmental agencies or financial institutions; and (2) if the Government determines that international balance of payments and international finance face or are likely to face serious difficulty or the movement of capital between Korea and abroad will cause or is likely to cause serious obstacles in carrying out its currency policies, exchange rate policies and other macroeconomic policies, the Ministry of Strategy and Finance may take measures to require any person who intends to perform capital transactions to obtain permission or to require any person who performs capital transactions to deposit part of the payments received in such transactions at certain Korean governmental agencies or financial institutions, in each case subject to certain limitations.

#### **Restrictions Applicable to Shares**

Under the Foreign Exchange Transaction Laws, a foreign investor who intends to acquire shares must designate a foreign exchange bank at which he must open a foreign currency account and a Won account exclusively for stock investments. No approval is required for remittance into Korea and deposit of foreign currency funds in the foreign currency account. Foreign currency funds may be transferred from the foreign currency account at the time required to make a deposit for, or settle the purchase price of, a stock purchase transaction to a Won account opened at a financial investment company with a securities dealing or brokerage license. Funds in the foreign currency account may be remitted abroad without any Korean governmental approval.

Dividends on shares of Korean companies are paid in Won. No Korean governmental approval is required for foreign investors to receive dividends on, or the Won proceeds of the sale of, any shares to be paid, received and retained in Korea. Dividends paid on, and the Won proceeds of the sale of, any shares held by a nonresident of Korea must be deposited either in a Won account with the investor's financial investment company with a securities dealing or brokerage license or in his Won account. Funds in the investor's Won account may be transferred to his foreign currency account or withdrawn for local living expenses, provided that any withdrawal of local living expenses by any one person exceeding US\$10,000 per day needs to be reported to the governor of the Financial Supervisory Service by the foreign exchange bank at which the Won account is maintained. Funds in the Won account may also be used for future investment in shares or for payment of the subscription price of new shares obtained through the exercise of preemptive rights.

Financial investment companies with a securities dealing, brokerage or collective investment license are allowed to open foreign currency accounts with foreign exchange banks exclusively for accommodating foreign investors' stock investments in Korea. Through these accounts, financial companies with a securities dealing, brokerage or collective investment license may enter into foreign exchange transactions on a limited basis, such as conversion of foreign currency funds and Won funds, either as a counterparty to or on behalf of foreign investors, without the investors having to open their own accounts with foreign exchange banks.

## **ITEM 10.E. Taxation**

The following summary is based upon tax laws, regulations, rulings, decrees, income tax conventions (treaties), administrative practice and judicial decisions of Korea and the United States as of the date of this annual report, and is subject to any change in Korean or United States law that may come into effect after such date. Investors in shares of common stock or American depositary shares are advised to consult their own tax advisers as to the Korean, United States or other tax consequences of the purchase, ownership and disposition of such securities, including the effect of any national, state or local tax laws.

## **Korean Taxation**

The following summary of Korean tax considerations applies to you so long as you are not:

- a resident of Korea;
- a corporation having its head office, principal place of business, or place of effective management in Korea (a Korean corporation); or
- engaged in a trade or business in Korea through a permanent establishment or a fixed base to which the relevant income is attributable or with which the relevant income is effectively connected.

#### Taxation of Dividends on Shares of Common Stock or American Depositary Shares

We will deduct Korean withholding tax from dividends (whether in cash or in shares) paid to you at a rate of 22% (including local income surtax). If you are a qualified resident and a beneficial owner of the dividends in a country that has entered into a tax treaty with Korea, you may qualify for a reduced rate of Korean withholding tax. See "— Tax Treaties" below for a discussion of treaty benefits. If we distribute to you free shares representing a transfer of certain capital reserves or asset revaluation reserves into paid-in capital, such distribution may be subject to a Korean withholding tax.

## Taxation of Capital Gains from Transfer of Common Shares or American Depositary Shares

As a general rule, capital gains earned by non-residents upon transfer of our common shares or American depositary shares ("ADSs") are subject to a Korean withholding tax at the lower of (1) 11% (including local income surtax) of the gross proceeds realized or (2) 22% (including local income surtax) of the net realized gain,

subject to the production of satisfactory evidence of acquisition costs and certain direct transaction costs associated with common shares or ADSs, unless exempt from Korean income taxation under an applicable tax treaty between Korea and the country of your tax residence. See "— Tax Treaties" below for a discussion on treaty benefits. Even if you do not qualify for the exemption under a tax treaty, you will not be subject to the foregoing withholding tax on capital gains if you meet certain requirements for the exemption under Korean domestic tax laws discussed in the following paragraphs.

You will not be subject to the Korean income taxation on capital gains realized upon a transfer of our common shares through the Korea Exchange if you (1) have no permanent establishment in Korea and (2) do not own and have never owned (together with any shares owned by any entity with which you have a special relationship and possibly including the shares represented by the ADSs) 25% or more of our total issued and outstanding shares at any time during the calendar year in which the sale occurs and during the five consecutive calendar years prior to the calendar year in which the sale occurs.

Under Korean tax law, ADSs are viewed as shares of stock for capital gains tax purposes. Accordingly, capital gains from sale or disposition of ADSs are taxed (if taxable) as if such gains are from sale or disposition of shares of our common stock. It should be noted that (i) capital gains earned by you (regardless of whether you have a permanent establishment in Korea) from a transfer of ADSs outside Korea will generally be exempt from Korean income taxation by virtue of the Special Tax Treatment Control Law of Korea, or the STTCL, provided that the issuance of ADSs is deemed to be an overseas issuance under the STTCL, but (ii) in the case where an owner of the underlying shares of stock transfers ADSs after conversion of the underlying shares into ADSs, the exemption under the STTCL described in (i) will not apply. In the case where an owner of the underlying shares of stock transfers and pay tax unless a purchaser or a financial investment company with a brokerage license, as applicable, withholds and pays the tax on capital gains derived from transfer of ADSs, as discussed below.

If you are subject to tax on capital gains with respect to a sale of common shares or ADSs, the purchaser or, in the case of a sale of common shares on the Korea Exchange or through a financial investment company with a brokerage license in Korea, the financial investment company is required to withhold Korean tax from the sales proceeds in an amount equal to 11% (including local income surtax) of the gross realization proceeds and to remit the withheld tax to the Korean tax authority, unless you establish your entitlement to an exemption under an applicable tax treaty or domestic tax law or produce satisfactory evidence of your acquisition costs and certain direct transaction costs associated with common shares or ADSs. See the discussion under "— Tax Treaties" below for an explanation of claiming treaty benefits.

## **Tax Treaties**

Korea has entered into a number of income tax treaties with other countries, including the United States, which reduce or exempt Korean withholding tax on the income derived by residents of such treaty countries. For example, under the Korea-U.S. income tax treaty, reduced rates of Korean withholding tax on dividends of 16.5% or 11.0%, respectively (including local income surtax), depending on your shareholding ratio, and an exemption from Korean withholding tax on capital gains are generally available to residents of the United States that are beneficial owners of the relevant dividend income or capital gains. However, under Article 17 (Investment or Holding Companies) of the Korea-U.S. income tax treaty, such reduced rates and exemption do not apply if (1) you are a United States corporation, (2) by reason of any special measures the tax imposed on you by the United States on corporate profits, and (3) 25% or more of your capital is held of record or is otherwise determined, after consultation between competent authorities of the United States and Korea, to be owned directly or indirectly by one or more persons who are not individual residents of the United States. Also, under Article 16 (Capital Gains) of the Korea-U.S. income tax treaty, the exemption on capital gains does not apply if (a) you have a permanent establishment in Korea and any shares of common stock in which you hold an

interest and which gives rise to capital gains are effectively connected with such permanent establishment, (b) you are an individual and you maintain a fixed base in Korea for a period or periods aggregating 183 days or more during the taxable year and your common shares or ADSs giving rise to capital gains are effectively connected with such fixed base or (c) you are an individual and you are present in Korea for a period or periods of 183 days or more during the taxable year.

You should inquire for yourself whether you are entitled to the benefit of an income tax treaty with Korea. It is the responsibility of the party claiming the benefits of an income tax treaty in respect of dividend payments or capital gains to submit to us, the purchaser, the financial investment company, or other withholding agent, as the case may be, a certificate as to his tax residence. In the absence of sufficient proof, we, the purchaser, the financial investment company, or other withholding agent, as the case may be, must withhold tax at the normal rates. Furthermore, in order for you to claim the benefit of a tax rate reduction or tax exemption on certain Korean source income (e.g., dividends or capital gains) under an applicable tax treaty as the beneficial owner of such Korean source income, Korean tax law requires you (or your agent) to submit an application (in the case for reduced withholding tax rate, an "application for entitlement to reduced tax rate," and in the case for exemption from withholding tax, an "application for tax exemption") with a certificate of your tax residency issued by the competent authority of your country of tax residence, subject to certain exceptions (together, the "BO application"). For example, a U.S. resident would be required to provide a Form 6166 as a certificate of tax residency with the application for entitlement to reduced tax rate or the application for tax exemption, as the case may be. Subject to certain exceptions, where the relevant income is paid to an overseas investment vehicle (an "OIV") that is not the beneficial owner of such income, a beneficial owner claiming the benefit of an applicable tax treaty with respect to such income must submit its BO application to such OIV, which in turn must submit an OIV report and a schedule of beneficial owners (and the BO applications collected from each beneficial owner, if such beneficial owner is applying for tax exemption) to the withholding agent prior to the payment date of such income. Effective as of January 1, 2022, an OIV shall be deemed to be a beneficial owner of the Korean source income if (i) under the applicable tax treaty, the OIV bears tax liabilities in the country in which it is established and (ii) the Korean source income is eligible for the treaty benefits under the tax treaty. The benefits under a tax treaty between Korea and the country of such OIV's residence will apply with respect to the relevant income paid to such OIV, subject to certain application requirements as prescribed by the Corporate Income Tax or Individual Income Tax Law. In the case of a tax exemption application, the withholding agent is required to submit such application (together with the applicable OIV report in the event the income will be paid to an OIV) to the relevant district tax office by the ninth day of the month following the date of the payment of such income.

## Inheritance Tax and Gift Tax

If you die while holding an ADS or donate an ADS, it is unclear whether, for Korean inheritance and gift tax purposes, you would be treated as the owner of the shares of common stock underlying the ADSs. If the tax authority interprets depositary receipts as the underlying share certificates, you may be treated as the owner of the shares of common stock and your heir or the donee (or in certain circumstances, you as the donor) will be subject to Korean inheritance or gift tax, which ranges from 10% to 50% recently, assessable based on the value of the ADSs or shares of common stock and the identity of the individual against whom the tax is assessed.

If you die while holding a common share or donate a subscription right or a common share, your heir or donee (or in certain circumstances, you as the donor) will be subject to Korean inheritance or gift tax at the same rate as indicated above.

At present, Korea has not entered into any tax treaty relating to inheritance or gift taxes.

## Securities Transaction Tax

If you transfer common shares through the Korea Exchange in 2023, you will be subject to a securities transaction tax at the rate of 0.05% (with such rate to be reduced to 0.03% if the transfer is made in 2024 and no

such securities transaction tax to be imposed on transfers starting January 1, 2025) and an agriculture and fishery special surtax at the rate of 0.15% of the sales price of common shares. If your transfer of common shares is not made through the Korea Exchange, subject to certain exceptions, you will be subject to a securities transaction tax at the rate 0.35% but will not be subject to an agriculture and fishery special surtax.

Depositary receipts, which the ADSs constitute, are included in the scope of securities transfer subject to securities transaction tax. Nonetheless, transfer of depositary receipts listed on a foreign securities exchange similar to the Korea Exchange (e.g., the New York Stock Exchange, the NASDAQ National Market) will not be subject to the securities transaction tax.

In principle, the securities transaction tax, if applicable, must be paid by a transferor of common shares. When a transfer is effected through a securities settlement company in Korea, such settlement company is generally required to withhold and remit the tax to the tax authorities. When such transfer is made through a financial investment company only, such financial investment company is required to withhold and remit the tax. Where a transfer is affected by a non-resident who has no permanent establishment in Korea by a method other than through a securities settlement company or a financial investment company, the transferee is required to withhold the securities transaction tax.

Non-reporting or underreporting of securities transaction tax will generally result in the imposition of penalties equal to 20% to 60% of the non-reported or 10% to 60% of underreported tax amount and a failure to timely pay securities transaction tax due will result in penalties of 8.03% per annum of the due but unpaid tax. The penalty is imposed on the party responsible for paying the securities transaction tax or, if the securities transaction tax is to be withheld, on the party that has the withholding obligation.

#### **Certain United States Federal Income Tax Consequences**

The following summary describes certain U.S. federal income tax considerations for beneficial owners of our common shares or ADSs that hold the common shares or ADSs as capital assets and are "U.S. holders." You are a "U.S. holder" if you are for U.S. federal income tax purposes:

- (i) an individual citizen or resident of the United States;
- (ii) a corporation, or other entity treated as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States, any state thereof or District of Columbia;
- (iii) an estate the income of which is subject to U.S. federal income taxation regardless of its source;
- (iv) a trust that is subject to the primary supervision of a court within the United States and has one or more U.S. persons with authority to control all substantial decisions of the trust; or
- (v) a trust that has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

In addition, this summary only applies to you if you are a U.S. holder that is a resident of the United States for purposes of the current income tax treaty between the United States and Korea (the "Treaty"), your common shares or ADSs are not, for purposes of the Treaty, effectively connected with a permanent establishment in Korea and you otherwise qualify for the full benefits of the Treaty.

This summary is based upon the provisions of the Internal Revenue Code of 1986, as amended (the "Code"), and regulations (including proposed regulations), rulings and judicial decisions thereunder as of the date hereof, as well as the Treaty, all of which are subject to change, perhaps retroactively. It is for general purposes only and you should not consider it to be tax advice. In addition, it assumes that each obligation under the deposit agreement will be performed in accordance with its terms. This summary does not represent a detailed description of all the U.S. federal income tax consequences to you in light of your particular circumstances, and

does not address the Medicare tax on net investment income, U.S. federal estate and gift taxes or the effects of any state, local or non-U.S. tax laws. In addition, it does not represent a detailed description of the U.S. federal income tax consequences applicable to you if you are subject to special treatment under the U.S. federal income tax laws, including if you are:

- a bank or one of certain other financial institutions;
- a dealer in securities or currencies;
- an insurance company;
- a regulated investment company;
- a real estate investment trust;
- a tax-exempt entity;
- a trader in securities that has elected to use a mark-to-market method of accounting for your securities holdings;
- a person holding common shares or ADSs as part of a hedging, conversion, constructive sale or integrated transaction or a straddle;
- a person liable for the alternative minimum tax;
- a partnership or other pass-through entity for U.S. federal income tax purposes;
- a person who owns or is deemed to own 10% or more of our stock (by vote or value);
- a person required to accelerate the recognition of any item of gross income with respect to our common shares or ADSs as a result of such income being recognized on an applicable financial statement; or
- a person whose functional currency is not the U.S. Dollar.

If a partnership (or other entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds our common shares or ADSs, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our common shares or ADSs, you are urged to consult your tax advisor.

You should consult your own tax advisor concerning the particular U.S. federal tax consequences to you of the ownership and disposition of common shares or ADSs, as well as any consequences arising under the laws of any other taxing jurisdiction.

## American Depositary Shares

If you hold ADSs, for U.S. federal income tax purposes, you generally will be treated as the owner of the underlying common shares that are represented by such ADSs. Accordingly, deposits or withdrawals of common shares for ADSs will not be subject to U.S. federal income tax.

#### Distributions on Common Shares or American Depositary Shares

Subject to the discussion below under "Passive Foreign Investment Company Rules," the gross amount of distributions on our common shares or ADSs (including amounts withheld to reflect Korean withholding tax) will be taxable as dividends to the extent paid out of our current or accumulated earnings and profits (as determined under U.S. federal income tax principles). Such income (including withheld taxes) will be includable in your gross income as ordinary income on the day you actually or constructively receive it, in the case of our common shares, or the day actually or constructively received by the ADS depositary, in the case of ADSs. Such dividends will not be eligible for the dividends-received deduction generally allowed to corporations under the Code.

Subject to applicable limitations (including a minimum holding period requirement), dividends received by non-corporate U.S. investors from a qualified foreign corporation may be treated as "qualified dividend income" that is subject to reduced rates of taxation. A qualified foreign corporation includes a foreign corporation that is eligible for the benefits of a comprehensive income tax treaty with the United States which the U.S. Treasury Department determines to be satisfactory for these purposes and which includes an exchange of information provision. The U.S. Treasury Department has determined that the Treaty meets these requirements, and we believe we are eligible for the benefits of the Treaty. A foreign corporation is also treated as a qualified foreign corporation with respect to dividends paid by that corporation on shares (or ADSs backed by such shares) that are readily tradable on an established securities market in the United States. U.S. Treasury Department guidance indicates that our ADSs, which are listed on the New York Stock Exchange, are readily tradable on an established securities market in the United States for these purposes. However, our common shares that are not represented by ADSs will generally not be considered readily tradable on an established securities market in the United States for these purposes. There also can be no assurance that our ADSs will be considered readily tradable on an established securities market in the United States in later years. Furthermore, non-corporate U.S. holders will not be eligible for the rate reduction on any dividends that we pay if we are a passive foreign investment company (as discussed below under "Passive Foreign Investment Company Rules") in the taxable year in which such dividends are paid or were a passive foreign investment company in the preceding taxable year. If you are a non-corporate U.S. holder, you should consult your own tax advisor regarding the application of these rules given your particular circumstances.

The amount of any dividend paid in Korean Won will equal the U.S. Dollar value of the Korean Won received calculated by reference to the exchange rate in effect on the date you receive the dividend, in the case of our common shares, or the date received by the ADS depositary, in the case of ADSs, regardless of whether the Korean Won are converted into U.S. Dollars. If the Korean Won received as a dividend are converted into U.S. Dollars on the date they are received, you generally will not be required to recognize foreign currency gain or loss in respect of the dividend income. If the Korean Won received are not converted into U.S. Dollars on the date of receipt, you will have a basis in the Korean Won equal to their U.S. Dollar value on the date of receipt. Any gain or loss realized on a subsequent conversion or other disposition of the Korean Won will be treated as United States source ordinary income or loss.

Subject to certain significant conditions and limitations, Korean taxes withheld from dividends (at a rate not exceeding the rate provided in the Treaty) may be treated as foreign income taxes eligible for credit against your U.S. federal income tax liability. See "- Korean Taxation - Tax Treaties" for a discussion of the Treaty rate. Korean taxes withheld in excess of the rate provided in the Treaty will not be eligible for credit against your U.S. federal income tax until you exhaust all effective and practical remedies to recover such excess withholding, including the seeking of competent authority assistance from the Internal Revenue Service (the "IRS"). For purposes of the foreign tax credit, dividends paid on our common shares or ADSs will be treated as income from sources outside the United States and will generally constitute passive category income. The rules governing the foreign tax credit are complex. For example, recently issued U.S. Treasury regulations impose additional requirements for foreign taxes to be eligible for a foreign tax credit, and there can be no assurance that those requirements will be satisfied if you do not elect to apply the benefits of the Treaty. Instead of claiming a foreign tax credit, you may be able to deduct Korean withholding taxes on dividends in computing your taxable income, subject to generally applicable limitations under U.S. federal income tax law (including that a U.S. holder is not eligible for a deduction for creditable foreign income taxes paid or accrued in a taxable year if such U.S. holder claims a foreign tax credit for any foreign income taxes paid or accrued in the same taxable year). You are urged to consult your tax advisors regarding the availability of the foreign tax credit or a deduction under your particular circumstances.

To the extent that the amount of any distribution exceeds our current and accumulated earnings and profits for a taxable year, as determined under U.S. federal income tax principles, the distribution will first be treated as a tax-free return of capital, causing a reduction of your adjusted basis in our common shares or ADSs (thereby increasing the amount of gain, or decreasing the amount of loss, to be recognized by you on a subsequent disposition of our common shares or ADSs), and the balance in excess of adjusted basis will be taxed as capital gain recognized on a sale or exchange. However, we do not expect to determine earnings and profits in accordance with U.S. federal income tax principles. Therefore, you should expect that a distribution will generally be reported and treated as a dividend (as discussed above).

Distributions of our common shares or ADSs or rights to subscribe for our common shares or ADSs that are received as part of a pro rata distribution to all of our shareholders (including holders of ADSs) generally will not be subject to U.S. federal income tax to recipient common shareholders (including holders of ADSs). Consequently, such distributions will not give rise to foreign source income and you will not be able to use a foreign tax credit for any Korean withholding tax imposed on such distributions unless such credit can be applied (subject to applicable limitations) against U.S. tax due on other income derived from foreign sources.

#### Disposition of Common Shares or American Depositary Shares

For U.S. federal income tax purposes, you will recognize gain or loss upon the sale, exchange or other disposition of our common shares or ADSs in an amount equal to the difference between the amount realized upon the sale, exchange or other disposition and your adjusted tax basis in our common shares or ADSs, as the case may be, both as determined in U.S. Dollars. Subject to the discussion below under "— Passive Foreign Investment Company Rules," such gain or loss will generally be capital gain or loss and will generally be long-term capital gain or loss if at the time of sale, exchange or other disposition, our common shares or ADSs have been held for more than one year. Long-term capital gains of non-corporate U.S. holders (including individuals) are eligible for reduced rates of taxation. The deductibility of capital losses is subject to limitations.

Any gain or loss you recognize on the sale, exchange or other disposition of our common shares or ADSs will generally be treated as United States source gain or loss. Consequently, you may not be able to claim a foreign tax credit for any Korean tax imposed on the disposition of our common shares or ADSs unless such credit can be applied (subject to applicable limitations) against tax due on other income treated as derived from foreign sources. However, pursuant to recently issued U.S. Treasury regulations, any such Korean tax would generally not be a foreign income tax eligible for a foreign tax credit (regardless of any other income that you may have that is derived from foreign sources). In such case, however, the non-creditable Korean tax may reduce the amount realized on the sale, exchange or other disposition of our common shares or ADSs. You are urged to consult your tax advisors regarding the availability of the foreign tax credit under your particular circumstances.

You should note that any Korean securities transaction tax imposed upon a disposition of our common shares or ADSs generally will not be treated as a creditable foreign tax for U.S. federal income tax purposes.

#### Passive Foreign Investment Company Rules

Based upon the past and projected composition of our income and assets and valuation of our assets, we do not believe that we were a PFIC for 2022, and we do not expect to be a PFIC in 2023 or to become one in the foreseeable future, although there can be no assurance in this regard. PFIC status is a factual determination that is made annually. Accordingly, it is possible that we may become a PFIC in the current or any future taxable year due to changes in composition of our income or assets or valuation of our assets.

In general, we will be considered a PFIC for any taxable year in which:

- at least 75% of our gross income is passive income; or
- at least 50% of the value (generally determined based on a quarterly average) of our assets is attributable to assets that produce or are held for the production of passive income.

For this purpose, passive income generally includes dividends, interest, certain royalties and rents and gains from financial investments (other than certain income derived in the active conduct of a banking business as

discussed below). In addition, cash and other assets readily convertible into cash are generally considered passive assets. If we own at least 25% by value of another corporation's stock, we will be treated, for purposes of the PFIC rules, as owning our proportionate share of the assets and receiving our proportionate share of the income of that corporation.

Our determination with respect to our PFIC status is based in part upon certain proposed U.S. Treasury regulations and other administrative pronouncements from the IRS which provide special rules for determining the character of income derived in the active conduct of a banking business for purposes of the PFIC rules. Specifically, these rules treat certain income earned by a non-U.S. corporation engaged in the active conduct of a banking business as non-passive income. Although we believe we have adopted a reasonable interpretation of the proposed U.S. Treasury regulations and administrative pronouncements, there can be no assurance that the IRS will follow the same interpretation. You should consult your own tax advisor regarding the application of these rules.

If we are a PFIC for any taxable year during which you hold our common shares or ADSs (and you do not make a timely mark-to-market election, as described below), you will be subject to special tax rules with respect to any "excess distribution" that you receive and any gain you realize from the sale or other disposition (including a pledge) of our common shares or ADSs. These special tax rules generally will apply even if we cease to be a PFIC in future years. Distributions you receive in a taxable year that are greater than 125% of the average annual distributions you received during the shorter of the three preceding taxable years or your holding period for our common shares or ADSs will be treated as excess distributions. Under these special tax rules:

- the excess distribution or gain will be allocated ratably over your holding period for our common shares or ADSs;
- the amount allocated to the current taxable year, and any taxable year prior to the first taxable year in which we are a PFIC, will be treated as ordinary income; and
- the amount allocated to each other year will be subject to tax at the highest tax rate in effect for that year for individuals or corporations, as applicable, and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each such year.

In certain circumstances, you could make a mark-to-market election (under which in lieu of being subject to the special rules discussed above, you will include gain on our common shares or ADSs on a mark-to-market basis as ordinary income), provided that our common shares or ADSs are regularly traded on a qualified exchange or other market. Our common shares are listed on the Korea Exchange, which must meet certain trading, listing, financial disclosure and other requirements to be treated as a qualified exchange under applicable U.S. Treasury regulations for purposes of the mark-to-market election, and no assurance can be given that the common shares are or will continue to be "regularly traded" for purposes of the mark-to-market election. Our ADSs are currently listed on the New York Stock Exchange, which constitutes a qualified exchange, although there can be no assurance that the ADSs are or will continue to be "regularly traded." If you make a valid mark-to-market election, for each year that we are a PFIC you will include as ordinary income the excess of the fair market value of your common shares or ADSs at the end of the year over your adjusted tax basis in the common shares or ADSs. You will be entitled to deduct as an ordinary loss in each such year the excess of your adjusted tax basis in the common shares or ADSs over their fair market value at the end of the year, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. If you make an effective mark-to-market election, in each year that we are a PFIC any gain you recognize upon the sale or other disposition of your common shares or ADSs will be treated as ordinary income, and any loss will be treated as ordinary loss, but such loss will be ordinary only to the extent of the net amount previously included in income as a result of the mark-to-market election.

A U.S. holder's adjusted tax basis in common shares or ADSs will be increased by the amount of any income inclusion and decreased by the amount of any deductions under the mark-to-market rules. If a U.S. holder

makes a mark-to-market election, it will be effective for the taxable year for which the election is made and all subsequent taxable years unless the common shares or ADSs are no longer regularly traded on a qualified exchange or other market or the IRS consents to the revocation of the election. You should consult your tax advisor about the availability of the mark-to-market election, and whether making the election would be advisable with respect to your particular circumstances.

In addition, a holder of common shares or ADSs in a PFIC can sometimes avoid the rules described above by electing to treat the company as a "qualified electing fund" under Section 1295 of the Code. This option is not available to you because we do not intend to comply with the requirements necessary to permit holders to make this election.

If we are a PFIC for any taxable year during which you hold our common shares or ADSs and any of our non-U.S. subsidiaries is also a PFIC, you will be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC for purposes of the application of the PFIC rules. You will not be able to make the mark-to-market election described above in respect of any lower-tier PFIC. You are urged to consult your tax advisors about the application of the PFIC rules to any of our subsidiaries.

If you hold our common shares or ADSs in any year in which we are classified as a PFIC, you will generally be required to file IRS Form 8621.

Non-corporate U.S. holders will not be eligible for reduced rates of taxation on any dividends received from us if we are a PFIC in the taxable year in which such dividends are paid or were a PFIC in the preceding taxable year. You should consult your tax advisor concerning the determination of our PFIC status and the U.S. federal income tax consequences of holding our common shares or ADSs if we are considered a PFIC in any taxable year.

#### Information Reporting and Backup Withholding

In general, information reporting will apply to dividends in respect of our common shares or ADSs and the proceeds from the sale, exchange or other disposition of our common shares or ADSs that are paid to you within the United States (and in certain cases, outside the United States), unless you establish that you are an exempt recipient. A backup withholding tax may apply to such payments if you fail to provide a taxpayer identification number and a certification that you are not subject to backup withholding or if you fail to report in full dividend and interest income.

Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules will be allowed as a refund or a credit against your U.S. federal income tax liability provided the required information is timely furnished to the IRS.

# FATCA

Under Sections 1471 through 1474 of the Code (such Sections commonly referred to as "FATCA"), certain entities in a broadly defined class of foreign financial institutions ("FFIs") may be subject to a 30% U.S. federal withholding tax on certain United States source payments made to the FFI, unless the FFI is a "participating FFI," which is generally defined as an FFI that (i) enters into an agreement with the IRS pursuant to which it agrees to comply with a complicated and expansive reporting regime or (ii) complies with the requirements of an intergovernmental agreement entered into by the United States and another jurisdiction regarding the implementation of FATCA (an "IGA"), or the FFI is otherwise deemed compliant with or exempt from FATCA.

The FATCA legislation also contains complex provisions requiring certain participating FFIs to withhold on certain "foreign passthru payments" made to FFIs that are not participating FFIs or otherwise exempt from FATCA withholding and to holders that fail to provide the information required by FATCA. Although the

definition of a "foreign passthru payment" is still reserved under current regulations, the term generally refers to payments that are from non-United States sources but that are "attributable to" certain United States payments described above. Pursuant to proposed U.S. Treasury regulations (upon which taxpayers may rely until final regulations are issued), withholding on foreign passthru payments, if applicable, would not be required with respect to payments made before the date that is two years after the date of publication of final regulations defining the term foreign passthru payment. It is unclear whether or to what extent payments on our common shares or ADSs would be considered foreign passthru payments that are subject to withholding under FATCA.

On June 10, 2015, the United States and Korea entered into an IGA to implement the foregoing requirements. The IGA is intended to result in the automatic exchange of tax information through reporting by FFIs to the IRS. Prospective investors should consult their tax advisors regarding the application of the FATCA rules to an investment in our common shares or ADSs.

## **ITEM 10.F. Dividends and Paying Agents**

Not applicable.

## **ITEM 10.G. Statements by Experts**

Not applicable.

# ITEM 10.H. Documents on Display

We are subject to the information requirements of the U.S. Securities Exchange Act of 1934, as amended, and, in accordance therewith, are required to file reports, including annual reports on Form 20-F, and other information with the U.S. Securities and Exchange Commission. You may inspect and copy these materials, including this annual report and the exhibits thereto, at SEC's Public Reference Room 100 Fifth Street, N.E., Washington, D.C. 20549. Please call the Commission at 1-800-SEC-0330 for further information on the public reference rooms. As a foreign private issuer, we are also required to make filings with the Commission by electronic means. Any filings we make electronically will be available to the public over the Internet at the Commission's web site at *http://www.sec.gov*.

## **ITEM 10.I. Subsidiary Information**

Not applicable.

## **ITEM 10.J.Annual Report to Security Holders**

Not applicable.

## ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

See "Item 4.B. Business Overview — Risk Management" for quantitative and qualitative disclosures about market risk.

## ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

#### **ITEM 12.A. Debt Securities**

Not applicable.

## **ITEM 12.B. Warrants and Rights**

Not applicable.

# **ITEM 12.C. Other Securities**

Not applicable.

# ITEM 12.D. American Depositary Shares

# **Depositary Fees and Charges**

Under the terms of the Deposit Agreement in respect of our American depositary shares ("ADSs"), the holder of ADSs may be required to pay the following fees and charges to Citibank, N.A., acting as depositary for our ADSs:

Item	Services	Fees	Paid by
1	Issuance of ADSs upon deposit of common shares (excluding issuances contemplated by items 3(b) and 5 below	Up to US\$5.00 per 100 ADSs (or fraction thereof) issued	Person depositing common shares or person receiving ADSs
2	Delivery of deposited securities against surrender of ADSs	Up to US\$5.00 per 100 ADSs (or fraction thereof) surrendered	Person surrendering ADSs for purpose of withdrawal of deposited securities or person to whom deposited securities are delivered
3	Distribution of (a) cash dividends or (b) ADSs pursuant to stock dividends	No fee, to the extent prohibited by the exchange on which the ADSs are listed. If the charging of such fee is not prohibited, the fees specified in item 4 below shall be payable	Person to whom distribution is made
4	Distribution of (a) cash proceeds (i.e., upon sale of rights and other entitlements) or (b) free shares in the form of ADSs (not constituting a stock dividend)	Up to US\$2.00 per 100 ADSs (or fraction thereof) held	Person to whom distribution is made
5	Distribution of securities other than ADSs or rights to purchase additional ADSs (i.e., spinoff shares)	Up to US\$5.00 per 100 ADSs (or fraction thereof) distributed	Person to whom distribution is made
6	Depositary Services	Unless prohibited by the exchange on which the ADSs are listed, up to US\$2.00 per 100 ADSs (or fraction thereof) held as of the last day of each calendar year, except to the extent of any cash dividend fee(s) charged under paragraph (3)(a) above during the applicable calendar year	Person holding ADSs on last day of calendar year
7	Distribution of ADSs pursuant to exercise of rights to purchase additional ADSs	Up to US\$2.00 per 100 ADSs (or fraction thereof) held	Person who exercises such rights

Holders and beneficial owners of ADSs, persons depositing common shares for deposit and persons surrendering ADSs for cancellation and for the purpose of withdrawing deposited securities shall be responsible for the following charges:

- (i) taxes (including applicable interest and penalties) and other governmental charges;
- such registration fees as may from time to time be in effect for the registration of common shares or other deposited securities on the share register and applicable to transfers of common shares or other deposited securities to or from the name of the custodian, the depositary or any nominees upon the making of deposits and withdrawals, respectively;
- (iii) such cable, telex and facsimile transmission and delivery expenses as are expressly provided in the Deposit Agreement to be at the expense of the person depositing or withdrawing common shares or holders and beneficial owners of ADSs;
- (iv) the expenses and charges incurred by the depositary in the conversion of foreign currency;
- (v) such fees and expenses as are incurred by the depositary in connection with compliance with exchange control regulations and other regulatory requirements applicable to common shares, deposited securities, ADSs and ADRs; and
- (vi) the fees and expenses incurred by the depositary, the custodian or any nominee in connection with the servicing or delivery of deposited securities.

Depositary fees payable upon the issuance and cancellation of ADSs are typically paid to the depositary by the brokers (on behalf of their clients) receiving the newly-issued ADSs from the depositary and by the brokers (on behalf of their clients) delivering the ADSs to the depositary for cancellation. The brokers in turn charge these transaction fees to their clients.

Depositary fees payable in connection with distributions of cash or securities to ADS holders and the depositary services fee are charged by the depositary to the holders of record of ADSs as of the applicable ADS record date. The depositary fees payable for cash distributions are generally deducted from the cash being distributed. In the case of distributions other than cash (i.e., stock dividends, rights offerings), the depositary charges the applicable fee to the ADS record date holders concurrent with the distribution. In the case of ADSs registered in the name of the investor (whether certificated or un-certificated in direct registration), the depositary sends invoices to the applicable record date ADS holders. In the case of ADSs held in brokerage and custodian accounts via the central clearing and settlement system, The Depository Trust Company (DTC), the depositary generally collects its fees through the systems provided by DTC (whose nominee is the registered holder of the ADSs held in DTC) from the brokers and custodians holding ADSs in their DTC accounts. The brokers and custodians who hold their clients' ADSs in DTC accounts in turn charge their clients' accounts the amount of the fees paid to the depositary banks.

In the event of refusal to pay the depositary fees, the depositary may, under the terms of the Deposit Agreement, refuse the requested service until payment is received or may set- off the amount of the depositary fees from any distribution to be made to the ADS holder.

The fees and charges the ADS holders may be required to pay may vary over time and may be changed by us and by the depositary. The ADS holders will receive prior notice of such changes.

Depositary Payments for the Fiscal Year 2022

In 2022, we received the following payments from Citibank, N.A., acting as depositary for our ADSs:

Reimbursement of settlement infrastructure fees (including DTC fees)Reimbursement of proxy process expenses (printing, postage and distribution)Legal expensesContributions towards our investor relations efforts (i.e., non-deal roadshows, investor	US\$ 74,079.9	
conferences and IR agency fees) and legal expenses incurred in connection to the		
preparation of our Form 20-F for the fiscal year 2022	US\$ 91,526.8	39
Total:	US\$405,519.1	8

Note: The amounts provided above are after deduction of applicable of U.S. taxes.

#### ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

Not applicable.

# ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

Not applicable.

# ITEM 15. CONTROLS AND PROCEDURES

#### **Disclosure Control**

Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act) as of December 31, 2022. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can provide only reasonable assurance of achieving their control objectives. Based upon our evaluation, our chief executive officer and chief financial officer concluded that the design and operation of our disclosure controls and procedures as of December 31, 2022 were effective to provide reasonable assurance that information required to be disclosed by us in the reports we file and submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the applicable rules and forms, and that it is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decision regarding required disclosure.

#### Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, for our company. Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we have evaluated the effectiveness of our internal control over financial reporting as of December 31, 2022 based on the framework established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Internal Control-Integrated Framework (2013) suspended the original framework issued by COSO in 1992 on December 15, 2014. We adopted the 2013 Framework on December 15, 2014. Further details of the changes made are set out below. Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with

generally accepted accounting principles and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of a company's assets, (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, and that a company's receipts and expenditures are being made only in accordance with authorizations of a company's management and directors, and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of a company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance with respect to consolidated financial statement preparation and presentation and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Based on this evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2022.

The effectiveness of our internal control over financial reporting has been audited by Samil PricewaterhouseCoopers, an independent registered public accounting firm, who has also audited our consolidated financial statements for the year ended December 31, 2022. Samil PricewaterhouseCoopers has issued an attestation report on the effectiveness of our internal control over financial reporting an independent registered public accounting firm, as stated in its report included herein, which expressed an unqualified opinion on the effectiveness of our internal control over financial reporting as of December 31, 2022.

### Attestation Report of the Independent Registered Public Accounting Firm

Samil PricewaterhouseCoopers's attestation report on the effectiveness of internal control over financial reporting can be found on page F-2 of this annual report.

# ITEM 16. [RESERVED]

## ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our Audit Committee currently consists of three outside directors, namely Yoon Jaewon (Chair), Kwak Su Keun and Bae Hoon. Our board of directors has determined that Yoon Jaewon, the chair of our Audit Committee is an "audit committee financial expert," as such term is defined by the regulations of the Securities and Exchange Commission issued pursuant to Section 407 of the Sarbanes-Oxley Act of 2002. Yoon Jaewon, Kwak Su Keun and Bae Hoon are independent as such term is defined in Section 303A.02 of the NYSE Listed Company Manual, Rule 10A-3 under the Exchange Act and the Korea Stock Exchange listing standards.

### ITEM 16B. CODE OF ETHICS

We have adopted a code of ethics for our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions as required under Section 406 of the Sarbanes-Oxley Act of 2002, together with an insider reporting system in compliance with Section 301 of the Sarbanes-Oxley Act. We have not granted any waiver, including an implicit waiver, from a provision of the code of ethics to any of the above-mentioned officers during our most recently completed fiscal year. As a further detailed guideline to the code of ethics, we have also adopted a code of ethics applicable to all the officers and employees of our holding company and our subsidiaries and established a supplemental code of behavior for all officers and employees of our holding company and our subsidiaries in order to provide additional guideline for the performance of their work-related duties as well as their daily behavior. Our code of ethics is available on our website www.shinhangroup.com.

## ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the aggregate fees billed for professional services rendered by our principal auditors for the years ended December 31, 2020, 2021 and 2022, for various types of services and a brief description of the nature of such services. Samil PricewaterhouseCoopers, a Korean independent registered public accounting firm, was our principal auditors for the years ended December 31, 2020, 2021 and 2022.

Aggregate Fees Billed During the Year Ended December 31,				
Type of Services	2020	2021	2022	Nature of Services
	(In	millions of W	on)	
Audit fees	₩ 11,751	₩ 12,533	₩ 12,807	Audit service for Shinhan Financial
				Group and its subsidiaries.
Audit related fees	244	434	373	Assurance services rendered in the
				ordinary course of our business
Tax fees	152	—	—	Tax return and consulting advisory
				service.
All other fees	—	—	—	All other services which do not
				meet the three categories above.
Total	₩ 12,147	₩ 12,967	₩ 13,180	

Our Audit Committee generally pre-approves all engagements of our principal accountants pursuant to policies and procedures adopted by it. Our Audit Committee has adopted the following policies and procedures for consideration and approval of requests to engage our principal accountants to perform audit and non-audit services. Engagement requests for audit and non-audit services for us or our subsidiaries must, in the first instance, be submitted to our Audit Team. If the request relates to services that would impair the independence of our principal accountants, the request must be rejected. If the engagement request relates to audit and permitted non-audit services, it must be forwarded to the Audit Committee for consideration. To facilitate the consideration of engagement requests between its meetings, the Audit Committee has delegated approval authority of the following: (i) permitted non-audit services to our subsidiaries, to one of its members who is "independent" as defined by the Securities and Exchange Commission and the New York Stock Exchange. Such member in our case is Yoon Jaewon, the chair of our Audit Committee, and she is required to report any approvals made by her to the Audit Committee at its next meeting. Our Audit Committee meets regularly once every quarter.

Any other audit or permitted non-audit service must be pre-approved by the Audit Committee on a case-by-case basis. Our Audit Committee did not pre-approve any non-audit services under the de minimis exception of Rule 2.01(c)(7)(i)(C) of Regulation S-X as promulgated by the Securities and Exchange Commission.

## ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

# ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

The following table sets forth information regarding purchases by us of our common shares during the period covered by this annual report.

Period	Total Number of Shares Purchased <sup>(1)</sup>	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs (as of end of period)
January 1 to March 31, 2022	_			\$ —
April 1 to June 30, 2022	3,665,423	₩40,923	3,665,423	—
July 1 to September 30, 2022	—			
October 1 to December 31, 2022	4,149,262	₩36,151	4,149,262	
Total	7,814,685	₩38,389	7,814,685	<u>\$ —</u>

Other than as described above, neither we nor any "affiliated purchaser," as defined in Rule 10b-18(a)(3) of the Exchange Act, purchased any of our equity securities during the period covered by this annual report.

# ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Our independent accountant has recently changed from Samil PricewaterhouseCoopers ("PwC") to KPMG Samjong Accounting Corp. ("KPMG Samjong"). Our Audit Committee evaluated the suitability and independence of KPMG Samjong, concluding to appoint KPMG Samjong as our independent auditor for the audit of our financial statements in Korea prepared in conformity with IFRS as adopted by Korea for the fiscal years ended December 31, 2023, 2024 and 2025. Our Audit Committee also approved the appointment of KPMG Samjong as our independent registered public accounting firm for the audit of our financial statements in conformity with IFRS as issued by the IASB for the fiscal year ended December 31, 2023. KPMG Samjong's appointment is effective from February 23, 2023. PwC's engagement as our independent auditor and independent registered public accounting firm of the audit of our consolidated financial statements as of and for the year ended December 31, 2022, and no separate dismissal process was required for PwC. However, resolutions by the audit committee are required for each of our subsidiaries, which our subsidiaries have obtained as necessary.

PwC's reports on our consolidated financial statements for each of the fiscal years ended December 31, 2022 and 2021 did not contain an adverse opinion or a disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles. During the two most recent fiscal years ended December 31, 2022 and 2021 and in the subsequent interim period preceding PwC's dismissal, or the Pre-Engagement Period, there were: (i) no disagreements between us and PwC on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of PwC, would have caused PwC to make reference to the subject matter of the disagreements in its reports on the consolidated financial statements of Shinhan Financial Group; and (ii) no "reportable events" as defined in Item 16F(a)(1)(v) of Form 20-F.

During the Pre-Engagement Period, neither we nor anyone acting on our behalf consulted with KPMG Samjong regarding any matter that was either the subject of a disagreement, as that term is defined in Item 16F(a)(1)(iv) of Form 20-F (and the related instructions thereto), or a reportable event as described in Item 16F(a)(1)(v) of Form 20-F.

We provided a copy of the disclosure in this Item to KPMG Samjong and provided KPMG Samjong the opportunity to furnish us with a letter addressed to the Commission containing any new information, clarification of our expression of its views, or the respects in which it does not agree. KPMG Samjong has not furnished us with such letter. We also provided a copy of the disclosure in this Item to PwC and requested that PwC furnish us with a letter addressed to the Commission stating whether it agrees with such disclosure, and if it does not agree, stating the respects in which it does not agree. A copy of PwC's letter dated April 20, 2023 is filed as Exhibit 15.1 to this Form 20-F.

### ITEM 16G. CORPORATE GOVERNANCE

We are committed to high standards of corporate governance. We are in compliance with the corporate governance provisions of the Korean Commercial Code, the Financial Holding Companies Act of Korea, the Act on Corporate Governance of Financial Companies, the Financial Investment Services and Capital Markets Act and the Listing Rules of the Korea Exchange. We, like all other companies in Korea, must comply with the corporate governance provisions of the Korean Commercial Code. In addition, as a financial holding company, we are also subject to the Financial Holding Companies Act and the Act on Corporate Governance of Financial Companies that are financial institutions must comply with the respective corporate governance provisions under the Act on Corporate Governance of Financial Companies and relevant laws under which they were established.

The Act on Corporate Governance of Financial Companies came into effect as of August 1, 2016. The Act was enacted to address calls for strengthened regulations on corporate governance of financial companies and to serve as a uniform regulation on corporate governance matters applicable to all financial companies in place of the separate regulations for each sector that existed. The Act contains several key measures, including, but not limited, to (i) condition of eligibility of officers of financial companies and standards for determining whether financial companies' officers may hold concurrent positions in other companies, (ii) standards for composition and operation of board of directors, (iii) standards for establishment, composition and operation of committees of the board of directors, (iv) internal control and risk management, (v) requirements and procedures for the approval of a change of major shareholders and (vi) special regulations for rights of minority shareholders of financial companies.

We are a "foreign private issuer" (as such term is defined in Rule 3b-4 under the Exchange Act), and our ADSs are listed on the New York Stock Exchange, or NYSE. Under Section 303A of the NYSE Listed Company Manual, NYSE-listed companies that are foreign private issuers are permitted to follow home country practice in lieu of the corporate governance provisions specified by the NYSE with limited exceptions. Under the NYSE Listed Company Manual, we as a foreign private issuer are required to disclose significant differences between NYSE's corporate governance standards and those we follow under Korean law. The following summarizes some significant ways in which our corporate governance practices differ from those followed by U.S. companies listed on the NYSE under the listing rules of the NYSE:

### Majority of Independent Directors on the Board

Under the NYSE listing rules, U.S. companies listed on the NYSE must have a board the majority of which is comprised of independent directors satisfying the requirements of "independence" as set forth in Rule 10A-3 under the Exchange Act. While as a foreign private issuer, we are exempt from this requirement, but our board of directors is in compliance with this requirement as it currently consists of 14 directors, of which 12 directors satisfy the requirements of "independence" as set forth in Rule 10A-3 under the Exchange Act. 12 of our directors are also "outside directors" as defined in the Financial Holding Companies Act of Korea. An "outside director" for purposes of the Act on Corporate Governance of Financial Companies and the Korean Commercial Code means a director who does not engage in the regular affairs of the financial holding company, and who is elected at a shareholders' meeting, after having been nominated by the outside director nominating committee, and none of the largest shareholder, those persons "specially related" to the largest shareholder of such company,

persons who during the past two years have served as an officer or employee of such company, the spouses and immediate family members of an officer of such company, and certain other persons specified by law may qualify as an outside director of such company. Under the Korea Exchange listing rules and the Korean Commercial Code, at least one-fourth of a listed company's directors must be outside directors. In the case of "large listed companies" as defined under the Korean Commercial Code or "large financial companies" as defined under the Act on Corporate Governance of Financial Companies, like us, a majority of the directors must be outside directors provided that there must be at least three outside directors.

### **Executive** Session

Under the NYSE listing rules, non-management directors of U.S. companies listed on the NYSE are required to meet on a regular basis without management present and independent directors must meet separately at least once per year. There is no such requirement under Korean law or listing standards or our internal regulations.

#### Audit Committee

Under the NYSE listing rules, listed companies must have an audit committee that has a minimum of three members, and all audit committee members must satisfy the requirements of independence set forth in Section 303A.02 of the NYSE Listed Company Manual and Rule 10A-3 under the Exchange Act. We are in compliance with this requirement as our Audit Committee is comprised of four outside directors meeting the requirements of independence set forth in Section 303A.02 of the NYSE Listed Company under the NYSE Listed Company Manual and Rule 10A-3 under the Exchange Act. We are in compliance with this requirement as our Audit Committee is comprised of four outside directors meeting the requirements of independence set forth in Section 303A.02 of the NYSE Listed Company Manual and Rule 10A-3 under the Exchange Act. A large listed company under the Korea Exchange listing rules and the Korean Commercial Code or a large financial company under the Act on Corporate Governance of Financial Companies must also establish an audit committee of which at least two-thirds of its members must be outside directors and whose chair must be an outside director. In addition, under the Act on Corporate Governance of Financial Companies, at least one member of the audit committee who is an outside director must also be an accounting or financial expert. We are also in compliance with the foregoing requirements.

### Nomination/Corporate Governance Committee

Under the NYSE listing rules, U.S. companies listed on the NYSE must have a nomination/corporate governance committee composed entirely of independent directors. In addition to identifying individuals qualified to become board members, this committee must develop and recommend to the board a set of corporate governance principles. Under the Korean Commercial Code and other applicable laws, large listed companies, financial holding companies, commercial banks, and certain other financial institutions are required to have an outside director nominating committee of which at least one-half of its members are required to be outside directors. However, there is no requirement to establish a corporate governance committee under applicable Korean law. Our outside director nominating committee is formed on an ad hoc basis prior to a general shareholders' meeting if the agenda for such meeting includes appointment of an outside director. The composition of the committee is in compliance with the relevant provisions under the Korean Commercial Code and the Act on Corporate Governance of Financial Companies, and the chair of the committee must be an outside director pursuant to the Act on Corporate Governance of Financial Companies.

We currently have a committee for recommending candidates for CEO, which is responsible for general corporate governance, reviewing and recommending nominees for the president and/or CEO of our group and the development, operation and review of our management succession plan, including setting the qualifications for he CEO, evaluating the CEO candidate pool and recommending CEO candidates. The chair of the committee must be an outside director, and the incumbent CEO may be restricted from participating and voting on matters related to CEO selection. We also have a committee for recommending candidates for independent directors and members of the audit committee, which is responsible for matters related to the recommendation and nomination of outside directors including audit committee members. In addition, in light of the recent emphasis on corporate

governance, in March 2021, we transferred certain functions, such as those relating to code of ethics and other code of behavior, determination of the size of the board of directors and other matters necessary for improving our overall corporate governance structure, from the corporate governance committee to the board of directors.

### **Compensation Committee**

Under the NYSE listing rules, U.S. companies listed on the NYSE are required to have a compensation committee which is composed entirely of independent directors. In January 2013, the SEC approved amendments to the listing rules of NYSE and NASDAQ regarding the independence of compensation committee members and the appointment, payment and oversight of compensation consultants. The listing rules were adopted as required by Section 952 of the Dodd-Frank Act and rule 10C-1 of the Securities Exchange Act of 1934, as amended, which direct the national securities exchanges to prohibit the listing of any equity security of a company that is not in compliance with the rule's compensation committee director and advisor independence requirements. Certain elements of the listing rules became effective on July 1, 2013 and companies listed on the NYSE must comply with such listing rules by the earlier of the company's first annual meeting after January 15, 2014, or October 31, 2014.

Under the Act on Corporate Governance of Financial Companies, financial institutions including financial holding companies must establish a compensation committee of which at least one-half of its members must be outside directors and whose chairman must be an outside director.

We currently have a remuneration committee, which is responsible for reviewing and approving the management's evaluation and compensation programs. The committee consists of four members, all of whom are outside directors and satisfy the independent director requirements as set forth in Rule 10A-3 under the Exchange Act.

### Corporate Governance Guidelines and Code of Business Conduct and Ethics

Under the NYSE listing rules, U.S. companies listed on the NYSE are required to establish corporate governance guidelines and to adopt a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers. As a foreign private issuer, we are exempt from this requirement. In Korea, the Financial Services Commission implemented the Standard Corporate Governance Guidelines for Financial Service Companies in December 2014, and accordingly, we have adopted in February 2015 and are currently complying with international regulators on corporate governance modeled after the standard guidelines implemented by the Financial Services Commission,

Pursuant to the requirements of the Sarbanes-Oxley Act, we have adopted a code of ethics applicable to all the officers and employees of our holding company and our subsidiaries, including all financial, accounting and other officers and employees that are involved in the preparation and disclosure of Shinhan Financial Group's consolidated financial statements and internal control of financial reporting. As a further detailed guideline to the code of ethics, we have also established a supplemental code of behavior for all officers and employees of our holding company and our subsidiaries in order to provide additional guideline for the performance of their work-related duties as well as their daily behavior. We have also adopted an insider reporting system in compliance with Section 301 of the Sarbanes-Oxley Act. The above-mentioned code of ethics and the code of behavior are available on our website www.shinhangroup.com.

On May 25, 2011, the SEC adopted final rules to implement whistleblower provisions of the Dodd-Frank Act, which are applicable to foreign private issuers with securities registered under the U.S. securities laws. The final rules provide that any eligible whistleblower who voluntarily provides the SEC with original information that leads to the successful enforcement of an action brought by the SEC under U.S. securities laws must receive an award of between 10 and 30 percent of the total monetary sanctions collected if the sanctions exceed US\$1,000,000. An eligible whistleblower is defined as someone who provides information about a possible

violation of the securities laws that he or she reasonably believes has occurred, is ongoing, or is about to occur. The possible violation does not need to be material, probably or even likely, but the information must have a "facially plausible relationship to some securities law violation"; frivolous submissions would not qualify. The final rules also prohibit retaliation against the whistleblower. While the final rules do not require employees to first report allegations of wrongdoing through a company's corporate compliance system, they do seek to incentivize whistleblowers to utilize internal corporate compliance first by, among other things, (i) giving employees who first report information internally the benefit of the internal reporting date for purposes of the SEC program so long as the whistleblower submits the same information to the SEC within 120 days of the initial disclosure; (ii) clarifying that the SEC will consider, as part of the criteria for determining the amount of a whistleblower's award, whether the whistleblower effectively utilized the company's corporate compliance program or hindered the function of the program; and (iii) crediting a whistleblower who reports internally first and whose company passes the information along to the SEC, which would mean the whistleblower could receive a potentially higher award for information gathered in an internal investigation initiated as a result of the whistleblower's internal report.

In addition, the final rules address concerns that the whistleblower rules incentivize officers, directors and those with legal, audit, compliance or similar responsibilities to abuse these positions by making whistleblower complaints to the SEC with respect to information they obtained in these roles by generally providing that information obtained through a communication subject to attorney-client privilege or as a result of legal representation would not be eligible for a whistleblower award unless disclosure would be permitted by attorney conduct rules. Accordingly, officers and directors, auditors and compliance personnel and other persons in similar roles would not be eligible to receive awards for information received in these positions unless (x) they have a reasonable basis to believe that (1) disclosure of the information is necessary to prevent the entity from engaging in conduct that is likely to cause substantial injury to the financial interests of the entity or investors; or (2) the entity is engaging in conduct that will impede an investigation of the misconduct, for example, destroying documents or improperly influencing witnesses; or (y) 120 days have passed since the whistleblower provided the information to senior responsible persons at the entity or 120 days have passed since the whistleblower received the information at a time when these people were already aware of the information.

In Korea, the Act on the Protection of Public Interest Whistleblowers (the "Act on Whistleblowers") was enacted in March 29, 2011 and became effective on September 30, 2011. Under the Act on Whistleblowers, a "conduct detrimental to the public interest" means any conduct falling under the penalty provisions of certain acts or any conduct subject to administrative measures such as cancellation or suspension of an approval or a permit. As the Financial Holding Companies Act is included in the "certain acts" above, any conduct falling under the penalty provisions or subject to administrative measures for a violation of the Financial Holding Companies Act constitutes a "conduct detrimental to the public interest." Any person deeming that a conduct detrimental to the public interest has been, or is likely to be, committed may make a public interest report to a representative of the organization involved or a relevant investigative agency. The personal information of a public interest whistleblower shall be taken. In addition, any disadvantageous measures against a public interest whistleblower shall be taken. In addition, any disadvantageous measures against a public interest whistleblower shall be taken. In addition, any disadvantageous measures against a public interest whistleblower shall be taken. In addition, any disadvantageous measures against a public interest whistleblower shall be taken and delayed payment of wage, are prohibited, and where a public interest report leads to a recovery of, or increase in, revenues of the Government, the public interest whistleblower may be entitled to compensation by the Anti-Corruption and Civil Rights Commission of Korea.

We established a group-wide whistleblower policy in July 2005 and maintain related policies and programs for most of our subsidiaries. For example, Shinhan Bank maintains a whistleblower program named "*Shinhan Jikimi*," through which any employee, vendor or customer can raise concerns and report suspicious circumstances in confidence using a variety of channels including the Internet, email, postal mail, facsimile and mobile phones. In addition, Shinhan Bank distributes to its employees a quarterly email notice intended to raise awareness of the whistleblower program and posts relevant informative materials on the company bulletin board. At Shinhan Card and Shinhan Securities, we strive to maintain transparency in every aspect of business activities and provide secure and accessible channels for all related parties to raise concerns and report violations.

### Shareholder Approval of Equity Compensation Plans

Under the NYSE listing rules, shareholders of U.S. companies listed on the NYSE are required to approve all equity compensation plans.

Under Korean law, board of directors of a listed company with capital of W300 billion or more may grant stock options to officers and employees other than directors exercisable for up to 1% of the company's issued and outstanding shares by board's resolution, provided that such grant is permitted by such company's articles of incorporation and is approved by a resolution of the subsequent general meeting of stockholders. Under our articles of incorporation, we may also grant stock options, but since April 1, 2010, we have not granted any stock options.

We currently have two equity compensation plans, consisting of a performance share plan for directors and key employees and an employee stock ownership plan for all employees under the Framework Act on Labor Welfare.

In accordance with our internal regulations, performance shares granted to directors are granted pursuant to a resolution by the board of director, subject to the limit amount set by a resolution at the shareholders' meeting while performance shares granted to key employees are granted pursuant to a resolution by the board of director, without any requirement that the limit amount be approved at the shareholders' meeting. There are no requirements relating to the granting of performance shares under applicable Korean laws and our articles of incorporation.

Under the Framework Act on Labor Welfare, a Korean company may issue stock options up to 20% of its issued and outstanding shares by a resolution at the shareholders' meeting, if permitted by the articles of incorporation. Our articles of incorporation does not contain such provision. The equity compensation scheme for the employee stock ownership association is governed by its internal regulations, over which we have no control under Korean law.

### Annual Certification of Compliance

Under the NYSE listing rules, a chief executive officer of a U.S. company listed on the NYSE must annually certify that he or she is not aware of any violation by the company of NYSE corporate governance standards. As a foreign private issuer, we are not subject to this requirement. However, in accordance with rules applicable to both U.S. companies and foreign private issuers, we are required to promptly notify the NYSE in writing if any executive officer becomes aware of any material noncompliance with the NYSE corporate governance standards applicable to us. In addition, foreign private issuers, including us, are required to submit to the NYSE an annual written affirmation relating to compliance with Sections 303A.06 and 303A.11 of the NYSE listed company manual, which are the NYSE corporate governance standards applicable to foreign private issuers. All written affirmations must be executed in the form provided by the NYSE, without modification. An annual written affirmation is required to be submitted to the NYSE within 30 days of filing with the SEC our annual report on Form 20-F. We have been in compliance with this requirement in all material respects and plan to submit such affirmation within the prescribed timeline.

### ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

### ITEM 16I. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS.

Not applicable.

### ITEM 17. FINANCIAL STATEMENTS

We have responded to Item 18 in lieu of responding to this item.

## ITEM 18. FINANCIAL STATEMENTS

Reference is made to Item 19(a) for a list of all financial statements filed as part of this annual report.

## ITEM 19. EXHIBITS

- (a) Exhibits filed as part of this Annual Report:See Exhibit Index beginning on page 296 of this annual report.
- (b) Financial Statements filed as part of this Annual Report:See Index to Financial Statements on page F-1 of this annual report.

### **INDEX OF EXHIBITS**

- 1.1 Articles of Incorporation, last amended as of March 23, 2023 (in English)†
- 2.1 Form of Common Stock Certificate (in English) †\*
- 2.2 Form of Deposit Agreement to be entered into among Shinhan Financial Group, Citibank, N.A., as depositary, and all owners and holders from time to time of American depositary shares issued thereunder, including the form of American depositary receipt\*
- 2.3 Long-term debt instruments of Shinhan Financial Group, Shinhan Bank and other consolidated subsidiaries for which financial statements are required to be filed are omitted pursuant to Item 601(b)(4)(iii) of Regulation S-K. Shinhan Financial Group agrees to furnish the Commission on request a copy of any instrument defining the rights of holders of its long-term debt and that of any subsidiary for which consolidated or unconsolidated financial statements are required to be filed.\*
- 4.1 Stock Purchase Agreement by and between Korea Deposit Insurance Corporation and Shinhan Financial Group dated July 9, 2003\*\*
- 4.2 Investment Agreement by and between Shinhan Financial Group and Korea Deposit Insurance Corporation dated July 9, 2003\*
- 4.3 Agreed Terms, dated June 22, 2003, by and among the President of Korea Deposit Insurance Corporation, CEO of Shinhan Financial Group, CEO of Chohung Bank, Chairman of the National Financial Industry Labor Union of Korea and the Head of the Chohung Bank Chapter of the National Financial Industry Labor Union\*
- 4.4 Merger Agreement between Shinhan Bank and Chohung Bank (in English) † \*\*\*
- 4.5 Split-Merger Agreement between Shinhan Card and Chohung Bank (in English) † \*\*\*
- 4.6 Form of Share Purchase Agreement, dated January 17, 2007, by and between Shinhan Financial Group and the holders of the redeemable preferred shares and the redeemable convertible shares issued by Shinhan Financial Group as part of the funding for the acquisition of LG Card Co., Ltd. (in English) †\*\*\*\*
- 4.7 LG Card Acquisition Agreement, dated 2006, between Korea Development Bank and 13 other financial institutions, on the one hand, and Shinhan Financial Group<sup>†\*\*\*\*\*</sup>
- 8.1 List of all subsidiaries of Shinhan Financial Group
- 12.1 Certifications of our Chief Executive Officer required by Rule 13a-14(a) of the Exchange Act
- 12.2 Certifications of our Chief Financial Officer required by Rule 13a-14(a) of the Exchange Act
- 13.1 Certifications of our Chief Executive Officer required by Rule 13a-14(b) and Section 1350 of Chapter 63 of the United States Code (18 U.S.C. 1350)
- 13.2 Certifications of our Chief Financial Officer required by Rule 13a-14(b) and Section 1350 of Chapter 63 of the United States Code (18 U.S.C. 1350)
- 15.1 Letter of Samil PricewaterhouseCoopers dated April 20, 2023
- 101.INS Inline XBRL Instance Document (the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document)
- 101.SCH Inline XBRL Taxonomy Extension Schema Document
- 101.CAL Inline XBRL Taxonomy Extension Calculation Linkbase Document
- 101.DEF Inline XBRL Taxonomy Extension Definition Linkbase Document
- 101.LAB Inline XBRL Taxonomy Extension Label Linkbase Document
- 101.PRE Inline XBRL Taxonomy Extension Presentation Linkbase Document
- 104 Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibits 101)
- † A fair and accurate translation from Korean into English.

- \* Incorporated by reference to the registrant's previous filing on Form 20-F (No. 001-31798), filed on September 15, 2003.
- \*\* Incorporated by reference to the registrant's previous filing on Form 20-F (No. 001-31798), filed on September 15, 2003. Confidential treatment has been requested for certain portions of the Stock Purchase Agreement.
- \*\*\* Incorporated by reference to the registrant's previous filing on Form 20-F (No. 001-31798), filed on June 30, 2006.
- \*\*\*\* Incorporated by reference to the registrant's previous filing on Form 20-F (No. 001-31798), filed on June 29, 2007.
- \*\*\*\*\* Incorporated by reference to registrant's previous filing on Form 20-F (No. 001-31798), filed on June 30, 2008.

### SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Date: April 20, 2023

Shinhan Financial Group Co., Ltd.

By: /s/ Jin Okdong

Name: Jin Okdong Title: Chief Executive Officer

## INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

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Auditor Firm ID: 1103	Auditor Name:	Auditor Location:
	Samil PricewaterhouseCoopers	17th Flr, 100, hangang-daero,
		Yongsan-gu, Seoul,
		Republic of Korea 04386

### **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Shareholders of Shinhan Financial Group Co., Ltd.:

### **Opinions on the Financial Statements and Internal Control over Financial Reporting**

We have audited the accompanying consolidated statements of financial position of Shinhan Financial Group Co., Ltd. and its subsidiaries (the "Company") as of December 31, 2022 and 2021, and the related consolidated statements of comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2022, including the related notes (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in *Internal Control — Integrated Framework* (2013) issued by the COSO.

### **Basis for Opinions**

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting appearing under Item 15. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

#### Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in

accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

### Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the consolidated financial statements that were communicated or required to be communicated to the audit committee and that (i) relate to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

### Allowance for Credit Losses of Loans Measured at Amortized Cost

As described in Notes 4, 5, and 12 to the consolidated financial statements, as of 31 December 2022, the allowance for credit losses was \$3,650,863 million on total loans at amortized cost retained of \$415,942,374 million. The Company recognizes allowance for expected credit losses of loans measured at amortized cost under both individual and collective assessment. For collectively assessed loans, the calculation of the allowance for credit losses required management to make a number of judgments, assumptions and estimates. The most significant included probability of default, the accuracy of borrower credit risk ratings, and forward-looking information. Allowance for credit losses for individually assessed loans are determined by the estimation of the expected cash flows.

The principal considerations for our determination that performing procedures relating to the allowance for credit losses of loans measured at amortized cost is a critical audit matter are: (i) there was significant judgment by management in determining the allowance, which in turn led to a high degree of auditor subjectivity in performing procedures related to the impairment models, key assumptions, such as probability of default, credit risk ratings, determination of the forward-looking information and the expected future cash flows related to these models, judgments and assumptions used to determine the allowance; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the estimation process, which included controls over the data, models and assumptions used in determining the allowance for credit losses. These procedures also included, among others, the involvement of professionals with specialized skill and knowledge to assist in testing management's process to estimate the allowance for credit losses including evaluating the appropriateness of methodology and models, and evaluating the reasonableness of significant assumptions used in the impairment models, such as probability of default and credit risk ratings. It also included evaluating the reasonableness of key assumptions in the forward-looking information. Evaluating the forward-looking information assumptions involved assessing their

reasonableness against external data and economic events that have occurred. We also assessed the reasonableness of the accuracy of borrower credit risk ratings and expected future cash flows related to individually assessed exposures.

### Valuation of Level 3 Over-the-Counter Derivatives measure fair value using the internal valuation model

As described in Note 4.(e) to the consolidated financial statements, over-the-counter derivatives classified as level 3 of Shinhan Securities Corp. subject to fair value measurement using internal valuation model were W9,001,730 million as of December 31, 2022. Valuation of such derivatives requires broad judgement on internal valuation models and the type of unobservable inputs used. When adopting or modifying models or unobservable inputs used for valuation of such derivatives, the most significant includes the appropriateness of internal valuation models or unobservable inputs used.

The principal considerations for our determination that performing procedures relating to valuation of level 3 over-the-counter derivatives is a critical audit matter are: (i) there was significant judgment by management in determining the internal valuation model, which in turn led to a high degree of auditor subjectivity in performing procedures related to the valuation of derivatives using internal valuation models; (ii) there was significant judgment and effort in evaluating audit evidence related to these internal valuation models and unobservable inputs used to determine the valuation of level 3 over-the-counter derivatives; and (iii) the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the consolidated financial statements. These procedures included testing the effectiveness of controls relating to the valuation process, which included controls over the review on development and validation on change of the internal valuation models and unobservable inputs used in valuation of level 3 derivatives. These procedures also included, among others, the involvement of professionals with specialized skill and knowledge to assist in developing an independent estimate of fair value using independently assessed internal valuation models and unobservable inputs for the evaluation.

/s/Samil PricewaterhouseCoopers Seoul, the Republic of Korea

April 20, 2023

We have served as the Company's auditor since 2020.

## SHINHAN FINANCIAL GROUP CO., LTD. AND SUBSIDIARIES Consolidated Statements of Financial Position

As of December 31, 2021 and 2022

(In millions of won)	Note	2021	2022
Assets			
Cash and due from banks at amortized cost	4, 8, 12, 19	₩ 28,453,404	29,532,235
Financial assets at fair value through profit or loss	4, 9, 19	, ,	56,643,670
Derivative assets	4, 10		6,461,796
Securities at fair value through other comprehensive income	4, 11, 19		63,661,719
Securities at amortized cost	4, 11, 19		57,971,493
Loans at amortized cost	4, 12		
Property and equipment, net	13, 18, 19		4,011,097
Intangible assets	14	/ /	5,807,836
Investments in associates	15	2,913,745	2,904,474
Current tax receivable	41	15,159	26,307
Deferred tax assets	41	134,854 675,391	1,052,333
Investment property Net defined benefit assets	16 25	142,020	363,108 619,653
Other assets	4, 12, 17, 19	35,973,754	34,507,838
Assets held for sale	4, 12, 17, 19	44,409	29,211
Total assets		₩648,152,185	675,884,281
Liabilities			
Deposits	4,20	₩364,896,675	383,010,745
Financial liabilities at fair value through profit or loss	4, 21	1,369,225	1,146,110
Financial liabilities designated at fair value through profit or loss		8,023,870	8,367,368
Derivative liabilities	4, 10		7,704,705
Borrowings	4, 23	43,167,065	49,279,175
Debt securities issued	4,24		77,288,783
Net defined benefit liabilities	25	51,204	14,664
Provisions	26	1,166,856	1,266,314
Current tax payable		702,660	702,143
Deferred tax liabilities	41	175,947	169,956
Liabilities under insurance contracts	27	54,333,498	54,315,124
Other liabilities	4, 28	40,990,836	41,488,772
Total liabilities		598,613,763	624,753,859
Equity	29		
Capital stock	_>	2,969,641	2,969,641
Hybrid bonds		3,334,531	4,196,968
Capital surplus		12,095,043	12,095,043
Capital adjustments		(664,429)	
Accumulated other comprehensive loss			(3,582,720)
Retained earnings		30,541,300	
Total equity attributable to equity holders of Shinhan Financial			
Group Co., Ltd.		47,291,150	48,438,706
Non-controlling interests		2,247,272	2,691,716
-			
Total equity		49,538,422	51,130,422
Total liabilities and equity		₩648,152,185	675,884,281

See accompanying notes to the consolidated financial statements.

# SHINHAN FINANCIAL GROUP CO., LTD. AND SUBSIDIARIES Consolidated Statements of Comprehensive Income

For the years ended December 31, 2020, 2021 and 2022

(In millions of won)	Note	2020	2021	2022
Interest income				
Financial assets at fair value through other				
comprehensive income and at amortized cost		₩13,943,159	14,027,418	19,167,750
Financial assets at fair value through profit or loss		830,837	696,812	940,916
		14,773,996	14,724,230	20,108,666
Interest expense		(4,891,296)	(3,954,905)	(7,644,985)
Net interest income	31	9,882,700	10,769,325	12,463,681
Fees and commission income		3,814,474	4,139,885	4,110,576
Fees and commission expense		(1,431,541)	(1,464,888)	(1,585,010)
Net fees and commission income	32	2,382,933	2,674,997	2,525,566
Insurance income		7,247,753	6,484,523	6,890,905
Insurance expenses		(7,851,685)	(7,259,909)	(7,718,138)
Net insurance expenses	27	(603,932)	(775,386)	(827,233)
Dividend income	33	97,956	124,531	142,529
Net gain (loss) on financial instruments at fair value through				
profit or loss	34	272,830	1,103,631	(304,113)
Net gain (loss) on financial instruments at fair value through				
profit or loss (overlay approach)	9	(136,255)	43,003	313,211
Net gain (loss) on financial instruments designated at fair				
value through profit or loss	35	198,239	(88,301)	576,942
Net gain on foreign currency transaction		526,615	222,819	180,304
Net gain (loss) on disposal of securities at fair value through	11	272 702	95 506	(107 202)
other comprehensive income	11	273,793	85,596	(127,393)
Net loss on disposal of securities at amortized cost Provision for allowance for credit loss	11 36	(25) (1,382,179)	(319) (974,685)	(101) (1,292,296)
General and administrative expenses	30 37	(1,382,179) (5,212,473)	(5,743,088)	(1,292,290) (6,013,514)
Other operating expenses, net	39	(3,212,473) (1,370,466)	(1,490,027)	(0,013,514) (1,749,504)
	57			
Operating income		4,929,736	5,952,096	5,888,079
Equity method income	15	159,533	158,600	121,697
Other non-operating income (expense), net	40	(335,398)	(527,032)	339,475
Profit before income taxes		4,753,871	5,583,664	6,349,251
Income tax expense	41	1,255,795	1,471,036	1,617,088
Profit for the year		₩ 3,498,076	4,112,628	4,732,163

## SHINHAN FINANCIAL GROUP CO., LTD. AND SUBSIDIARIES **Consolidated Statements of Comprehensive Income (Continued)** For the years ended December 31, 2020, 2021 and 2022

(In millions of won, except earnings per share data)	Note	2020	2021	2022
Other comprehensive income for the year, net of income tax	29			
Items that are or may be reclassified to profit or loss:				
Loss on securities at fair value through other comprehensive income		₩ (86,784)	(879,671)	(2,447,712)
Gain (loss) on financial instruments at fair value through		(00,701)	(079,071)	(2,117,712)
profit or loss (overlay approach)	9	90,298	(20,098)	(220,097)
Equity in other comprehensive income (loss) of associates Foreign currency translation adjustments for foreign		(3,318)	2,748	(15,758)
operations		(161, 365)	252,308	14,732
Net change in unrealized fair value of cash flow hedges Other comprehensive income (loss) of separate account		(14,460) 3,884	21,700 (41,273)	(70,494) (113,207)
Other comprehensive medine (1088) of separate account				
Items that will never be reclassified to profit or loss:		(171,745)	(664,286)	(2,852,536)
Remeasurements of the defined benefit liability		15,812	43,277	251,991
Equity in other comprehensive loss of associates		(10)	(2)	(5)
Valuation gain on securities at fair value through other				
comprehensive income		6,841	35,441	5,133
Gain(loss)on disposal of securities at fair value through other comprehensive income Changes in own credit risk on financial liabilities		(27,826)	(29,421)	2,134
designated at fair value through profit of loss		3,084	(2,798)	(4,749)
		(2,099)	46,497	254,504
Total other comprehensive income, net of income tax		(173,844)	(617,789)	(2,598,032)
Total comprehensive income for the year		₩3,324,232	3,494,839	2,134,131
Profit attributable to:				
Equity holders of Shinhan Financial Group Co., Ltd.	29, 42	₩3,414,595	4,019,254	4,642,292
Non-controlling interests		83,481	93,374	89,871
		₩3,498,076	4,112,628	4,732,163
Total comprehensive income attributable to:				
Equity holders of Shinhan Financial Group Co., Ltd.		₩3,242,745	3,402,925	2,045,190
Non-controlling interests		81,487	91,914	88,941
		₩3,324,232	3,494,839	2,134,131
Earnings per share:	29, 42			
Basic and diluted earnings per share in won		₩ 6,654	7,308	8,454

See accompanying notes to the consolidated financial statements.

(In millions of won) Equity attributable to equity holders of Shinha

(In millions of won)		Equity attribut	able to equity l	holders of Shinh	Equity attributable to equity holders of Shinhan Financial Group Co., Ltd.	oup Co., Ltd.			
	Capital stock	Hybrid bonds	Capital surplus	Capital adjustments	Accumulated other compre- hensive income (loss)	Retained earnings	Sub-total	Non- controlling interests	Total
Balance at January 1, 2020	<del>W</del> 2,732,463	1,731,235	10,565,353	(1,116,770)	(260, 156)	25,525,821	39,177,946	2,752,435	41,930,381
1 otal comprehensive income for the year Profit for the year Other commedensitie income (loce) not of	I	I	I		I	3,414,595	3,414,595	83,481	3,498,076
Outer compt encusive income (1088), net of income tax:									
Loss on valuation and disposal of securities at fair value through other comprehensive									
income		Ι	I		(107, 484)	I	(107, 484)	(285)	(107, 769)
Gain on financial instruments at fair value through profit or loss (overlav approach)				I	90.298		90.298		90.298
Equity in other comprehensive loss of									
associates					(3, 328)		(3, 328)		(3, 328)
Foreign currency translation adjustments for foreign operations					(159.596)		(159.596)	(1.769)	(161.365)
Net change in unrealized fair value of cash									
flow hedges Other commedencing income of concerts					(14,460)		(14,460)		(14,460)
outer comprehensive income of separate account					3,884		3,884		3,884
Remeasurements of defined benefit plans					15,752		15,752	60	15,812
Changes in own credit risk on financial liabilities designated at fair value through									
profit or loss					3,084		3,084	I	3,084
Total other comprehensive loss					(171,850)		(171,850)	(1,994)	(173,844)
Total comprehensive income(loss)					(171,850)	3,414,595	3,242,745	81,487	3,324,232
Other changes in equity Dividends						(883.929)	(883.929)		(883.929)
Dividends to hybrid bonds						(85.327)	(85.327)		(85.327)
Issuance of hybrid bonds		448,699					448,699		448,699
Paid-in capital increase	237,178		1,197,774				1,434,952		1,434,952
Acquisition of treasury stock(Note 29)				(150, 467)			(150, 467)		(150, 467)
Disposal of treasury stock(Note 29)				451,809			451,809		451,809
Retirement of treasury stock(Note 29)				150,000		(171,021)	(CZ) 133 164		(CZ) 122 16A
Change in other non-controlling interests			710(1)+	(100,222)		(111,01)		(546,631)	(546, 631)
	237,178	448,699	1,669,586	428,835		(1,135,422)	1,648,876	(546,631)	1,102,245
Reclassification of OCI retained earnings					27,825	(27,825)			
Balance at December 31, 2020	<del>W</del> 2,969,641	2,179,934	12,234,939	(687,935)	(404, 181)	27,777,169	44,069,567	2,287,291	46,356,858

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SHINHAN FINANCIAL GROUP CO., LTD. AND SUBSIDIARIES <b>Consolidated Statements of Changes in Equity (Continued)</b> For the year ended December 31, 2021	LTD. AND SU n Equity (Con	JBSIDIARIE ttinued)	S						
(In millions of won)		Equity attribut	able to equity <b>h</b>	olders of Shinh	Equity attributable to equity holders of Shinhan Financial Group Co., Ltd.	oup Co., Ltd.			
	Capital stock	Hybrid bonds	Capital surplus	Capital adjustments	Accumulated other compre- hensive income (loss)	Retained earnings	Sub-total	Non- controlling interests	Total
Balance at January 1, 2021	<del>W</del> 2,969,641	2,179,934	12,234,939	(687,935)	(404, 181)	27,777,169	44,069,567	2,287,291	46,356,858
I otal comprehensive income for the year Profit for the year			I	I		4.019.254	4.019.254	93.374	4.112.628
Other comprehensive income (loss), net of income tax.									
Loss on valuation and disposal of securities at fair value through other comprehensive									
income		I	Ι		(871, 104)		(871, 104)	(2,547)	(873, 651)
Loss on financial instruments at fair value through profit or loss (overlay approach)	l			l	(20,098)		(20,098)		(20,098)
Equity in other comprehensive income of associates					2.746		2.746		2.746
Foreign currency translation adjustments for							Î		
foreign operations Net change in unrealized fair value of cash					251,842		251,842	466	252,308
flow hedges				l	21,700		21,700		21,700
Outer comprehensive income of separate account	I		I	I	(41,273)		(41,273)		(41, 273)
Remeasurements of defined benefit plans Changes in own credit risk on financial					42,656		42,656	621	43,277
liabilities designated at fair value through									
					(2,190)		(2,190)		(2, 190)
I otal other comprehensive loss					(010,329)		(010,329)	(1,460)	(017,789)
Total comprehensive income(loss)					(616,329)	4,019,254	3,402,925	91,914	3,494,839
Other changes in equity Dividends	I	I	I	I	I	(803,838)	(803, 838)		(803, 838)
Interim dividends						(299,082)	(299,082)		(299,082)
Dividends to hybrid bonds						(116,388)	(116,388)		(116,388)
Issuance of nybrid bonds Acquisition of treasury stock (Note 29)		/ 60,401,1 		(10)			16C,4C1,1 (97)		1,6C,4C1,1 (97)
Disposal of treasury stock (Note 29)				23,589			23,589		23,589
Change in other capital adjustments			(105)	(4)		(241)	(350)		(350)
		1 154 597	(139,896)	23 506		(1 219 549)	(181, 261)	(131 933)	(2/1, /24) (313, 275)
Reclassification of OCI retained earnings					35,574	(35,574)		(	(
Balance at December 31, 2021	<del>W</del> 2,969,641	3,334,531	12,095,043	(664,429)	(984,936)	30,541,300	47,291,150	2,247,272	49,538,422

SHINHAN FINANCIAL GROUP CO., LTD. AND SUBSIDIARIES Consolidated Statements of Changes in Equity (Continued) For the year ended December 31, 2022	LTD. AND SU n Equity (Con	JBSIDIARIE ttinued)	S						
(In millions of won)		Equity attribut	able to equity	holders of Shinh	Equity attributable to equity holders of Shinhan Financial Group Co., Ltd.	oup Co., Ltd.			
	Capital stock	Hybrid bonds	Capital surplus	Capital adjustments	Accumulated other compre- hensive income (loss)	Retained earnings	Sub-total	Non- controlling interests	Total
Balance at January 1, 2022	<del>W</del> 2,969,641	3,334,531	12,095,043	(664,429)	(984,936)	30,541,300	47,291,150	2,247,272	49,538,422
Total compremensive income for the year Profit for the year Other comprehensive income (loss), net of	Ι					4,642,292	4,642,292	89,871	4,732,163
income tax: Loss on valuation and disposal of securities at fair value through other commehantive									
in the value an order outer comprehensive income				I	(2,436,859)		(2, 436, 859)	(3,586)	(2,440,445)
Loss on mancial instruments at fair value through profit or loss (overlay approach)	Ι			I	(220,097)		(220,097)		(220,097)
Equity in other comprehensive ross of associates Exacts our convention of increments for					(15,763)		(15,763)		(15,763)
roteign currency translation adjustiments for foreign operations Not observe in summing for rolling of cond-	I			I	12,936		12,936	1,796	14,732
Net change in unrealized fair value of cash flow hedges Other commender into the optimized	l			l	(70, 494)		(70,494)		(70, 494)
Other comprehensive ross of separate account	I			I	(113,207)	I	(113, 207)	I	(113,207)
liabilites(assets) Changes in own credit risk on financial					251,131		251,131	860	251,991
liabilities designated at fair value through profit or loss	ļ				(4,749)		(4,749)		(4,749)
Total other comprehensive loss					(2,597,102)		(2,597,102)	(930)	(2,598,032)
Total comprehensive income(loss)					(2,597,102)	4,642,292	2,045,190	88,941	2,134,131
Other changes in equity Dividends		I	I	I		(747 705)	(747 705)	I	(747 705)
Interim dividends						(637,598)	(637,598)		(637, 598)
Dividends to hybrid bonds Issuance of hybrid bonds		007 120				(156, 277)	(156,277)		(156,277)
Repayments of hybrid bonds		(134,683)		(317)			(135,000)		(135,000)
Acquisition of treasury stock (Note 29) Retirement of treasury stock (Note 29)				(300,000) 300,000		(300,061)	(500,000) (61)		(300,000) (61)
Change in other capital adjustments Change in other non-controlling interests				(3,904) 85,791			(3,904) 85,791	355,503	(3,904) 441,294
)		862,437		81,570		(1,841,641)	(897,634)	355,503	(542, 131)
Reclassification of OCI retained earnings					(682)	682			
Balance at December 31, 2022	<del>W</del> 2,969,641	4,196,968	12,095,043	(582,859)	(3,582,720)	33,342,633	48,438,706	2,691,716	51,130,422

See accompanying notes to the consolidated financial statements.

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## **Consolidated Statements of Cash Flows**

For the years ended December 31, 2020, 2021 and 2022

(In millions of won)	Note	2020	2021	2022
Cash flows from operating activities				
Profit before income taxes		₩ 4,753,871	5,583,664	6,349,251
Adjustments for:				
Interest income	31	(14,773,996)	(14,724,230)	(20,108,666)
Interest expense	31	4,891,296	3,954,905	7,644,985
Dividend income	33	(97,956)	(124,531)	(142,529)
Net fees and commission expense	32	187,304	124,486	126,665
Net insurance loss	27	1,726,150	1,356,064	404,300
Net loss (gain) on financial instruments at fair value				
through profit or loss	34	136,191	(174,279)	541,832
Net loss (gain) on derivatives	10	(245,681)	64,128	719,766
Net loss (gain) on financial instruments at fair value	_			
through profit or loss (overlay approach)	9	136,255	(43,003)	(313,211)
Net loss (gain) on foreign currency translation		(232,723)	(21,130)	68,860
Net gain on financial instruments designated at fair	25	(0.41.0(())	(422.01.4)	(00( 741)
value through profit or loss	35	(241,066)	(423,914)	(806,741)
Net loss (gain) on disposal of securities at fair value	1.1	(072 702)		107 202
through other comprehensive income	11	(273,793)	(85,596)	127,393
Net loss on disposal of securities at amortized cost	11	25	319	101
Provision for allowance for credit loss	36	1,382,179	974,685	1,292,296
Employee benefit	25	175,539	221,259	194,952
Depreciation and other amortization	37	768,488	902,692	1,053,820
Other operating expense	39	202,178	457,359	427,362
Equity method income, net	15	(159,533)	(158,600)	(121,697)
Other non-operating expense (income)	40	153,360	447,138	(437,203)
		(6,265,783)	(7,252,248)	(9,327,715)
Changes in assets and liabilities:				
Due from banks at amortized cost		(1,541,911)	2,690,535	(1,059,733)
Securities at fair value through profit or loss		(7,088,599)	(2,934,113)	5,535,664
Due from banks at fair value through profit or loss		862,047	92,944	
Loans at fair value through profit or loss		132,172	341,140	(721,736)
Financial instruments designated at fair value through				
profit or loss		(708,627)	(9,466)	1,100,240
Derivative instruments		(65,288)	14,548	726,249
Loans at amortized cost		(32,897,127)	(28,740,535)	(24,109,475)
Other assets		(7,866,826)	(6,920,943)	152,673
Deposits		33,139,123	36,948,828	18,309,172
Liabilities for defined benefit obligations		(243,428)	(261,750)	(341,740)
Provisions		51,567	(25,526)	(59,400)
Other liabilities		8,503,803	(4,489,460)	211,712
		(7,723,094)	(3,293,798)	(256,374)
Income taxes paid		(1,184,910)	(1,149,965)	(1,693,408)
Interest received		14,570,884	14,325,392	19,205,026
Interest paid		(5,267,781)	(4,114,027)	(6,773,240)
Dividends received		80,728	100,936	89,020
Net cash inflow (outflow) from operating activities		₩ (1,036,085)	4,199,954	7,592,560

**Consolidated Statements of Cash Flows (Continued)** 

For the years ended December 31, 2020, 2021 and 2022

(In millions of won)	Note	2020	2021	2022
Cash flows from investing activities				
Decrease in financial instruments at fair value through				
profit or loss		₩ 4,537,421	4,362,417	5,175,744
Increase in financial instruments at fair value through				
profit or loss		(4,982,663)	(5,409,361)	(5,976,774)
Proceeds from disposal of securities at fair value through				
other comprehensive income		53,048,284	29,991,033	21,493,133
Acquisition of securities at fair value through other				
comprehensive income		(52,657,353)	(37,575,878)	(23,515,761)
Proceeds from disposal of securities at amortized cost		5,923,611	5,203,156	5,397,628
Acquisition of securities at amortized cost		(7,645,000)	(7,343,501)	
Proceeds from disposal of property and equipment	13, 40	248,037	20,068	93,511
Acquisition of property and equipment	13	(279,654)	(334,874)	(326,546)
Proceeds from disposal of intangible assets	14, 40	5,298	15,867	23,040
Acquisition of intangible assets	14	(362,415)	(555,340)	(616,581)
Proceeds from disposal of investments in associates	15	266,322	357,401	516,735
Acquisition of investments in associates	15	(776,799)	(588,827)	(657,836)
Proceeds from disposal of investment property	16, 40	113,038	276	259,453
Acquisition of investment property	16	(243,806)	(8,292)	(6,883)
Proceeds from disposal of assets held for sale		2,048	47,792	624,837
Change in other assets		11,233	(220,636)	(238,869)
Proceeds from settlement of hedging derivative financial				
instruments		25,722	61,502	12,585
Payment of settlement of hedging derivative financial				
instruments		(186,169)	(53,313)	(135,669)
Net cash flow from business combination	47	(73,081)		(27,840)
Net cash outflow from investing activities		₩ (3,025,926)	(12,030,510)	(11,031,456)

Consolidated Statements of Cash Flows (Continued)

For the years ended December 31, 2020, 2021 and 2022

(In millions of won)	Note	2020	2021	2022
Cash flows from financing activities				
Issuance of hybrid bonds		₩ 448,698	1,154,597	997,120
Repayments of hybrid bonds			_	(135,000)
Net increase in borrowings		7,465,106	849,212	6,145,271
Proceeds from debt securities issued		21,480,455	28,561,082	39,521,966
Repayments of debt securities issued		(21,508,827	) (24,143,252)	(41,777,940)
Increase in financial liabilities designated at fair value				
through profit or loss				49,993
Change in other liabilities		(30,526	) 83,067	239,591
Dividends paid		(968,847	) (1,218,761)	(1,540,871)
Proceeds from settlement of hedging derivative financial				
instruments		851,381	1,223,033	2,391,556
Payment of settlement of hedging derivative financial				
instruments		(807,705		(2,319,927)
Acquisition of treasury stock		(150,182	) (79)	(300,000)
Disposition and redemption of treasury stock		161,863	23,588	(60)
Increase(decrease) in non-controlling interests		566,673	(84,998)	382,929
Redemption of lease liabilities		(781,867	) (275,273)	(259,913)
Paid-in capital increase		1,154,347	_	—
Issuance of convertible preferred shares		—	—	—
Payment of stock issuance costs			(105)	
Net cash inflow from financing activities		7,880,569	4,961,745	3,394,715
Effect of exchange rate changes on cash and cash				
equivalents held		(51,385	) 112,854	(57,837)
Increase (decrease) in cash and cash equivalents		3,767,173	(2,755,957)	(102,018)
Cash and cash equivalents at beginning of year	44	23,092,227	26,859,400	24,103,443
Cash and cash equivalents at end of year	44	₩ 26,859,400	24,103,443	24,001,425

See accompanying notes to the consolidated financial statements.

### 1. Reporting entity

Shinhan Financial Group Co., Ltd., the controlling company, and its subsidiaries included in consolidation (collectively the "Group") are summarized as follows:

(a) Controlling company

Shinhan Financial Group Co., Ltd. (the "Shinhan Financial Group" or the "Company"), the controlling company, is incorporated on September 1, 2001 for the main purposes of controlling, managing and funding Shinhan Bank, Shinhan Securities Co., Ltd., Shinhan Capital Co., Ltd. and Shinhan BNP Asset Management Co., Ltd. by way of share transfers. The total capital stock amounted to \$1,461,721 million. Also, Shinhan Financial Group's shares have been listed on the Korea Exchange since September 10, 2001 and Shinhan Financial Group's American Depositary Shares have been registered with the Securities and Exchange Commission (SEC) and listed on the New York Stock Exchange since September 16, 2003.

(b) Ownership of Shinhan Financial Group and its major consolidated subsidiaries as of December 31, 2021 and 2022 are as follows:

			Date of financial	Ownership (%)	
Investor	Investee(*1)	Location	information	2021	2022
Shinhan Financial Group Co.,					
Ltd.	Shinhan Bank	Korea	December 31	100.0	100.0
"	Shinhan Card Co., Ltd.	"	"	100.0	100.0
**	Shinhan Securities Co.,				
	Ltd. (*2)	"	"	100.0	100.0
**	Shinhan Life Insurance Co.,				
	Ltd.	"	"	100.0	100.0
>>	Shinhan Capital Co., Ltd.	"	"	100.0	100.0
>>	Jeju Bank	"	"	75.3	75.3
"	Shinhan Credit Information				
	Co., Ltd. (*3)	"	"	100.0	_
>>	Shinhan Alternative				
	Investment Management				
	Inc. (*4)	"	"	100.0	_
>>	Shinhan Asset Management				
	Co., Ltd. (*4)	"	"	100.0	100.0
"	SHC Management Co., Ltd.	"	"	100.0	100.0
>>	Shinhan DS	"	"	100.0	100.0
"	Shinhan Savings Bank	"	"	100.0	100.0
"	Shinhan Asset Trust Co.,				
	Ltd. (*5)	"	"	60.0	100.0
"	Shinhan AITAS Co., Ltd.	"	"	99.8	99.8
"	Shinhan REITs				
	Management Co., Ltd.	"	"	100.0	100.0
"	Shinhan AI Co., Ltd.	"	"	100.0	100.0
"	Shinhan Venture Investment				
	Co., Ltd.	"	"	100.0	100.0
"	Shinhan EZ General				
	Insurance, Ltd. (*6)	"	"		85.1

## 1. Reporting entity (continued)

Investor	Investee(*1)	Location	Date of financial information	Owners	hip (%) 2022
Shinhan Bank	Shinhan Bank America	USA	,,	100.0	100.0
,,,	Shinhan Bank Europe	COIL		100.0	100.0
	GmbH	Germany	"	100.0	100.0
"	Shinhan Bank Cambodia	Cambodia	**	97.5	97.5
"	Shinhan Bank Kazakhstan				
	Limited	Kazakhstan	,,	100.0	100.0
"	Shinhan Bank Canada	Canada	"	100.0	100.0
"	Shinhan Bank (China)				
	Limited	China	"	100.0	100.0
"	Shinhan Bank Japan	Japan	"	100.0	100.0
"	Shinhan Bank Vietnam Ltd.	Vietnam	"	100.0	100.0
"	Banco Shinhan de Mexico	Mexico	"	99.9	99.9
,,	PT Bank Shinhan Indonesia	Indonesia	"	99.0	99.0
Shinhan Bank Japan	SBJDNX	Japan	"	100.0	100.0
Shinhan Card Co., Ltd.	Shinhan Credit Information Co., Ltd. (*3)	Korea	December 31		100.0
>>	LLP MFO Shinhan Finance	Kazakhstan	"	100.0	100.0
"	PT. Shinhan Indo Finance (*7)	Indonesia	,,	50.0+1 share	76.3
"	Shinhan Microfinance Co., Ltd.	Myanmar	"	100.0	100.0
"	Shinhan Vietnam Finance Co., Ltd.	Vietnam	"	100.0	100.0
Shinhan Securities Co., Ltd.	Shinhan Securities America Inc. (*8)	USA	"	100.0	100.0
"	Shinhan Securities Asia Ltd. (*9)	Hong Kong	"	100.0	100.0
"	SHINHAN SECURITIES VIETNAM CO., LTD.	Vietnam	"	100.0	100.0
"	PT. Shinhan Sekuritas Indonesia	Indonesia	"	99.0	99.0
PT Shinhan Sekuritas Indonesia	PT. Shinhan Asset Management Indonesia	"	"	75.0	75.0
Shinhan Life Insurance Co., Ltd.	Shinhan Financial Plus	Korea	"	100.0	100.0
"	Shinhan CubeOn Co., Ltd.	Korea	"	100.0	100.0
"	Shinhan Life Insurance Vietnam Co., Ltd.	Vietnam	"		100.0
Shinhan Asset Management Co., Ltd.	SHINHAN ASSET MGT HK, LIMITED	Hong Kong	>>	100.0	100.0
Shinhan DS	SHINHAN DS VIETNAM CO., LTD.	Vietnam	"	100.0	100.0

(\*1) Subsidiaries such as trust, beneficiary certificate, corporate restructuring fund and private equity fund which are not actually operating their own business are excluded.

### 1. Reporting entity (continued)

- (\*2) Shinhan Investment Co., Ltd. has changed its name to Shinhan Securities Co., Ltd. on October 1, 2022.
- (\*3) On July 28, 2022, the Company disposed 100% of shares to Shinhan Card.
- (\*4) Shinhan Asset Management Co., Ltd. and Shinhan Alternative Investment Management Inc. have merged on January 5, 2022 to form a company named Shinhan Asset Management Co., Ltd.
- (\*5) The Group has acquired remaining shares of Asia Trust Co., Ltd. during the period, and Asia Trust Co., Ltd. became the Group's wholly-owned subsidiary. Asia Trust Co., Ltd. has changed its name to Shinhan Asset Trust Co., Ltd.
- (\*6) The Group has acquired additional 94.54 % of shares of BNP Paribas Cardif General Insurance, Ltd. (5.46 % of shares of Shinhan Life Insurance Co., Ltd.) during the period, and BNP Paribas Cardif General Insurance, Ltd. became the Group's wholly-owned subsidiary. BNP Paribas Cardif General insurance, Ltd. has changed its name to Shinhan EZ General Insurance, Ltd. The controlling company participated in a paid-in capital increase of ₩80 billion conducted by Shinhan EZ General Insurance, Ltd. and the Group's share ratio decreased from 100% to 85.1%.
- (\*7) The paid-in capital increase was completed during the period, and the Group's share ratio has increased from 50 % + 1 share to 76.3 %.
- (\*8) Shinhan Investment America Inc. has changed its name to Shinhan Securities America Inc. during the period.
- (\*9) Shinhan Investment Asia Ltd. has changed its name to Shinhan Securities Asia Ltd. during the period.
- (c) Consolidated structured entities

Consolidated structured entities are as follows:

Category	Consolidated structured entities	Description
Trust	Shinhan Bank (including development trust) and 17 others	A trust is consolidated when the Group as a trustee is exposed to variable returns, if principle or interest amounts of the entrusted properties falls below guaranteed amount, the Group should compensate it, and the Group has the ability to affect those returns.
Asset-Backed Securitization	MPC Yulchon Green I and 226 others	An entity for asset backed securitization is consolidated when the Group has sole decision- making authority to dispose assets or change the conditions of the assets, and the Group is exposed to, or has rights to related variable returns by providing credit enhancement and purchases of subordinated securities.

### **1.** Reporting entity (continued)

Category	Consolidated structured entities	Description
Structured Financing	SHPE Holdings One Co., Ltd.	An entity established for structured financing relating to real estate, shipping, or mergers and acquisitions is consolidated, when the Group has the greatest credit to the entity, has sole decision-making authority of these Entities due to the entities default, and is exposed to, or has rights to related variable returns.
Investment Fund	KoFC Shinhan Frontier Champ 2010-4 PEF and 149 others	An investment fund is consolidated, when the Group manages or invests assets of the investment funds on behalf of other investors as a collective investor or a business executive, or has the ability to dismiss the manager of the investment funds, and is exposed to, or has rights to, the variable returns.

(\*) The Group provides credit contribution (ABCP purchase agreements) of ₩6,940,100 million for the purpose of credit enhancement of structured companies.

### 2. Basis of preparation

### (a) Statement of compliance

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS"). IFRS are the standards and related interpretations issued by the International Accounting Standards Board ("IASB").

The consolidated financial statements of the Group were authorized for issue by the Board of Directors on February 8, 2023. and the consolidated financial statements were submitted for approval to the stockholder's meeting held on March 23, 2023.

### (b) Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis, except for the following material items in the statement of financial position:

- derivative financial instruments measured at fair value
- financial instruments at fair value through profit or loss measured at fair value
- financial instruments at fair value through other comprehensive income measured at fair value
- liabilities for cash-settled share-based payment arrangements measured at fair value
- financial assets and liabilities designated as hedged items in a fair value hedge accounting of which changes in fair value attributable to the hedged risk recognized in profit or loss
- liabilities for defined benefit plans recognized at the net of the total present value of defined benefit obligations less the fair value of plan assets

2. Basis of preparation (continued)

### (c) Functional and presentation currency

The respective financial statements of the Group entities are prepared in the functional currency of the respective economic environment in which the group entities operate. These consolidated financial statements are presented and reported in Korean won, which is the Controlling Company's functional currency and the currency of the primary economic environment in which the Group operates.

### (d) Use of estimates and judgments

The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. If the estimates and assumptions based on management's best judgment as of December 31, 2022 are different from the actual environment, these estimates and actual results may be different.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Information about critical judgments in applying accounting policies that have a significant effect on the amounts recognized in the consolidated financial statements and information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are described in Note 5.

In preparing these consolidated financial statements, the significant judgments made by management in applying the Group's accounting policies and the key sources of estimation uncertainty are the same as those that applied to the consolidated financial statements as of and for the year ended December 31, 2021.

### (e) Standards and amendments adopted by the Group

The Group has newly applied the following accounting policies upon preparation of the annual consolidated financial statements for the year ended December 31, 2022.

### i) IFRS 3 'Business combination' amended – Reference to the Conceptual Framework

The amendments update a reference of definition of assets and liabilities to be recognized in a business combination in revised Conceptual Framework for Financial Reporting. However, the amendments add an exception for the recognition of liabilities and contingent liabilities within the scope of IAS 37 '*Provisions, Contingent Liabilities and Contingent Assets*', and IFRIC 21 '*Levies*'. The amendments also clarify that contingent assets should not be recognized at the acquisition date. The amendments do not have a significant impact on the consolidated financial statements.

### ii) IAS 16 'Property, Plant and Equipment ' amended – Proceeds before the intended use

The amendments require the entity to recognize the proceeds from selling such items, and the costs of producing those items, in profit or loss, and prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while the entity is preparing the asset for its intended use. The amendments do not have a significant impact on the consolidated financial statements.

(In millions of won)

### 2. Basis of preparation (continued)

# *iii) IAS 37, 'Provisions, Contingent Liabilities and Contingent Assets' amended—Onerous Contracts: Cost of Fulfilling a Contract*

The amendments clarify that the direct costs of fulfilling a contract include both the incremental costs of fulfilling the contract and an allocation of other costs directly related to fulfilling contracts when assessing whether the contract is onerous. The amendments do not have a significant impact on the consolidated financial statements.

### iv) Annual Improvements to IFRSs 2018-2020 Cycle

For Annual Improvements to IFRSs 2018-2020 Cycle, the amendments will take effect for annual periods beginning after January 1, 2022 and are permitted for early application. The amendments do not have a significant impact on the consolidated financial statements.

- IFRS 1, 'First-time Adoption of IFRS'-First-time adopter subsidiaries
- IFRS 9, 'Financial Instruments' -10% test-related fee for financial liabilities removal
- IAS 41, 'Agriculture'- Fair value measurement

### v) IAS 7, 'Statements of Cash flows' - Cash and cash equivalents

The Group did not classify deposits with restrictions under relevant regulations, such as reserve deposits, as cash and cash equivalents. However, in accordance with the IFRS Interpretation Committee's agenda decision in April 2022 'Demand Deposits with Restrictions on Use arising from a Contract with a Third Party' and the response to IFRS inquiry stating 'whether the reserve deposit should be classified as cash and cash equivalents', it was changed to classify reserve deposits corresponding to demand deposits as cash and cash equivalents retroactively. The impact of this change in accounting policy is as follows:

### ① Impact on consolidated statements of cash flows

	December 31, 2020	December 31, 2021	December 31, 2022
Decrease in cash flows from operating activities	₩ 3,373,232	(6,880,161)	(877,724)
Effect of exchange rate changes on cash and cash			
equivalents denominated in foreign currencies	10,133	3,301	(1,575)
Increase in cash and cash equivalents at the beginning of			
the period	14,513,053	17,896,418	11,019,558
Increase in cash and cash equivalents at the end of the			
period	₩17,896,418	11,019,558	10,140,259

2 Impact on notes to the consolidated statements of cash flows

	December 31, 2020	December 31, 2021	December 31, 2022
Decrease in restricted deposits - excluded cash and cash			
equivalents	₩17,896,418	11,019,558	10,140,259

### 3. Significant accounting policies

Significant accounting policies applied by the Group upon the preparation of consolidated financial statements under IFRS are described below, and consolidated financial statements for the year ended

(In millions of won)

### 3. Significant accounting policies (continued)

December 31, 2022 and comparative periods were prepared using the same accounting policy, except for changes in accounting policy described in the Note 2.

### (a) Operating segments

The Group has divided the segments based on internal reports reviewed periodically by the top sales decision maker to make decisions about the resources allocated to the segments and evaluate their performance. There are six reporting segments as described in Note 7. The reporting segments are operated separately according to the nature of the goods and services provided and the organizational structure of the Group.

The segment reported to the Chief Executive Officer ("CEO") includes items directly attributable to a segment as well as those that can be allocated on a reasonable basis.

It is the CEO's responsibility to evaluate the resources to be distributed to the business and the performance of the business, and to make strategic decisions.

### (b) Basis of consolidation

### i) Subsidiaries

Subsidiaries are investees controlled by the Group. The Group controls an investee when it is exposed to, or has rights to, variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

If a member of the Group uses accounting policies other than those adopted in the consolidated financial statements for the same transactions and events in similar circumstances, appropriate adjustments are made to its financial statements in preparing the consolidated financial statements.

### ii) Structured entity

The Group establishes or invests in various structured entities. It does not own shares directly or indirectly for these companies. Considering the terms and conditions of the arrangement in which the structured entity was established, the Group gains and losses from the operations of the structured entity. It is included in the consolidated entities if it is determined that it has the ability to direct the activities of a consolidated structured entity affect these gains and losses. The Group does not recognize any non-controlling interests as equity in relation to structured entities in the consolidated statements of financial position since the non-controlling interests in these entities are recognized as liabilities of the Group.

### iii) Intra-group transactions eliminated on consolidation

Intra-group balances, transactions, and any unrealized income and expenses arising from intra-group transactions are eliminated in preparing the consolidated financial statements. Unrealized intra-group losses are recognized as expense if intra-group losses indicate an impairment that requires recognition in the consolidated financial statements.

### 3. Significant accounting policies (continued)

### iv) Non-controlling interests

Non-controlling interests in a subsidiary are accounted for separately from the parent's ownership interests in a subsidiary. Each component of net profit or loss and other comprehensive income is attributed to the owners of the parent and non-controlling interest holders, even when the non-controlling interests balance is reduced to below zero.

### (c) Business combinations

### i) Business combinations

A business combination is accounted for by applying the acquisition method, unless it is a combination involving entities or businesses under common control.

Each identifiable asset or liability is measured at its acquisition-date fair value except for below:

- Leases are required to be classified based on the contractual terms and other factors
- Only those contingent liabilities assumed in a business combination that are a present obligation and can be measured reliably are recognized
- Deferred tax assets or liabilities are recognized and measured in accordance with IAS 12, '*Income Taxes*'
- Employee benefit arrangements are recognized and measured in accordance with IAS 19, 'Employee Benefits'
- Compensation assets are recognized and measured on the same basis as the items subject to compensation.
- Reacquired rights are measured in accordance with special provisions
- Liabilities or equity instruments related to share-based payment transactions are measured in accordance with the method in IFRS 2, *'Share-based Payment'*
- Non-current assets held for sale are measured at fair value less costs to sell in accordance with IFRS 5, *Non-current Assets Held for Sale and Discontinued Operations*'

As of the acquisition date, non-controlling interests in the acquired are measured as the non-controlling interests' proportionate share of the acquirer's identifiable net assets.

The transfer consideration in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the acquirer, the liabilities incurred by the acquirer to former owners of the acquired and the equity interests issued by the acquirer. However, any portion of the acquirer's share-based payment awards exchanged for awards held by the acquired employee that is included in transfer consideration in the business combination shall be measured in accordance with the method described above rather than at fair value.

Acquisition-related costs are costs the acquirer incurs to effect a business combination. Those costs include broker's fees; advisory, legal, accounting, valuation and other professional or consulting fees; general administrative costs, including the costs of maintaining an internal acquisitions department; and costs of registering and issuing debt and equity securities. Acquisition-related costs, other than those associated with the issue of debt or equity securities, which are recognized in accordance with IAS 32 and IFRS 9, are expensed in the periods in which the costs are incurred and the services are received.

### 3. Significant accounting policies (continued)

### (d) Investments in associates and joint ventures

An associate is an entity in which the Group has significant influence, but not control, over the entity's financial and operating policies. Significant influence is presumed to exist when the Group holds between 20 and 50 percent of the voting power of another entity.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

The investment in an associate and a joint venture is initially recognized at cost, and the carrying value is increased or decreased to recognize the Group's share of the profit or loss and changes in equity of the associate and the joint venture after the date of acquisition. Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated the Group's stake in preparing the consolidated financial statements. Unrealized losses are also being derecognized unless the transaction provides evidence of an impairment of the transferred assets.

If an associate or a joint venture uses accounting policies different from those of the Group for transactions and events in similar circumstances, appropriate adjustments are made to its financial statements in applying the equity method.

When the carrying value of that interest, including any long-term investments, is reduced to nil, the recognition of further losses is discontinued except to the extent that the Group has an obligation or has to make payments on behalf of the investee for further losses.

### (e) Cash and cash equivalents

The Group classifies cash balances, call deposits and highly liquid investment assets with original maturities of three months or less from the acquisition date that are easily converted into a fixed amount of cash, and are subject to an insignificant risk of changes in their fair value as cash and cash equivalents. Equity instruments are excluded from cash equivalents unless they are, in substance, cash equivalents, like in the case of preferred shares acquired within a short period of their maturity and with a specified redemption date.

### (f) Non-derivative financial assets

Financial assets are recognized in the consolidated statement of financial position when the Group becomes a party to the contract. In addition, a standardized purchase or sale (a purchase or sale of a financial asset under a contract whose terms require delivery of the asset within the time frame established generally by regulation or convention in the market concerned) is recognized on the trade date.

A financial asset is measured initially at its fair value plus, for an item not at Fair Value Through Profit or Loss ("FVTPL"), transaction costs that are directly attributable to its acquisition of the financial asset. Transaction costs on the financial assets at FVTPL that are directly attributable to the acquisition are recognized in profit or loss as incurred.

3. Significant accounting policies (continued)

### i) Financial assets designated at FVTPL

Financial assets can be irrevocably designated as measured at FVTPL despite of classification standards stated below, if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise from measuring assets or liabilities or recognizing the gains or losses on them on different bases.

### ii) Equity instruments

For the equity instruments that are not held for short-term trading, at initial recognition, the Group may make an irrevocable election to present subsequent changes in fair value in other comprehensive income. Equity instruments that are not classified as financial assets at Fair Value through Other Comprehensive Income ("FVOCI") are classified as financial assets at FVTPL.

The Group subsequently measures all equity investments at fair value. Valuation gains or losses of the equity instruments that are classified as financial assets at FVOCI previously recognized as other comprehensive income is not reclassified as profit or loss on recognition. The Group recognizes dividends in profit or loss when the Group's right to receive payments of the dividend is established.

Valuation gains or losses due to changes in fair value of the financial assets at FVTPL are recognized in the consolidated statement of comprehensive income gains or losses on financial assets at FVTPL. Impairment loss (reversal) on equity instruments at FVOCI is not recognized separately.

### iii) Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model in which the asset is managed and the contractual cash flow characteristics of the asset. Debt instruments are classified as financial assets at amortized cost, at FVOCI, or at FVTPL. Debt instruments are reclassified only when the Group's business model changes.

### ① Financial assets at amortized cost

Assets that are held within a business model whose objective is to hold assets to collect contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. A gain or loss on a financial asset measured at amortized cost that is not subject to a hedging relationship is recognized in profit or loss when the financial asset is derecognized or impaired. Interest income on the effective interest method is included in the 'Interest income' in the consolidated statement of comprehensive income.

### ② Financial assets at FVOCI

Assets that are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets and, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Other than (reversal of) impairment losses, interest income, foreign exchange differences, gains or losses of the financial assets at FVOCI are recognized as other comprehensive income in equity. On removal, gains or losses accumulated in other comprehensive income are reclassified to profit or loss. The interest income on the effective interest method is included in the 'Interest income' in the consolidated statement of comprehensive income. Foreign exchange differences and impairment losses are included in the 'Net foreign currency transaction gain' and 'Provision for credit losses allowance' in the consolidated statement of comprehensive income, respectively.

3. Significant accounting policies (continued)

### ③ Financial assets at FVTPL

Debt securities other than financial assets at amortized costs or FVOCI are classified at FVTPL. Unless hedge accounting is applied, gains or losses from financial assets at FVTPL are recognized as profit or loss and are included in 'Net gain(loss) on financial assets at fair value through profit or loss' in the consolidated statement of comprehensive income.

### iv) Embedded derivatives

Financial assets with embedded derivatives are classified regarding the entire hybrid contract, and the embedded derivatives are not separately recognized. The entire hybrid contract is considered when it is determined whether the contractual cash flows represent solely payments of principal and interest.

### v) Derecognition of financial assets

The Group derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. If the Group does not have or transfer most of the risks and rewards of ownership of the financial asset, the entity shall remove the financial asset if it does not control the financial asset. If the Group continues to control the financial asset, it continues to recognize the transferred asset to the extent that it is continuously involved and recognizes the related liability together.

If the Group transfers the right to cash flows of a financial asset but holds most of the risks and rewards of ownership of the financial asset, the entity shall continue to recognize the asset. Also, the amount of disposal received is recognized as a liability.

### vi) Offsetting

Financial assets and financial liabilities are offset and the net amount is presented in the consolidated statement of financial position only when the Group currently has a legally enforceable right to set off the recognized amounts, and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

### (g) Derivative financial instruments

Derivatives are initially recognized at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are accounted for as described below.

### i) Hedge accounting

The Group holds forward exchange contracts, interest rate swaps, currency swaps and other derivative contracts to manage interest rate risk and foreign exchange risk. The Group designated derivatives as hedging instruments to hedge the risk of changes in the fair value of assets, liabilities or firm commitments (a fair value hedge) and foreign currency risk of highly probable forecasted transactions or firm commitments (a cash flow hedge).

On initial designation of the hedge, the Group formally documents the relationship between the hedging instrument(s) and hedged item(s), including the risk management objectives and strategy in undertaking the hedge transaction. In addition, this document describes the hedging instrument, hedged item, and the method

(In millions of won)

### 3. Significant accounting policies (continued)

of evaluating the effect of the hedging instrument offsetting changes in the fair value or cash flow of the hedged item due to the hedged risk at the initiation of the hedging relationship and in subsequent periods.

## ① Fair value hedge

Changes in the fair value of a derivative hedging instrument designated as a fair value hedge are recognized in profit or loss. The gain or loss from remeasuring the hedging instrument at fair value for a derivative hedging instrument and the gain or loss on the hedged item attributable to the hedged risk are recognized in profit or loss in the same line item of the separate statement of comprehensive income.

The Group discontinues fair value hedge accounting if the hedging instrument expires or is sold, terminated or exercised, or if the hedge no longer meets the criteria. Any adjustment arising from G/L on the hedged item attributable to the hedged risk is amortized to profit or loss from the date the hedge accounting is discontinued.

### 2 Cash flow hedge

When a derivative is designated to hedge the variability in cash flows attributable to a particular risk associated with a recognized asset or liability or a highly probable forecasted transaction that could affect profit or loss, the effective portion of changes in the fair value of the derivative is recognized in other comprehensive income, net of tax, and presented in the hedging reserve in equity. Any ineffective portion of changes in the fair value of the derivative is recognized income of the derivative is recognized immediately in profit or loss.

If the hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, terminated, exercised, or the designation is revoked, then hedge accounting is discontinued prospectively. The cumulative gain or loss on the hedging instrument that has been recognized in other comprehensive income is reclassified to profit or loss in the periods during which the forecasted transaction occurs. If the forecasted transaction is no longer expected to occur, then the balance in other comprehensive income is recognized immediately in profit or loss.

### ③ Net investment hedge

The portion of the change in fair value of a financial instrument designated as a hedging instrument that meets the requirements for hedge accounting for a net investment in a foreign operation is recognized in other comprehensive income and the ineffective portion of the hedge is recognized in profit or loss. The portion recognized as other comprehensive income that is effective as a hedge is recognized in the statement of comprehensive income as a result of reclassification adjustments in accordance with IAS 21, "Effect of Changes in Foreign Exchange Rates" at the time of disposing of its overseas operations or disposing of a portion of its overseas operations to profit or loss.

### ii) Other derivative financial instruments

All derivatives except those designated as hedging instruments and are effective in hedging are measured at fair value. Changes in the fair value of other derivative financial instrument not designated as a hedging instrument are recognized immediately in profit or loss.

### iii) Gains and losses on initial recognition

Any difference between the fair value of over the counter derivatives at initial recognition and the amount that would be determined at that date using a valuation technique in a situation in which the valuation is dependent on unobservable parameters is not recognized in profit or loss but is deferred, and the deferred gains and losses

Notes to the Consolidated Financial Statements

(In millions of won)

### 3. Significant accounting policies (continued)

on initial transaction are depreciated on a straight-line basis over the life of the instrument or the remainder is recognized in profit or loss immediately when the fair value becomes observable.

### (h) Expected credit losses of Financial assets

The Group recognizes allowance for credit loss("ACL") for debt instruments measured at amortized cost and fair value through other comprehensive income, and lease receivable, loan commitments and financial guarantee contracts using the expected credit loss impairment model. Financial assets migrate through the following three stages based on the change in credit risk since initial recognition and allowance for credit loss for the financial assets are measured at the 12-month expected credit losses ("ECL") or the lifetime ECL, depending on the stage.

	Category	Allowance for credit loss
STAGE 1	When credit risk has not increased significantly since the initial recognition	12-months ECL: the ECL associated with the probability of default events occurring within the next 12 months
STAGE 2	When credit risk has increased significantly since the initial recognition	Lifetime ECL: a lifetime ECL associated with the probability of default events occurring over the remaining lifetime
STAGE 3	When assets are impaired	Same as above
~ ~		

The Group, meanwhile, only recognizes the cumulative changes in lifetime expected credit losses since the initial recognition as an allowance for credit loss for purchased or originated credit-impaired financial assets.

The total period refers to the expected life span of the financial instrument up to the contract expiration date.

### i) Reflection of forward-looking information

The Group reflects forward-looking information presented by internal experts based on a variety of information when measuring expected credit losses. Assuming that the measurement factor of expected credit losses has a certain correlation with economic fluctuations, the expected credit losses are calculated by reflecting forward-looking information through modeling between macroeconomic variables and measurement factors.

### ii) Measurement of expected credit loss of financial assets at amortization cost

The expected credit loss of an amortized financial asset is measured as the difference between the present value of the cash flows expected to be received and the cash flow expected to be received. For this purpose, we calculate expected cash flows for individually significant financial assets. For non-individual significant financial assets, the financial assets collectively include expected credit losses as part of a set of financial assets with similar credit risk characteristics.

Expected credit losses are deducted using the allowance for credit loss account and are written off if the financial assets are not recoverable. The allowance for credit loss is increased when the written-off loan receivables are subsequently collected and changes in the allowance for credit loss are recognized in profit or loss.

### iii) Measurement of estimated credit loss of financial assets at FVOCI

The calculation of expected credit losses is the same as for financial assets measured at amortized cost, but changes in allowance for credit loss are recognized in other comprehensive income. In the case of disposal

3. Significant accounting policies (continued)

### (h) Expected credit losses of Financial assets (continued)

and redemption of other comprehensive income – fair value, the allowance for credit loss is reclassified from other comprehensive income to profit or loss and recognized in profit or loss.

### (i) Property and equipment

Property and equipment are initially measured at cost and after initial recognition. The cost of property and equipment includes expenditures arising directly from the construction or acquisition of the asset, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located. Certain land and buildings are measured at fair value at the date of transition to IFRS, which is deemed cost, in accordance with IFRS 1, '*First-time Adoption of IFRS*'. Subsequent to initial recognition, the asset is measured at cost less accumulated depreciation and accumulated impairment losses, if any.

The Group recognizes in the carrying value of an item of property and equipment the cost of replacing part of property and equipment when that cost is incurred if it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying value of those parts that are replaced is derecognized. The costs of the day-to-day servicing of property and equipment are recognized in profit or loss as incurred.

Land is not depreciated. Other property and equipment are depreciated on a straight-line basis over the estimated useful lives, which most closely reflect the expected pattern of consumption of the future economic benefits embodied in the asset. The estimated useful lives for the current and comparative periods are as follows:

Descriptions	Useful lives
Buildings	40~50 years
Other properties	4~5 years

Depreciation methods, useful lives and residual values are reassessed at each fiscal year-end and in case adjustments are needed, it is accounted for as a change in accounting estimate.

### (j) Intangible assets

Intangible assets are measured initially at cost and, subsequently, are carried at cost less accumulated amortization and accumulated impairment losses.

Amortization of intangible assets except for goodwill is calculated on a straight-line basis over the estimated useful lives of intangible assets as shown below, from the date that they are available for use. The residual value of intangible assets is zero. However, if there are no foreseeable limits to the periods over which certain intangible assets are expected to be available for use, they are determined to have indefinite useful lives and are not amortized.

Descriptions	Useful lives
Software	5 years
Capitalized development cost	5 years
Other intangible assets	5 years or contract periods

# 3. Significant accounting policies (continued)

Amortization periods and the amortization methods for intangible assets with finite useful lives are reviewed at the end of each reporting period. The useful lives of intangible assets that are not being amortized are reviewed at the end of each reporting period to determine whether events and circumstances continue to support indefinite useful life assessments for those assets. Changes are accounted for as changes in accounting estimates.

Expenditures on research activities, undertaken with the prospect of gaining new technical knowledge and understanding, are recognized in profit or loss as incurred. Development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Group intends to and has sufficient resources to complete development and to use or sell the asset. Other development expenditures are recognized in profit or loss as incurred.

# (k) Investment properties

Investment property is property held either to earn rental income or for capital appreciation or both. An investment property is initially recognized at cost including any directly attributable expenditure. Subsequent to initial recognition, the asset is measured at cost less accumulated depreciation and accumulated impairment losses, if any.

The depreciation method and the estimated useful lives for the current and comparative periods are as follows:

Descriptions	Useful lives	Depreciation method
Buildings	40 years	Straight-line

# (l) Leases

# *i)* Accounting treatment as the lessee

The Group leases various tangible assets, such as real estate and vehicles, and each of the lease contract is negotiated individually and includes a variety of terms and conditions. There are no other restrictions imposed by the lease contracts, but the lease assets cannot be provided as collaterals for borrowings.

At the commencement date of the lease, the Group recognizes the right-of-use assets and the lease liabilities. Each lease payment is allocated to payment for the principal portion of the lease liability and financial costs. The Group recognizes in profit or loss the amount calculated to produce a constant periodic rate of interest on the lease liability balance for each period as financial costs. Right-of-use assets are depreciated using a straight-line method from the commencement date over the lease term.

Lease liabilities are measured at the present value of the lease payments that are not paid at the commencement date of the lease, and the lease payments included in the measurement of the liabilities consist of the following payments:

- Fixed payments (including in-substance fixed payments, less any lease incentives receivable)
- Variable lease payments depending on the index or rate (interest rate)
- Amounts expected to be paid by the lessee under the residual value guarantee
- The exercise price of a purchase option if the lessee is reasonably certain to exercise that option

(In millions of won)

# 3. Significant accounting policies (continued)

• Payments of penalties for terminating the lease, if the lease term reflects the lessee exercising an option to terminate the lease

If the interest rate implicit in the lease is readily determined, the lease payments are discounted by the rate; if the rate is not readily determined, the lessee's incremental borrowing rate is used.

The cost of the right-of-use assets comprise:

- The amount of the initial measurement of the lease liability
- Any lease payments made at or before the commencement date (less any lease incentives received)
- Any initial direct costs incurred by the lessee
- An estimate of costs to be incurred by the lessee in dismantling and removing the underlying asset, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease

Lease payments related to short-term leases or low-value assets are recognized as current expenses over the lease term using the straight-line method. A short-term lease is a lease that has a lease term of 12 months or less, and the low-value assets lease is a lease of which the underlying asset value is not more than  $\mathbf{W}6$  million.

Additional considerations for the Group when accounting for lessees include:

Extension and termination options are included in a number of real estate lease contracts of the Group. In determining the lease term, management considers all relevant facts and circumstances that create an economic incentive not to exercise the options. The periods covered by, a) an option to extend the lease if the lesse is reasonably certain to exercise that option, or b) an option to terminate the lease if the lesse is reasonably certain not to exercise that option, is included when determining the lease term. The Group reassesses whether the Group is reasonably certain to exercise the extension option, or not to exercise a termination option, upon the occurrence of either a significant event or a significant change in circumstances that is within the control of the lessee, and affects whether the lesse is reasonably certain to exercise an option not previously included in its determination of the lease term, or not to exercise an option previously included in its determination of the lease term.

# ii) Accounting treatment as the lessor

The Group leases out to lessee various tangible assets, including vehicles under operating and finance lease contracts, and each of the lease contract is negotiated individually and includes a variety of terms and conditions. The risk management method for all rights held by the Group in the underlying assets includes repurchase agreements, residual value guarantees, etc.

# ① Finance leases

The Group recognizes them as a receivable at an amount equal to the net investment in the lease, and the difference from the carrying value of the leasing asset as of the commencement date is recognized as profit or loss from disposal of the lease asset. In addition, interest income is recognized by applying the effective interest method for the amount of the Group's net investment in finance leases. Lease-related direct costs are included in the initial recognition of financial lease receivables and are accounted for in a way that reduces the revenue for the lease term.

# 3. Significant accounting policies (continued)

# ② Operating leases

The Group recognizes the lease payments as income on straight-line basis, and adds the lease initial direct costs incurred during negotiation and contract phase of the operating lease to the carrying value of the underlying asset. In addition, the depreciation policy of operating lease assets is consistent with the Group's depreciation policy of other similar assets.

# (m) Assets held for sale

Non-current assets, or disposal groups comprising assets and liabilities, that are expected to be recovered primarily through sale rather than through continuing use, are classified as held for sale. In order to be classified as held for sale, the asset (or disposal group) must be available for immediate sale in its present condition and its sale must be highly probable. The assets or disposal group that are classified as non-current assets held for sale are measured at the lower of their carrying value and fair value less cost to sell.

The Group recognizes an impairment loss for any initial or subsequent write-down of an asset (or disposal group) to fair value less costs to sell, and a gain for any subsequent increase in fair value less costs to sell, up to the cumulative impairment loss previously recognized.

An asset that is classified as held for sale or part of a disposal group classified as held for sale is not depreciated (or amortized).

# (n) Impairment of non-financial assets

The carrying values of the Group's non-financial assets, other than assets arising from employee benefits, deferred tax assets and non-current assets held for sale, are reviewed at the end of the reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

Goodwill and intangible assets that have indefinite useful lives or that are not yet available for use, irrespective of whether there is any indication of impairment, are tested for impairment annually by comparing their recoverable amount to their carrying value.

The Group estimates the recoverable amount of an individual asset, and if it is impossible to measure the individual recoverable amount of an asset, then the Group estimates the recoverable amount of cash-generating unit ("CGU"). The recoverable amount of an asset or a CGU is the greater of its value in use and its fair value less costs to sell. The value in use is estimated by applying a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or the CGU for which estimated future cash flows have not been adjusted, to the estimated future cash flows expected to be generated by the asset or the CGU.

An impairment loss is recognized if the carrying value of an asset or a CGU exceeds its recoverable amount. Impairment losses are recognized in profit or loss.

Goodwill acquired in a business combination is allocated to each CGU that is expected to benefit from the synergies arising from the goodwill acquired. Any impairment identified at the CGU level will first reduce the carrying value of goodwill and then be used to reduce the carrying value of the other assets in the CGU on a pro rata basis. Impairment losses of goodwill cannot be reversed in the subsequent period. At the end of each reporting period, the Group reviews whether there are any signs of impairment loss that has been recognized in the prior period no longer exists or has decreased, and reversal occurs only if there is a change in the estimate used to determine the recoverable amount after the recognition of the impairment loss. The

# SHINHAN FINANCIAL GROUP CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements

(In millions of won)

# 3. Significant accounting policies (continued)

asset's carrying value does not exceed the carrying value that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

# (o) Non-derivative financial liabilities

The Group recognizes financial liabilities in the consolidated statement of financial position when the Group becomes a party to the contractual provisions of the financial liability in accordance with the substance of the contractual arrangement and the definitions of financial liabilities.

Transaction costs on the financial liabilities at FVTPL are recognized in profit or loss as incurred.

# i) Financial liabilities designated at FVTPL

Financial liabilities can be irrevocably designated as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases, or a group of financial instruments is managed and its performance is evaluated on a fair value basis, in accordance with a documented risk management or investment strategy. The amount of change in the fair value of the financial liabilities designated at FVTPL that is attributable to changes in the credit risk of that liabilities shall be presented in other comprehensive income.

# ii) Financial liabilities at FVTPL

Since initial recognition, financial liabilities at FVTPL is measured at fair value, and changes in the fair value are recognized as profit or loss.

# iii) Other financial liabilities

Non-derivative financial liabilities other than financial liabilities at fair value through profit or loss are classified as other financial liabilities, and other financial liabilities include deposits, borrowings, debt securities and etc. At the date of initial recognition, other financial liabilities are measured at fair value minus transaction costs that are directly attributable to the acquisition. Subsequent to initial recognition, other financial liabilities are measured at amortized cost using the effective interest method.

The Group derecognizes a financial liability from the consolidated statement of financial position when it is extinguished (i.e. when the obligation specified in the contract is discharged, canceled or expires).

# (p) Foreign currency

# i) Foreign currency transactions

Transactions in foreign currencies are translated to the respective functional currencies of the Group at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the end of the reporting period are retranslated to the functional currency using the exchange rate at the end of the reporting period. Non-monetary foreign currency items measured at fair value are converted to the exchange rate on the date the fair value is determined, and non-monetary items measured at historical cost are converted to the exchange rate on the trading day.

All foreign currency differences arising from the conversion of monetary items are recognized in profit or loss. However, the Group excludes currency differences at the time of settlement of monetary items,

# 3. Significant accounting policies (continued)

conversion differences in net investments in foreign operations and conversion differences for financial liabilities designated cash flow hedges. If gains or losses arising from non-monetary items are recognized in other comprehensive income, the effect of exchange rate changes included in those gains or losses is also recognized in other comprehensive income. In addition, if recognized in profit or loss, the effect of exchange rate changes is also recognized in profit or loss.

# ii) Foreign operations

If the presentation currency of the Group is different from a foreign operation's functional currency, the financial statements of the foreign operation are translated into the presentation currency using the following methods:

The assets and liabilities of foreign operations, whose functional currency is not the currency of a hyperinflationary economy, are translated to presentation currency at exchange rates at the reporting date. The income and expenses of foreign operations are translated to functional currency at exchange rates at the dates of the transactions. Foreign currency differences are recognized in other comprehensive income.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying values of assets and liabilities arising on the acquisition of that foreign operation are treated as assets and liabilities of the foreign operation and are translated using the exchange rate at the reporting date.

Upon disposal of foreign operations, the cumulative amount of the exchange differences recognized as a separate line item within the equity and other comprehensive income is reclassified from other comprehensive income to profit and loss at the time of recognition. When disposing subsidiaries, including foreign operations, proportional shares of exchange differences recognized in other comprehensive income are reverted to non-controlling shares of foreign operations, and in other cases, disposing some of the portions of foreign operations, only the proportional shares of the accumulated exchange differences recognized in other comprehensive income are classified as profit and loss.

# iii) Net investment in a foreign operation

If the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely in the foreseeable future, then foreign currency differences arising on the item form part of the net investment in the foreign operation and are recognized in other comprehensive income and reclassified from equity to profit or loss on disposal of the net investment.

# (q) Equity capital

# i) Capital stock

Capital stock is classified as equity. Incremental costs directly attributable to the transaction of stock are deducted from equity, net of any tax effects.

Preferred stocks are classified as equity if they do not need to be repaid or are repaid only at the option of the Group and if payment is determined by the Group's discretion, and dividends are recognized when the shareholders' meeting approves the dividends. Preferred stocks that are eligible for reimbursement of a defined or determinable amount on or after a certain date are classified as liabilities. The related dividend is recognized in profit or loss at the time of occurrence as interest expense.

# 3. Significant accounting policies (continued)

# ii) Hybrid bonds

The Group classifies an issued financial instrument, or its component parts, as a financial liability or an equity instrument depending on the substance of the contractual arrangement of such financial instrument. Hybrid bonds where the Group has an unconditional right to avoid delivering cash or another financial asset to settle a contractual obligation are classified as an equity instrument and presented in equity. Hybrid bonds issued by subsidiaries of the group are classified as non-controlling interests according to this classification criteria. In addition, distributions paid are treated as net income attributable to non-controlling interests in the consolidated statement of comprehensive income.

# iii) Capital adjustment

The effect of changes in ownership interests in subsidiaries that do not lose control over the equity attributable to owners of the parent is included in capital adjustments.

# (r) Employee benefits

# i) Short-term employee benefits

Short-term employee benefits are employee benefits that are due to be settled within 12 months after the end of the period in which the employees render the related service. When an employee has rendered service to the Group during an accounting period, the Group recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service.

# ii) Other long-term employee benefits

The Group's net obligation in respect of other long-term employee benefits that are not expected to be settled wholly before 12 months after the end of the annual reporting period in which the employees render the related service, is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. Remeasurements are recognized in profit or loss in the period in which they arise.

# iii) Retirement benefits: defined contribution plans

The Group recognizes the contribution expense as an account of severance payments in profit or loss in the period according to the defined contribution plans, when an employee provides work services for a certain period of time, except for the case when it is included in the cost of the asset. Contributions payable are recognized as liabilities (unpaid expenses) after deducting the contributions already paid. In addition, if the contribution already paid exceeds the contribution due for services provided before the end of the reporting period, the future contribution is reduced or cash refunded due to the excess is recognized as an asset (prepaid expense).

# iv) Retirement benefits: defined benefit plans

For the year ended December 31, 2022, defined benefit liabilities related to the defined benefit plan are recognized by deducting the fair value of external reserve from the present value of the defined benefit plan debt.

Defined benefit liabilities are calculated annually by independent actuaries using the predicted unit credit method. If the net present value of the defined benefit obligation less the fair value of the plan assets is an

(In millions of won)

# 3. Significant accounting policies (continued)

asset then the present value of the economic benefits available to the entity in the form of a refund from the plan or a reduction in future contributions to the plan.

The remeasurement component of net defined benefit liability is the change in the effect on asset ceiling except for the amount included in the net interest income of plan assets and net revenues of plan assets excluding actuarial gains and losses to the net of defined benefit liabilities. It is immediately recognized in other comprehensive income. The Group determines the net interest on the net defined benefit obligation (asset) by multiplying the net defined benefit obligation (asset) by the discount rate determined at the beginning of the annual reporting period and is the net present value of the net defined benefit obligation. It is determined by taking into consideration the fluctuations. Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When an amendment or reduction of the system occurs, the gain or loss resulting from the change or decrease in the benefits to the past service is immediately recognized in profit or loss. The Group recognizes gains or losses on settlement when the defined benefit plan is settled.

# v) Termination benefits

Termination benefits are recognized as an expense when the Group is committed demonstrably, without realistic possibility of withdrawal, to a formal detailed plan to either terminate employment before the normal retirement date, or to provide termination benefits as a result of an offer made to encourage voluntary redundancy. Termination benefits for voluntary redundancies are recognized as an expense if the Group has made an offer of voluntary redundancy, it is probable that the offer will be accepted, and the number of acceptances can be estimated reliably. If benefits are payable more than 12 months after the reporting period, then they are discounted to their present value.

# (s) Share-based payment transactions

In regards to the share-based payment transactions which grants an employee a stock or stock option in exchange for the goods or services provided, if the fair value of the goods or services provided or the fair value of the goods or services provided cannot be reliably measured, the Group indirectly measures the fair value of the goods or services based on the fair value of the given equity, and the amount is recognized as employee benefit expenses and capital during the vesting period. For share-based payment awards with non-vesting conditions, the grant date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

The fair value of the amount payable to employees in respect of share appreciation rights, which are settled in cash, is recognized as an expense with a corresponding increase in liabilities, over the period that the employees unconditionally become entitled to payment. The liability is remeasured at each reporting date and at settlement date. Any changes in the fair value of the liability are recognized as personnel expense in profit or loss.

# (t) **Provisions**

Provisions are recognized when the Group has a present legal or constructive obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

(In millions of won)

# 3. Significant accounting policies (continued)

The risks and uncertainties that inevitably surround many events and circumstances are taken into account in reaching the best estimate of a provision. Where the effect of the time value of money is material, provisions are determined at the present value of the expected future cash flows.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision is reversed.

Provisions shall be used only for expenditures for which the provisions are originally recognized.

# (u) Financial guarantee contract

A financial guarantee contract is a contract that requires the Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument.

Financial guarantee contracts are recognized initially at their fair value, and the initial fair value is amortized over the life of the financial guarantee contract.

After initial recognition, financial guarantee contracts are measured at the higher of:

- Loss allowance in accordance with IFRS 9 'Financial Instruments'
- The amount initially recognized less, when appropriate, the cumulative amount of income recognized in accordance with the principles of IFRS 15, '*Revenue from Contracts with Customers*'

# (v) Insurance contracts

# i) Investment contract liabilities, including insurance contract liabilities and discretionary dividend factors

The group establishes liability reserves in accordance with the Insurance Business Law and the related regulations. The reserves are calculated according to the insurance policy, insurance premiums and liability reserve calculation method. The main contents are as follows.

# i-1) Premium reserves

This is the amount to be accumulated for insurance claim payable for the existing contracts as of the end of the reporting period, the reserves are calculated by deducting the present value of net premiums to be earned after the end of the reporting period from the present value of claims to be paid to the policyholder after the date of the statement of financial position.

# i-2) Unearned premium reserves

Among premiums that are due for payment before the end of the reporting period, the prepaid premium reserves for the next period are calculated through a premium and liability reserves calculation method.

# i-3) Guarantee reserves

The total amount of reserve for variable minimum guarantee (①) and reserve for general account guarantee (@) is provided as guarantee reserve.

3. Significant accounting policies (co

# Significant accounting policies (continued)

① Variable minimum guarantee reserve

This reserve is the amount that must be accumulated to guarantee insurance premiums above a certain level for contracts maintained as of the end of the reporting period, and is measured at the higher of:

- i) the average amount of the top 30% of net loss expected in the future
- ii) the minimum required amount by insurance types, minimum guarantees, level of guarantees and limits of stock investment portion
- 2 General account guarantee reserve

As of the end of the reporting period, the amount of reserve for insurance contracts that are insured under general account is required to be paid to guarantee the level of refunds, and select the largest of the following:

- i) Average of the amount deducted from the appropriateness of the liability reserve calculated by excluding the guarantee option from the appropriateness evaluation of the liability reserve calculated by including the guarantee option for each interest rate scenario
- ii) The amount of compensation (including annulment contract) against the guarantee received from the policy holder by the rate applied at the premium calculation in the insurance premium and liability reserve calculation method

# i-4) Reserve for outstanding claims

As of the end of the reporting period, the Group has accrued the amount for which the reason for the payment of insurance claims, etc. has been incurred and the amount of the claim payment has not been paid yet due to the dispute or lawsuit related to the insurance settlement (pending in the Financial Dispute Mediation Committee). In addition, the Group recognizes unrecognized losses based on historical experience.

# i-5) Reserves for participating policyholders' dividends

The reserve is provided for the purpose of contributing to the policyholder dividend according to the laws and regulations and the reserve for dividend reserve for the policyholder and the dividend reserve for the subsequent business year.

The policyholder dividend reserve is the amount that is not paid as of the end of the reporting period for the settlement amount and the reserve for dividend policy for the next fiscal year is based on the policyholder dividend calculated on the insurance contract effective as of the end of the reporting period.

# ① Excess crediting rate reserve

In the case of a dividend insurance contract which has been maintained for more than one year as of the end of the reporting period among contracts signed before October 1, 1997, the difference between the planned interest rate and the one-year maturity deposit rate shall be preserved.

# ② Mortality dividend reserve

Dividends arising from contracts that are maintained for more than one year at the end of the reporting period are used to offset the expected mortality and actual mortality rates applied to premiums.

# 3. Significant accounting policies (continued)

# 3 Interest dividend reserve

For the contracts that have been maintained for more than one year as of the end of the reporting period, the amount calculated by applying the interest dividend reserve rate to the net written premium reserve less the unearned acquisition costs. However, the insurance sold before October 1, 1997 is applied to the amount deducted from the net premium in the event that the planned interest rate by the insurance product is less than the dividend standard.

# Reserves for long-term special dividends

For the effective dividend policy agreement that has been maintained for 6 years or more, the amount calculated by applying the long-term special dividend rate to the amount deducted from the net premiums for the end of the year.

However, insurance sold before October 1, 1997 is applied to the deduction of unearned premiums at the end of the year when the expected interest rate by the insurance product is less than the dividend standard rate.

### i-6) Reserve for interest dividends

In order to cover the policyholder dividend in the future, the total amount is set aside according to business performance according to the law or insurance contracts.

# i-7) Reserve for dividend insurance loss reserve

In accordance with the regulations set by the supervisory authority, dividend insurance profit is accumulated within 30/100 of the contractor's stake. The reserve for the compensation of dividend insurance losses shall compensate for the loss of dividend insurance contracts in accordance with the provisions of the fiscal year within five years from the end of the accumulated reporting period and shall be used as the policyholder dividend source for the individual contractor.

# ii) Contractor's equity adjustment

In accordance with IAS 39, the Group classifies the gains and losses of available for sale financial assets as policyholder's equity and shareholders' equity based on the reserve ratio for dividend paying and non-dividend paying insurance for the year ended December 31, 2022, and the portion of policyholder's equity is accounted as policyholder's equity adjustment.

# iii) Evaluation of debt appropriateness

At the end of each reporting period, the group assesses whether the recognized insurance liability is appropriate using the current estimates of future cash flows of the policy, and if the carrying value of the insurance liability is deemed to be inappropriate in terms of the estimated future cash flows. The reserve for premiums is added to the profit or loss by the amount corresponding to the deficiency.

# iv) Reinsurance assets

The group presents the recoverable amount of reinsurance assets. The group assesses at the end of each reporting period whether there is objective evidence that a reinsurance asset is impaired. If there is objective

(In millions of won)

# 3. Significant accounting policies (continued)

evidence that the entity will not be able to collect all amounts under the terms of the agreement as a result of an event that occurred after the initial recognition and if the event has a reliable and measurable impact on the amount to be received. If reinsurance assets are determined to be impaired, impairment loss is recognized in the profit and loss for the current period.

# v) Deferred acquisition cost

The group recognizes unrealized gains and losses arising from long-term insurance contracts as assets and amortizes the premiums over the life of the insurance contracts equally. If the contribution period exceeds 7 years, the amortization period is 7 years if there is an unrecognized balance at the date of the cancelation, the entire amount of the cancelation is amortized in the fiscal year to which the cancelation date belongs. But, if the ratio of additional premiums is higher at the early stage of the insurance period for the purpose of recovering the excess of the unearned premiums and the early settlement costs, the new settlement expenses are treated as the period expense.

# (w) Recognition of revenues and expenses

The Group's revenues are recognized using five-step revenue recognition model as follows: ① 'Identifying the contract'  $\rightarrow$  ② 'Identifying performance obligations'  $\rightarrow$  ③ 'Determining the transaction price'  $\rightarrow$  ④ 'Allocating the transaction price to performance obligations'  $\rightarrow$  ⑤ 'Recognizing the revenue by satisfying performance obligations'.

# i) Interest income and expense

Interest income and expense are recognized in profit or loss using the effective interest method. The effective interest rate is the rate that exactly discounts the estimated future cash payments and receipts through the expected life of the financial asset or liability or, where appropriate, a shorter period to the net carrying value of the financial asset or liability.

When calculating the effective interest rate, the Group estimates cash flows considering all contractual terms of the financial instrument, but does not consider future credit losses. The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate, and all other premiums or discounts. When it is not possible to estimate reliably the cash flows or the expected life of a financial instrument, the Group uses the contractual cash flows over the full contractual term of the financial instrument.

Once a financial asset or a group of similar financial assets has been written down as a result of an impairment loss, interest income is thereafter recognized using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss.

# ii) Fees and commission

The recognition of revenue for financial service fees depends on the purposes for which the fees are assessed and the basis of accounting for any associated financial instrument.

① Fees that are an integral part of the effective interest rate of a financial instrument

Such fees are generally treated as an adjustment to the effective interest rate. Such fees may include compensation for activities such as evaluating the borrower's financial condition, evaluating and recording

(In millions of won)

# 3. Significant accounting policies (continued)

guarantees, collateral and other security arrangements, preparing and processing documents, closing the transaction and the origination fees received on issuing financial liabilities. However, when the financial instrument is measured at fair value with the change in fair value recognized in profit or loss, the fees are recognized as revenue when the instrument is initially recognized.

# 2 Fees earned as services are provided

Fees and commission income, including investment management fees, sales commission, and account servicing fees, are recognized as the related services are provided.

# ③ Fees that are earned on the execution of a significant act

The fees that are earned on the execution of a significant act including commission on the allotment of shares or other securities to a client, placement fee for arranging a loan between a borrower and an investor and sales commission, are recognized as revenue when the significant act has been completed.

# iii) Insurance income

The Group recognizes insurance income for the insurance premium paid of which the payment date arrived by the premium payment methods of the insurance contract; and recognizes advance receipts for the insurance premium paid of which the payment date has not arrived at the end of the reporting period.

# iv) Dividend income

Dividend income is recognized when the shareholder's right to receive payment is established. Usually this is the ex-dividend date for equity securities. The Group provides compensation in various forms such as payment discounts and gifts.

# (x) Revenue from Contracts with Customers

The fair value of the consideration received or receivable in exchange for the initial transaction is allocated to the reward points ("points") and the remainder of the fee income. The Group provides compensation in various forms such as payment discounts and free gifts. The consideration to be allocated to the points is estimated based on the fair value of the monetary benefits to be provided in consideration of the expected recovery rate of points awarded in accordance with the customer loyalty program and the expected time of recovery. Points for distribution through the cost paid by the customer is recognized by deducting from the revenue from fees.

# (y) Income tax

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

Current tax is the expected tax payable or receivable on the taxable profit or loss for the year, using tax rates enacted or substantively enacted at the end of the reporting period and any adjustment to tax payable in respect of previous years. The taxable profit is different from the accounting profit for the period since the

# 3. Significant accounting policies (continued)

taxable profit is calculated excluding the temporary differences, which will be taxable or deductible in determining taxable profit (tax loss) of future periods, and non-taxable or non-deductible items from the accounting profit. The unpaid taxes related to the Group's current tax are calculated using the enacted or substantially established tax rate.

Deferred tax is recognized, using the asset-liability method, in respect of temporary differences between the carrying values of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. A deferred tax liability is recognized for all taxable temporary differences. A deferred tax asset is recognized for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which they can be utilized. However, deferred tax is not recognized for the following temporary differences: taxable temporary differences arising on the initial recognition of goodwill, or the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting profit or loss nor taxable income.

The Group applies a consolidated tax method based on a consolidated tax base and a domestic corporation (hereinafter referred to as the "Consolidated Entity Corporation ") that is fully controlled by the consolidated parent company and the consolidated tax base.

The Group evaluates the feasibility of temporary differences, taking into account the future taxable income of individual companies and consolidated groups, respectively. The change in deferred tax assets (liabilities) was recognized as expense (income), except for the amount associated with items directly added to the equity account.

For additional temporary differences in subsidiaries, associates, and joint venture investment interests, the Group may control the timing of the disappearance of temporary differences. All deferred tax liabilities are recognised except in cases where temporary differences are unlikely to dissipate in the foreseeable future. Deferred tax assets arising from deductible temporary differences are likely to be extinguished in the foreseeable future. In addition, it is recognised when taxable income is likely to be used for temporary differences.

The carrying value of deferred tax assets is reviewed at the end of each reporting period. The carrying value of deferred tax assets is reduced when it is no longer likely that sufficient taxable income will be generated to use benefits from deferred tax assets.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period to recover or settle the carrying value of its assets and liabilities.

Deferred tax assets and liabilities are corporate taxes imposed by the same taxation authority. Deferred tax assets and liabilities are offset only if there is a legally enforceable right to offset the related current tax liabilities and assets.

Because of the tax polices taken by the Group, tax uncertainties arise from the complexity of transactions and differences in tax law analysis. Also, it arises from a tax refund suit, tax investigation, or a refund suit against the tax authorities' tax amount. The Group paid the tax amount by the tax authorities in accordance with IFRIC 23. However, it will be recognized as the corporate tax assets if there is a high possibility of a refund in the future. In addition, the amount expected to be paid as a result of the tax investigation is recognized as the tax liability.

# 3. Significant accounting policies (continued)

# (z) Accounting for trust accounts

The Group accounts for trust accounts separately from its bank accounts under the Financial Investment Services and Capital Markets Act No. 114 and thus the trust accounts are not included in the accompanying consolidated financial statements. In this regard, the funds lent to the trust account are counted as trust account loans and loans borrowed from the trust account as other accounting accounts (non-payment of the trust account). In accordance with the Financial Investment Business Regulations, trust remuneration is acquired in connection with the operation, management, and disposal of trust property, and it is counted as the operating profit of trust business.

# (aa) Earnings per share

The Group presents basic and diluted earnings per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to the ordinary shareholder of the Group by the weighted average number of common shares outstanding during the period, adjusted for own shares held. Diluted EPS is determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding, adjusted for own shares held, for the effects of all dilutive potential ordinary shares, which comprise share options granted to employees.

# (ab) New standards and amendments not yet adopted by the Group

The following new accounting standards and amendments have been published that are not mandatory for annual periods beginning after January 1, 2022, and have not been early adopted by the Group. The Group did not early apply the following new standards and amendments when preparing consolidated financial statements

# *i)* IAS 1 'Presentation of Financial Statements' amended – Classification of Liabilities as Current or Non-current

The amendments clarify that liabilities are classified as either current or non-current, depending on the substantive rights that exist at the end of the reporting period. Classification is unaffected by the likelihood that an entity will exercise right to defer settlement of the liability or the expectations of management. Also, the settlement of liability includes the transfer of the entity's own equity instruments, however, it would be excluded if an option to settle them by the entity's own equity instruments if compound financial instruments is met the definition of equity instruments and recognized separately from the liability. The amendments should be applied for annual periods beginning on or after January 1, 2024, and earlier application is permitted. The Group expects that the amendments will not have a significant impact on the consolidated financial statements.

# ii) IAS 1 'Presentation of Financial Statements' amended—Disclosure of Accounting Policies

The amendments require an entity to define and to disclose its material information about accounting policies. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group expects that the amendments will not have a significant impact on the consolidated financial statements.

# 3. Significant accounting policies (continued)

# *iii) IAS 8 'Accounting Policies, Changes in Accounting Estimates and Errors' amended – Definition of Accounting Estimates*

The amendments clarify the definition of accounting estimates and how distinguish it from a change in accounting policies. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group expects that the amendments will not have a significant impact on the consolidated financial statements.

# *iv)* IAS 12 'Income Taxes' – Deferred Tax Related to Assets and Liabilities Arising from a Single Transaction

Under the amendments, an entity does not apply the initial recognition exemption for transactions which involve the recognition of both an asset and liability – which in turn leads to equal taxable and deductible temporary differences. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group expects that the amendments will not have a significant impact on the consolidated financial statements.

# v) IFRS 17 'Insurance Contracts'

# ① Key amendments to accounting policies

IFRS 17 '*Insurance Contracts*' issued in May 2017 will be applied for annual periods beginning on or after January 1, 2023. The standard will replace IFRS 4 '*Insurance Contracts*' which is the current standard.

The main features of IFRS 17 include measurement of the current value of insurance liabilities, recognition of insurance revenue on an accrual basis, and separate presentation of investment income from insurance performance. Under IFRS 4, insurance liability was measured using historical information (e.g., interest rates at sale, etc.). In addition, when the entity receives the premium, it recognizes the premium received as an insurance revenue on a cash basis and there is no obligation to present insurance and investment income or expense separately. On the contrary, IFRS 17 measures insurance liability at its present value (i.e. at the reporting date) by using updated discount rates which reflect current market-based information such as assumptions and risks. An insurance revenue is recognized on an accrual basis, reflecting the services provided to the policyholder by the insurance company for each accounting periods. Moreover, insurance finance income or expenses and the investment income or expenses will be presented separately.

If the Group applies IFRS 17 in preparation of the financial statements, significant differences with current financial statements may arise due to the following reasons. These differences do not include all of the future differences and they may be changed depending on further analysis.

# <sup>(2)</sup> Evaluation of insurance liabilities

Under IFRS 17, the Group estimates all cash flows under the insurance contract, then measures insurance liability by using discount rates that reflect assumptions and risks at the reporting date.

Specifically, the Group identifies a portfolio of insurance contracts which comprises contracts subject to similar risks and managed together and disaggregates the groups of insurance contracts with similar profitability within the portfolio. Then, the Group measures the groups of insurance contracts at the total of estimates of future cash flows (reflecting cash flows related to insurance contracts and the time value of money), risk adjustment and contractual service margin. Upon the application of IFRS 17, contractual service margin account has been newly introduced. The contractual service margin presents the unrealized profit that the Group will recognize as it provides services in the future.

# 3. Significant accounting policies (continued)

Reinsurance contract is an insurance contract issued by one entity (the reinsurer) to compensate another entity for claims arising from one or more insurance contracts issued by that another entity (underlying insurance contracts). When estimating present value of future cash flows arising from reinsurance contracts, the Group would use assumptions consistent with those it uses for the underlying contracts.

The Group calculates the discount rate for measuring the current value of an insurance liability using the bottom-up approach, such as, by adding a liquidity premium to the risk-free rate of return (risk-free interest rate term structure) and the confidence level to calculate risk adjustment which reflects measurement of an uncertainty regarding the amount and timing of cash flows in a non-financial risk (insurance risk, cancellation risk, cost risk, etc.).

For insurance liability measurement models, the General Model (GM) is applied for underlying contracts, etc., but the Variable Fee Approach (VFA) is applied for insurance contracts that have direct participation features that meet certain requirements. However, Premium Allocation Approach (PAA) is applied for contracts with of one year or less coverage period.

# 3 Recognition and measurement of financial performance

According to IFRS 17, insurance revenue is recognized on an accrual basis including services (insurance coverage) provided to the policyholder for each accounting period. Investment components (such as cancellation or maturity refunds) being repaid to the policyholder even if an insured event does not occur, are excluded from insurance revenue. Insurance finance income or expenses and investment income or expenses are presented separately to enable information users to understand the sources of profits or losses.

The Group includes time value of money and financial risk, and the effect of changes in the time value of money and financial risk related to the groups of insurance contracts in the insurance finance income or expenses. This requires the Group to make an accounting policy choice as to whether to disaggregate insurance finance income or expenses for the period between profit or loss and other comprehensive income.

The Group disaggregates the amounts recognized in the statements of profit or loss and other comprehensive income by portfolios. In case of applying the 'General Model (GM)', insurance finance income or expenses are recognized in other comprehensive income.

### ④ Accounting policies related to transition

According to the transition of IFRS 17, the Group shall adjust the groups of insurance contracts issued before the transition date, that is measured at cost to be measured at its current value by applying a full retrospective approach, modified retrospective approach or fair value approach (January 1, 2022, the beginning of the annual reporting period immediately preceding the date of initial application).

In principle, the Group shall identify, recognize, and measure (full retrospective approach) each group of insurance contracts as if IFRS 17 had been applied even before the transition date. However, if this approach is impracticable, the Group may choose to apply either the modified retrospective approach or fair value approach. On the other hand, for groups of insurance contracts with direct participation features which meet certain criteria, a fair value approach may be applied even if the full retrospective approach is applicable.

The objective of the modified retrospective approach is to achieve the closest outcome to full retrospective application possible using reasonable and supportable information available without undue cost or effort.

# 3. Significant accounting policies (continued)

The fair value approach is an approach of assessing a group of insurance contracts using fair value assessments, etc. in accordance with IFRS 13 'Fair Value Measurement'. To apply the fair value approach, the Group shall determine the contractual service margin or loss component of the liability for remaining coverage at the transition date as the difference between the fair value of a group of insurance contracts and the fulfilment cash flows measured at that date.

The Group applies modified retrospective approach only for underlying contracts issued within three years before the transition date, and fair value approach for other underlying contracts and reinsurance contracts held, to measure insurance liability at transition date.

# **5** Preparation for application

The Group has completed setting up actuarial assumptions and models and insurance liability settlement system. Before 2023, when the standard is first applied, the Group is planning to continue fostering and reinforcing additional professionals and will constantly promote advancement, including improvements on system stability and verification of the consistency of data output. Also, the Group is being overhauled and established an Internal Control of Financial Reporting that goes along with the dynamic accounting environment in order to prepare and disclose reliable accounting information.

The application of IFRS 17 will not only result to a change in accounting standards, but will also affect insurance product development, sales strategies, and long-term management strategies. Therefore, with the aim of re-establishment of the overall business management system, the Group will continue to provide training to the employees and report to the management the status and implementation plan of IFRS 17.

# <sup>®</sup> Financial effects analysis

As the implementation of IFRS 17 results to changes in the measurement of liabilities, revenue recognition, etc., the Group expects that it will lead to a volatility in financial figures of financial statements prepared for the year ended 2023.

The Group's assessment of financial impact of the initial application of IFRS 17 using the current financial reporting system established as of December 31, 2022, for the financial statements prepared for the year ended 2022 are as follows. However, at this point, it is difficult in practice to provide reasonable estimates of the impact on future financial statements, as sufficient review and analysis of accounting policies and actuarial assumptions and methodology for the application of IFRS 17 is still in progress. Therefore, the results on analysis are subject to change depending on additional information and economic conditions available in the future.

# (i) Impact on the statement of financial position and the statement of comprehensive income

The Group classifies financial assets according to its business model by introducing *IFRS 9 'Financial Instruments'*, but it will change its classification and measurement for capital volatility management through market valuation of insurance liabilities as it allows revaluation of the business model when introducing *IFRS 17 'Insurance Contracts'* in 2023. Accordingly, the group assessed the preliminary financial impact by applying the classification adjustments in IFRS 17 to financial assets removed between the transition date and the initial application date to present comparative information for financial assets whose classification and measurement requirements in IFRS 9 have been changed through business model revaluation.

[Shinhan Life Insurance Co., Ltd.]

3. Significant accounting policies (continued)

# <Statement of Financial Position>

The statement of financial position prepared in accordance with IFRS 4 and IFRS 17 as at December 31, 2022 are as follows:

Accounts	Under IFRS 4 and 9 (A) (*1)	Accounts	Under IFRS 17 and 9 (B) (*2)	( <b>B-A</b> )
Total Assets	66,753,920	Total Assets	56,501,131	(10,252,789)
Cash and due from banks at		Cash and due from banks		
amortized cost	1,112,577	at amortized cost	1,653,704	
Financial assets at fair value		Financial assets at fair		
through profit or loss		value through profit or		
	6,662,617	loss	11,527,229	
Securities at fair value		Securities at fair value		
through other		through other		
comprehensive income	10,946,361	comprehensive income	32,753,803	
Securities at amortized cost		Securities at amortized		
	27,744,212	cost	4,338,766	
Loans at amortized cost	8,612,410	Loans at amortized cost	4,219,870	
Reinsurance contract assets		Reinsurance contract		
	295,621	assets	59,017	
Other assets	11,380,122	Other assets	1,948,742	
Total Liabilities	63,271,167	Total Liabilities	48,414,409	(14,856,758)
Insurance contract liabilities		Insurance contract		
	53,369,918	liabilities	42,928,691	
		Reinsurance contract		
		liabilities	62,770	
		Investment contract		
		liabilities	2,296,401	
Other liabilities	9,901,249	Other liabilities	3,126,547	
Total equity	3,482,753	Total equity	8,086,722	4,603,969

(\*1) The amounts applied under IFRS 9 'Financial Instruments' and IFRS 4 'Insurance Contracts'

(Application of the overlay approach under IFRS 4 to financial assets related to insurance contracts).

(\*2) The amounts applied under IFRS 9 'Financial Instruments' and IFRS 17 'Insurance Contracts'.

### **3.** Significant accounting policies (continued)

### <Statement of Comprehensive Income>

The statement of comprehensive income prepared in accordance with IFRS 4 and IFRS 17 for the year ended December 31, 2022 are as follows:

Accounts	Under IFRS 4 and 9 (A) (*1)	Accounts	Under IFRS 17 and 9 (B) (*2)	( <b>B-A</b> )
Operating income	9,412,664	Insurance service result	733,320	
		Insurance service revenue	760,665	
		Net reinsurance	100,000	
		service expenses	(27,345)	
Operating expenses	(8,796,865)	Net financial result	(182,741)	
		Investment income	588,729	
		Insurance finance		
		expenses	(771,470)	
Operating profit	615,799	Operating profit	550,579	(65,220)
Non-operating income or				
expenses	(17,562)	Non-operating income	(17,673)	
Profit before income taxes	598,237	Profit before income taxes	532,906	(65,331)
Income tax expense	(134,644)	Income tax expense	(117,331)	
Profit for the year	463,593	Profit for the year	415,575	(48,018)
Other comprehensive loss for		Other comprehensive loss		
the year	(2,122,609)	for the year	(592,441)	
Total comprehensive loss for		Total comprehensive loss		
the year	(1,659,016)	for the year	(176,866)	1,482,150

(\*1) The amounts applied under IFRS 9 'Financial Instruments' and IFRS 4 'Insurance Contracts'

(Application of the overlay approach under *IFRS 4* to financial assets related to insurance contracts).

(\*2) The amounts applied under IFRS 9 'Financial Instruments' and IFRS 17 'Insurance Contracts'.

# <Statement of Cash Flows>

The statement of cash flows prepared in accordance with IFRS 4 and IFRS 17 for the year ended December 31, 2022 are as follows:

Accounts	Under IFRS 4 and 9 (A) (*1)	Under IFRS 17 and 9 (B) (*2)	( <b>B-A</b> )
Cash flows from operating activities	(931,218)	(1,337,223)	(406,005)
Cash flows from investing activities	288,321	623,849	335,528
Cash flows from financing activities	(42,340)	(42,340)	—

(\*1) The amounts applied under *IFRS 9 'Financial Instruments'* and *IFRS 4 'Insurance Contracts'* (Application of the overlay approach under IFRS 4 to financial assets related to insurance contracts).

(\*2) The amounts applied under IFRS 9 'Financial Instruments' and IFRS 17 'Insurance Contracts'.

# 3. Significant accounting policies (continued)

[Shinhan EZ General Insurance, Ltd.]

# <Statement of Financial Position>

The statement of financial position prepared in accordance with IFRS 4 and IFRS 17 as at December 31, 2022 are as follows:

Accounts	Under IFRS 4 and 9 (A) (*1)	Accounts	Under IFRS 17 and 9 (B) (*2)	( <b>B-A</b> )
Total Assets	241,096	Total Assets	222,971	(18,125)
Cash and due from banks at amortized cost	133,996	Cash and due from banks at amortized cost	133,996	
Securities at fair value through other		Securities at fair value through other		
comprehensive income Securities at amortized cost	9,876	comprehensive income Securities at amortized	9,876	
	40,016	cost	40,016	
Reinsurance contract assets		Reinsurance contract		
	35,748	assets	24,713	
Other assets	21,460	Other assets	14,370	
Total Liabilities	115,448	Total Liabilities	85,520	(29,928)
Insurance contract liabilities		Insurance contract		
	93,885	liabilities	75,318	
		Reinsurance contract liabilities		
		Investment contract		
		liabilities	—	
Other liabilities	21,563	Other liabilities	10,202	
Total equity	125,648	Total equity	137,451	11,803

(\*1) The amounts applied under IFRS 9 'Financial Instruments' and IFRS 4 'Insurance Contracts'.

(\*2) The amounts applied under IFRS 9 'Financial Instruments' and IFRS 17 'Insurance Contracts'.

(In millions of won)

# 3. Significant accounting policies (continued)

(i) Impact on the statement of financial position and the statement of comprehensive income

# <Statement of Comprehensive Income>

The statement of comprehensive income prepared in accordance with IFRS 4 and IFRS 17 for the year ended December 31, 2022 are as follows:

Accounts	Under IFRS 4 and 9 (A) (*1)	Accounts	Under IFRS 17 and 9 (B) (*2)	( <b>B-A</b> )
Operating income	71,210	Insurance service result	(11,060)	
		Insurance service revenue Net reinsurance	(7,977)	
		service expenses	(3,083)	
Operating expenses	(86,452)	Net financial result	1,490	
		Investment income	2,181	
		Insurance finance		
		expenses	(691)	
Operating profit	(15,242)	Operating profit	(9,570)	5,672
Non-operating income	212	Non-operating income	212	
Profit before income taxes	(15,030)	Profit before income taxes	(9,358)	5,672
Income tax expense		Income tax expense	_	
Profit for the year	(15,030)	Profit for the year	(9,358)	5,672
Other comprehensive income		Other comprehensive		
for the year	208	income for the year	225	
Total comprehensive loss for		Total comprehensive loss		
the year	(14,822)	for the year	(9,133)	5,689

(\*1) The amounts applied under IFRS 9 'Financial Instruments' and IFRS 4 'Insurance Contracts'.

(\*2) The amounts applied under IFRS 9 'Financial Instruments' and IFRS 17 'Insurance Contracts'.

# <Statement of Cash Flows>

The statement of cash flows prepared in accordance with IFRS 4 and IFRS 17 for the year ended December 31, 2022 are as follows:

Accounts	Under IFRS 4 and 9 (A) (*1)	Under IFRS 17 and 9 (B) (*2)	<u>(B-A)</u>
Cash flows from operating activities	9,331	9,331	
Cash flows from investing activities	(59,056)	(59,056)	
Cash flows from financing activities	(79,183)	(79,183)	—

(\*1) The amounts applied under IFRS 9 'Financial Instruments' and IFRS 4 'Insurance Contracts'.

(\*2) The amounts applied under IFRS 9 'Financial Instruments' and IFRS 17 'Insurance Contracts'

3. Significant accounting policies (continued)

# (ii) Financial impact of transition to IFRS 17

As of the transition date (January 1, 2022), the measurement of liability for underlying contracts held, using different transition approaches is as follows:

[Shinhan Life Insurance Co., Ltd.]

Transition approach	Date issued - insurance contract	Insurance contract liabilities	Contractual Service Margin
Modified retrospective approach	2019 - 2021	1,437,967	2,734,701
Fair value approach	Before 2018	49,184,220	3,753,602
		50,622,187	6,488,303

As of the transition date (January 1, 2022), the amount of reinsurance contracts held calculated by applying the fair value approach is \$281,763 million of reinsurance contract liabilities.

[Shinhan EZ General Insurance, Ltd.]

Transition approach	Date issued	Insurance contract	Contractual
	- insurance contract	liabilities	Service Margin
Modified retrospective approach	2019 - 2021	47,331	100

As of the transition date (January 1, 2022), the amount of reinsurance contracts held calculated by applying the fair value approach is \$13,025 million of reinsurance contract liabilities.

# (iii) Financial impact on insurance assets and liabilities

As of December 31, 2022, the amount of insurance contract liabilities applying IFRS 17 is as follows:

[Shinhan Life Insurance Co., Ltd.]

Classification	Insurance contract liabilities	Contractual service margin (under liabilities)	Insurance contract assets	Contractual service margin (under assets)
Underlying contracts	42,928,691	6,924,913		
Reinsurance contracts	62,770	(83,185)	59,017	94,861
	42,991,461	6,841,728	59,017	94,861

[Shinhan EZ General Insurance, Ltd.]

Classification	Insurance contract liabilities	Contractual service margin (under liabilities)	Insurance contract assets	Contractual service margin (under assets)
Underlying contracts	75,318	_	519	(94)
Reinsurance contracts			24,713	
	75,318		25,232	(94)

# 4. Financial risk management

# (a) Overview

# (a) Overview

Shinhan Financial Group Co., Ltd. (collectively the "Group") manages various risks that may be arisen by each business sector and the major risks to which the Group is exposed include credit risk, market risk, interest rate risk, and liquidity risk. These risks are recognized, measured, controlled and reported in accordance with risk management guidelines established at the controlling company level and at the subsidiary level.

# i) Risk management principles

The risk management principles of the Group are as follows:

- All business activities take into account the balance of risks and profits within a predetermined risk trend.
- The controlling company shall present the Group Risk Management Model Standards and supervise their compliance, and have responsibility and authority for group-level monitoring.
- Operate a risk-related decision-making system that enhances management's involvement.
- Organize and operate risk management organizations independent of the business sector.
- Operate a performance management system that clearly considers risks when making business decisions.
- Aim for preemptive and practical risk management functions.
- Share a cautious view to prepare for possible deterioration of the situation.

# ii) Risk management organization

The basic policies and strategies for risk management of the Group are established by the Risk Management Committee (collectively the "Group Risk Management Committee") within the controlling company's Board of Directors. The Group's Chief Risk Management Officer (CRO) assists the Group Risk Management Committee and consults the risk policies and strategies of the group and each subsidiary through the Group Risk Council, which includes the CRO of each subsidiary. The subsidiary implements the risk policies and strategies of the Group through each company's risk management committee, risk-related committee, and risk management organization, and consistently establishes and implements the detailed risk policies and strategies of the subsidiary. The risk management team of the controlling company assists the Group's chief risk management and supervision.

Shinhan Financial Group has a hierarchical limit system to manage the risks of the Group to an appropriate level. The Group Risk Management Committee sets the risk limits that can be assumed by the Group and its subsidiaries, while the Risk Management Committee and the Committee of each subsidiary set and manage detailed risk limits by risk, department, desk and product types.

# ① Group Risk Management Committee

The Group established the risk management system for the Group and each of its subsidiaries, and comprehensively manages group risk-related matters such as establishing risk policies, limits, and approvals. The Committee consists of directors of the Group.

(In millions of won)

# 4. Financial risk management (continued)

The resolution of the Committee is as follows:

- Establish risk management basic policy in line with management strategy
- Determine the level of risk that can be assumed by the Group and each subsidiary
- · Approve appropriate investment limit or loss allowance limit
- Enact and amend the Group Risk Management Regulations and the Group Risk Council Regulations
- Matters concerning risk management organization structure and division of duties
- Matters concerning the operation of the risk management system
- Matters concerning the establishment of various limits and approval of limits
- Make decisions on approval of the FSS's internal rating law for non-retail and retail credit rating systems
- Matters concerning risk disclosure policy
- Analysis of crisis situation, related capital management plan and financing plan
- Matters deemed necessary by the board of directors
- Materials required by external regulations such as the Financial Services Commission and other regulations and guidelines
- Matters deemed necessary by the Chairman

The resolution of the Group Risk Management Committee is reported to the Board of Directors.

# <sup>(2)</sup> Group Risk Management Council

In order to maintain the Group's risk policy and strategy consistently, the Group decides what is necessary to discuss the risks of the Group and to carry out the policies set by the Group Risk Management Committee. The members are chaired by the group's risk management officer and consist of the risk management officers of major subsidiaries.

# iii) Group Risk Management System

① Management of the risk capital

Risk capital refers to the capital required to compensate for the potential loss (risk) if it is actually realized. Risk capital management refers to the management of the risk assets considering its risk appetite, which is a datum point on the level of risk burden compared to available capital, so as to maintain the risk capital at an appropriate level. The Group and subsidiaries establish and operate a risk planning process to reflect the risk plan in advance when establishing financial and business plans for risk capital management, and establish a risk limit management system to control risk to an appropriate level.

# 2 Risk Monitoring

In order to proactively manage risks by periodically identifying risk factors that can affect the group's business environment, the Group has established a multi-dimensional risk monitoring system. Each

# 4. Financial risk management (continued)

subsidiary is required to report to the Group on key issues that affect risk management at the group level. The Group prepares weekly, monthly and occasional monitoring reports to report to Group management including the CRO.

In addition, the Risk Dash Board is operated to derive abnormal symptoms through three-dimensional monitoring of major portfolios, increased risks, and external environmental changes of assets for each subsidiary. If necessary, the Group takes preemptive risk management to establish and implement countermeasures.

# 3 Risk Reviewing

When conducting new product new business and major policy changes, risk factors are reviewed by using a pre-defined checklist to prevent indiscriminate promotion of business that is not easy to judge risk and to support rational decision making. The subsidiary's risk management department conducts a preliminary review and post-monitoring process on products, services, and projects to be pursued in the business division. In case of matters that are linked or jointly promoted with other subsidiaries, the risk reviews are carried out after prior-consultation with the risk management department of the Group.

# ④ Risk management

The Group maintains a group wide risk management system to detect the signals of any risk crisis preemptively and, in the event of a crisis actually happening, to respond on a timely, efficient and flexible basis so as to ensure the Group's survival as a going concern. Each subsidiary maintains crisis planning for three levels of contingencies, namely, 'alert', 'imminent crisis' and 'crisis' determination of which is made based on quantitative and qualitative monitoring and consequence analysis, and upon the happening of any such contingency, is required to respond according to a prescribed contingency plan. At the controlling company level, the Group maintains and installs crisis detection and response system which is applied consistently group-wide, and upon the happening of any contingency at two or more subsidiary level, the Group directly takes charge of the situation so that the Group manages it on a concerted group wide basis.

# (b) Credit risk

Credit risk is the risk of potential economic loss that may be caused if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and is the largest risk which the Group is facing. The Group's credit risk management encompasses all areas of credit that may result in potential economic loss, including not just transactions that are recorded on balance sheets, but also off-balance-sheet transactions such as guarantees, loan commitments and derivative transactions.

Shinhan Bank's basic policy on credit risk management is determined by the Risk Policy Committee. The Risk Policy Committee consists of the chairman of the CRO, the Chief Credit Officer (CCO), the head of the business group, and the head of the risk management department, and decides the credit risk management plan and the direction of the loan policy for the entire bank. Apart from the Risk Policy Committee, the Credit Review Committee is established to separate credit monitoring, such as large loans and limit approval, and is composed of chairman, the CCO, CRO and the head of the group in charge of the credit-related business group, the head of the credit planning department, and the senior examination team to enhance the credit quality of the loan and profitability of operation.

Shinhan Bank's credit risk management includes processes such as credit evaluation, credit monitoring, and credit supervision, and credit risk measurement of counterparties and limit management processes and credit

# 4. Financial risk management (continued)

risk measurements for portfolios. All loan customers of Shinhan Bank are evaluated and managed with credit ratings. Retail customers are evaluated by summing up the information of personal information the bank's internal information and external credit information, and the corporate customers are evaluated by considering financial and non-financial items such as industrial risk, operating risk, and management risk. The evaluated credit rating is used for credit approval, limit management, pricing, credit loss provisioning, etc., and is the basis for credit risk management. The credit evaluation system is divided into an evaluation system for retail customers, a SOHO evaluation system, and an evaluation system for corporate customers. It is subdivided and refined by each model to reflect the Basel III requirements. The corporate credit decision is based on a collective decision-making system, making objective and prudent decisions. In the case of a general credit of loans, the credit is approved based on the consultation between branch's RM (Relationship Manager) and loan officers of each business division's headquarters. In the case of a large or important credit, the credit is approved by the review council. In particular, the Credit Deliberation Committee, the highest decision-making body of the loan, reviews for important loans such as large loans. Credits for retail customers are monitored by an automated credit scoring systems (CSS) based on objective statistical methods and bank credit policies.

The Bank operates a regular monitoring system for the regular management of individual loans. The loan officers and RM evaluate the adequacy of the result of the loan review by automatically searching for anticipated insolvent companies among business loan partners, and if necessary, the credit rating of the corporate is requested of an adjustment. In accordance with these procedures, the corporate customers are classified as an early warning company, an observation company, and a normal company, and then are managed differently according to the management guidelines for each risk stage, thereby preventing the insolvency of the loan at an early stage. The financial analysis support system affiliated with a professional credit rating agency supports credit screening and management, and the credit planning department calculates and manages industrial grades, and analyzes and provides industry trends and company information. In order to control the credit risk for the credit portfolio to an appropriate level, credit VaR limits are set and managed for each business and business sector, and to prepare for the credit risk caused by biased exposure to specific sectors, the Group sets and manages exposure limits for each sector by the party, industry, country, etc.

Shinhan Card's basic policy on credit risk is determined by the Risk Management Committee. The Risk Management Committee consists of the Risk Management Officer (CRO) as the chairperson, and is composed of the heads of each business division and supporting division, and the heads of related departments. Apart from the RMC, a credit committee in charge of monitoring corporate credits and other important credits over a certain amount has been established to separate credit policy decisions from credit monitoring.

Shinhan Card's credit rating system is divided into ASS(Application Scoring System) and BSS(Behavior Scoring System). Unless a customer fall under "rejections due to policy" (such circumstances include delinquency of other credit card companies) and his/her credit rating is above a certain rate, an application of AS is approved. There is a separate screening criterion for credit card customers, who has maintained its relationship with Shinhan Financial Group for a long-term and has a good credit history. In addition, the elements of credit ratings are used as the basis for setting limits when issuing cards. The BSS, which is recalculated monthly, predicts the delinquency probability of cardholders, and utilizes it to monitor members and monitor portfolio risk.

# 4. Financial risk management (continued)

# i) Techniques, assumptions and input variables used to measure impairment

i-1) Determining significant increases in credit risk since initial recognition

At the end of each reporting period, the Group assesses whether the credit risk on a financial instrument has increased significantly since initial recognition. When making the assessment, the Group uses the change in the risk of a default occurring over the expected life of the financial instrument instead of the change in the amount of expected credit losses.

To make the assessment, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition and considers reasonable and supportable information, that is available without undue cost or effort, and is indicative of significant increases in credit risk since initial recognition. Information includes the default experience data held by the Group and analysis by an internal credit rating expert.

# i-1-1) Measuring the risk of default

The Group assigns an internal credit risk rating to each individual exposure based on observable data and historical experiences that have been found to have a reasonable correlation with the risk of default. The internal credit risk rating is determined by considering both qualitative and quantitative factors that indicate the risk of default, which may vary depending on the nature of the exposure and the type of borrower.

# i-1-2) Measuring term structure of probability of default

Internal credit risk rating is the main variable inputs to determine the duration structure for the risk of default. The Group accumulates information after analyzing the information regarding exposure to credit risk and default information by the type of product and borrower and results of internal credit risk assessment. For some portfolios, the Group uses information obtained from external credit rating agencies when performing these analyses.

The Group applies statistical techniques to estimate the probability of default for the remaining life of the exposure from the accumulated data and to estimate changes in the estimated probability of default over time.

4. Financial risk management (continued)

# i-1-3) Significant increases in credit risk

The Group uses the indicators defined as per portfolio to determine the significant increase in credit risk and such indicators generally consist of changes in the risk of default estimated from changes in the internal credit risk rating, qualitative factors, days of delinquency, and others. The method used to determine whether credit risk of financial instruments has significantly increased after the initial recognitions is summarized as follows:

Corporate exposures	Retail exposures	Card exposures
Significant change in credit ratings	Significant change in credit ratings	Significant change in credit ratings
Continued past due more than 30 days	Continued past due more than 30 days	Continued past due more than 7 days(personal card)
Loan classification of precautionary or below	Loan classification of precautionary or below	Loan classification of precautionary or below
Borrower with early warning signals	Borrower with early warning signals	Specific delinquent pool segment
Negative net assets	Specific pool segment	
Adverse audit opinion or disclaimer of opinion	Collective loans for housing for which the constructors are insolvent	
Interest coverage ratio below 1 for a consecutive period of three years or negative cash flows from operating activities for a consecutive period of two years	Loans with identified indicators for significant increases in other credit risk	
Loans with identified indicators for significant increases in other credit risk		

The Group assumes that the credit risk of the financial instrument has been increased significantly since initial recognition if a specific exposure is past due more than 30 days (except, for a specific portfolio if it is past due more than 7 days). The Group counts the number of days past due from the earliest date on which the Group fails to fully receive the contractual payments from the borrower, and does not take into account the grace period granted to the borrower.

The Group regularly reviews the criteria for determining if there have been significant increases in credit risk from the following perspective:

- A significant increase in credit risk shall be identified prior to the occurrence of default.
- The criteria established to judge the significant increase in credit risk shall have a more predictive power than the criteria for days of delinquency.

# i-2) Modified financial assets

If the contractual cash flows on a financial asset have been modified through renegotiation and the financial asset is not derecognized, the Group assesses whether there has been a significant increase in the credit risk

(In millions of won)

# 4. Financial risk management (continued)

of the financial instrument by comparing the risk of a default occurring at initial recognition based on the original, unmodified contractual terms and the risk of a default occurring at the reporting date based on the modified contractual terms.

The Group may adjust the contractual cash flows of loans to customers who are in financial difficulties in order to manage the risk of default and enhance the collectability (hereinafter referred to as 'debt restructuring'). These adjustments generally involve extension of maturity, changes in interest payment schedule, and changes in other contractual terms.

Debt restructuring is a qualitative indicator of a significant increase in credit risk and the Group recognizes lifetime expected credit losses for the exposure expected to be the subject of such adjustments. If a borrower faithfully makes payments of contractual cash flows that are modified in accordance with the debt restructuring or if the borrower's internal credit rating has recovered to the level prior to the recognition of the lifetime expected credit losses, the Group recognizes the 12-month expected credit losses for that exposure again.

# i-3) Risk of default

The Group considers a financial asset to be in default if it meets one or more of the following conditions:

- If a borrower is overdue 90 days or more from the contractual payment date,
- If the Group judges that it is not possible to recover principal and interest without enforcing the collateral on a financial asset

The Group uses the following indicators when determining whether a borrower is in default:

- Qualitative factors (e.g. breach of contractual terms),
- Quantitative factors (e.g. if the same borrower does not perform more than one payment obligations to the Group, the number of days past due per payment obligation. However, in the case of a specific portfolio, the Group uses the number of days past due for each financial instrument),
- Internal observation data and external data

The definition of default applied by the Group generally conforms to the definition of default defined for regulatory capital management purposes; however, depending on the situations, the information used to determine whether a default has occurred and the extent thereof may vary.

# i-4) Reflection of forward-looking information

The Group reflects future forward-looking information presented by a group of internal experts based on various information when measuring expected credit losses. The Group utilizes economic forecasts disclosed by domestic and foreign research institutes, governments, and public institutions to predict forward-looking information.

The Group reflects future macroeconomic conditions anticipated from a neutral standpoint that is free from bias in measuring expected credit losses. Expected credit losses in this respect reflect conditions that are most likely to occur and are based on the same assumptions that the Group used in its business plan and management strategy.

The Group analyzed the data experienced in the past, derived correlations between major macroeconomic variables and credit risks required for predicting credit risk and credit loss for each portfolio, and then

(In millions of won)

# 4. Financial risk management (continued)

reflected future forecast information through regression estimation. To reflect the COVID-19 economic situation, the Group has reviewed the 3 scenarios of upside, central and downside to reflect the final forward-looking information. For the years ended December 31, 2021 and 2022, macroeconomic variables used by the Group are as follows for each scenario.

Correlation

<December, 31, 2021>

① Upside scenario

	Correlation between			2022 (*	•2),(*3)	
Major variables(*1)	credit risks	2021.4Q (*2),(*3)	1Q	2Q	3Q	4Q
GDP growth rate(YoY %)	(-)	4.1	3.0	3.1	3.8	3.7
Private consumption index(YoY %)	(-)	6.3	5.1	2.5	3.7	3.8
Facility investment growth rate(YoY %)	(-)	4.1	0.5	1.2	5.0	5.1
Consumer price index growth rate(%)	(-)	3.6	2.6	2.4	2.0	2.0
Balance on current account(100 million						
dollars)	(-)	202.0	230.0	200.0	220.0	230.0
Government bond 3y yields(%)	—	1.87	1.90	1.90	2.00	2.00
<sup>(2)</sup> Central scenario						
	Correlation between			2022 (*	•2),(*3)	
Major variables(*1)	credit risks	2021.4Q (*2),(*3)	1Q	2Q	3Q	4Q
GDP growth rate(YoY %)	(-)	4.1	2.3	2.4	3.0	3.4
Private consumption index(YoY %)	(-)	6.3	4.4	1.8	2.9	3.5
Facility investment growth rate(YoY %)	(-)	4.1	0.2	0.8	4.5	4.9
Consumer price index growth rate(%)	(-)	3.6	2.7	2.5	2.2	2.0
Balance on current account(100 million						
dollars)	(-)	202.0	220.0	180.0	200.0	220.0
Government bond 3y yields(%)		1.87	1.80	1.80	1.90	1.90
3 Downside scenario						
	Correlation between			2022 (*	•2),(*3)	
Major variables(*1)	credit risks	2021.4Q (*2),(*3)	1Q	2Q	3Q	4Q
GDP growth rate(YoY %)	(-)	4.1	1.3	1.3	1.8	3.1
Private consumption index(YoY %)	(-)	6.3	3.4	0.7	1.8	3.1
Facility investment growth rate(YoY %)	(-)	4.1	(0.5)	0.3	4.3	4.5
Consumer price index growth rate(%)	(-)	3.6	3.2	3.0	3.0	2.8
Balance on current account(100 million						
dollars)	(-)	202.0	200.0	170.0	180.0	200.0
		202.0	200.0	170.0	100.0	200.0

Government bond 3y yields(%)

(\*1) Shinhan Bank applied the GDP growth rate and private consumption index as the major variables. In addition, Shinhan Card applied the GDP growth rate, facility investment growth rate, consumer price index growth rate, and balance on current account as the major variables. In addition to the table above, the Group has selected additional forecasts for the KOSPI.

\_\_\_\_

1.87

2.00 2.00 2.20 2.40

4. Financial risk management (continued)

- (\*2) Considering the default forecast period, the Group reflected the future economic outlook.
- (\*3) The macroeconomic outlook figures are estimated by the Group for the purpose of calculating expected credit losses based on information from domestic and foreign research institutes. Therefore, it could be different from other institutions' estimates.

<December, 31, 2022>

① Upside scenario

	Correlation between			2023 (	*2),(*3)	
Major variables(*1)	credit risks	2022.4Q (*2),(*3)	1Q	2Q	3Q	4Q
GDP growth rate(YoY %)	(-)	1.4	1.6	1.7	2.5	3.9
Private consumption index(YoY %)	(-)	3.6	4.9	2.8	2.1	3.6
Facility investment growth rate(YoY %)	(-)	6.6	1.5	2.0	(4.2)	5.3
Consumer price index growth rate(%)	(+)	5.3	5.0	4.0	3.4	3.0
Balance on current account(100 million dollars)	(-)	15.0	30.0	40.0	80.0	100.0
Government bond 3y yields(%)	—	3.9	3.7	4.0	4.0	4.0

<sup>(2)</sup> Central scenario

	Correlation between			2023 (	*2),(*3)	
Major variables(*1)	credit risks	2022.4Q (*2),(*3)	1Q	2Q	3Q	4Q
GDP growth rate(YoY %)	(-)	1.4	0.4	0.5	1.2	3.7
Private consumption index(YoY %)	(-)	3.6	3.8	1.5	0.6	2.8
Facility investment growth rate(YoY %)	(-)	6.6	0.8	1.0	(5.3)	4.6
Consumer price index growth rate(%)	(+)	5.3	5.3	4.4	3.8	3.4
Balance on current account(100 million dollars)	(-)	15.0	20.0	30.0	60.0	80.0
Government bond 3y yields(%)	—	3.9	4.0	4.2	4.2	4.2

③ Downside scenario

	Correlation between			2023 (*	*2),(*3)	
Major variables(*1)	credit risks	2022.4Q (*2),(*3)	1Q	2Q	3Q	4Q
GDP growth rate(YoY %)	(-)	1.4	(0.4)	(0.5)	(0.1)	2.9
Private consumption index(YoY %)	(-)	3.6	2.9	0.3	(0.8)	1.9
Facility investment growth rate(YoY %)	(-)	6.6	0.2	0.3	(6.4)	3.4
Consumer price index growth rate(%)	(+)	5.3	5.7	4.8	4.4	3.8
Balance on current account(100 million dollars)	(-)	15.0	10.0	20.0	40.0	60.0
Government bond 3y yields(%)	—	3.9	4.3	4.6	4.6	4.6

# 4. Financial risk management (continued)

Worst scenario

Major variables(*1)	Correlation between credit risks	Economic Crisis for 1 year(*4)
GDP growth rate(YoY %)	(-)	(5.1)
Private consumption index(YoY %)	(-)	(11.9)
Facility investment growth rate(YoY %)	(-)	(38.6)
Consumer price index growth rate(%)	(+)	7.5
Balance on current account(100 million dollars)	(-)	401.1
Government bond 3y yields(%)	—	4.4

- (\*1) As a result of examining the correlation between each variable, Shinhan Bank applied the GDP growth rate and private consumption index increase rate, etc. as the major variables to reflect the final forward-looking information, while, Shinhan Card applied the GDP growth rate, facility investment change rate, and current account balance, etc. as the major variables. In addition to the table above, the Group has selected unemployment rate and KOSPI forecasts.
- (\*2) Considering the default forecast period, the Group reflected the future economic outlook.
- (\*3) The macroeconomic outlook figures are estimated by the Group for the purpose of calculating expected credit losses based on information from domestic and foreign research institutes. Therefore, it could be different from other institutions' estimates.
- (\*4) Shinhan Bank and Jeju Bank reviewed and reflected the Worst scenario (during the foreign exchange crisis) in addition to the three scenarios of Upside, Central and Downside.

The predicted correlations between the macroeconomic variables and the risk of default, used by the Group, are derived based on long-term data over the past ten years.

The recent historical default rate is an important reference when estimating the default rate in consideration of the future economic outlook. Economic indicators have worsened since 2020 due to the economic contraction caused by the COVID-19. However, the historical default rate of the Group's has remained stable because of various government support in response to the COVID-19. The Group manages the credit risk through classifying borrowers in moratorium of interest payments and moratorium of repayment that is one of the financial relief programs into Stage2 to reflect the impact of potential insolvency.

The Group has considered multiple economic scenarios in applying forward-looking information to measure the expected credit losses. Assuming a 100% weighting of Upside, Central, and Downside scenarios, the sensitivity to the Group's provision for expected credit loss is not significant.

# i-5) Measurement of expected credit losses

Key variables used in measuring expected credit losses are as follows:

- Probability of default ("PD")
- Loss given default ("LGD")
- Exposure at default ("EAD")

These variables have been estimated from historical experience data by using the statistical techniques developed internally by the Group and have been adjusted to reflect forward-looking information.

(In millions of won)

# 4. Financial risk management (continued)

Estimates of PD over a specified period are estimated by reflecting characteristics of counterparties and their exposure, based on a statistical model at a specific point of time. The Group uses its own information to develop a statistical credit assessment model used for the estimation, and additional information observed in the market is considered for some portfolios such as a group of large corporates. When a counterparty or exposure is concentrated in specific grades, the method of measuring PD for those grades would be adjusted, and the PD by grade is estimated by considering contract expiration of the exposure.

LGD refers to the expected loss if a borrower defaults. The Group calculates LGD based on the experience recovery rate measured from past default exposures. The model for measuring LGD is developed to reflect type of collateral, seniority of collateral, type of borrower, and cost of recovery. In particular, LGD for retail loan products uses loan to value (LTV) as a key variable. The recovery rate reflected in the LGD calculation is based on the present value of recovery amount, discounted at the effective interest rate.

EAD refers to the expected exposure at the time of default. The Group derives EAD reflecting a rate at which the current exposure is expected to be used additionally up to the point of default within the contractual limit. EAD of financial assets is equal to the total carrying value of the asset, and EAD of loan commitments or financial guarantee contracts is calculated as the sum of the amount expected to be used in the future.

In measuring expected credit losses on financial assets, the Group uses the contractual maturity as the period subject to expected credit loss measurement. The contractual maturity is computed taking into account the extension right held by the borrower.

Risk factors of PD, LGD and EAD are collectively estimated according to the following criteria:

- Type of products
- Internal credit risk rating
- Type of collateral
- LTV
- Industry that the borrower belongs to
- Location of the borrower or collateral
- Days of delinquency

The criteria classifying groups is periodically reviewed to maintain homogeneity of the group and adjusted if necessary. The Group uses external benchmark information to supplement internal information for a particular portfolio that did not have sufficient internal data accumulated from the past experience.

# i-6) Write-off of financial assets

The Group writes off a portion of or entire loan or debt security that is not expected to receive its principal and interest. In general, the Group conducts write-off when it is deemed that the borrower has no sufficient resources or income to repay the principal and interest. Such determination on write-off is carried out in accordance with the internal rules of the Group and is carried out with the approval of an external institution, if necessary. Apart from write-off, the Group may continue to exercise its right of collection under its own recovery policy even after the write-off of financial assets.

# ii) Maximum exposure to credit risk

Exposure to credit risk is the exposure related to due from banks, loans, investments in debt securities, derivative transactions, off-balance sheet accounts such as loan commitment. The exposures of due from

(In millions of won)

# 4. Financial risk management (continued)

banks and loans are classified into government, bank, corporation or retail based on the exposure classification criteria of BASEL III credit risk weights, and the net carrying value, excluding provisions, is presented as the maximum amount that can be exposed by credit risk.

The Group's maximum exposure to credit risk without taking into account of any collateral held or other credit enhancements as of December 31, 2021 and 2022 is as follows:

2021

-

	2021	2022
Due from banks and loans at amortized cost (*1),(*3):		
Banks	₩ 14,166,508	20,137,657
Retail	186,358,002	183,539,365
Government/Public sector/Central bank	15,251,465	15,481,390
Corporations	172,527,573	192,985,692
Card receivable	25,065,621	27,375,162
	413,369,169	439,519,266
Due from banks and loans at fair value through profit or loss(*3):		
Banks	34,262	135,214
Corporations	1,683,344	2,280,081
	1,717,606	2,415,295
Securities at fair value through profit or loss	58,310,838	51,604,186
Securities at fair value through other comprehensive		
income	63,806,919	62,093,908
Securities at amortized cost(*1)	49,930,076	57,971,493
Derivative assets	3,799,189	6,461,796
Other financial assets(*1),(*2)	23,238,932	21,896,490
Guarantee contracts	16,745,707	18,226,546
Loan commitments and other credit liabilities	193,853,866	205,255,277
	₩824,772,302	865,444,257

(\*1) The maximum exposure amounts for due from banks, loans, securities at amortized cost and other financial assets at amortized cost are recorded as net of allowances.

(\*2) Other financial assets mainly comprise of accounts receivable, accrued income, deposits, domestic exchange settlement debit and suspense payments.

(\*3) Classified as similar credit risk group based on calculation of the BIS ratio under new Basel Capital Accord (Basel III).

# 4. Financial risk management (continued)

*iii)* The maximum amount of exposure to credit risk by type of collateral as of December, 31, 2021 and 2022 is as follows:

		2021		
	12 months	Life time expected	ed credit loss	
Classification	Expected credit loss	Not impaired	Impaired	Total
Guarantee	₩ 61,890,908	8,354,723	214,589	70,460,220
Deposits and Savings	2,166,075	285,965	2,446	2,454,486
Property and equipment	1,560,567	416,545	20,162	1,997,274
Real estate	127,505,563	14,318,098	256,972	142,080,633
Securities	1,906,005	128,293	7	2,034,305
Others	5,035,546		5,495	5,041,041
Total	₩200,064,664	23,503,624	499,671	224,067,959
		2022		
	12 months	2022 Life time expected	ed credit loss	
Classification	12 months Expected credit loss	-	ed credit loss Impaired	Total
Classification Guarantee		Life time expected		Total 70,502,515
	Expected credit loss	Life time expecte Not impaired	Impaired	
Guarantee	Expected credit loss ₩ 61,643,599	Life time expected Not impaired 8,583,456	Impaired 275,460	70,502,515
Guarantee Deposits and Savings	Expected credit loss ₩ 61,643,599 2,814,723	Life time expected Not impaired 8,583,456 287,890	Impaired 275,460 4,348	70,502,515 3,106,961
Guarantee Deposits and Savings Property and equipment	Expected credit loss ₩ 61,643,599 2,814,723 1,546,908	Life time expected Not impaired 8,583,456 287,890 404,440	Impaired 275,460 4,348 11,523	70,502,515 3,106,961 1,962,871
Guarantee Deposits and Savings Property and equipment Real estate	Expected credit loss ₩ 61,643,599 2,814,723 1,546,908 136,154,296	Life time expected Not impaired 8,583,456 287,890 404,440 17,439,371	Impaired 275,460 4,348 11,523 317,213	70,502,515 3,106,961 1,962,871 153,910,880

# 4. Financial risk management (continued)

iv) Impairment information by credit risk of financial assets

Details of impaired financial assets due to credit risk as of December 31, 2021 and 2022 are as follows:

					2021				
	12-month expected credit loss	ed credit loss	Life tir	Life time expected credit loss	lit loss				Mitigation of credit risk
	Grade 1	Grade 2	Grade 1	Grade 2	Impaired	Total	Allowances	Net	collateral
Due from banks and loans at amortized cost:									
Banks	₩ 10,793,973	3,278,144	112,254	434		14,184,805	(18, 297)	(18,297) 14,166,508	133,618
Retail	169, 313, 467	7,015,361	7,900,192	2,127,173	581,534	186,937,727	(579, 725)	(579,725) 186,358,002	126,988,030
Government/Public									
sector/ Central bank	14,531,532	710,527	17,433	257		15,259,749	(8, 284)	15,251,465	9,000
Corporations	101,866,101	44,060,819	10,743,965	16,702,928	853,977	174,227,790	(1,700,217)	172,527,573	93,682,859
Card receivable	18,793,517	2,541,833	1,829,837	2,350,634	428,068	25,943,889	(878,268)	25,065,621	8,774
	315,298,590	57,606,684	20,603,681	21,181,426	1,863,579	416,553,960	(3, 184, 791)	413,369,169	220,822,281
Securities at fair value through other comprehensive income (*)	56.176.008	7,478,125		152.786		63.806.919		63.806.919	
Securities at amortized cost	48,305,398	1,605,335		36,290		49,947,023	(16,947)	49,930,076	
	<del>W</del> 419,779,996	66,690,144	20,603,681	21,370,502	1,863,579	530,307,902	(3,201,738)	527,106,164	220,822,281
	-	-	•		-	-	-		-

(\*) Credit loss allowance recognized as other comprehensive income of securities at fair value through other comprehensive income amounted to W37,486 million as of December 31, 2021.

# 4. Financial risk management (continued)

					2022				
									Mitigation of
	12-month expected credit loss	ed credit loss	Life tir	Life time expected credit loss	dit loss				due to
	Grade 1	Grade 2	Grade 1	Grade 2	Impaired	Total	Allowances	Net	collateral
Due from banks and loans at amortized cost:									
Banks	<b>W</b> 15,883,274	4,166,423	111,593	177		20,161,467	(23, 810)	20,137,657	42,418
Retail	165,886,703	6,846,625	8,544,051	2,340,393	709,935	184,327,707	(788, 342)	(788,342) 183,539,365	129, 278, 429
Government/Public									
sector/ Central bank	14,401,434	1,071,236	15,755	557		15,488,982	(7, 592)	(7,592) 15,481,390	9,000
Corporations	116,264,866	47,287,903	12,582,994	17,780,729	880,857	194, 797, 349	(1, 811, 657)	(1,811,657) 192,985,692	104,854,134
Card receivable	20,858,888	2,727,744	1,671,259	2,662,353	493,480	28,413,724	(1,038,562)	27,375,162	12,589
	333,295,165	62,099,931	22,925,652	22,784,209	2,084,272	443,189,229	(3,669,963)	439,519,266	234,196,570
Securities at fair value through other									
comprehensive income(*)	52,920,399	9,106,311		67,198		62,093,908		62,093,908	
Securities at amortized cost	56,333,659	1,643,689		10,516		57,987,864	(16, 371)	57,971,493	
	<del>W</del> 442,549,223	72,849,931	22,925,652	22,861,923	2,084,272	563,271,001	(3,686,334)	559,584,667	234,196,570

(\*) Credit loss allowance recognized as other comprehensive income of securities at fair value through other comprehensive income amounted to W33,108 million as of December 31, 2022.

# 4. Financial risk management (continued)

#### v) Credit risk exposures per credit grade of off-balance items

Credit risk exposures per credit grade of off-balance items as of December 31, 2021 and 2022 are as follows:

		2021		
	Grade 1	Grade 2	Impaired	Total
Guarantee contracts:				
12-month expected credit loss	₩ 12,671,376	3,434,615	_	16,105,991
Life time expected credit loss	342,224	205,179	—	547,403
Impaired			92,313	92,313
	13,013,600	3,639,794	92,313	16,745,707
Loan commitment and other credit line				
12-month expected credit loss	160,307,100	23,370,613	_	183,677,713
Life time expected credit loss	7,406,324	2,759,057	—	10,165,381
Impaired			10,772	10,772
	167,713,424	26,129,670	10,772	193,853,866
	₩180,727,024	29,769,464	103,085	210,599,573
		2022		
	Grade 1	Grade 2	Impaired	Total
Guarantee contracts:				
12-month expected credit loss	₩ 14,262,990	3,314,584	—	17,577,574
Life time expected credit loss	386,159	164,400		550,559
Impaired			98,413	98,413
	14,649,149	3,478,984	98,413	18,226,546
Loan commitment and other credit line				
12-month expected credit loss	178,532,138	17,418,916	—	195,951,054
Life time expected credit loss	6,287,658	3,011,715	4,850	9,299,373 4,850
Impaired				
	184,819,796	20,430,631	4,850	205,255,277
	₩199,468,945	23,909,615	103,263	223,481,823

vi) Credit qualities are classified based on the internal credit rating as follows:

Type of Borrower	Grade 1	Grade 2
Individuals	Probability of default below 2.25% for each pool	Probability of default 2.25% or above for each pool
Government/Public agency/Central bank	OECD sovereign credit rating of 6 or above	OECD sovereign credit rating of below 6
Banks and Corporations (Including credit card bond) Card receivables (Individuals)	Internal credit rating of BBB+ or above Behavior scoring system of 7 grade or above	Internal credit rating of below BBB+ Behavior scoring system of below 7 grade

# 4. Financial risk management (continued)

#### vii) Credit risk exposures per credit quality of derivative assets

Credit quality of derivative assets as of December 31, 2021 and 2022 are as follows:

	2021	2022
Grade 1	₩3,201,912	5,942,661
Grade 2	597,277	519,135
	₩3,799,189	6,461,796

(\*) Credit quality of derivative assets is classified based on the internal credit ratings.

# 4. Financial risk management (continued)

viii) Concentration by geographic location

An analysis of concentration by geographic location for financial instrument, net of allowance, as of December 31, 2021 and 2022 are as follows:

	al	6,508	8,002	1,465	7,573	5,621	9,169		34,262	1,683,344	1,717,606	0,838	6,919	0,076	4,608	5,707	3,866	9,573
	Total	14,166,508	186,358,002	15,251,465	172,527,573	25,065,62	413,369,169		ň	1,68	1,71	58,310,838	63,806,919	49,930,076	587,134,608	16,745,707	193,853,866	210,599,573
	Other	2,759,969	1,481,516	440,075	6,534,333	16,881	11,232,774			268,328	268,328	1,539,176	1,314,425	1,029,705	15,384,408	91,380	4,417,681	4,509,061
	China	2,677,445	1,944,105	462,308	2,947,746	32,281	8,063,885					76,107	679,527	80,041	8,899,560	617,574	2,157,388	2,774,962
	Vietnam	1,676,080	2,412,670	248,301	3,012,133	170,929	7,520,113					27,613	120,884	902,377	8,570,987	382,307	2,772,750	3,155,057
2021	Germany	530,688	3,111	217,773	94,186	233	845,991					19,048	52,199		917,238	13,374	87,080	100,454
	Japan	450,689	4,338,281	1,279,012	4,375,807	2,033	10,445,822		l	19,274	19,274	91,766	250,768	244,149	11,051,779	28,725	771,183	799,908
	UK	235,591	7,683		254,051	462	497,787					255,023	164, 340		917,150	4,690	260,036	264,726
	USA	1,525,158	392,882	796,405	3,684,068	10,435	6,408,948		34,262	282,513	316,775	2,359,478	1,871,526	777,546	11,734,273	156,225	686,381	842,606
	Korea	₩ 4,310,888	175,777,754	11,807,591	151,625,249	24,832,367	368,353,849			1,113,229	1,113,229	53,942,627	59,353,250	46,896,258	<del>W</del> 529,659,213	₩ 15,451,432	182,701,367	<del>W</del> 198,152,799
	<u>Classification <math>(*)</math></u>	Due from banks and loans at amortized cost Banks	Retail	Government/Public sector/Central bank	Corporations	Card receivable		Deposits and loans at FVTPL	Banks	Corporations		Securities measured at FVTPL	Securities at FVOCI	Securities at amortized cost		Off-balance accounts Guarantees Loan commitments and other lightlities	related to credit	

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(\*) The following accounts are the net carrying value less provision for doubtful accounts.

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Classification(*)	Korea	A SIT	IIK	Ianan	2022 Germany	Vietnam	China	Other	Total
	NUICA	Ven		Japan	Certitally			Ould	1 0141
Due from banks and loans at amortized cost									
Banks	<del>W</del> 5,956,111	2,259,951	765,128	879,022	675,370	1,793,330	3,861,678	3,947,067	20,137,657
Retail	171,780,848	403,445	8,199	4,357,325	3,716	3,183,424	2,030,305	1,772,103	183,539,365
Government/Public sector/Central bank	11,251,561	915,306		1,404,163	426,747	345,843	441,551	696,219	15,481,390
Corporations	170,961,934	3,687,701	451,254	5,152,628	105,205	3,228,817	2,694,661	6,703,492	192,985,692
Card receivable	27,065,988	11,017	428	2,291	286	236,095	38,416	20,641	27,375,162
	387,016,442	7,277,420	1,225,009	11,795,429	1,211,324	8,787,509	9,066,611	13,139,522	439,519,266
Deposits and loans at FVTPL									
Banks	109,098	26,116							135,214
Corporations	1,510,976	285,107	82,172	17,829				383,997	2,280,081
	1,620,074	311,223	82,172	17,829				383,997	2,415,295
Securities measured at FVTPL	48,322,318	1,602,598	252,390	58,255	23,610	31,952	16,469	1,296,594	51,604,186
Securities at FVOCI	55,849,223	3,104,384	193,598	348,240	34,065	92,940	688,085	1,783,373	62,093,908
Securities at amortized cost	54,843,005	1,020,227		214,653		726,476	110,884	1,056,248	57,971,493
	547,651,062	13,315,852	1,753,169	12,434,406	1,268,999	9,638,877	9,882,049	17,659,734	613,604,148
Off-balance accounts									
Guarantees Loan commitments and other liabilities	16,426,498	118,951	23,481	47,805	44,203	329,904	1,015,543	220,161	18,226,546
related to credit	194,236,727	1,312,830	317,335	550,116	42,230	1,816,773	2,548,483	4,430,783	205,255,277
	<del>W</del> 210,663,225	1,431,781	340,816	597,921	86,433	2,146,677	3,564,026	4,650,944	223,481,823

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(\*) The following accounts are the net carrying value less provision for doubtful accounts.

# 4. Financial risk management (continued)

ix) Concentration by industry sector

An analysis of concentration by industry sector of financial instrument, net of allowance, as of and December 31, 2021 and 2022 is as follows:

	Total	14,166,508 186,358,002	15,251,465 172,527,573 25,065,621	413,369,169	34,262	1,083,344 1,717,606	58,310,838 63,806,919	49,930,076 587,134,608	16,745,707 193,853,866	210,599,573
			- 1		-		58,			
	Retail customers	 186,358,002	22,511,147	208,869,149					1,537 117,316,312	117,317,849
	Other	718,679	$\begin{array}{c} 33,265\\ 33,463,014\\ 1,899,301\end{array}$	36,114,259		84,976	18,897,062 30,766,944	<u>37,297,295</u> <u>123,160,536</u>	2,132,267 20,404,848	22,537,115
	Lodging and Restaurant		$\frac{-}{6,544,166}$ 29,713	6,573,879		2,637	$\frac{-,}{152,341}$ 30,928	6,759,785	151,653 499,633	651,286
2021	Construction service			3,772,906		22.537	299,972 1,144,998	$\frac{1,249,070}{6,489,483}$	207,691 2,213,871	2,421,562
	Real estate and business		$\begin{array}{c} 1,797\\41,106,836\\46,896\end{array}$	41,155,529		78.753	773,687 775,967	$\frac{1,074,393}{43,858,329}$	350,591 3,676,457	4,027,048
	Retail and wholesale		21,167,564 228,900	21,396,464		15,107	1,169,038 523,631	23,104,240	3,469,001 8,908,201	12,377,202
	Manufacturing		53,134,572 252,973	53,387,545	007   007	492,598	3,229,756	60,658,745	8,124,340 25,389,003	$\frac{33,513,343}{=}$
	Finance and insurance	₩ 13,447,829 	$15,216,403 \\13,384,083 \\51,123$	42,099,438	34,262	980,730 1.020.998	33,769,892 27,034,695	10,309,318 114,234,341	2,308,627 15,445,541	<del>W</del> 17,754,168
	Classification $(*)$	Due from banks and loans at amortized cost: Banks Retail	Government/Public sector/Central bank Corporations Card receivable		Due from banks and loans at FVTPL Banks	Corporations	Securities measured at FVTPL Securities at FVOCI	Securities at amortized cost	Off-balance accounts Guarantees Loan commitments and other liabilities related to credit	

(\*) The composition details by industry are net book value less allowances.

# 4. Financial risk management (continued)

2022	Construction Lodging and Retail service Restaurant Other customers Total	29,979 — 621,675 — 20,137,657 — — — 183,539,365 183,539,365 — 57,318 — 15,481,390 4,470,587 6,619,476 39,380,955 — 192,985,692	6,650,809 41,144,091 209,108,350 4			$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$
	Real estate and business		45,139,058	69,533 154 270	223,862	$\begin{array}{c} 1,039,955\\ 780,751\\ 1,090,606\end{array}$	<u>48,274,232</u> 115,912 <u>3,918,854</u>
	Retail and wholesale	22,984,739	23,250,959	04 203	94,393	1,018,407 602,196 	24,965,955 3,403,653 10,535,492
	Manufacturing		58,137,880	615 603	615,693	$\begin{array}{c} 1,962,916\\ 2,917,059\\ 9,931\end{array}$	63,643,479 8,998,689 28,414,045
	Finance and insurance	W 19,486,003 — 15,422,776 16,579,826	51,536,440	26,115	1,20/,04/	29,194,048 25,383,957 14,169,681	121,597,888 2,444,168 17,871,585
	Classification (*)	Due from banks and loans at amortized cost: Banks Retail Government/Public sector/Central bank Corporations	Current contractors and loans of EV/TDI	Banks Demonstrations	Corporations	Securities measured at FVTPL Securities at FVOCI Securities at amortized cost	Off-balance accounts Guarantees Loan commitments and other liabilities related to credit

(\*) The composition details by industry are net book value less allowances.

#### 4. Financial risk management (continued)

#### (c) Market risk

#### i) Market risk management from trading positions

#### i-1) Concept of Market risk

Market risk is defined as the risk of loss of trading account position of financial institutions due to changes on market price, such as interest rates, exchange rates and stock prices, etc. and is divided into general market risks and individual risks. A general market risk refers to a loss from price variability caused by events affecting the market as a whole, such as interest rates, exchange rates and stock prices; and an individual risk refers to a loss from price variability related to individual events of securities issuer, such as bonds and stocks.

#### i-2) Market Risk Management Method

The basic principle of market risk management in the trading sector is to maintain the maximum possible loss due to market risk within a certain level. To this end, the Group sets and operates VaR limits, investment limits, position limits, sensitivity limits, and loss limits from the portfolio to individual desks. These limits are managed daily by the department in charge of risk management, independent from the operating department.

Trading positions refer to securities, foreign exchange positions, and derivative financial instruments held for the purpose of obtaining short-term trading gains. As a method of measuring market risk, VaR (Value at Risk) is typical, and it is a statistical measurement of the potential maximum loss that can occur due to changes in market conditions. VaR calculates the standard method market risk using the Group Market Risk Measurement System (TRMS), and Shinhan Bank and Shinhan Financial Investment use their own internal model market risk calculation system.

Stress tests are conducted to supplement risk measurement by statistical methods and to manage losses that may arise from rapid changes in the economic environment.

Shinhan Bank measures the market risk of linear products, such as stocks and bonds, as well as non-linear products, such as options by applying historical simulation method of 99% confidence level-based VaR. Trading position data is automatically interfaced into management system, and the system conducts VaR measurement and manages the limit. In addition, the Bank sets loss limit, sensitivity limit, investment limit, stress limit, etc. for Trading Department and desks, and monitors daily.

Shinhan Securities measures daily market risk by applying historical simulation VaR method of 99.9% confidence level-based VaR. Historical simulation VaR method does not require assumption on a particular distribution since the method derives scenarios directly from historical market data, and measures non-linear products, such as options, in details. In addition to the VaR limit, the Shinhan Securities sets and manages issuance and transaction limit, and stop-loss limit for each department.

### 4. Financial risk management (continued)

An analysis of the Group's requisite capital in light of the market risk for trading positions as of and for the years ended December 31, 2021 and 2022 based on the standard guidelines for risk management promulgated by the Financial Supervisory Service, is as follows:

		202			
	Average	Maximum	Minimum	December 31	
Interest rate risk	₩ 587,482	625,298	557,622	576,515	
Stock price risk	209,101	231,137	179,415	219,900	
Foreign exchange risk	274,140	301,271	245,232	299,909	
Commodity risk	8,544	9,571	8,043	8,043	
Option volatility risk	16,404	30,244	1,269	19,032	
	₩1,095,671	1,197,521	991,581	1,123,399	
		202	2		
	Average	202 Maximum	2 <u>Minimum</u>	December 31	
Interest rate risk	<u>Average</u> ₩ 485,531	-		December 31 447,425	
Interest rate risk Stock price risk		Maximum	Minimum		
	₩ 485,531	Maximum 526,936	Minimum 447,425	447,425	
Stock price risk	₩ 485,531 217,845	Maximum 526,936 242,341	Minimum 447,425 196,879	447,425 242,341	
Stock price risk Foreign exchange risk	<ul> <li>₩ 485,531</li> <li>217,845</li> <li>334,543</li> </ul>	Maximum 526,936 242,341 374,984	Minimum 447,425 196,879 293,437	447,425 242,341 344,415	

#### i-3) Shinhan Bank

The analyses of the ten-day 99% confidence level-based VaR for managing market risk for trading positions of Shinhan Bank as of and for the years ended December 31, 2021 and 2022 are as follows:

		202	21	
	Average	Maximum	Minimum	December 31
Interest rate risk	₩ 28,749	55,773	17,537	28,030
Stock price risk	11,583	21,340	3,850	19,618
Foreign exchange risk (*)	159,165	185,514	136,936	161,978
Option volatility risk	162	368	29	60
Commodity risk	11	151		8
Portfolio diversification effect	(25,023)	(52,611)	(13,207)	(17,470)
	₩174,647	210,535	145,145	192,224

#### 4. Financial risk management (continued)

		20	22	
	Average	Maximum	Minimum	December 31
Interest rate risk	₩ 44,719	64,628	24,322	53,777
Stock price risk	20,303	24,879	13,443	21,659
Foreign exchange risk (*)	191,013	262,319	161,760	252,453
Option volatility risk	84	211	25	110
Commodity risk	13	193		27
Portfolio diversification effect	(33,760)	(77,335)	(10,872)	(62,957)
	₩222,372	274,895	188,678	265,069

(\*) Both trading and non-trading accounts are included.

#### i-4) Shinhan Card

The analyses of Shinhan Card's requisite capital in light of the market risk for trading positions as of and for the years ended December 31 2021 and 2022, based on the standard guidelines for risk management promulgated by the Financial Supervisory Service, are as follows:

		2021					
	Average	Maximum	Minimum	December 31			
Interest rate risk(*)	₩1,996	2,350	1,700	1,700			
		2022					
	Average	Maximum	Minimum	December 31			
Interest rate risk(*)	₩1,784	2,401	1,650	1,801			

(\*) Foreign subsidiaries are excluded from the calculation.

#### i-5) Shinhan Securities

The analyses of the ten-day 99.9% confidence level-based VaR for managing market risk for trading positions of Shinhan Securities as of and for the years ended December 31, 2021 and 2022 are as follows:

	2021					
	Average	Maximum	Minimum	December 31		
Interest rate risk	₩ 21,079	35,503	7,724	27,207		
Stock price risk	31,668	62,315	15,856	33,295		
Foreign exchange risk	24,354	43,826	2,548	28,594		
Option volatility risk	49,345	96,355	31,155	79,589		
Portfolio diversification effect	(47,759)	(104,149)	(7,380)	(58,241)		
	₩ 78,687	133,850	49,903	110,444		

#### 4. Financial risk management (continued)

	2022					
	Average	Maximum	Minimum	December 31		
Interest rate risk	₩ 30,003	44,131	17,123	39,578		
Stock price risk	36,100	63,956	14,507	25,762		
Foreign exchange risk	31,709	63,480	13,452	63,480		
Option volatility risk	70,021	103,928	40,806	43,102		
Portfolio diversification effect	(64,641)	(147,826)	(9,066)	(74,885)		
	₩103,192	127,669	76,822	97,037		

#### i-6) Shinhan Life Insurance

The analyses of the ten-day 99.9% confidence level-based VaR for managing market risk for trading positions of Shinhan Life Insurance as of and for the years ended December 31, 2021 and 2022 are as follows:

	2021					
	Average	Maximum	Minimum	December 31		
Interest rate risk	₩ 4,161	9,262	457	1,259		
Stock price risk	8,938	15,009	1,909	6,303		
Foreign exchange risk	7,680	13,746	481	11,404		
Option volatility risk	1,252	2,828	26	47		
	₩22,031	40,845	2,873	19,013		
		2	022			
	Average	2 Maximum	022 Minimum	December 31		
Interest rate risk	Average ₩ 3,412			December 31 3,415		
Interest rate risk Stock price risk		Maximum	Minimum			
	₩ 3,412	Maximum 6,756	Minimum 1,253	3,415		
Stock price risk	₩ 3,412 9,441	<u>Maximum</u> 6,756 11,034	Minimum 1,253 6,206	3,415 9,505		

#### ii) Interest rate risk management from non-trading positions

#### ii-1) Principle

Interest rate risk refers to the possibility of a decrease in net interest income or in net asset value that occurs when interest rates fluctuate unfavorably from the Group's financial position. The Group manages changes in net interest income or net asset value that occur due to changes in interest rates by early predicting the factors of interest rate risk fluctuation related to the Group's net interest income and net asset value through the interest rate risk management.

#### ii-2) Managements

Shinhan Financial Group's major financial subsidiaries manage interest rate risks independently by the risk management organization and the treasury department, and have internal regulations on interest rate risk management strategies, procedures, organization, measurement, and major assumptions.

#### 4. Financial risk management (continued)

One of the key indicators of managing interest rate risk is the Earnings at Risk (EaR) from an earning perspective and the Value at Risk (VaR) from an economic value perspective. Interest rate VaR represents the maximum anticipated loss in a net present value calculation, whereas interest rate EaR represents the maximum anticipated loss in a net interest income calculation for the immediately following one-year period, in each case, as a result of negative movements in interest rates.

The precision of risk management system differs by each subsidiary. Interest rate VaR and interest rate EaR are measured by internal method or IRRBB (Interest Rate Risk In The Banking Book), and interest rate risk limits are set and monitored based on the interest rate VaR. In accordance with the amendments in Regulations for Supervision of Financial Holding Companies, the Group measures the interest rate risk using the Basel III based IRRBB, which measures the interest rate risk more precisely than the existing BIS standard framework by segmenting maturities of interest rates, reflecting customer behavior models and diversifying interest rate shocks. The interest rate VaR scenario based IRRBB measures ① parallel up shock ② parallel down shock ③ the interest rate VaR scenario based IRRBB measures the scenario value with the largest loss as interest rate risk. Under the existing BIS standard framework,  $\pm$  200bp parallel shock scenario is applied to all currency. However, as the shock width is set differently by currency and period, interest rate risk is measured significantly by the IRRBB (e.g. (KRW) Parallel  $\pm$  300bp, Short Term  $\pm$  400bp, Long Term  $\pm$  200bp, (USD) Parallel  $\pm$  200bp, Short Term  $\pm$  300bp, Long Term  $\pm$  150bp). In the IRRBB method, the existing interest rate VaR and the interest rate EaR are expressed as  $\Delta$  EVE (Economic Value of Equity) and  $\Delta$  NII (Net Interest Income), respectively.

Since impacts of each subsidiary on changes of interest rates are differentiated by portfolios, the Group is preparing to respond proactively while monitoring the financial market and regulatory environment, and making efforts to hedge or reduce interest rate risk. In addition, the subsidiaries conduct the crisis analysis on changes in market interest rates and report it to management and the Group.

In particular, through its ALM (Asset and Liability Management) system, Shinhan Bank measures and manages its interest rate risk based on various analytical measures such as interest rate gap, duration gap and NPV (Net Present Value) and NII (Net Interest Income) simulations, and monitors on a monthly basis its interest rate VaR limits, interest rate EaR (Earnings at Risk) limits and interest rate gap ratio limits.

The details of interest rate VaR and EaR for major subsidiaries for as of December 31, 2021 and 2022 are as follows:

#### ii-3) Shinhan Bank

	2021	2022
$\Delta EVE(*1)$	₩774,352	1,046,136
ΔNII (*2)	96,145	599,941
ii-4) Shinhan Card		
n-4) Similar Card		
	2021	2022
$\Delta EVE(*1)$	₩831,361	1,249,597
ΔNII (*2)	672,303	693,911

#### 4. Financial risk management (continued)

ii-5) Shinhan Securities

	2021	2022
$\Delta \text{EVE}(*1)$	₩186,587	212,135
ΔNII (*2)	187,548	95,076

ii-6) Shinhan Life Insurance

	2021	2022
$\Delta \text{EVE}(*1)$	₩2,751,977	2,353,230
$\Delta NII (*2)$	84,812	62,923

- (\*1)  $\Delta EVE$  is the change in economic value of equity capital that can arise from changes in interest rates that affect the present value of assets, liabilities and off-balance sheet items by using the Basel III standard based IRRBB method.
- (\*2) ΔNII is the change in net interest income that can occur over the next year due to changes in interest rates by using the Basel III standard based IRRBB method.

#### iii) Foreign exchange risk

Exposure to foreign exchange risk can be defined as the difference (net position) between assets and liabilities presented in foreign currency, including derivative financial instruments linked to foreign exchange rate. Foreign exchange risk is a factor that causes market risk of the trading position and is managed by the Group under the market risk management system.

The management of Shinhan Bank's foreign exchange position is centralized at the S&T Center. Dealers in the S&T Center manage Shinhan Bank's overall position within the set limits through spot trading, forward contracts, currency options, futures and swaps and foreign exchange swaps. Shinhan Bank sets a limit for net open positions by currency and the limits for currencies other than the U.S. dollars (USD), Japanese yen (JPY), Euros (EUR) and Chinese yuan (CNY) are set in order to minimize exposures from the other foreign exchange trading.

# 4. Financial risk management (continued)

Foreign currency denominated assets and liabilities as of December 31, 2021 and 2022 are as follows:

	2021								
	USD	JPY	EUR	CNY	Other	Total			
Assets:									
Cash and due from banks at									
amortized cost	₩ 4,958,621	1,878,286	479,644	700,378	3,630,253	11,647,182			
Due from banks at FVTPL	34,262		—			34,262			
Loans at FVTPL	534,098		—			534,098			
Loan at amortized cost	24,443,325	9,901,710	975,680	5,090,928	10,093,297	50,504,940			
Securities at FVTPL	5,417,837	15,557	577,157	233	553,519	6,564,303			
Derivative assets	863,223	526	10,440	1,429	33,576	909,194			
Securities at FVOCI	4,264,191	162,023	240,705	397,010	998,246	6,062,175			
Securities at amortized cost	1,306,357	241,232	69,282	80,133	1,812,470	3,509,474			
Other financial assets	4,347,761	242,919	324,886	173,906	927,110	6,016,582			
	₩46,169,675	12,442,253	2,677,794	6,444,017	18,048,471	85,782,210			
Liabilities:									
Deposits	₩20,060,092	10,642,720	1,376,168	4,820,793	9,766,248	46,666,021			
Financial liabilities at									
FVTPL	7,114	—	—	—	581,458	588,572			
Derivative liabilities	496,616	418	12,042	1,712	13,642	524,430			
Borrowings	7,518,545	940,877	181,027	463,098	931,802	10,035,349			
Debt securities issued	8,887,807	137,022	892,220		982,736	10,899,785			
Financial liabilities									
designated at FVTPL	1,553,683		—			1,553,683			
Other financial liabilities	3,806,778	116,544	195,387	551,976	1,112,455	5,783,140			
	₩42,330,635	11,837,581	2,656,844	5,837,579	13,388,341	76,050,980			
Net domestic and foreign									
currency exposure	₩ 3,839,040	604,672	20,950	606,438	4,660,130	9,731,230			
Off-balance derivative exposure	(419,387)	(62,614)	325,000	(95,526)	(2,113,543)	(2,366,070)			
Net foreign currency exposure	₩ 3,419,653	542,058	345,950	510,912	2,546,587	7,365,160			

# 4. Financial risk management (continued)

	2022						
	USD	JPY	EUR	CNY	Other	Total	
Assets:							
Cash and due from banks at							
amortized cost	₩ 6,905,793	2,071,000	263,746	715,471	4,848,097	14,804,107	
Due from banks at FVTPL	26,116	_	_	_		26,116	
Loans at FVTPL	291,678		239,520	_		531,198	
Loan at amortized cost	29,077,790	10,608,558	1,735,218	5,021,722	10,639,672	57,082,960	
Securities at FVTPL	4,569,547	4,894	718,381	425	362,497	5,655,744	
Derivative assets	1,476,251	2,585	33,613	4,598	33,866	1,550,913	
Securities at FVOCI	5,911,909	180,352	287,774	498,367	1,191,984	8,070,386	
Securities at amortized cost	1,442,437	203,102	96,701	110,997	1,705,337	3,558,574	
Other financial assets	3,471,591	597,067	563,242	344,126	1,555,264	6,531,290	
	₩53,173,112	13,667,558	3,938,195	6,695,706	20,336,717	97,811,288	
Liabilities:							
Deposits	₩25,719,297	11,812,723	1,633,007	5,035,481	11,769,661	55,970,169	
Financial liabilities at							
FVTPL	10,038	—	—	—	422,006	432,044	
Derivative liabilities	1,345,476	1,899	59,206	3,074	77,662	1,487,317	
Borrowings	9,976,462	1,349,529	182,926	85,862	1,226,389	12,821,168	
Debt securities issued	10,774,062	352,677	675,600	108,864	1,495,991	13,407,194	
Financial liabilities							
designated at FVTPL	1,077,789	—	—		—	1,077,789	
Other financial liabilities	4,282,674	259,683	621,770	889,138	1,520,382	7,573,647	
	₩53,185,798	13,776,511	3,172,509	6,122,419	16,512,091	92,769,328	
Net domestic and foreign							
currency exposure	₩ (12,686)	(108,953)	765,686	573,287	3,824,626	5,041,960	
Off-balance derivative exposure	3,692,999	711,180	(466,451)	(55,705)	(1,836,929)	2,045,094	
Net foreign currency exposure	₩ 3,680,313	602,227	299,235	517,582	1,987,697	7,087,054	

#### 4. Financial risk management (continued)

#### (d) Liquidity risk

Liquidity risk refers to the risk of unexpected losses (such as the disposal of assets abnormal pricing, the procurement of high interest rates, etc.) or insolvency due to inconsistency in funding periods between assets and liabilities or a sudden outflow of funds.

Each subsidiary seeks to minimize liquidity risk through early detection of risk factors related to the sourcing and managing of funding that may cause volatility in liquidity and by ensuring that it maintains an appropriate level of liquidity through systematic management. At the Group level, the Group manages liquidity risk by conducting monthly stress tests that compare liquidity requirements under normal situations against those under three types of stress situations, namely, the group-specific internal crisis, crisis in the external market and a combination of internal and external crisis. Therefore, the Group is checking the liquidity side for abnormalities in preparation for the usual crisis.

In addition, in order to pre-emptively and comprehensively manage liquidity risk, the Group measures and monitors liquidity risk management using various indices, including the 'limit management index', 'early warning index' and 'monitoring index'.

Shinhan Bank applies the following basic principles for liquidity risk management:

- Raise funding in sufficient amounts, at the optimal time at reasonable costs;
- Maintain risk at appropriate levels and preemptively manage them through a prescribed risk limit system and an early warning signal detection system;
- Secure stable sources of revenue and minimize actual losses by implementing an effective assetliability management system based on diversified sources of funding with varying maturities;
- Monitor and manage daily and intra-daily liquidity positions and risk exposures for timely payment and settlement of financial obligations due under both normal and crisis situations;
- Conduct periodic contingency analysis in anticipation of any potential liquidity crisis and establish and implement emergency plans in case of a crisis actually happening; and
- Consider liquidity-related costs, benefits of and risks in determining the pricing of the Group's products and services, employee performance evaluations and approval of launching of new products and services.

Shinhan Card sets and operates a level that can withstand a 3-month credit crunch for end-of-month liquidity. The Group defines and manages the level of caution, anxiety and risk for the real-life liquidity gap ratio, liquidity buffer ratio, and ABS weight compared to borrowings which are major indicators related to liquidity risk. A contingency plan has been established to prepare for a crisis.

(In millions of won)

# 4. Financial risk management (continued)

The details of the composition of non-derivative financial instruments and derivative financial instruments by remaining period are as of December 31, 2021 and 2022 are as follows:

	2021(*1)							
	Less that month		1~3 months	3~6 months	6 months ~ 1 year	1~5 years	More than 5 years	Total
Non-derivative financial instruments:								
Assets:								
Cash and due from banks at								
amortized cost	₩ 24,864	1,116	796,046	329,809	1,151,073	108,491	1,299,438	28,548,973
Due from banks at fair value through profit or loss	34	1,263	_	_				34,263
Loans at fair value through profit or								
loss	170	),540	628,905	117,975	49,932	563,246	167,284	1,697,882
Loans at amortized cost	32,258	3,357	45,442,330	57,821,874	89,630,955	129,534,255	75,571,202	430,258,973
Securities at fair value through profit								
or loss	51,899	9,638	106,637	385,952	608,957	2,024,069	5,776,840	60,802,093
Securities at fair value through other	(0.04)		1 201 550	04 =04	(2) ( ) (0)	1 2 10 102	005.050	(100(050
comprehensive income	60,818		1,204,770	91,704	634,600	1,249,183	897,270	64,896,373
Securities at amortized cost Other financial assets		5,883	2,542,470	1,992,334	4,273,021	18,358,433	36,658,577	64,340,718
Other Infancial assets	21,052	2,012	50,602	25,096	372,536	253,373	1,800,309	23,553,928
	₩ 191,613	3,655	50,771,760	60,764,744	96,721,074	152,091,050	122,170,920	674,133,203
Liabilities:								
Deposits(*2)	₩ 212,378	3,477	36,147,003	40,879,482	59,303,450	17,046,796	2,589,696	368,344,904
Financial liabilities at fair value								
through profit or loss	1,371	,503		_			_	1,371,503
Borrowings	13,159	9,909	3,928,317	3,643,545	5,171,542	14,168,441	3,649,507	43,721,261
Debt securities issued	4,833	3,061	7,033,973	7,257,291	17,537,101	41,799,782	5,334,848	83,796,056
Financial liabilities designated at fair								
value through profit or loss		2,597	294,931	586,682	1,298,402	4,165,201	1,346,057	8,023,870
Other financial liabilities	26,754	1,163	175,952	136,110	568,997	579,871	159,352	28,374,445
	₩ 258,829	9,710	47,580,176	52,503,110	83,879,492	77,760,091	13,079,460	533,632,039
Off balance(*3):								
Guarantee contracts	₩ 16,745	5,707	_	_	_	_	_	16,745,707
Other liabilities related to loan								
commitments	193,853	3,866	—	—	—			193,853,866
	₩ 210,599	9,573						210,599,573
Derivatives	₩ 380	),609	23,508	11,867	23,099	(363,034)	47,464	123,513

#### 4. Financial risk management (continued)

	2022(*1)						
	Less than 1 month	1~3 months	3~6 months	6 months ~ 1 year	1~5 years	More than 5 years	Total
Non-derivative financial instruments:							
Assets:							
Cash and due from banks at							
amortized cost	₩ 25,149,737	974,982	529,653	1,795,509	126,607	1,087,249	29,663,737
Due from banks at fair value							
through profit or loss	26,116	_	_		_	—	26,116
Loans at fair value through profit or							
loss	424,585	858,019	58,705	141,706	735,426	329,636	2,548,077
Loans at amortized cost	40,117,301	50,209,078	62,027,337	95,214,850	138,145,726	85,266,419	470,980,711
Securities at fair value through profit							
or loss	42,441,397	124,005	452,662	436,486	2,823,913	7,941,405	54,219,868
Securities at fair value through other							
comprehensive income	54,294,050	1,664,172	506,614	955,692	5,508,063	748,761	63,677,352
Securities at amortized cost	518,445	2,048,707	1,331,479	5,383,089	26,724,733	36,906,942	72,913,395
Other financial assets	17,681,452	88,720	53,740	539,107	341,421	1,793,979	20,498,419
	₩180,653,083	55,967,683	64,960,190	104,466,439	174,405,889	134,074,391	714,527,675
Liabilities:							
Deposits (*2)	₩210,900,107	42,661,824	41,864,404	71,259,303	21,141,919	2,627,394	390,454,951
Financial liabilities at fair value							
through profit or loss	1,148,899	_				_	1,148,899
Borrowings	11,960,133	4,760,298	4,798,388	7,249,539	12,298,388	9,024,107	50,090,853
Debt securities issued	4,563,916	8,368,614	9,646,088	16,486,221	37,534,713	5,157,377	81,756,929
Financial liabilities designated at							
fair value through profit or loss	276,430	725,909	706,117	1,511,517	4,063,511	1,092,827	8,376,311
Other financial liabilities	27,579,552	233,395	133,729	287,774	1,037,741	113,667	29,385,858
	₩256,429,037	56,750,040	57,148,726	96,794,354	76,076,272	18,015,372	561,213,801
Off balance (*3):							
Guarantee contracts	₩ 18,226,546						18,226,546
Other liabilities related to loan	10,220,510						10,220,510
commitments	205,255,277	_	_	_	_	_	205,255,277
	₩223,481,823						223,481,823
Derivatives	₩ (384,134)	8,916	(7,058)	(220,528)	(1,211,454)	(24,069)	(1,838,327)

(\*1) These amounts include cash flows of principal and interest on financial assets and financial liabilities.

(\*2) Demand deposits amounting to ₩172,107,724 million and ₩157,446,276 million as of December 31, 2021 and 2022 are included in the 'Less than 1 month' category, respectively.

(\*3) Though guarantees, loan agreements, and other credit offerings provided by the Group exist, if the counterparty requests a payment, the Group should fulfill the obligation immediately.

### 4. Financial risk management (continued)

#### (e) Measurement of fair value

The fair values of financial instruments being traded in an active market are determined by the published market prices of each period end. The published market prices of financial instruments being held by the Group are based on the trading agencies' notifications.

If the market for a financial instrument is not active, such as OTC (Over The Counter market) derivatives, fair value is determined either by using a valuation technique or independent third-party valuation service. The Group uses its judgment to select a variety of methods and make rational assumptions that are mainly based on market conditions existing at the end of each reporting period.

The fair value of financial instruments is determined using valuation techniques; a method of using recent transactions between independent parties with reasonable judgment and willingness to trade, a method of referring to the current fair value of other financial instruments that are substantially identical, discounted cash flow model and option pricing models. For example, the fair value of an interest rate swap is calculated as the present value of the expected future cash flows, and the fair value of foreign exchange forwarding contract is calculated by applying the public forward exchange rate at the end of the reporting period.

The Group classifies and discloses fair value of financial instruments into the following three-level hierarchy:

- Level 1: Financial instruments measured at quoted prices from active markets are classified as fair value level 1.
- Level 2: Financial instruments measured using valuation techniques where all significant inputs are observable market data are classified as level 2.
- Level 3: Financial instruments measured using valuation techniques where one or more significant inputs are not based on observable market data are classified as level 3.

#### 4. Financial risk management (continued)

#### i) Financial instruments measured at fair value

i-1) The fair value hierarchy of financial instruments presented at their fair values in the statements of financial position as of December 31, 2021 and 2022 are as follows:

	2021					
	Level 1	Level 2	Level 3(*3)	Total		
Financial assets:						
Due from banks measured at FVTPL	₩ —	—	34,262	34,262		
Loans at FVTPL (*1)		790,510	892,834	1,683,344		
Securities at FVTPL:						
Debt securities and other securities (*2)	7,250,389	40,396,692	10,580,066	58,227,147		
Equity securities	942,433	107,416	1,325,466	2,375,315		
Gold/silver deposits	83,691			83,691		
	8,276,513	40,504,108	11,905,532	60,686,153		
Derivative assets:						
Trading	11,542	3,033,965	528,619	3,574,126		
Hedging		225,063		225,063		
	11,542	3,259,028	528,619	3,799,189		
Securities measured at FVOCI:						
Debt securities	24,951,761	38,855,158		63,806,919		
Equity securities	257,947	48,225	725,232	1,031,404		
	25,209,708	38,903,383	725,232	64,838,323		
	₩33,497,763	83,457,029	14,086,479	131,041,271		
Financial liabilities:						
Financial liabilities measured at FVTPL:						
Securities sold	₩ 787,767	—	—	787,767		
Gold/silver deposits	581,458			581,458		
	1,369,225			1,369,225		
Financial liabilities designated at fair value						
through profit or loss:						
Derivatives-combined securities (*2)		401,345	7,622,525	8,023,870		
Derivative liabilities:						
Trading	191,061	2,862,761	153,933	3,207,755		
Hedging		196,060	182,749	378,809		
	191,061	3,058,821	336,682	3,586,564		
	₩ 1,560,286	3,460,166	7,959,207	12,979,659		

<sup>(\*1)</sup> Of the Financial assets at FVTPL invested by the Group, P-note's valuation of amount related to Lime Asset Management is ₩157.9 billion. As of December 31, 2021, in this regard, international disputes are under way, the Group has estimated its fair value based on financial information within the recent audit report of underlying assets since it doesn't have fair market value observable through active trading markets.

(In millions of won)

# 4. Financial risk management (continued)

Accounting estimates and assumptions used in preparing consolidated financial statements may lead to adjustment in response to changes in uncertainty, such as information and market conditions available in the future. In addition, the ultimate impact on the business, financial condition, performance, and liquidity of the Group is unpredictable.

- (\*2) Financial instruments (Beneficiary certificates: ₩300.2 billion and derivatives-combined securities: ₩300.2 billion) related to GEN2 Partners asset management were delayed in repurchase for the year ended December 31, 2021. The Group estimated fair value using the net asset value based on the most recent data available for the repurchase suspension fund. Since then, it has an uncertainty in measuring fair value due to market conditions.
- (\*3) The valuation amount for the over-the-counter derivatives classified as Level 3 by Shinhan Securities Corp. are ₩72,980 million in financial assets at FVTPL, ₩7,622,526 million in financial liabilities designated at fair value through profit or loss, ₩527,726 million in derivative assets, and ₩153,084 million in derivative liabilities. The above level 3 over-the-counter derivatives measure fair value using the internal valuation model of Shinhan Securities Co., Ltd.

#### 4. Financial risk management (continued)

	2022				
		Level 1	Level 2	Level 3(*3)	Total
Financial assets:					
Due from banks measured at FVTPL	₩	_	26,116		26,116
Loans at FVTPL (*1)		—	957,543	1,431,637	2,389,180
Securities at FVTPL:					
Debt securities and other securities (*2)		5,757,167	34,154,575	11,616,475	51,528,217
Equity securities		623,094	5,044	1,996,050	2,624,188
Gold/silver deposits		75,969			75,969
		6,456,230	34,159,619	13,612,525	54,228,374
Derivative assets:					
Trading		47,550	5,586,798	529,144	6,163,492
Hedging			298,304		298,304
		47,550	5,885,102	529,144	6,461,796
Securities measured at FVOCI:					
Debt securities	2	4,784,510	37,309,398		62,093,908
Equity securities		691,257	—	876,554	1,567,811
	2	5,475,767	37,309,398	876,554	63,661,719
	₩3	1,979,547	78,337,778	16,449,860	126,767,185
Financial liabilities:					
Financial liabilities measured at FVTPL:					
Securities sold	₩	724,104	—		724,104
Gold/silver deposits		422,006			422,006
		1,146,110	—		1,146,110
Financial liabilities designated at fair value					
through profit or loss:					
Derivatives-combined securities (*2)		—	389,132	7,930,909	8,320,041
Debt securities issued		—	47,327	7 020 000	47,327
Derivative liabilities:		_	436,459	7,930,909	8,367,368
Trading		248,462	5,809,597	467,522	6,525,581
Hedging			835,365	343,759	1,179,124
		248,462	6,644,962	811,281	7,704,705
	337	· · ·		· · · · · · · · · · · · · · · · · · ·	
	W	1,394,572	7,081,421	8,742,190	17,218,183

(\*1) Of the Financial assets at FVTPL invested by the Group, P-note's valuation of amount related to Lime Asset Management is ₩133.8 billion. As of December 31, 2022, in this regard, international disputes are under way, the Group has estimated its fair value based on financial information within the recent audit report of underlying assets since it doesn't have fair market value observable through active trading markets. Accounting estimates and assumptions used in preparing consolidated financial statements may lead to adjustment in response to changes in uncertainty, such as information and market conditions available in the future. In addition, the ultimate impact on the business, financial condition, performance, and liquidity of the Group is unpredictable.

#### 4. Financial risk management (continued)

- (\*2) Financial instruments (Beneficiary certificates: ₩221.7 billion and derivatives-combined securities: ₩221.7 billion) related to GEN2 Partners asset management were delayed in repurchase for the year ended December 31, 2022. The Group estimated fair value using the net asset value based on the most recent data available for the repurchase suspension fund. Since then, it has an uncertainty in measuring fair value due to market conditions.
- (\*3) The valuation amount for the over-the-counter derivatives classified as Level 3 by Shinhan Securities Corp. are ₩75,925 million in financial assets at FVTPL, ₩7,930,909 million in financial liabilities designated at fair value through profit or loss, ₩526,868 million in derivative assets, and ₩468,028 million in derivative liabilities. The above level 3 over-the-counter derivatives measure fair value using the internal valuation model of Shinhan Securities Co., Ltd.

#### i-2) Classification of financial instruments as fair value level 3

The Group uses the evaluation value from evaluators who are qualified and external independent to determine the fair value for Group's assets at the end of each reporting period. Changes in carrying values of financial instruments classified as Level 3 for the years ended December 31, 2021 and 2022 are as follows:

	2021					
	Financial	Securities at fair value through other	Financial liabilities designated at fair		e assets and ties, net	
	at fair value through profit or loss	comprehensive profit or loss	value through profit or loss	Held for trading	Held for hedging	
Beginning balance	₩10,925,715	717,408	(8,141,504)	321,499	(102,024)	
Recognized in total comprehensive						
income for the year:						
Recognized in profit (loss) for the	0.51.0.65	1.10		240.046		
year (*1)	271,065	448	(273,536)	348,046	(80,725)	
Recognized in other						
comprehensive income (loss) for						
the year	38,566	24,672	(1,526)			
	309,631	25,120	(275,062)	348,046	(80,725)	
Purchase	4,792,810	21,440	_	4,394		
Issue	—		(8,488,977)	_	_	
Settlement	(3,498,968)	(38,736)	9,283,018	(299,633)		
Reclassification (*3)	(9,641)		—	—		
Transfer to level 3 (*2)	507,984		—	446		
Transfer from level 3 (*2)	(194,903)			(66)		
Ending balance	₩12,832,628	725,232	(7,622,525)	374,686	(182,749)	

#### 4. Financial risk management (continued)

	2022					
	Financial	Securities Financial at fair value liabilities through other designated at		Derivative liabiliti		
	at fair value through profit or loss	comprehensive profit or loss	value through profit or loss	Held for trading	Held for hedging	
Beginning balance	₩12,832,628	725,232	(7,622,525)	374,686	(182,749)	
Recognized in total comprehensive income						
for the year:						
Recognized in profit (loss) for the						
year (*1)	21,694	_	633,415	(484,756)	(161,010)	
Recognized in other comprehensive						
income (loss) for the year	(152,921)	(705)	(5,919)			
	(131,227)	(705)	627,496	(484,756)	(161,010)	
Purchase	5,878,937	162,937		190,380	_	
Issue	—		(6,030,787)	—	_	
Settlement	(3,479,624)	(10,910)	5,094,907	(18,763)		
Transfer to level 3 (*2)	173,636			—	_	
Transfer from level 3 (*2)	(230,188)			75		
Ending balance	₩15,044,162	876,554	(7,930,909)	61,622	(343,759)	

(\*1) Recognized profit or loss of the changes in carrying value of financial instruments classified as Level 3 for the years ended December 31, 2021 and 2022 are included in the accounts of the statements of comprehensive income, of which the amounts and the related accounts are as follows:

		2021
	Amounts recognized in profit or loss	Recognized profit or loss from the financial instruments held as of December 31
Net gain on financial assets at fair value through profit or loss	₩ 619,111	322,974
Net gain (loss) on financial liabilities designated at fair value through profit or loss	(273,536)	186,003
Net gain on securities at fair value through other comprehensive		
income	448	_
Net other operating expense	(80,725)	(83,669)
	₩ 265,298	425,308

#### 4. Financial risk management (continued)

		2022
	Amounts recognized in profit or loss	Recognized profit or loss from the financial instruments held as of December 31
Net loss on financial assets at fair value through profit or loss	₩(463,062)	(607,708)
Net gain on financial liabilities designated at fair value through profit or loss	633,415	762,342
Net gain on securities at fair value through other comprehensive income	_	_
Net other operating expense	(161,010)	(161,010)
	₩ 9,343	(6,376)

(\*2) The investment securities transferred to Level 3 as the availability of observable market data changed due to reasons such as suspension of trading, and the derivative instruments transferred to Level 3 as the availability of observable market data changed due to reasons such as changes in the valuation.

(\*3) It has been replaced by investment assets in associates.

- i-3) Valuation techniques and significant inputs not observable in markets
- i-3-1) Valuation techniques and inputs used in measuring the fair value of financial instruments classified as level 2 as of December 31, 2021 and 2022 are as follows:

2021			
Valuation technique	Carrying value	Significant inputs	
DCF, NAV	₩41,187,202	Discount rate, interest rate, stock price and etc.	
NAV	107,416	Price of underlying assets such as stocks, bonds, etc.	
	41.294.618		
	, - ,		
Ontion model	3 033 965	Discount rate, foreign exchange	
Implied forward	5,055,705	rate, volatility, stock price and commodity index, etc.	
interest rate, DCF	225,063	commonly mack, etc.	
	3,259,028		
DCF	38,855,158	Interest rate, discount rate and price of underlying assets such as stock, bonds, etc.	
NAV	48,225	bonds, etc.	
	w 03,437,029		
	DCF, NAV NAV Option model, Implied forward interest rate, DCF	technique     value       DCF, NAV     ₩41,187,202       NAV     107,416       41,294,618       Option model, Implied forward     3,033,965       interest rate, DCF     225,063       DCF     38,855,158	

# 4. Financial risk management (continued)

	<u>`</u> _		2021
Type of financial instrument	Valuation technique	Carrying value	Significant inputs
Liabilities			
Financial liabilities designated at fair value through profit or loss			
Compound financial instruments	Option model	₩ 401,345	Discount rate
Derivative liabilities	-	,	
Trading	Option model,	2,862,761	Discount rate, foreign exchange rate,
Hedging	DCF	196,060	volatility, stock price and commodity index, etc.
		3,058,821	
		₩3,460,166	
			2022
Type of financial instrument	Valuation technique	Carrying value	Significant inputs
Assets			
Financial asset at fair value through			
profit or loss			
Debt securities	DCF, NAV	₩35,138,234	
Equity securities	NAV	5,044	price and etc. Price of underlying assets such as
Equity securities	1471 4	5,044	stocks, bonds, etc.
		35,143,278	, ,
Derivative assets			
Trading	Option model,	5,586,798	Discount rate, foreign exchange
Trading	Implied forward	5,500,790	rate, volatility, stock price and
	interest rate,		commodity index, etc.
	DCF		
Hedging		298,304	
		5,885,102	
Securities at fair value through other comprehensive income			
Debt securities	DCF	37,309,398	Interest rate, discount rate and price
			of underlying assets such as stock,
			bonds, etc.
		₩78,337,778	

#### 4. Financial risk management (continued)

	2022				
Type of financial instrument	Valuation technique	Carrying value	Significant inputs		
<b>Liabilities</b> Financial liabilities designated at fair value through profit or loss					
Debt securities issued	Option model	₩ 47,327	Discount rate, volatility		
Compound financial instruments	1	389,132	Discount rate		
		436,459			
Derivative liabilities					
Trading	Option model, DCF	5,809,597	Discount rate, foreign exchange rate, volatility, stock price and commodity index, etc.		
Hedging		835,365			
		6,644,962			
		₩7,081,421			

i-3-2) Valuation techniques and significant inputs, but not observable, used in measuring the fair value of financial instruments classified as level 3 as of December 31, 2021 and 2022 are as follows:

			2021	
Type of financial instrument	Valuation technique	Carrying value(*2)	Significant unobservable inputs	Range
Financial assets Financial asset at fair value through profit or loss				
Debt securities	DCF, NAV, Option model(*1)	₩11,507,162	The volatility of the underlying asset, Discount rate, Correlations and Growth rate	19.48%~72.69% 0.07%~27.30% 23.17%~58.47% 0.00%~1.00%
Equity securities	DCF, NAV, Option model(*1), Comparable company analysis	1,325,466	The volatility of the underlying asset, Discount rate, Correlations and Growth rate	16.00%~32.00% 5.45%~16.35% 0.00%~54.00% 1.00%
		12,832,628		
Derivative assets				
Equity and foreign exchange related	Option model(*1)	28,783	The volatility of the underlying asset and Correlations	2.29%~50.00% -5.00%~91.00%
Interest rates related	Option model(*1)	6,029	The volatility of the underlying asset, Correlations and Discount rate	0.70% 80.00%~82.00% 1.11%~1.83%
Credit and commodity related	Option model(*1)	493,807	The volatility of the underlying asset and Hazard Rate	0.70%~4.70% 5.17%~93.69%
		528,619		
Securities at fair value through other comprehensive income				
Equity securities	DCF, NAV, Option model(*1), Comparable company analysis	725,232	The volatility of the underlying asset, Discount rate and Growth rate	25.49% 9.80%~22.79% 0.00%~2.00%
		₩14,086,479		

#### 4. Financial risk management (continued)

			2021	
Type of financial instrument	Valuation technique	Carrying value(*2)	Significant unobservable inputs	Range
Financial liabilities				
Financial liabilities at fair value through profit or				
loss				
Equity related	Option model(*1)	₩7,622,525	The volatility of the underlying asset, and Correlations	0.50%~94.90% -12.00%~88.00%
Derivative liabilities				
Equity and foreign			The volatility of the underlying	2.29%~42.00%
exchange related	Option model(*1)	13,214	asset, and Correlations The volatility of the underlying	-5.00%~91.00% 0.46%~0.78%
Interest rates related	Option model(*1)	258,364	asset, Regression coefficient, and	0.00%~0.54%
			Correlations	0.00%~90.34%
Credit and commodity			The volatility of the underlying	1.90%~94.90%
related	Option model(*1)	65,104	asset, and Hazard Rate	$5.17\% \sim 100.79\%$
		336,682		
		₩7,959,207		

(\*1) Option model that the Group uses in derivative valuation includes Black-Scholes model, Hull-White model, Monte Carlo simulation, etc.

(\*2) There is no disclosure for valuation techniques and input variables related to items where the carrying value is recognized as a reasonable approximation of fair value and the carrying value is disclosed at fair value.

# 4. Financial risk management (continued)

			2022	
Type of financial instrument	Valuation technique	Carrying value(*2)	Significant unobservable inputs	Range
<b>Financial assets</b> Financial asset at fair value through				
profit or loss				
Debt securities	DCF, NAV, Option model(*1), Income approach	₩13,048,112	The volatility of the underlying asset, Discount rate, Correlations, Growth rate, and Liquidation Value	0.60%~68.10% 2.92%~38.87% 15.94%~90.00%
Equity securities	DCF, NAV, Option model(*1), Comparable company	1,996,050	The volatility of the underlying asset, Discount rate and Correlations	
	analysis, Transaction case price	15 044 162		20.50%~25.30% 5.59%~15.18% 11.90%~66.00%
Derivative assets		15,044,162		
Equity and foreign exchange			The volatility of the underlying	4.89%~84.40%
related	Option model(*1)	54,541	asset and Correlations	7.30%~72.30%
Interest rates related	Option model(*1)	51,025	The volatility of the underlying asset and Correlations	0.60%~1.10% 76.60%~78.90%
Credit and commodity related	Option model(*1)	423,578	The volatility of the underlying asset, Correlations and Hazard Rate	42.20%~55.90% 99.9% 1.20%~3.60%
		529,144		
Securities at fair value through other comprehensive income				
Equity securities	DCF, NAV, Option model(*1), Comparable company analysis	876,554	The volatility of the underlying asset, Discount rate, Growth rate and Volatility	28.62% 9.08%~19.14% 0.00%~2.00% 0.56%~1.21%
		₩16,449,860		

#### 4. Financial risk management (continued)

			2022	
	Valuation technique	Carrying value(*2)	Significant unobservable inputs	Range
Financial liabilities				
Financial liabilities designated at				
fair value through profit or loss				
Equity related	Option model(*1)	₩7,930,909	The volatility of the underlying	0.20%~84.40%
			asset and Correlations	-44.20%~86.30%
Derivative liabilities				
Equity and foreign exchange			The volatility of the underlying	4.89%~84.40%
related	Option model(*1)	13,841	asset and Correlations	-42.30%~87.60%
Interest rates related	Option model(*1)	642,123	The volatility of the underlying	0.20%~1.10%
			asset, Regression coefficient and	0.00%~1.46%
			Correlations	23.60%~90.34%
Credit and commodity related	Option model(*1)	155,317	The volatility of the underlying	0.20%~45.70%
			asset, Correlations	23.60%~78.90%
			and Hazard Rate	$1.20\% \sim 2.90\%$
		811,281		
		₩8,742,190		

- (\*1) Option model that the Group uses in derivative valuation includes Black-Scholes model, Hull-White model, Monte Carlo simulation, etc.
- (\*2) There is no disclosure for valuation techniques and input variables related to items where the carrying value is recognized as a reasonable approximation of fair value and the carrying value is disclosed at fair value.

#### i-4) Sensitivity for changing in unobservable inputs

For level 3 fair value measurement, changing one or more of the unobservable inputs used to reasonably possible alternative assumptions would have the following effects on profit or loss, or other comprehensive income as of December 31, 2021 and 2022.

	2021	
	Favorable changes	Unfavorable changes
Financial assets:		
Effects on profit or loss for the $period(*1),(*2)$ :		
Financial asset at fair value through profit or loss	₩39,084	(43,072)
Derivative assets	16,893	(11,809)
Securities at fair value through other comprehensive income(*2)	38,865	(38,210)
	₩94,842	(93,091)
Financial liabilities:		
Effects on profit or loss for the period(*1):		
Financial liabilities designated at fair value through profit or loss	₩45,493	(50,845)
Derivative liabilities	25,326	(23,486)
	₩70,819	(74,331)

#### 4. Financial risk management (continued)

	2022	
	Favorable changes	Unfavorable changes
Financial assets:		
Effects on profit or loss for the period(*1),(*2):		
Financial asset at fair value through profit or loss	₩ 62,840	(59,865)
Derivative assets	12,499	(11,465)
Securities at fair value through other comprehensive income(*2)	44,097	(32,469)
	₩119,436	(103,799)
Financial liabilities:		
Effects on profit or loss for the $period(*1)$ :		
Financial liabilities designated at fair value through profit or loss	₩ 57,121	(60,525)
Derivative liabilities	16,388	(16,908)
	₩ 73,509	(77,433)

(\*1) Fair value changes are calculated by increasing or decreasing the volatility of the underlying asset(-10~10%p) or correlations (-10~10%p), a significant unobservable input.

(\*2) Fair value changes are calculated by increasing or decreasing the growth rate and discount rate, which are a significant unobservable input, from -1%p to 1%p.

# ii) Financial instruments measured at amortized cost

ii-1) The method of measuring the fair value of financial instruments measured at amortized cost is as follows:

Туре	Measurement methods of fair value
Cash and due from banks	The carrying value and the fair value for cash are identical and most of deposits are floating interest rate deposits or next day deposits of a short-term instrument. For this reason, the carrying value approximates fair value.
Loans	The fair value of the loans is measured by discounting the expected cash flow at the market interest rate and credit risk of the borrower.
Securities	An external professional evaluation agency is used to calculate the valuation amount using the market information. The agency calculates the fair value based on active market prices, and DCF model is used to calculate the fair value if there is no quoted price.
Deposits and borrowings	The carrying value and the fair value for demand deposits, cash management account deposits, call money as short-term instrument are identical. The fair value of others is measured by discounting the contractual cash flow at the market interest rate that takes into account the residual risk.
Debt securities issued	Where available, the fair value of deposits and borrowings is based on the published price quotations in an active market. In case there is no data for an active market price, it is measured by discounting the contractual cash flow at the market interest rate that takes into account the residual risk.

#### 4. Financial risk management (continued)

Туре	Measurement methods of fair value
Other financial assets and other financial liabilities	The carrying value is measured at fair value for short-term and suspense accounts, such as spot exchange, inter-bank fund transfer, and domestic exchange of payments, and for the remaining financial instruments, the present value is calculated by discounting the contractual cash flows at a discount rate which considered residual risk at the market interest rate.

ii-2) The carrying value and the fair value of financial instruments measured at amortized cost as of December 31, 2021 and 2022 are as follows:

	202	1	2022	
	Carrying value	Fair value	Carrying value	Fair value
Assets:				
Deposits measured at amortized cost	₩ 24,232,013	24,216,932	27,227,755	27,123,736
Loans measured at amortized cost	389,137,156	390,406,822	412,291,511	409,344,807
Securities measured at amortized cost				
Government bonds	34,679,301	34,377,110	38,371,463	33,820,827
Financial institution bonds	3,423,536	3,477,834	6,530,386	6,294,481
Corporation bonds	11,827,239	11,750,467	13,069,644	11,428,463
	49,930,076	49,605,411	57,971,493	51,543,771
Other financial assets	23,238,932	23,389,209	21,896,490	22,129,807
	₩486,538,177	487,618,374	519,387,249	510,142,121
Liabilities:				
Deposit liabilities				
Demand deposits	₩172,107,724	172,107,724	157,446,276	157,446,276
Time deposits	161,498,901	161,301,409	196,265,911	195,886,583
Certificate of deposit	16,576,536	16,606,894	14,921,375	14,748,736
Issued bill deposit	5,818,001	5,817,844	6,631,858	6,631,276
CMA deposits	5,246,478	5,246,478	4,634,010	4,634,010
Others	3,649,035	3,648,983	3,111,315	3,110,993
	364,896,675	364,729,332	383,010,745	382,457,874
Borrowing debts:				
Call-money	1,534,611	1,534,611	1,276,301	1,276,301
Bills sold	9,032	9,019	15,057	15,006
Bonds sold under repurchase agreements	10,709,115	10,709,115	9,544,536	9,544,536
Borrowings	30,914,307	30,803,417	38,443,281	37,602,027
	43,167,065	43,056,162	49,279,175	48,437,870
Debts:				
Borrowings in Korean won	69,288,982	69,081,140	63,927,063	62,059,253
Borrowings in foreign currency	10,860,381	11,076,757	13,361,720	13,051,576
	80,149,363	80,157,897	77,288,783	75,110,829
Other financial liabilities	29,880,879	29,872,186	32,099,649	31,790,397
	₩518,093,982	517,815,577	541,678,352	537,796,970

4. Financial risk management (continued)

ii-3) The fair value hierarchy of financial assets and liabilities which are not measured at their fair values in the statements of financial position but with their fair value disclosed as of December 31, 2021 and 2022 are as follows:

	2021			
	Level 1	Level 2	Level 3	Total
Assets:				
Deposits measured at amortized cost	₩ 252,474	23,964,458		24,216,932
Loans measured at amortized cost		2,387,533	388,019,289	390,406,822
Securities measured at amortized cost:				
Government bonds	23,045,322	11,331,788		34,377,110
Financial institution bonds Corporation bonds	698,105	2,779,729 11,662,046	88,421	3,477,834 11,750,467
Corporation bonds			· · · · · · · · · · · · · · · · · · ·	
	23,743,427	25,773,563	88,421	49,605,411
Other financial assets		14,200,356	9,188,853	23,389,209
	₩23,995,901	66,325,910	397,296,563	487,618,374
Liabilities:				
Deposit liabilities:				
Demand deposits	₩ —	172,107,724		172,107,724
Time deposits			161,301,409	161,301,409
Certificate of deposit	—	—	16,606,894	16,606,894
Issued bill deposit			5,817,844	5,817,844
CMA deposits Other		5,246,478	05 041	5,246,478
Other		3,553,942	95,041	3,648,983
		180,908,144	183,821,188	364,729,332
Borrowing debts:				
Call-money	—	1,534,611		1,534,611
Bills sold	—	—	9,019	9,019
Bonds sold under repurchase agreements			10,709,115	10,709,115
Borrowings			30,803,417	30,803,417
		1,534,611	41,521,551	43,056,162
Debts:				
Borrowings in won	_	38,474,804	30,606,336	69,081,140
Borrowings in foreign currency		7,956,414	3,120,343	11,076,757
		46,431,218	33,726,679	80,157,897
Other financial liabilities		9,413,875	20,458,311	29,872,186
	₩	238,287,848	279,527,729	517,815,577

# 4. Financial risk management (continued)

	2022				
	]	Level 1	Level 2	Level 3	Total
Assets:					
Deposits measured at amortized cost	₩	429,794	26,693,942		27,123,736
Loans measured at amortized cost		—	5,832,484	403,512,323	409,344,807
Securities measured at amortized cost:					
Government bonds		2,668,684	11,152,143	—	33,820,827
Financial institution bonds		1,898,457	4,396,024		6,294,481
Corporation bonds			11,428,463		11,428,463
	2	4,567,141	26,976,630		51,543,771
Other financial assets			12,598,487	9,531,320	22,129,807
	₩24	4,996,935	72,101,543	413,043,643	510,142,121
Liabilities:					
Deposit liabilities:					
Demand deposits	₩	—	157,446,276		157,446,276
Time deposits		—		195,886,583	195,886,583
Certificate of deposit		—		14,748,736	14,748,736
Issued bill deposit		—	4 (24 010	6,631,276	6,631,276
CMA deposits Other		_	4,634,010 3,057,789	53,204	4,634,010 3,110,993
Other					·
			165,138,075	217,319,799	382,457,874
Borrowing debts:					
Call-money		—	1,276,301		1,276,301
Bills sold		—		15,006	15,006
Bonds sold under repurchase agreements Borrowings		_	19,922	9,544,536 37,582,105	9,544,536 37,602,027
Bonowings			· · · · · · · · · · · · · · · · · · ·		
			1,296,223	47,141,647	48,437,870
Debts:					
Borrowings in won		—	31,665,994	30,393,259	62,059,253
Borrowings in foreign currency			9,625,410	3,426,166	13,051,576
			41,291,404	33,819,425	75,110,829
Other financial liabilities			8,921,782	22,868,615	31,790,397
	₩		216,647,484	321,149,486	537,796,970

4. Financial risk management (continued)

ii-4) Valuation techniques and inputs used in the fair value measurements categorized within Level 2 and Level 3 for fair value disclosures, which are not recognized at fair value, as at December 31, 2021 and 2022, are as follows:

	2021			
	Fair value(*)	Valuation technique	Inputs	
Financial instruments classified as level 2 :				
Assets				
Due from banks measured at amortized				
cost	₩ 23,964,458	DCF	Discount rate	
Loans measured at amortized cost	2,387,533	DCF	Discount rate, Credit spread and Prepayment rate	
Securities measured at amortized cost	25,773,563	DCF	Discount rate	
Other financial assets	14,200,356	DCF	Discount rate	
Financial instruments classified as level 3 :				
Assets				
Loans measured at amortized cost	388,019,289	DCF	Discount rate, Credit spread and Prepayment rate	
Securities measured at amortized cost	88,421	DCF	Discount rate	
Other financial assets	9,188,853	DCF	Discount rate	
	₩463,622,473			
Financial instruments classified as level 2 :				
Liabilities				
Deposits	₩180,908,144	DCF	Discount rate	
Borrowings	1,534,611	DCF	Discount rate	
Debt securities issued	46,431,218	DCF	Discount rate	
Other financial liabilities	9,413,875	DCF	Discount rate	
Financial instruments classified as level 3 :				
Liabilities				
Deposits	183,821,188	DCF	Discount rate	
Borrowings	41,521,551	DCF	Discount rate	
Debt securities issued	33,726,679	DCF	Discount rate,	
			Regression coefficient	
			and Correlations	
Other financial liabilities	20,458,311	DCF	Discount rate	
	₩517,815,577			
	WJ17,015,577			

(\*) Valuation techniques and inputs are not disclosed when the carrying value is a reasonable approximation of fair value.

# 4. Financial risk management (continued)

	2022		
	Fair value(*)	Valuation technique	Inputs
Financial instruments classified as level 2 :			
Assets			
Due from banks measured at amortized cost	₩ 26,693,942	DCF	Discount rate
Loans measured at amortized cost	5,832,484	DCF	Discount rate, Credit spread
			and Prepayment rate
Securities measured at amortized cost	26,976,630	DCF	Discount rate
Other financial assets	12,598,487	DCF	Discount rate
Financial instruments classified as level 3 :			
Assets			
Loans measured at amortized cost			Discount rate, Credit spread
	403,512,323	DCF	and Prepayment rate
Securities measured at amortized cost	—	DCF	Discount rate
Other financial assets	9,531,320	DCF	Discount rate
	₩ 485,145,186		
Financial instruments classified as level 2 :			
Liabilities			
Deposits	₩ 165,138,075	DCF	Discount rate
Borrowings	1,296,223	DCF	Discount rate
Debt securities issued	41,291,404	DCF	Discount rate
Other financial liabilities	8,921,782	DCF	Discount rate
Financial instruments classified as level 3 :			
Liabilities			
Deposits	217,319,799	DCF	Discount rate
Borrowings	47,141,647	DCF	Discount rate
Debt securities issued	33,819,425	DCF	Discount rate,
			Regression coefficient
			and Correlations
Other financial liabilities	22,868,615	DCF	Discount rate
	₩ 537,796,970		

(\*) Valuation techniques and inputs are not disclosed when the carrying value is a reasonable approximation of fair value.

*iii)* Changes in gains or losses on valuation at the transaction date for the years ended December 31, 2021 and 2022, are as follows:

	2021	2022
Beginning balance	₩(292,599)	(160,525)
New transactions	(206,897)	(88,769)
Recognized in profit for the year	338,971	105,335
Ending balance	₩(160,525)	(143,959)

### 4. Financial risk management (continued)

### (f) Classification by categories of financial instruments

Financial assets and liabilities are measured at fair value or amortized cost. The financial instruments measured at fair value or amortized costs are measured in accordance with the Group's valuation methodologies, which are described in Note 4.(e) Measurement of fair value.

The carrying values of each category of financial assets and financial liabilities as of December 31, 2021 and 2022 is as follows:

			2021		
	FVTPL	FVOCI	Amortized cost	Derivatives held for hedging	Total
Assets:					
Cash and due from					
banks at amortized	<b>XX</b> 7		29 452 404		29 452 404
cost	₩ —	—	28,453,404	_	28,453,404
Due from banks at fair value through profit					
or loss	34,262			_	34,262
Securities at fair value	0 .,202				0 .,202
through profit or loss	60,686,153				60,686,153
Derivatives assets	3,574,126			225,063	3,799,189
Loans at fair value					
through profit or loss	1,683,344	_		_	1,683,344
Loans at amortized cost	_		389,137,156		389,137,156
Securities at fair value					
through other					
comprehensive					
income	—	64,838,323	_		64,838,323
Securities at amortized					
cost	—		49,930,076		49,930,076
Others			23,238,932		23,238,932
	₩65,977,885	64,838,323	490,759,568	225,063	621,800,839

### 4. Financial risk management (continued)

			2021		
	FVTPL	FVTPL liabilities designated	Financial liabilities measured at amortized cost	Derivatives held for hedging	Total
Liabilities:					
Deposits Financial liabilities at fair value through profit or	₩ —	—	364,896,675		364,896,675
loss Financial liabilities	1,369,225	—	—	—	1,369,225
designated at FVTPL	_	8,023,870			8,023,870
Derivatives liabilities	3,207,755			378,809	3,586,564
Borrowings		_	43,167,065		43,167,065
Debt securities issued			80,149,363	_	80,149,363
Others		—	29,880,879		29,880,879
	₩4,576,980	8,023,870	518,093,982	378,809	531,073,641
			2022		
	FVTPL	FVOCI	Amortized cost	Derivatives held for hedging	Total
Assets:					
Cash and due from banks at amortized cost	₩	_	29,532,235	_	29,532,23
Due from banks at fair value through profit					
or loss	26,116	—			26,110
Securities at fair value	54.000.054				<b>5 ( 000 05</b>
through profit or loss	54,228,374	—	—		54,228,374
Derivatives assets Loans at fair value	6,163,492	—		298,304	6,461,790
through profit or loss	2,389,180				2,389,180
Loans at amortized cost	2,507,100		412,291,511		412,291,51
Securities at fair value through other comprehensive			,_,_,,,,,,,,		,_,_,,,,,,,,
income		63,661,719			63,661,719
Securities at amortized			57,971,493		57,971,493
Others		_	21,896,490		21,896,490
	₩62,807,162	63,661,719	521,691,729	298,304	648,458,914
	w 02,007,102			270,304	040,400,914

### 4. Financial risk management (continued)

		2022		
FVTPL	FVTPL liabilities designated	Financial liabilities measured at amortized cost	Derivatives held for hedging	Total
₩ —		383,010,745		383,010,745
1,146,110	_		_	1,146,110
—	8,367,368	—		8,367,368
6,525,581		—	1,179,124	7,704,705
		49,279,175		49,279,175
		77,288,783		77,288,783
		32,099,649		32,099,649
₩7,671,691	8,367,368	541,678,352	1,179,124	558,896,535
	₩ — 1,146,110 6,525,581 — —	FVTPL     liabilities designated       ₩     —       1,146,110     —        8,367,368       6,525,581     —        —        —        —	FVTPL       FVTPL       Financial liabilities measured at amortized cost $\Psi$ —       383,010,745         1,146,110       —       —          8,367,368       —         6,525,581       —       —          49,279,175       —          77,288,783           32,099,649	FVTPL       Financial liabilities measured at amortized cost       Derivatives held for hedging $\Psi$ —       383,010,745       —         1,146,110       —       —       — $=$ 8,367,368       —       — $=$ 49,279,175       —       1,179,124 $=$ —       77,288,783       — $=$ $=$ 32,099,649       —

### (g) Transfer of financial instruments

i) Transfers that do not qualify for derecognition

① Sale of repurchase bonds

Among the Group's sale of repurchase bonds, followings are the details of financial instruments that do not qualify for derecognition because the Group sold under repurchase agreement at a fixed price as of December 31, 2021 and 2022:

	2021	2022
Transferred asset:		
Securities at FVTPL	₩ 9,883,335	7,461,978
Securities at FVOCI	647,541	1,325,157
Securities at amortized cost	210,490	269,724
	₩10,741,366	9,056,859
Associated liabilities: Bonds sold under repurchase agreements	₩10,709,115	9,544,536

### 2 Securities loaned

If the securities owned by the Group are loaned, the ownership of the securities is transferred, but is required to be returned at the end of the loan period. Therefore, the Group continues to recognize the entire securities loaned as it holds most of the risks and compensation of the securities.

### 4. Financial risk management (continued)

Securities loaned as of December 31, 2021 and 2022 are as follows:

	2021	2022	Borrowers
Government bonds	₩9,044,914	13,282,971	Korea Securities Finance Corp., Korea Securities Depository, etc.
Financial institutions bonds	209,594	425,179	Korea Securities Finance Corp., Korea Securities Depository, etc.
Corporation bonds	_	222,857	BNP Paribas Securities Corp.
Equity securities	8,109	44,622	CITIGROUP GLOBAL MARKETS Ltd., etc.
	₩9,262,617	13,975,629	

### 3 Securitization of financial assets

The Group uses the securitization of financial assets as a means of financing and to transfer risk. Generally, these securitization transactions result in the transfer of contractual cash flows to the debt securities holders issued from the financial asset portfolio. The Group recognizes debt securities issued without derecognition of assets under individual agreements, partially recognizes assets to the extent of the Group's level of involvement in assets, or recognizes rights and obligations arising from the derecognition and transfer of assets as separate assets and liabilities. The Group derecognizes the entire asset only if it transfers contractual rights to the cash flows of financial assets or if it holds contractual rights but bears contractual obligations to pay cash flows to the other party without significant delays or reinvestment and transfers most of the risks and benefits of ownership (e.g., credit risk, interest rate risk, prepayment risk, etc.). For the years ended December 31, 2021 and 2022, the carrying value of financial assets related to securitization transactions that have neither been transferred nor derecognized are  $\Psi11,529,634$  million and  $\Psi11,429,250$  million, respectively; the carrying values of related liabilities are  $\Psi8,284,109$  million and  $\Psi6,366,124$  million, respectively.

### ii) Financial instruments qualified for derecognition and continued involvement

There are no financial instruments which qualify for derecognition and in which the Group has continuing involvements as of December 31, 2021, and 2022.

## 4. Financial risk management (continued)

# (h) Offsetting financial assets and financial liabilities

Financial assets and liabilities subject to offsetting, enforceable master netting arrangements and similar agreements as of December 31, 2021 and 2022 are as follows:

			2021			
	Gross amounts of	Gross amounts of recognized financial assets/ liabilities set off in	Net amounts of financial assets/ liabilities presented	Related amoun statement of 1	Related amounts not set off in the statement of financial position	
	recognized financial assets/ liabilities	the statement of financial position	in the statement of financial position	Financial instruments	Cash collateral received	Net amount
Assets:						
Derivatives (*1)	<del>W</del> 3,821,253		3,821,253	0 500 102	100 497	1 775 000
Other financial instruments (*1)	7,873,305		7,873,305	co1,60c,6	409,401	000,077,1
Securities repurchased under repurchase agreements and bonds						
purchased under repurchase agreements $(*2)$	12,749,800		12,749,800	12,618,359		131,441
Securities loaned (*2)	2,648,248	I	2,648,248	2,648,248		
Domestic exchange settlement debit $(*3)$	44,872,022	38, 171, 649	6,700,373			6,700,373
Receivables from disposal of securities (*4)	7,082,779	3,477,874	3,604,905	2,668,065		936,840
Insurance receivables	70,087		70,087	45,849		24,238
	<del>W</del> 79,117,494	41,649,523	37,467,971	27,489,704	409,487	9,568,780
Liabilities:						
Derivatives (*1)(*5)	<del>W</del> 11,434,081		11,434,081	010 000 01	1 000	0 112 001 0
Other financial instruments (*1)	6,781,044		6,781,044	210,060,01	1,000	c1c,071,0
Bonds sold under repurchase agreements (*2)	10,709,115		10,709,115	10,492,779		216,336
Securities borrowed (*2)	787,767		787,767	787,767		
Domestic exchange settlement pending $(*3)$	40,062,057	38, 171, 649	1,890,408	1,809,727		80,681
Payable from purchase of securities (*4)	7,036,630	3,477,874	3,558,756	2,668,767		889,989
Insurance payables	45,940		45,940	45,849		91
	<del>W</del> 76,856,634	41,649,523	35,207,111	25,898,701	1,000	9,307,410

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(\*1) The Group has certain derivative transactions subject to the ISDA (International Derivatives Swaps and Dealers Association) agreement. According to the ISDA agreement, when credit events (e.g. default) of counterparties occur, all derivative agreements are terminated and set off. At the time of termination, the

### SHINHAN FINANCIAL GROUP CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements (In millions of won)

(In millions of won)

### 4. Financial risk management (continued)

parties to the transaction will offset the amount of payment or payment to each other, and one party will pay the other party a single amount will be paid to the other party.

- (\*2) Resale and repurchase agreement, securities borrowing and lending agreement are also similar to ISDA agreement with respect to enforceable netting agreements.
- (\*3) The Group has legally enforceable right to set off and settles financial assets and liabilities on a net basis under normal business terms. Therefore, domestic exchanges settlement receivables (payables) are recorded on a net basis in the consolidated statements of financial position.
- (\*4) It is an account that deals with bonds and liabilities based on the settlement of listed stocks traded in the market. The Group currently has a legally enforceable right to set off the recognized amounts and intends to settle on a net basis. Therefore, the net amount is presented in the consolidated statement of financial position. The offset amount of related bonds and liabilities based on the settlement of over-the-counter derivatives in-house payment by Central Clearing System is included.
- (\*5) As of December 31, 2021, the total amount of financial liabilities includes ₩8,023,870 million of ELS (equity-linked securities) products and of DLS (derivative linked securities) products. In the course of this transaction, the Group has provided collateral for some transactions. The financial instruments provided as collateral of ₩717,841 million are included in the related instruments not offset in the statement of financial position. The total amount of financial liabilities recognized as of December 31, 2021 is ₩445,128 million for transactions with the other party with collective offset contracts or similar arrangements.

### 4. Financial risk management (continued)

2022

	Gross amounts of recognized financial assets/liabilities	Gross amounts of recognized financial assets/liabilities set off in the statement of financial position	Net amounts of financial assets/ liabilities presented in the statement of financial position	Related amount statement of f Financial instruments	Related amounts not set off in the statement of financial position Financial Cash collateral instruments received	Net amount
Assets:						
Derivatives (*1)	<del>W</del> 6,523,848		6,523,848	10.050.050	030 CLV	1 525 200
Other financial instruments (*1)	7,435,655	I	7,435,655	600,006,01	410,404	246,000,2
Securities repurchased under repurchase agreements and bonds						
purchased under repurchase agreements (*2)	12,991,705		12,991,705	12,839,843		151,862
Securities loaned (*2)	4,673,143		4,673,143	4,660,603		12,540
Domestic exchange settlement debit $(*3)$	45,282,683	39,247,867	6,034,816			6,034,816
Receivables from disposal of securities (*4)	4,933,264	2,405,878	2,527,386	1,767,831		759,555
Insurance receivables	145,747		145,747	121,315		24,432
	<del>W</del> 81,986,045	41,653,745	40,332,300	30,340,451	473,252	9,518,597
Liabilities:						
Derivatives (*1),(*5)	<del>W</del> 15,797,823		15,797,823	011 000 11	1 000	010 010
Other financial instruments (*1)	6,198,330	I	6, 198, 330	11,222,110	1,000	10,071,040
Bonds sold under repurchase agreements (*2)	9,544,536	I	9,544,536	8,931,247		613,289
Securities borrowed (*2)	724,104		724,104	724,104		
Domestic exchange settlement pending (*3)	41,556,442	39,247,867	2,308,575	2,231,508		77,067
Payable from purchase of securities (*4)	4,854,358	2,405,878	2,448,480	1,768,821		679,659
Insurance payables	122,083		122,083	121,315		768
	<del>W</del> 78,797,676	41,653,745	37,143,931	24,999,105	1,000	12,143,826

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- (\*1) The Group has certain derivative transactions subject to the ISDA (International Derivatives Swaps and Dealers Association) agreement. According to the ISDA agreement, when credit events (e.g. default) of counterparties occur, all derivative agreements are terminated and set off. At the time of termination, the parties to the transaction will offset the amount of payment or payment to each other, and one party will pay the other party a single amount will be paid to the other party.
  - (\*2) Resale and repurchase agreement, securities borrowing and lending agreement are also similar to ISDA agreement with respect to enforceable netting agreements.
    - (\*3) The Group has legally enforceable right to set off and settles financial assets and liabilities on a net basis under normal business terms. Therefore, domestic exchanges settlement receivables (payables) are recorded on a net basis in the consolidated statements of financial position.

### 4. Financial risk management (continued)

- (\*4) It is an account that deals with bonds and liabilities based on the settlement of listed stocks traded in the market. The Group currently has a legally enforceable right to set off the recognized amounts and intends to settle on a net basis. Therefore, the net amount is presented in the consolidated statement of financial position. The offset amount of related bonds and liabilities based on the settlement of over-the-counter derivatives in-house payment by Central Clearing System is included.
- (\*5) As of December 31, 2022, the total amount of financial liabilities includes ₩8,320,041 million of ELS (equity-linked securities) products and of DLS (derivative linked securities) products. In the course of this transaction, the Group has provided collateral for some transactions. The financial instruments provided as collateral of ₩432,228 million are included in the related instruments not offset in the statement of financial position. The total amount of financial liabilities recognized as of December 31, 2022 is ₩1,934,547 million for transactions with the other party with collective offset contracts or similar arrangements.

### (i) Capital risk management

The criteria for capital adequacy to be complied with by the Group are 8.0%. In addition, the minimum regulatory BIS capital ratio, which should be maintained additionally to increase the ability to absorb losses, has been raised to up to 14% as the capital regulation based on the Basel III standard is enforced from 2016. This is based on the addition of capital conservation capital (2.5%p) and domestic system-critical banks (D-SIB) capital (1.0%p) and economic response capital (2.5%p) to the existing lowest common equity capital ratio, and economic response capital can be charged up to 2.5%p during credit expansion period. As of December 31, 2022, the minimum regulatory BIS capital ratio to be observed is 11.5%, which is the standard for applying capital conservation capital (2.5%p), D-SIB capital (1.0%p), and economic response capital (0%p).

Basel III capital ratio is the concept of 'International Agreement on the Measurement and Standards of Equity Capital' of the Basel Bank Supervisory Commission of BIS (International Settlement Bank). It is calculated as '(common stock capital (after deduction of deductions) + other basic capital + supplementary capital) ÷ risk weighted assets'.

The capital of common stock can be the first to make up for the loss of the financial holding company. The capital of common stock consists of capital stock, capital reserve, retained earnings and other, which will not be redeemed until the liquidation and will be redeemed at the last during the liquidation. Other basic capital consists of capital securities that meet certain requirements as capital of permanent nature. Complementary capital is capital that can compensate for losses of financial holding companies during liquidation, and consists of capital securities, etc. that meet certain requirements. The deduction items are those held by the Group as assets or capital items, but do not contribute to the ability to absorb losses. Unless otherwise noted, it will be deducted from common stock capital.

### 4. Financial risk management (continued)

The capital ratio of the Group based on Basel III is as of December 31, 2021 and 2022 are as follows:

	2021	2022
Capital :		
Tier I common equity capital	₩ 35,469,554	37,287,768
Additional tier 1 capital	4,965,931	6,018,792
Tier I capital	40,435,485	43,306,560
Tier II capital	3,427,951	3,714,400
Total capital (A)	₩ 43,863,436	47,020,960
Total risk-weighted assets (B)	₩270,692,183	291,542,598
Capital adequacy ratio (A/B)	16.20%	16.13%
Tier I capital adequacy ratio	14.94%	14.85%
Common stock ratio	13.10%	12.79%

(\*) As of December 31, 2022, the Group has maintained an appropriate consolidated equity capital ratio according to the BIS equity capital regulation.

### 5. Significant estimates and judgments

The preparation of financial statements requires the Group to make estimates and assumptions concerning the future. Management also needs to exercise judgment in applying the Group's accounting policies. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. As the resulting accounting estimates will, by definition, seldom equal the related actual results, it can contain a significant risk of causing a material adjustment. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying values of assets and liabilities within the next financial year are discussed below.

### (a) Estimation of impairment of goodwill

The Group reviews the goodwill annually in accordance with the accounting policy in Note 3. The recoverable amount of the cash-generating unit (group) is determined based on the value-in-use calculation. These calculations are based on estimates.

### (b) Income taxes

The Group is subject to tax laws from various countries. In the normal course of business, there are various types of transactions and different accounting methods that may add uncertainties to the decision of the final income taxes. The Group has recognized current and deferred taxes that reflect tax consequences based on the best estimates in which the Group expects, at the end of the reporting period, to recover or settle the carrying value of its assets and liabilities. However, actual income taxes in the future may not be identical to the recognized deferred tax assets and liabilities, and this difference can affect current and deferred tax at the period when the final tax effect is determined.

5. Significant estimates and judgments (continued)

### (c) Fair value of financial instruments

The fair values of financial instruments (e.g. over-the-counter derivatives) which are not actively traded in the market are determined by using valuation techniques. The Group determines valuation techniques and assumptions based on significant market conditions at the end of each reporting period. Diverse valuation techniques are used to determine the fair value of financial instruments, from generic valuation techniques to internally developed valuation models that incorporate various types of assumptions and variables.

### (d) Allowance for credit loss, guarantees and unused loan commitments

The Group determines and recognizes allowances for losses on debt securities, loans and other receivables measured at amortized cost or FVOCI, and recognizes provisions for guarantees and unused loan commitments through impairment testing. The accuracy of allowances and provisions for credit losses are determined by the estimation of expected cash flows for individually assessed allowances, and methodology and assumptions used for collectively assessed allowances and provisions for groups of loans, guarantees and unused loan commitments.

### 6. Investment in subsidiaries

(a) The summarized financial information of the controlling company and the Group's major subsidiaries as of December 31, 2021 and 2022is as follows:

		2021		2022		
Investees(*1)(*2)	Asset balance	Liability balance	Equity balance	Asset balance	Liability balance	Equity balance
Shinhan Financial Group(separate)	₩ 36,815,893	10,410,517	26,405,376	37,456,314	10,779,765	26,676,549
Shinhan Bank	467,435,213	438,199,575	29,235,638	491,981,392	460,814,132	31,167,260
Shinhan Card Co., Ltd.	38,472,228	31,737,225	6,735,003	43,050,321	35,591,567	7,458,754
Shinhan Securities Co., Ltd. (*3)	44,446,803	39,421,314	5,025,489	43,821,577	38,479,027	5,342,550
Shinhan Life Insurance Co., Ltd.	70,535,556	65,382,992	5,152,564	66,753,920	63,271,167	3,482,753
Shinhan Capital Co., Ltd.	10,921,698	9,189,041	1,732,657	13,035,892	11,048,996	1,986,896
Jeju Bank	6,944,214	6,428,269	515,945	7,320,304	6,798,450	521,854
Shinhan Credit Information Co., Ltd. (*4)	31,377	12,334	19,043			_
Shinhan Alternative Investment						
Management Inc. (*5)	114,973	70,449	44,524			_
Shinhan Asset Management Co., Ltd. (*5)	242,760	40,181	202,579	319,511	88,519	230,992
SHC Management Co., Ltd.	9,636	—	9,636	9,746	—	9,746
Shinhan DS	92,591	52,804	39,787	107,366	59,833	47,533
Shinhan Savings Bank	2,644,942	2,413,176	231,766	3,043,506	2,723,713	319,793
Shinhan Asset Trust Co., Ltd. (*6)	373,488	122,890	250,598	435,815	110,981	324,834
Shinhan AITAS Co., Ltd.	90,116	9,786	80,330	94,725	10,147	84,578
Shinhan REITs Management Co., Ltd.	63,026	10,584	52,442	58,610	5,559	53,051
Shinhan AI Co., Ltd.	44,031	2,563	41,468	41,431	2,264	39,167
Shinhan Venture Investment Co., Ltd.	98,914	23,331	75,583	140,310	63,309	77,001
Shinhan EZ General Insurance, Ltd.	—	_	_	241,096	115,448	125,648

(\*1) The consolidated financial statements of the consolidated subsidiaries are based on consolidated financial statements, if applicable.

### 6. Investment in subsidiaries (continued)

- (\*2) Trusts, beneficiary certificates, securitization special limited liability companies, associates and private equity investment specialists that are not actually operating their own business are excluded.
- (\*3) Shinhan Investment Co., Ltd. has changed its name to Shinhan Securities Co., Ltd. on October 1, 2022.
- (\*4) On July 28, 2022, the Company disposed 100% of shares to Shinhan Card.
- (\*5) Shinhan Asset Management Co., Ltd. and Shinhan Alternative Investment Management Inc. have merged on January 5, 2022 to form a holding company named Shinhan Asset Management Co., Ltd.
- (\*6) The Group has acquired remaining shares of Asia Trust Co., Ltd. during the period, and Asia Trust Co., Ltd. became the Group's wholly-owned subsidiary. Asia Trust Co., Ltd. has changed its name to Shinhan Asset Trust Co., Ltd.

### 6. Investment in subsidiaries (continued)

(b) The summarized income information of the controlling company and the Group's major subsidiaries for the years ended December 31, 2020, 2021 and 2022 are as follows:

		2020			2021			2022	
Investees(*1)(*2)	Operating Income	Net Income (*3)	Comprehensive Income (*3)	Operating Income	Net Income (*3)	Comprehensive Income (*3)	Operating Income	Net Income (*3)	Comprehensive Income (*3)
Shinhan Financial Group (separate)	<b>W</b> 1,718,407	1,274,443	1,274,892	1,875,675	1,413,956	1,413,675	1,806,604	1,249,251	1,251,294
Shinhan Bank	25,049,392	2,078,232	1,911,575	23,540,347	2,494,894	2,396,829	35,514,461	3,045,732	2,394,238
Shinhan Card Co., Ltd.	4,091,178	606,554	599,451	4,359,627	676,297	710,090	4,761,181	644,555	671,113
Shinhan Securities Co., Ltd. (*4)	9,290,965	154,531	147,210	7,592,350			10,548,842	412,339	427,451
Shinhan Life Insurance Co., Ltd.	5,405,933	177,834	227,596	7,079,569		_	9,412,664	463,593	(1,659,016)
Orange Life Insurance Co., Ltd. (*5)	4,456,340	279,282	132,425	2,112,353	216,826	(96, 157)			
Shinhan Capital Co., Ltd.	626,455	160,583	162, 134	783,890	274,855	275,760	922,592	303,276	307,988
Jeju Bank	214,615	17,521	16,557	204,543	18,446	11,739	275,582	22,820	11,658
Shinhan Credit Information Co., Ltd. (*6)	42,658	1,493	1,650	42,417	1,936	2,079	20,705	1,029	1,450
Shinhan Alternative Investment Management									
Inc. (*7)	17,219	3,433	3,433	28,010	9,163	9,163			
Shinhan Asset Management Co., Ltd. (*7)	88,870	26,663	26,663	107,598	32,152	32,066	174,242	37,064	36,892
SHC Management Co., Ltd.	70	5	5		(2)	(2)		110	110
Shinhan DS	164,327	1,862	2,845	244,445	4,100	5,653	279,453	6,835	7,739
Shinhan Savings Bank	123,590	26,953	26,888	163,643	30,310	30,037	241,013	38,384	37,884
Shinhan Asset Trust Co., Ltd. (*8)	102,816		45,765	144,971	75,823	75,972	152,563	73,654	74,236
Shinhan AITAS Co., Ltd.	58,599	13,020	12,954	53,005	9,816	9,816	55,270	9,500	9,500
Shinhan REITs Management Co., Ltd.	12,176	3,764	3,764	16,440	8,481	8,469	11,433	540	609
Shinhan AI Co., Ltd.	10,246	304	284	12,106	478	455	10,668	(2, 217)	(2,301)
Shinhan Venture Investment Co., Ltd.	3,500	(1, 146)	(1,015)	32,134	15,929	15,750	19,839	1,526	1,418
							:	:	

(\*2) Trusts, beneficiary certificates, securitization special limited liability companies, associates and private equity investment specialists that are not (\*1) The consolidated financial statements of the consolidated subsidiaries are based on consolidated financial statements, if applicable.

actually operating their own business are excluded.

(\*3) This amount includes non-controlling interests.

(\*4) Shinhan Investment Co., Ltd. has changed its name to Shinhan Securities Co., Ltd. on October 1, 2022.

(\*5) The amount as of December 31, 2021 is revenue, net income (loss) and total comprehensive income for the six months prior to the merger with Shinhan Life Insurance Co., Ltd.

(In millions of won)

### 6. Investment in subsidiaries (continued)

- (\*6) On July 28, 2022, the Company disposed 100% of shares to Shinhan Card Co., Ltd. The amount as of December 31, 2022 is revenue, net income (loss) and total comprehensive income for the six month period ended before the disposal of Shinhan Card Co., Ltd.
- (\*7) Shinhan Asset Management Co., Ltd. and Shinhan Alternative Investment Management Inc. merged on January 5, 2022. The company name after the merger is Shinhan Asset Management Co., Ltd.
- (\*8) The Group has acquired remaining shares of Asia Trust Co., Ltd. during the period, and Asia Trust Co., Ltd. became the Group's wholly-owned subsidiary. Asia Trust Co., Ltd. has changed its name to Shinhan Asset Trust Co., Ltd.
- (\*9) For the acquired company, the amount is from the consolidated statements of comprehensive income for the period after the acquisition point.
  - (c) Change in the scope of consolidation
  - i) Change in consolidated subsidiaries for the year ended December 31, 2022 are as follows:

	Company	Description
Included	Shinhan EZ General Insurance, Ltd.	Newly acquired subsidiary
Excluded	Shinhan Alternative Investment	Extinguished due to merger with
	Management Inc.	Shinhan Asset Management Co., Ltd.

- (\*) Subsidiaries such as trust, beneficiary certificate, corporate restructuring fund and private equity fund which are not actually operating their own business are excluded.
- ii) Change in consolidated subsidiaries for the year ended December 31, 2021 are as follows:

	Company	Description
Included	Shinhan Life Insurance Vietnam Co., Ltd.	Newly acquired subsidiary
Included	Shinhan CubeOn Co., Ltd.	Newly acquired subsidiary
Excluded	Orange Life Insurance Co., Ltd.	Extinguished due to merger with
		Shinhan Life Insurance Co., Ltd.

(\*) Subsidiaries such as trust, beneficiary certificate, corporate restructuring fund and private equity fund which are not actually operating their own business are excluded.

### 7. Operating segments

(a) Segment information

The general descriptions by operating segments as of December 31, 2022 are as follows:

Segment	Description
Banking	Credit to customers, lending to and receiving deposits from customers, and its accompanying work
Credit card	Sales of credit cards, cash services, card loan services, installment financing, lease and its accompanying work
Securities	Securities trading, consignment trading, underwriting and its accompanying work
Life insurance	Life insurance business and its accompanying work
Credit	Facility rental, new technology business financing, others and its accompanying work
Others	Business segments that do not belong to the above segments, such as real estate trust, investment advisory services, venture business investment and other remaining business

(In millions of won)

### 7. **Operating segments (continued)**

(b) The following tables provide information of income and expense for each operating segment for the years ended December 31, 2020, 2021 and 2022:

	2020							
				Life			Consolidation	
	Banking	Credit card	Securities	insurance	Credit	Others	adjustment	Total
Net interest income	₩ 6,037,632	1,755,039	517,044	1,608,953	158,817	7,805	(202,590)	9,882,700
Net fees and commission income	822,408	483,486	544,183	162,284	21,346	347,004	2,222	2,382,933
Reversal of (provision for)								
allowance for credit loss	(690,084)	(483,883)	(111,796)	(12,236)	(63,429)	(22,522)	1,771	(1,382,179)
General and administrative expenses	(3,237,641)	(698,796)	(565,485)	(463,439)	(58,494)	(314,097)	125,479	(5,212,473)
Other income (expense), net	(130,488)	(169,304)	(11,348)	(727,530)	120,735	140,138	36,552	(741,245)
Operating income	2,801,827	886,542	372,598	568,032	178,975	158,328	(36,566)	4,929,736
Equity method income (loss)	(811)	—	37,760	(1,244)	32,133	(2,489)	94,184	159,533
Income tax expense	673,972	251,357	48,464	156,698	49,211	44,883	31,210	1,255,795
Profit for the year	₩ 1,999,002	703,305	154,531	457,116	160,583	112,992	(89,453)	3,498,076
Controlling interest	₩ 1,998,563	703,204	154,772	457,116	160,583	112,992	(172,635)	3,414,595
Non-controlling interests	439	101	(241)	—	—	—	83,182	83,481

	2021							
		Life Consolidation				Consolidation		
	Banking	Credit card	Securities	insurance	Credit	Others	adjustment	Total
Net interest income	₩ 6,738,165	1,799,153	517,296	1,620,266	231,679	68,991	(206,225)	10,769,325
Net fees and commission income	818,426	634,716	601,793	170,781	28,812	415,212	5,257	2,674,997
Reversal of (provision for)								
allowance for credit loss	(364,291	) (442,668)	(80,134)	(21,760)	(34,064)	(35,421)	3,653	(974,685)
General and administrative expenses	6 (3,409,144	) (790,733)	(696,278)	(557,292)	(80,056)	(366,149)	156,564	(5,743,088)
Other income (expense), net	(305,508	) (179,695)	234,209	(660,416)	194,564	177,912	(235,519)	(774,453)
Operating income	3,477,648	1,020,773	576,886	551,579	340,935	260,545	(276,270)	5,952,096
Equity method income (loss)	25,401	(1,109)	65,341	(739)	29,644	16,201	23,861	158,600
Income tax expense	821,201	266,798	94,864	139,106	94,329	71,120	(16,382)	1,471,036
Profit for the year	₩ 2,417,880	771,757	320,662	391,637	274,855	205,880	(270,043)	4,112,628
Controlling interest	₩ 2,417,361	770,457	320,783	391,637	274,855	205,880	(361,719)	4,019,254
Non-controlling interests	519	1,300	(121)	) —	_		91,676	93,374

	2022								
		Banking	Credit card	Securities	Life insurance	Credit	Others	Consolidation adjustment	Total
Net interest income	₩	8,358,526	1,798,005	428,420	1,648,339	260,011	154,722	(184,342)	12,463,681
Net fees and commission income		801,109	702,392	484,632	107,385	30,587	394,319	5,142	2,525,566
Reversal of (provision for)									
allowance for credit loss		(621,690)	(560,264)	546	(16,942)	(19,803)	(72,859)	(1,284)	(1,292,296)
General and administrative expenses	5	(3,761,767)	(777,496)	(690,539)	(499,228)	(80,320)	(401,604)	197,440	(6,013,514)
Other income (expense), net		(715,837)	(283,011)	(102,084)	(625,653)	158,560	87,985	(315,318)	(1,795,358)
Operating income		4,060,341	879,626	120,975	613,901	349,035	162,563	(298,362)	5,888,079
Equity method income (loss)		22,301	7,115	70,270	4,222	54,937	(735)	(36,413)	121,697
Income tax expense	_	1,030,445	227,769	145,301	134,644	98,468	35,006	(54,545)	1,617,088
Profit for the year	₩	2,974,716	738,391	412,339	463,593	303,275	132,375	(292,526)	4,732,163
Controlling interest	₩	2,973,996	735,204	412,496	463,593	303,275	132,375	(378,647)	4,642,292
Non-controlling interests		720	3,187	(157)			_	86,121	89,871

### 7. Operating segments (continued)

(c) Interest gains and losses from segment external customers and cross-sector interest gains and losses for the years ended December 31, 2020, 2021 and 2022 are as follows:

				20	20			
	Banking	Credit card	Securities	Life insurance	Credit	Others	Consolidation adjustment (*)	Total
Net interest income from: External customers (*) Internal transactions	₩ 6,037,205 427	1,809,149 (54,110	526,167 ) (9,123)	1,605,575 3,378	169,192 (10,375)	(54,902) 62,707	(209,686) 7,096	9,882,700 
	₩ 6,037,632	1,755,039	517,044	1,608,953	158,817	7,805	(202,590)	9,882,700
				20	21			
	Banking	Credit card	Securities	Life insurance	Credit	Others	Consolidation adjustment (*)	Total
Net interest income from: External customers (*) Internal transactions	₩ 6,741,279 (3,114)	1,849,209 (50,056	534,969 ) (17,673)	1,617,186 3,080	241,035 (9,356)	781 68,210	(215,134) 8,909	10,769,325
	₩ 6,738,165	1,799,153	517,296	1,620,266	231,679	68,991	(206,225)	10,769,325
				20	22			
	Banking	Credit card	Securities	Life insurance	Credit	Others	Consolidation adjustment (*)	Total
Net interest income from: External customers (*) Internal transactions	₩ 8,366,892 (8,366)	1,857,351 (59,346	442,554 ) (14,134)	1,644,953 3,386	269,230 (9,219)	73,068 81,654	(190,367) 6,025	12,463,681
	₩ 8,358,526	1,798,005	428,420	1,648,339	260,011	154,722	(184,342)	12,463,681

(\*) Consolidated adjustment to net interest income from external customers is from the securities and others which were measured in fair values as a part of business combination accounting.

### 7. **Operating segments (continued)**

(d) The following tables provide information of net fees and commission income (expense) of each operating segment for the years ended December 31, 2020, 2021 and 2022 are as follows:

				2	020			
	Banking	Credit card	Securities	Life insurance	Credit	Others	Consolidation adjustment	Total
Net fees and commission income from:								
External customers	₩859,225	531,394	553,308	173,865	22,381	242,760		2,382,933
Internal transactions	(36,817)	(47,908)	(9,125)	(11,581)	(1,035)	104,244	2,222	
	₩822,408	483,486	544,183	162,284	21,346	347,004	2,222	2,382,933
				2	021			
	Banking	Credit card	Securities	Life insurance	Credit	Others	Consolidation adjustment	Total
Net fees and commission income from:								
External customers	₩863,879	681,129	615,414	181,345	27,351	305,879		2,674,997
Internal transactions	(45,453)	(46,413)	(13,621)	(10,564)	1,461	109,333	5,257	
	₩818,426	634,716	601,793	170,781	28,812	415,212	5,257	2,674,997
				2	022			
	Banking	Credit card	Securities	Life insurance	Credit	Others	Consolidation adjustment	Total
Net fees and commission income from:								
External customers	₩844,888	734,900	496,097	121,229	26,737	301,715	—	2,525,566
Internal transactions	(43,779)	(32,508)	(11,465)	(13,844)	3,850	92,604	5,142	
	₩801,109	702,392	484,632	107,385	30,587	394,319	5,142	2,525,566

### 7. Operating segments (continued)

### (e) Financial information of geographical area

The following table provides information of income from external consumers by geographical area for the years ended December 31, 2020, 2021 and 2022.

	2020	2021	2022
Domestic	₩4,436,252	5,404,278	5,047,406
Overseas	493,484	547,818	840,673
	₩4,929,736	5,952,096	5,888,079

The following table provides information of non-current assets by geographical area as of December 31, 2021 and 2022.

	2021	2022
Domestic	₩10,029,650	9,825,529
Overseas	336,687	356,512
	₩10,366,337	10,182,041

(\*) Non-current assets comprise property and equipment, intangible assets and investment properties.

### 8. Cash and due from banks at amortized cost

(a) Cash and due from banks at amortized cost as of December 31, 2021 and 2022 are as follows:

	2021	2022
Cash and cash equivalents:		
Cash	₩ 4,194,831	2,304,480
Cash equivalents	26,560	—
	4,221,391	2,304,480
Deposits denominated in Korean won:		
Reserve deposits	9,851,064	8,647,429
Time deposits	892,053	2,205,832
Other	2,701,873	2,571,005
	13,444,990	13,424,266
Deposits denominated in foreign currency:		
Deposits	6,731,190	8,516,315
Time deposits	2,148,955	3,153,208
Other	1,924,601	2,153,066
	10,804,746	13,822,589
Allowance for credit losses	(17,723)	(19,100)
	₩28,453,404	29,532,235

### 8. Cash and due from banks at amortized cost (continued)

(b) Restricted due from banks at amortized cost as of December 31, 2021 and 2022 are as follows:

	2021	2022	Related Regulations or Acts
Deposits denominated in Korean won:			
Reserve deposits	₩ 9,851,064	8,647,429	Article 55 of the Bank of Korea Act
Other	1,174,670	2,192,566	Article 74 of the Capital Markets and Financial Investment Business Act, etc.
	11,025,734	10,839,995	
Deposits denominated in foreign currency	2,870,908	2,963,995	Articles of the Bank of Korea Act, New York State Banking Act, derivatives related, etc.
	₩13,896,642	13,803,990	

### 9. Financial assets at fair value through profit or loss

(a) Financial assets at fair value through profit or loss as of December 31, 2021 and 2022 are as follows:

	2021	2022
Debt instruments:		
Governments	₩ 3,961,045	4,304,950
Financial institutions	13,449,550	11,616,813
Corporations	9,618,302	7,632,222
Stocks with put option	627,275	353,569
Equity investment with put option	2,625,297	3,185,222
Beneficiary certificates	13,386,212	12,169,688
Commercial papers	7,042,045	4,939,927
CMA	3,591,822	3,850,613
Others (*)	3,925,599	3,475,213
	58,227,147	51,528,217
Equity instruments:		
Stocks	2,182,829	2,410,017
Equity investment	12,962	38,515
Others	179,524	175,656
	2,375,315	2,624,188
	₩60,602,462	54,152,405
Other:		
Loans at FVTPL	₩ 1,683,344	2,389,180
Due from banks at fair value	34,262	26,116
Gold/silver deposits	83,691	75,969
	₩62,403,759	56,643,670

- (\*) As of December 31, 2022 and 2021, restricted reserve for claims of customers' deposits (trusts) are ₩1,705,724 million and ₩2,080,626 million, respectively.
- (b) Financial assets to which overlay approach are applied in accordance with IFRS 9 '*Financial Instruments*' and IFRS 4 '*Insurance Contracts*' as of December 31, 2021 and 2022 are as follows:

	2021	2022
Due from banks at fair value through profit or loss	₩ 34,262	26,116
Securities at fair value through profit or loss	4,903,275 4,631,9	
	₩ 4,937,537	4,658,089

A financial asset is eligible for designation for the overlay approach, if it is measured at fair value through profit or loss applying IFRS 9 but would not have been measured at fair value through profit or loss in its entirety applying IAS 39; and it is not held in respect of an activity that is not associated with contracts within the scope of IFRS 4.

### 9. Financial assets at fair value through profit or loss (continued)

The reclassified amounts between profit or loss and other comprehensive income due to the overlay approach as of and for the years ended December 31, 2021 and 2022 are as follows:

		202	1			
	Profit or loss				Other comp incom	
	By IFRS 9	By IAS 39	Amount	Tax effect		
Net gain (loss) on valuation of financial assets at fair value through profit or loss	₩130,170	83,288	46,882	(12,893)		
Net gain (loss) on disposal of financial assets at fair value through profit or loss	(2,668)	87,217	(89,885)	24,719		
	₩127,502	170,505	(43,003)	11,826		

(\*) The amount of the policyholders equity adjustment for the reclassification of other comprehensive income is ₩11,079 million for the year ended December 31, 2021.

	2022			
	Profit or loss		Other comj incom	
	By IFRS 9	By IAS 39	Amount	Tax effect
Net gain (loss) on valuation of financial assets at fair value through profit or loss	₩(187,706)	33,508	(221,214)	58,622
Net gain (loss) on disposal of financial assets at fair value through profit or loss	39,547	131,544	(91,997)	24,379
	₩(148,159)	165,052	(313,211)	83,001

(\*) The amount of the policyholders equity adjustment for the reclassification of other comprehensive income is ₩13,277 million for the year ended December 31, 2022.

### 10. Derivatives

(a) The notional amounts of derivatives outstanding as of December 31, 2021 and 2022 are as follows:

	2021	2022
Foreign currency related:		
Over the counter:		
Currency forwards	₩145,786,842	129,544,881
Currency swaps	36,532,622	40,557,913
Currency options	2,270,594	1,327,752
	184,590,058	171,430,546
Exchange traded:	<i>(</i> <b>11 10 1</b>	<b>5</b> 10 (10
Currency futures	641,104	719,618
	185,231,162	172,150,164
Interest rates related:		
Over the counter:		
Interest rate forwards and swaps	35,518,719	37,170,647
Interest rate options	258,460	226,924
	35,777,179	37,397,571
Exchange traded:		
Interest rate futures	3,293,821	2,783,937
Interest rate options	54,890	
Interest rate swaps (*)	72,898,275	94,803,271
	76,246,986	97,587,208
	112,024,165	134,984,779
Credit related:		
Over the counter:		
Credit swaps	4,737,329	5,155,334
Equity related:		
Over the counter:		
Equity swaps and forwards	2,073,995	4,008,263
Equity options	677,824	878,122
	2,751,819	4,886,385
Exchange traded:	1 (20.020	0 440 104
Equity futures	1,678,070	2,443,194
Equity options	3,298,673	1,444,098
	4,976,743	3,887,292
	7,728,562	8,773,677
Commodity related:		
Over the counter:		
Commodity swaps and forwards	789,930	898,332
Commodity options	11,500	8,000
	801,430	906,332
Exchange traded:		
Commodity futures and options	158,550	69,373
	959,980	975,705
	·	

### **10.** Derivatives (continued)

	2021	2022
Hedge:		
Currency forwards	1,279,598	1,249,589
Currency swaps	3,726,939	4,647,279
Interest rate forwards and swaps	8,695,960	16,475,525
	13,702,497	22,372,393
	₩324,383,695	344,412,052

(\*) The notional amounts of derivatives outstanding those will be settled in the 'Central Counter Party (CCP)' system.

(b) Fair values of derivative instruments as of December 31, 2021 and 2022 are as follows:

	2021		2022	
	Assets	Liabilities	Assets	Liabilities
Foreign currency related:				
Over the counter:				
Currency forwards	₩2,183,315	1,797,419	3,089,759	2,838,793
Currency swaps	651,292	748,302	1,626,567	1,807,229
Currency options	12,218	11,591	14,776	13,603
	2,846,825	2,557,312	4,731,102	4,659,625
Exchange traded:				
Currency futures	12	210	17	928
	2,846,837	2,557,522	4,731,119	4,660,553
Interest rates related:				
Over the counter:				
Interest rate forwards and swaps	166,855	303,227	772,513	1,062,772
Interest rate options	3,748	611	5,169	1,983
	170,603	303,838	777,682	1,064,755
Exchange traded:				
Interest rate futures	1,701	1,828	2,555	972
Interest rate options	83			
	1,784	1,828	2,555	972
	172,387	305,666	780,237	1,065,727
Credit related:				
Over the counter:				
Credit swaps	493,829	65,103	423,966	19,235
Equity related:				
Over the counter:				
Equity swap and forwards	28,803	69,880	169,504	393,810
Equity options	3,884	8,671	2,704	1,139
	32,687	78,551	172,208	394,949

### **10. Derivatives (continued)**

	202	1	20	22
	Assets	Liabilities	Assets	Liabilities
Exchange traded:				
Equity futures	817	19,903	31,035	100,490
Equity options	6,324	167,237	11,414	145,895
	7,141	187,140	42,449	246,385
	39,828	265,691	214,657	641,334
Commodity related:				
Over the counter:				
Commodity swaps and forwards	18,557	3,149	10,983	136,701
Commodity options		8,406		1,517
	18,557	11,555	10,983	138,218
Exchange traded:				
Commodity futures and options	2,688	2,218	2,530	514
	21,245	13,773	13,513	138,732
Hedge:				
Currency forwards	106	46,139	23,143	37,757
Currency swaps	63,560	79,407	158,297	72,367
Interest rate forwards and swaps	161,397	253,263	116,864	1,069,000
	225,063	378,809	298,304	1,179,124
	₩3,799,189	3,586,564	6,461,796	7,704,705

(c) Gain or loss on valuation of derivatives for the years ended December 31, 2020, 2021 and 2022 are as follows:

	2020	2021	2022
Foreign currency related			
Over the counter			
Currency forwards	₩(108,854)	268,310	44,245
Currency swaps	210,072	(201,500)	(143,586)
Currency options	4,979	2,007	4,247
	106,197	68,817	(95,094)
Exchange traded			
Currency futures	(96)	(199)	(48)
	106,101	68,618	(95,142)
Interest rates related			
Over the counter			
Interest rate forwards and swaps	(73,926)	(142,703)	(173,277)
Interest rate options	(372)	792	285
	(74,298)	(141,911)	(172,992)
Exchange traded			
Interest rate futures	4,236	(4)	1,582
	(70,062)	(141,915)	(171,410)

### **10.** Derivatives (continued)

	2020	2021	2022
Credit related			
Over the counter			
Credit swaps	7,255	192,729	(25,562)
Equity related			
Over the counter			
Equity swap and forwards	(15,979)	(176,430)	(192,888)
Equity options	(2,082)	3,307	3,360
	(18,061)	(173,123)	(189,528)
Exchange traded			
Equity futures	26,305	(19,408)	(69,455)
Equity options	196,288	32,555	(27,932)
	222,593	13,147	(97,387)
	204,532	(159,976)	(286,915)
Commodity related			
Over the counter			
Commodity swaps and forwards	(13,519)	(19,097)	(148,591)
Commodity options		(4,956)	5,840
	(13,519)	(24,053)	(142,751)
Exchange traded			
Commodity futures	11,374	469	2,014
	(2,145)	(23,584)	(140,737)
Hedge	120,700	(203,563)	(741,873)
	₩366,381	(267,691)	(1,461,639)

### (d) Impact of hedge accounting on the consolidated financial statements

*i) Gains*(*losses*) *on fair value hedged items and hedging instruments attributable to the hedged ineffectiveness for the years ended December 31, 2021 and 2022 are as follows:* 

		2021	
	Gains on fair value hedges (hedged items)	Losses on fair value hedges (hedging instruments)	Hedge ineffectiveness recognized in profit or loss (*2)
Fair value hedges:			
Interest rate risk (*1)	₩273,219	(281,649)	(8,430)
Foreign exchange risk (*1)	26,547	(32,829)	(6,282)
	₩299,766	(314,478)	(14,712)

### **10.** Derivatives (continued)

		2022	
	Gains on fair value hedges (hedged items)	Losses on fair value hedges (hedging instruments)	Hedge ineffectiveness recognized in profit or loss (*2)
Fair value hedges:			
Interest rate risk (*1)	₩697,330	(728,397)	(31,067)
Foreign exchange risk (*1)	20,748	(22,056)	(1,308)
Stock price volatility risk	(4,762)	3,411	(1,351)
	₩713,316	(747,042)	(33,726)

(\*1) The related account categories are presented as interest rate swap assets / liabilities and currency swap assets.

(\*2) Ineffective portion of hedge: the difference between hedging instruments and hedged items.

*ii)* Due to the ineffectiveness of hedge of cash flow risk and hedge of net investment in foreign operations during the year, the amounts recognized in the income statement and other comprehensive income are as follows:

		2021	
	Gains (losses) on hedges recognized in other comprehensive income	Hedge ineffectiveness recognized in profit or loss (*2)	From cash flow hedge reserve to profit or loss reclassified amount
Cash flow hedges:			
Interest rate risk (*1)	₩ 15,492	(49,882)	_
Foreign exchange risk (*1)	14,439	(14,955)	24,464
Discontinuation of			
cash flow hedges		—	8,799
Hedge of net investments:			
Foreign exchange risk (*1)	(74,525)	(2,094)	
	₩ (44,594)	(66,931)	33,263
		2022	
	Gains (losses) on hedges recognized in other comprehensive income	Hedge ineffectiveness recognized in profit or loss (*2)	From cash flow hedge reserve to profit or loss reclassified amount
Cash flow hedges:			
Interest rate risk (*1)	₩(132,203)	(47,854)	(65)
Foreign exchange risk (*1)	32,159	(54,969)	124,214
Discontinuation of			
cash flow hedges		—	9,270
Hedge of net investments:			
Foreign exchange risk (*1)	(25,793)	(4,096)	
	₩(125,837)	(106,919)	133,419

(\*1) The related account categories are presented as interest rate swap assets / liabilities and currency swap assets / liabilities, currency forwards assets / liabilities and borrowings.

(\*2) Ineffective portion of hedge: The difference between hedging instruments and hedged items.

### **10.** Derivatives (continued)

- (e) Effect of hedge accounting on financial statement, statement of comprehensive income, statement of changes in equity
- i) Purpose and strategy of risk avoidance

The Group transacts with derivative financial instruments to hedge its interest rate risk and currency risk arising from the assets and liabilities of the Group. The Group applies the fair value hedge accounting for the changes in the market interest rates of the Korean won structured notes, foreign currency generated financial debentures, structured deposits in foreign currencies and foreign currency investment receivables; and cash flow hedge accounting for interest rate swaps and currency swaps to hedge cash flow risk due to interest rates and foreign exchange rates of the Korean won debt, the Korean won bonds, foreign currency bonds, etc. In addition, in order to hedge the exchange rate risk of the net investment in overseas business, the Group applies the net investment hedge accounting for foreign operations using currency forward and non-derivative financial instruments.

*ii)* Nominal amounts and average hedge ratios for hedging instruments as of December 31, 2021 and 2022 are as follows:

				2021			
	Less than 1 year	1~2 years	2~3 years	3~4 years	4~5 years	More than 5 years	Total
Interest risk:							
Nominal values:	₩ 693,057	1,256,392	641,413	158,833	1,589,729	4,356,536	8,695,960
Average price condition (*1) Average hedge	0.88%	1.21%	1.30%	1.00%	1.00%	0.66%	0.87%
ratio:	100%	100%	100%	100%	100%	100%	100%
Exchange risk: (*2) Nominal values: Average hedge	2,328,042	2,164,591	568,991	699,433	480,878	22,525	6,264,460
ratio:	100%	100%	100%		100%	100%	100%

(\*1) Interest rate swaps consist of 3M CD, 3M USD Libor, 3M Euribor, and 3M AUD Bond.

(\*2) The average exchange rates of net investment hedge instruments are USD/KRW 1,143.95, JPY/ KRW 10.53, EUR/KRW 1,288.52, GBP/KRW 1,484.00, AUD/KRW 817.06, CAD/KRW 868.95, SGD/KRW 859.87, CNY/KRW 174.40, SEK/KRW 124.85

### **10.** Derivatives (continued)

				2022			
	Less than 1 year	1~2 years	2~3 years	3~4 years	4~5 years	More than 5 years	Total
Interest risk:							
Nominal values:	₩5,338,313	3,023,185	612,113	2,114,152	819,140	4,568,622	16,475,525
Average price							
condition (*1)	0.72%	0.82%	2.53%	1.52%	1.48%	0.68%	0.94%
Average hedge							
ratio:	100%	100%	100%	100%	100%	100%	100%
Exchange risk: (*2)							
Nominal values:	2,620,663	610,676	1,108,785	1,900,980	942,804		7,183,908
Average hedge							
ratio:	100%	100%	100%	100%	100%		100%

(\*1) Interest rate swaps consist of 3M CD, 3M USD Libor, 3M Euribor, and 3M AUD Bond.

(\*2) The average exchange rates of net investment hedge instruments are USD/KRW 1,198.11, JPY/ KRW 10.13, EUR/KRW 1,336.97, GBP/KRW 1,484.00, AUD/KRW 812.44, CAD/KRW 948.79, SGD/KRW 859.87, CNY/KRW 190.96, SEK/KRW 125.49.

*iii)* Effect of derivatives on statement financial position, statement of comprehensive income, statement of changes in equity

	2021							
	Nominal amount	Carrying value of asset (*)	Carrying value of liabilities (*)	Changes in fair value in the period				
Fair value hedges								
Interest rate swap	₩7,079,468	156,710	236,758	(277,450)				
Currency forward	176,369		4,995	(8,835)				
Cash flow hedges								
Interest rate swap	1,616,492	4,687	16,505	23,257				
Currency swap	3,726,939	63,560	79,407	156,271				
Currency forward	866,129	106	31,486	(63,659)				
Hedge of net investments in foreign								
operations								
Currency forward	237,100		9,658	(14,948)				
Borrowings	1,257,923		1,256,241	(61,672)				

(\*) The related account categories are presented as interest rate swap assets / liabilities and currency forward assets and liabilities.

### **10.** Derivatives (continued)

	2022							
	Nominal amount	Carrying value of asset (*)	Carrying value of liabilities (*)	Changes in fair value in the period				
Fair value hedges								
Interest rate forward and swap	₩13,530,243	77,757	895,005	(740,190)				
Currency forward	113,126	4,038	635	1,780				
Cash flow hedges								
Interest rate swap	2,945,282	39,107	173,995	(126,075)				
Currency swap	4,647,281	158,297	72,367	119,277				
Currency forward	883,003	15,708	35,976	(3,136)				
Hedge of net investments in foreign								
operations								
Currency forward	253,460	3,397	1,146	(773)				
Borrowings	1,287,039	—	1,282,361	(29,116)				

(\*) The related account categories are presented as interest rate swap assets / liabilities and currency forward assets and liabilities.

*iv)* Effect of hedging items on statement financial position, statement of comprehensive income, statement of changes in equity

					2021			
	v	carrying alue of sset (*)	Carrying value of liabilities (*)	Assets of Cumulative fair value hedge adjustment	fair value hedge	Changes if fair value in the year		Foreign currency conversion reserves
Fair value hedges								
Interest rate risk Borrowings and								
others	₩	704,942	6,370,330	6,207	(85,441)	274,005	—	_
Foreign exchange risk Securities								
in foreign currency		415,693	_	_	—	23,109	—	—
Cash flow hedge								
Interest rate risk Debentures in won and debentures in foreign currency		607,062	1,714,303	_		22,432	67,553	_
Foreign exchange risk			,. ,			, -	,	
Debentures in foreign currency and loans in foreign currency	2	,848,303	2,782,574	_	_	336,281	(19,296)	_
Hedge of net investments in foreign								
operations								
Foreign exchange risk Net assets in foreign operation		_	_	_	_	74,525	_	(66,626)

(\*) The related account categories are presented as interest rate swap assets / liabilities and currency forwards.

### **10.** Derivatives (continued)

					2022			
		Carrying value of ssset (*)	Carrying value of liabilities (*)	Assets of Cumulative fair value hedge adjustment	fair value hedge	Changes if fair value in the year	Cash flow hedge reserve	Foreign currency conversion reserves
Fair value hedges								
Interest rate risk Borrowings and								
others	₩	505,668	12,711,595	69,687	(861,128)	708,439	—	—
Foreign exchange risk Securities in foreign currency Cash flow hedges		205,470			—	(4,002)	—	
Interest rate risk Debentures in								
won and debentures in foreign currency Foreign exchange risk		475,027	1,689,360	_	_	31,830	(58,956)	_
Debentures in foreign currency and loans in foreign currency Hedge of net investments in foreign operations	2	2,778,511	2,843,059		_	52,361	(1,468)	
Foreign exchange risk Net assets in foreign operation		_	_	_	_	25,793	_	(40,834)

(\*) The related account categories are presented as interest rate swap assets / liabilities and currency forwards.

(f) Hedge relationships affected by an interest rate index

The revised Standard requires exceptions to the analysis of future information in relation to the application of hedge accounting, while uncertainty exists due to movements of the interest rate indicator reform. The exception assumes that when assessing whether the expected cash flows that comply with existing interest rate indicators are highly probable, whether there is an economic relationship between the hedged item and the hedging instrument, and whether there is a high hedge effectiveness between the hedged item and the hedging instrument, the interest rate indicators that are based on the hedged item do not change due to the effect of the interest rate index reform. The nominal amount of the hedging instrument related to the interest rate index as of December 31, 2021 and 2022, are as follows:

		December 31, 2021							
Interest rate index	Carrying value of hedged item, Assets	Carrying value of hedged item, Liabilities	Nominal amount of hedging instrument						
KRW 3M CD (*1)	₩	2,509,045	2,580,000						
USD 1M LIBOR (*2)	_	241,192	241,842						
USD 3M LIBOR(*1),(*2)	539,197	3,589,452	4,187,018						
EURIBOR 1M		220,992	221,050						
EURIBOR 3M	25,094	267,830	293,972						
	₩564,291	6,828,511	7,523,882						

(\*1) Include nominal amount of the hedging instrument related to the CMS(Constant Maturity Swap) calculated based on the CD and LIBOR rate.

(\*2) Exclude the nominal amount that will mature before the end of June 30, 2023, when LIBOR interest rate calculation is discontinued.

### **10.** Derivatives (continued)

	December 31, 2022							
Interest rate index	Carrying value of hedged item, Assets	Carrying value of hedged item, Liabilities	Nominal amount of hedging instrument					
KRW 3M CD (*1)	₩ —	9,247,047	9,390,000					
USD 1M LIBOR (*2)	_	258,393	258,529					
USD 3M LIBOR(*1),(*2)	283,014	3,785,641	4,196,714					
EURIBOR 1M	—	_	—					
EURIBOR 3M	3,236	269,826	274,294					
	₩286,250	13,560,907	14,119,537					

- (\*1) Include nominal amount of the hedging instrument related to the CMS(Constant Maturity Swap) calculated based on the CD and LIBOR rate.
- (\*2) Exclude the nominal amount that will mature before the end of June 30, 2023, when LIBOR interest rate calculation is discontinued.

The USD LIBOR interest rate will be replaced by a SOFR (Secured Overnight Financing Rate) based on actual transactions. In Korea, the "Korea Overnight Financing Repo Rate (KOFR)" was finally selected as the risk-free index interest rate. The Group has assumed that in this hedging relationship, the spread changed on the basis of SOFR, KOFR would be similar to the spread included in the interest rate swap and forward used as the hedging instrument after LIBOR rate is suspended. The Group does not assume any changes in other conditions.

### 11. Securities at fair value through other comprehensive income and securities at amortized cost

(a) Details of securities at FVOCI and securities at amortized cost as of December 31, 2021 and 2022 are as follows:

	2021	2022
Securities at FVOCI: Debt securities:		
Government bonds	₩ 25,687,070	27,197,987
Financial institutions bonds	19,702,292	19,030,714
Corporate bonds and others	18,417,557	15,865,207
	63,806,919	62,093,908
Equity securities (*):		
Štocks	922,579	1,475,153
Equity investments	4,118	3,833
Others	104,707	88,825
	1,031,404	1,567,811
	64,838,323	63,661,719
Securities at amortized cost: Debt securities:		
Government bonds	34,679,301	38,371,463
Financial institutions bonds	3,423,536	6,530,386
Corporate bonds and others	11,827,239	13,069,644
	49,930,076	57,971,493
	₩114,768,399	121,633,212

- (\*) Equity securities in the table above are classified as other comprehensive income equity securities designated as fair value items, and other comprehensive income and fair value options are exercised for the purpose of holding as required by the policy.
- (b) Changes in carrying value of debt securities at fair value through other comprehensive income and securities at amortized cost for the years ended December 31, 2021 and 2022 are as follows:

	2021										
	Debt securitie other com	s at fair val prehensive		Debt securities at amortized cost							
	12-month expected credit loss	Life time expected credit loss	Total	12-month expected credit loss	Life time expected credit loss	Total					
Beginning balance	₩57,142,298	267,135	57,409,433	47,293,109	_	47,293,109					
Transfer (from)to 12-month expected credit loss	51,055	(51,055)		_							
	(35.665)	35.665		(35,505)	35.505						
Net increase and decrease (*)		/ /	6,397,486	2,653,129		2,653,914					
Ending balance	₩63,654,133	152,786	63,806,919	49,910,733	36,290	49,947,023					
credit loss Transfer (from)to life time expected credit loss Net increase and decrease (*)	₩57,142,298 51,055 (35,665) 6,496,445	267,135 (51,055) (35,665 (98,959)	57,409,433 	47,293,109 (35,505) 2,653,129	 ) 35,505  785	47,293,10					

(\*) Included the effects from changes in purchase, disposal, repayment, foreign exchange rate, amortization of fair value adjustments recognized through business combination accountings.

### 11. <u>Securities at fair value through other comprehensive income and securities at amortized</u> cost (continued)

	2022									
	Debt securities other com			Debt securities at amortized cost						
	12-month expected credit loss	Life time expected credit loss	Total	12-month expected credit loss	Life time expected credit loss	Total				
Beginning balance	₩63,654,133	152,786	63,806,919	49,910,733	36,290	49,947,023				
Transfer (from)to 12-month expected credit loss Transfer (from)to life time expected	61,740	(61,740)	)	18,544	(18,544)	_				
credit loss	(23,619)	23,619		_						
Net increase and decrease (*)	(1,690,349)	(47,467)	(1,737,816)	8,048,071	(7,230)	8,040,841				
Business combination (Note 47)	24,805		24,805							
Ending balance	₩62,026,710	67,198	62,093,908	57,977,348	10,516	57,987,864				

- (\*) Included the effects from changes in purchase, disposal, repayment, valuation, changes in foreign exchange rate and amortization of fair value adjustments recognized through business combination accountings and the others
- (c) Changes in allowance for credit loss of debt securities at fair value through other comprehensive income and securities at amortized cost for the years ended December 31, 2021 and 2022 are as follows:

	2021									
	Debt securities at fair value through other comprehensive income Debt securities at amortized of the securities at a securitie									
	12 months expected credit loss	Life time expected credit loss	12 months expected credit loss	Life time expected credit loss	Total					
Beginning balance	₩22,493	678	23,171	10,486	_	10,486				
Transfer (from)to 12-month expected credit loss	33	(33)								
Transfer (from)to life time expected credit loss	(63)	63		(216)	216					
Provision (Reversal)	19,722	(25)	19,697	5,065	240	5,305				
Disposal and others (*)	(5,302)	(80)	(5,382)	) 1,149	7	1,156				
Ending balance	₩36,883	603	37,486	16,484	463	16,947				

(\*) Included the effects from changes in foreign exchange rate, debt restructuring, investment conversion.

### 11. <u>Securities at fair value through other comprehensive income and securities at amortized</u> cost (continued)

			2022	2		
	Debt securitie other com	s at fair valu prehensive ir		Debt securi	ties at amor	tized cost
	12 months expected credit loss	Life time expected credit loss	Total	12 months expected credit loss	Life time expected credit loss	Total
Beginning balance	₩36,883	603	37,486	16,484	463	16,947
Transfer (from)to 12-month expected credit						
loss	166	(166)		203	(203)	_
Transfer (from)to life time expected credit loss	(20)	20				_
Provision (Reversal)	(3,393)	(355)	(3,748)	(197)	(94)	(291)
Disposal and others (*)	(641)	11	(630)	(276)	(9)	(285)
Ending balance	₩32,995	113	33,108	16,214	157	16,371

- (\*) Included the effects from changes in debt restructuring, investment conversion, foreign exchange rate and the others.
- (d) Gain or loss on disposal of securities at fair value through other comprehensive income and securities at amortized cost for the years ended December 31, 2021 and 2022 are as follows:

	2021	2022
Gain on disposal of securities at FVOCI	₩131,189	26,357
Loss on disposal of securities at FVOCI	(45,593)	(153,750)
Gain on disposal of securities at amortized cost (*)	24	4
Loss on disposal of securities at amortized cost (*)	(343)	(105)
	₩ 85,277	(127,494)

- (\*) The issuers of those securities have exercised the early redemption options and the others.
- (e) Income or loss on equity securities at fair value through other comprehensive income
- The Group recognizes dividends, amounting to ₩24,216 million and ₩26,996 million, related to equity securities at fair value through other comprehensive income for the years ended December 31, 2021 and 2022, respectively.
- ii) The details of disposal of equity securities at fair value through other comprehensive income for the years ended December 31, 2021 and 2022 are as follows:

	2021	2022
	Stocks acqu investment co	
Fair value at the date of disposal	₩ 84,624	48,525
Cumulative net gain(loss) at the time of disposal	(42,058)	2,943

(\*) The reason for the disposal is the disposal of stocks acquired by investment conversion.

### 12. Loans at amortized cost, etc.

(a) Loans at amortized cost for configuration by customer as of December 31, 2021 and 2022 are as follows:

	2021	2022
Retail loans	₩159,006,999	160,416,509
Corporate loans(*)	199,465,807	215,344,233
Public and other loans	3,468,917	3,788,040
Loans between banks	3,849,565	7,428,874
Credit card receivables	25,999,576	28,459,691
	391,790,864	415,437,347
Discount	(30,001)	(21,879)
Deferred loan origination costs	543,361	526,906
	392,304,224	415,942,374
Less: Allowance for credit loss	(3,167,068)	(3,650,863)
	₩389,137,156	412,291,511

(\*) Included loans for solo proprietor business, etc.

## 12. Loans at amortized cost, etc. (continued)

(b) Changes in carrying value of loans at amortized cost, etc. as of December 31, 2021 and 2022 are as follows:

i) Loans at amortized cost

						7	2021						
		Retail			Corporate			Credit card			Others		
	12 months expected credit loss	Life time expected credit loss	Impaired financial asset	12 months expected credit loss	Life time expected credit loss	Impaired financial asset	12 months expected credit loss	Life time expected credit loss	Impaired financial asset	12 months expected credit loss	Life time expected I credit loss	Impaired financial asset	Total
Beginning balance	W138,516,630 8,215,137	8,215,137	466,427	152,338,024	26,210,417	1,057,932	18,969,258	3,951,689	468,377	8,405,173	665,196	18,225	359,282,485
I ransfer (from) to 12 months expected credit losses	3,200,712	3,200,712 (3,192,315) (8,397)	(8,397)	6,566,663	6,566,663 (6,494,160)	(72,503)	390,658	(390,593)	(65)	43,343 (43,343)	(43,343)		
Transfer (from) to lifetime expected credit losses	(3,482,541)	(3,482,541) 3,516,278	(33,737)	(9,636,590) 9,659,114	9,659,114	(22,524)	(674,961)	675,063	(102)	(94,270)	94,272	(2)	I
Transfer (from) to credit-													
impaired financial assets	(194, 192)	(194,192) $(134,008)$	328,200	(230, 972)	(322, 361)	553,333	(110,704)	(110,704) (158,036) 268,740	268,740	(968)	(2)	898	
Net increase and decrease(*1)	12,821,174	12,821,174 (255,318)	38,153	20,922,205	(222, 364)	(146, 801)	2,772,167	88,680	287,576 (	(1,810,906) (47,466)	(47, 466)	(108)	34,446,992
Charge off(*2)			(279, 789)			(299,661)		Ι	(566,944)			(1,218)	(1, 147, 612)
Disposal		(724)	(53, 241)	(84,433)	(180)	(139,019)						(4)	(277, 641)
Ending balance	<del>W</del> 150,861,783	8,149,050	457,616	169,874,897	28,830,466	930,757	21,346,418	4,166,803	457,582	6,542,444	668,657	17,751	392,304,224
		=	-	•   •			.		- - -				

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(\*1) The amount is due to execution, collection, debt restructuring, investment conversion, exchange rate fluctuation, etc. (\*2) The amount of uncollected loans currently in recovery (principal and interest) is **W**10,613,730 million, which is written off as of December 31, 2021.

# 12. Loans at amortized cost, etc. (continued)

#### *ii)* Due from banks at amortized cost and other financial assets

		2021	l	
	12 month expected credit loss	Life time expected credit loss	Impaired financial asset	Total
Beginning balance	₩51,881,798	99,899	57,658	52,039,355
Transfer (from) to 12 month expected credit losses	13,111	(13,079)	(32)	
Transfer (from) to lifetime expected credit losses	(29,026)	29,048	(22)	
Transfer (from) to credit- impaired financial assets	(1,049)	(11,797)	12,846	
Net increase and decrease(*)	(4,315,675)	580	37,428	(4,277,667)
Charge off	—		(27,929)	(27,929)
Disposal		(1)	(855)	(856)
Ending balance	₩47,549,159	104,650	79,094	47,732,903

(\*) The amount is due to execution, collection, debt restructuring, investment conversion, exchange rate fluctuation, etc.

# 12. Loans at amortized cost, etc. (continued)

i) Loans at amortized cost

2022

		Retail			Corporate			Credit card			Others		
	12 months expected credit loss	Life time expected credit loss	Impaired financial asset	12 months expected credit loss	Life time expected credit loss	Impaired financial asset	12 months expected credit loss	Life time expected credit loss	Impaired financial asset	12 months expected credit loss	Life time expected credit loss	Impaired financial asset	Total
Beginning balance Tranefar (from) to 12 months	W150,861,783 8,149,050 457,616 169,874,897 28,830,466	8,149,050	457,616	169,874,897	28,830,466	930,757	21,346,418	4,166,803	457,582	6,542,444	668,657	17,751	392,304,224
expected credit losses Transfer (from) to lifetime expected		(3,390,943)	(11,376)	3,402,319 $(3,390,943)$ $(11,376)$ $7,620,541$ $(7,612,945)$ $(7,596)$	(7,612,945)	(7,596)	431,252	(430,915)	(337)	55,766	55,766 (55,766)		
credit losses	-	4,275,492	(34,725)	(4,240,767) $4,275,492$ $(34,725)$ $(11,480,879)$ $11,491,902$ $(11,023)$	11,491,902	(11,023)	(764,938)	765,279	(341)	(52,028) 52,030	52,030	(2)	
Transfer (from) to credit- impaired financial assets	(255,175)	(154,510) 409,685	409,685	(222,960)	(489,488) 712,448	712,448	(115,976)	(115,976) (160,843) 276,819	276,819	(18)	(12)	30	
Net increase and decrease(*1)	2,019,166	(385,941) 127,162	127,162	16,796,397	(164,011)	(164,011) (267,984)	2,689,877	(6, 713)	(6,713) 352,143	3,821,009	767	181	24,982,053
Charge off(*2)	Ι		(263, 962)			(249, 453)			(592, 386)			(1, 121)	(1, 106, 922)
Disposal		(1,151)	(1,151) (78,428)	(17,000)		(1,333) (136,419)						(2,748)	(237,079)
Business combination (Note 47)		I		I				I		98			98
Ending balance	<u>W151,787,326</u> 8,491,997	8,491,997	605,972	$\frac{605,972}{182,570,996}$	32,054,591	970,730	23,586,633	4,333,611	493,480	10,367,271	665,676	14,091	415,942,374

(\*1) The amount is due to execution, collection, debt restructuring, investment conversion, exchange rate fluctuation, etc.

(\*2) The amount of uncollected loans currently in recovery (principal and interest) is W9,739,237 million, which is written off as of December 31, 2022.

# 12. Loans at amortized cost, etc. (continued)

ii) Due from banks at amortized cost and other financial assets

		2022	2	
	12 month expected credit loss	Life time expected credit loss	Impaired financial asset	Total
Beginning balance	₩47,549,159	104,650	79,094	47,732,903
Transfer (from) to 12 month expected credit losses	16,401	(16,309)	(92)	
Transfer (from) to lifetime expected credit losses	(23,870)	23,985	(115)	
Transfer (from) to credit- impaired financial assets	(10,008)	(3,654)	13,662	
Net increase and decrease(*)	1,630,953	57,051	21,722	1,709,726
Charge off	—	_	(25,636)	(25,636)
Disposal	—	_	(1,123)	(1,123)
Business combination (Note 47)	89,648			89,648
Ending balance	₩49,252,283	165,723	87,512	49,505,518

(\*) The amount is due to execution, collection, debt restructuring, investment conversion, exchange rate fluctuation, etc.

# **12.** Loans at amortized cost, etc. (continued)

(c) Changes in allowance for credit loss of loans at amortized cost and other financial assets as of December 31, 2021 and 2022 are as follows:

# *i) Loans at amortized cost*

							2021						
		Retail			Corporate			Credit cards			Others		
	12 month expected credit loss	Life time expected credit loss	Impaired financial asset	12 month expected credit loss	Life time expected credit loss	Impaired financial asset	12 month expected credit loss	Life time expected credit loss	Impaired financial asset	12 month expected credit loss	Life time expected credit loss	Impaired financial asset	Total
Beginning balance Transfer (from) to 12 months	<del>W</del> 149,034	86,048	198,440	568,614	665,083	481,244	203,908	374,453	306,690	11,434	9,601	~	3,060,966
expected credit losses Transfer (from) to lifetime	20,528	20,528 (19,794)	(734)	85,187	(79,571)	(5,616)	26,178	(26,149)	(29)	200	(200)	I	
expected credit losses Transfer (from) to credit-	(9,078)	21,383	(12,305)	(55,055)	63,834	(8,779)	(14,471)	14,548	(77)	(359)	359		
impaired financial assets	(3, 203)	(7, 112)	10,315	(1,830)	(48,468)	50,298	(1,003)	(1,503)	2,506	(2)		7	
Provision (reversal)	10,812		154,260	(68,403)	135,401	263,327	75,981	202,000	137,456	(1, 342)	(503)	(298)	907,070
Charge off			(279, 789)		Ι	(299,661)			(566,944)	Ι	I	(1,218)	(1, 147, 612)
Amortization of discount			(4,651)			(12, 894)			7,973				(9,572)
Disposal		(1)	(13, 617)	(9)		(14, 528)						(1)	(28, 153)
Collection			103,316			76,245			207,631			887	388,079
Others(*)	5,912	11,209	34,571	1,793	5,973	(9,310)	(85,882)	(162, 272)	194,026	269	-		(3,710)
Ending balance	<del>W</del> 174,005	90,412	189,806	530,300	742,252	520,326	204,711	401,077	289,232	10,195	9,258	5,494	3,167,068

(\*) Other changes are due to debt restructuring, investment conversion and changes in foreign exchange rate, etc.

### 12. Loans at amortized cost, etc. (continued)

#### *ii)* Due from banks at amortized cost and other financial assets

			2021	l	
	e	2 months xpected redit loss	Life time expected credit loss	Impaired financial asset	Total
Beginning balance	₩	35,691	8,281	48,930	92,902
Transfer (from) to 12 months expected credit losses		241	(230)	(11)	_
Transfer (from) to lifetime expected credit losses		(284)	288	(4)	_
Transfer (from) to credit- impaired financial assets		(290)	(2,012)	2,302	_
Provision		8,555	1,426	42,181	52,162
Charge off		_		(27,929)	(27,929)
Disposal		_		(40)	(40)
Collection		_		2,357	2,357
Others (*)		139,995	255	2,257	142,507
Ending balance	₩	183,908	8,008	70,043	261,959

(\*) Other changes are due to debt restructuring, investment conversion and changes in foreign exchange rate, etc.

# **12.** Loans at amortized cost, etc. (continued)

*i)* Loans at amortized cost

2022

		Retail			Corporate			Credit cards			Others		
	12 month expected credit loss	Life time expected credit loss	Impaired financial asset	12 month expected credit loss	Life time expected credit loss	Impaired financial asset	12 month expected credit loss	Life time expected credit loss	Impaired financial asset	12 month expected credit loss	Life time expected credit loss	Impaired financial asset	Total
Beginning balance	<del>W</del> 174,005	90,412	189,806	530,300	742,252	520,326	204,711	401,077	289,232	10,195	9,258	5,494	3,167,068
Transfer (from) to 12 months expected credit losses	l 17,317	(16,023)	(1,294)	92,620	(90,661)	(1,959)	24,579	(24,471)	(108)	403	(403)		
Transfer (from) to lifetime expected credit losses	(9,449)		(16,565)	(62,583)	64,821	(2,238)		14,892	(140)	(122)	122	I	
Transfer (from) to credit- impaired			12 005	(1.461)	(220 99)	101 23	10011		2 1 25	E	(2)	9	
nnancial assets Provision (reversal)	(4,702) 95,929	(5,102) 84,402	244,633	(1,401) (14,887)	(ccu,00) 159,287	07,494 103,935	(1,094) 101,644	(2,041) 254,090	209,353	(1) 3,405	(c) 246	0 2,387	${1,244,424}$
Charge off			(263, 962)			(249, 453)			(592, 386)			(1, 121)	(1,106,922)
Amortization of discount		I	(5,923)		I	(13, 189)	I	I	7,307				(11, 805)
Disposal		(28)	(22, 676)		(5)	(10, 723)	I	I		I		(217)	(33,649)
Collection			108,666	I		55,441			217,407			145	381,659
Others(*)	(8,264)	(8,264) (10,584)	19,121	15,187	30,896	17,605	(103, 976)	(172,074)	222,175	2			10,088
Ending balance	<del>W</del> 264,836	165,090	265,611	559,176	840,557	487,239	211,112	471,473	355,975	13,882	9,218	6,694	3,650,863

(\*) Other changes are due to debt restructuring, investment conversion and changes in foreign exchange rate, etc.

#### 12. Loans at amortized cost, etc. (continued)

#### *ii)* Due from banks at amortized cost and other financial assets

		2022	2	
	12 months expected credit loss	Life time expected credit loss	Impaired financial asset	Total
Beginning balance	₩183,908	8,008	70,043	261,959
Transfer (from) to 12 months expected credit losses	315	(274)	(41)	_
Transfer (from) to lifetime expected credit losses	(740)	765	(25)	
Transfer (from) to credit- impaired financial assets	(75)	(1,267)	1,342	
Provision	2,275	3,278	27,226	32,779
Charge off	_		(25,636)	(25,636)
Disposal	_	_	(61)	(61)
Collection	_		2,502	2,502
Others (*)	110,514	(70)	(729)	109,715
Business combination (Note 47)	16			16
Ending balance	₩296,213	10,440	74,621	381,274

- (\*) Other changes are due to debt restructuring, investment conversion and changes in foreign exchange rate, etc.
- (d) Changes in deferred loan origination costs for the years ended December 31, 2021 and 2022 are as follows:

	2021	2022
Beginning balance	₩ 516,815	543,361
Loan origination	255,482	209,347
Amortization, etc.	(228,936)	(225,802)
Ending balance	₩ 543,361	526,906

#### 13. Property and equipment

(a) Details of property and equipment as of December 31, 2021 and 2022 are as follows:

		2021	l	
	Acquisition cost	Accumulated depreciation	Accumulated Impairment	Carrying value
Land	₩2,173,134			2,173,134
Buildings	1,210,401	(446,321)	(7,594)	756,486
Right-of-use assets	1,229,169	(621,042)	_	608,127
Other assets	2,294,740	(1,786,323)		508,417
	₩6,907,444	(2,853,686)	(7,594)	4,046,164

#### **13.** Property and equipment (continued)

		2022	2	
	Acquisition cost	Accumulated depreciation	Accumulated Impairment	Carrying value
Land	₩2,101,176			2,101,176
Buildings	1,165,468	(455,617)	(7,594)	702,257
Other assets	2,424,987	(1,836,533)	—	588,454
Right-of-use assets	1,208,728	(589,518)		619,210
	₩6,900,359	(2,881,668)	(7,594)	4,011,097

(b) Changes in property and equipment for the years ended December 31, 2021 and 2022 are as follows:

			2021		
	Land	Buildings	Right-of-use assets	Others	Total
Beginning balance	₩2,219,227	810,761	590,417	369,292	3,989,697
Acquisition(*1)	513	32,777	316,925	289,614	639,829
Disposal	(709)	(1,378)	(26,930)	(5,086)	(34,103)
Depreciation(*2)	—	(49,646)	(289,585)	(154,104)	(493,335)
Impairment	—	(7,594)			(7,594)
Amounts transferred from(to) investment property	(46,046)	(27,727)		_	(73,773)
Amounts transferred from(to) intangible assets	_	_	_	3,676	3,676
Amounts transferred from(to) non-current assets held for sale(*3)	(169)	(853)		_	(1,022)
Effects of foreign currency	()	(000)			(-,)
adjustments	318	146	17,300	5,025	22,789
Ending balance	₩2,173,134	756,486	608,127	508,417	4,046,164

(\*1) ₩18,748 million transferred from assets-under-construction is included.

(\*2) Included in general administrative expense and other operating income(loss) of the consolidated statements of comprehensive income.

(\*3) Includes buildings, land, etc.

#### 13. Property and equipment (continued)

			2022		
	Land	Buildings	Others	Right-of-use assets	Total
Beginning balance	₩2,173,134	756,486	508,417	608,127	4,046,164
Acquisition(*1)	631	49,220	257,662	369,153	676,666
Disposal	(13,173)	(1, 124)	(4,212)	(75,563)	(94,072)
Depreciation(*2)	—	(49,935)	(186,307)	(287,886)	(524,128)
Amounts transferred from(to) investment property Amounts transferred from(to) intangible	2,892	(12,446)	_	—	(9,554)
assets			6,916		6,916
Amounts transferred from(to) non-current assets held for sale(*3) Amounts transferred from(to) operating	(62,288)	(39,469)		_	(101,757)
lease assets		_	214		214
Effects of foreign currency adjustments Business combination (Note 47)	(20)	(475)	4,877 887	4,328 1,051	8,710 1,938
Ending balance	₩2,101,176	702,257	588,454	619,210	4,011,097

(\*1) ₩33,983 million transferred from assets-under-construction is included.

(\*2) Included in general administrative expense and other operating income(loss) of the consolidated statements of comprehensive income.

(\*3) Includes buildings, land, etc.

(c) Insured assets and liability insurance as of December 31, 2022 are as follows:

	D	ecember 31, 202	22
Type of insurance	Insured assets and objects	Amount covered	Insurance company
Comprehensive insurance for financial institutions	Cash(including ATM)	25,500	Samsung Fire & Marine Insurance Co., Ltd., etc.
Comprehensive Property insurance	Property Total Risk, Machine Risk,		
	General Liability		Samsung Fire & Marine
	Collateral	1,667,825	Insurance Co., Ltd., etc.
Fire insurance	Business property		Meritz Fire & Marine
	and real estate	35,062	Insurance Co., Ltd., etc.
Compensation liability insurance for	Officer liability of		Meritz Fire & Marine
officers	executives	50,000	Insurance Co., Ltd., etc.
Compensation liability insurance for	Employee		Meritz Fire & Marine
employee accident		82,029	Insurance Co., Ltd., etc.
Burglary insurance	Cash and securities	,	Samsung Fire & Marine
		60,480	Insurance Co., Ltd., etc.
Others	Personal	,	, ,
	information liability		Samsung Fire & Marine
	insurance, etc.	56,862	Insurance Co., Ltd., etc.

(\*) Aside from the insurance mentioned above, the Group has entered into car insurance, medical insurance, property insurance, and employee accident insurance.

#### 14. Intangible assets

(a) Details of intangible assets as of December 31, 2021 and 2022 are as follows:

	2021	2022
Goodwill	₩4,670,134	4,683,902
Software	192,582	263,341
Development cost	229,148	454,284
Others	552,918	406,309
	₩5,644,782	5,807,836

(b) Changes in intangible assets for the years ended December 31, 2021 and 2022 are as follows:

			2021		
	Goodwill	Software	Development cost	Others	Total
Beginning balance	₩4,689,792	144,535	183,592	462,700	5,480,619
Acquisition	_	103,929	127,993	225,228	457,150
Business combination	13,851			—	13,851
Disposal and write-off	_	(2,341)	(719)	(5,349)	(8,409)
Amounts transferred from(to) property and					
equipment	—		(3,676)	_	(3,676)
Impairment(*1)	(33,509)		(270)	(765)	(34,544)
Amortization(*2)	—	(55,531)	(77,734)	(129,615)	(262,880)
Effects of changes in foreign exchange rate		1,990	(38)	719	2,671
Ending balance	₩4,670,134	192,582	229,148	552,918	5,644,782

- (\*1) Goodwill impairment has occurred at Shinhan Bank Indonesia within the banking sector and PT Shinhan Sekuritas Indonesia within the securities sector among the cash-generating units. After the impairment test for goodwill of Shinhan Bank Indonesia, among the carrying value exceeding recoverable amount of cash-generating unit, which is \\$32,396 million, the Group has recognized \\$32,072 million as an impairment of goodwill which is 99% of the Group's total stake. After the impairment test for goodwill of PT Shinhan Sekuritas Indonesia, among the carrying value exceeding recoverable amount of cash-generating unit, which is \\$2,595 million, the Group has recognized \\$2,569 million as an impairment of goodwill which is 99% of the Group's total stake. This has occurred as a result of the persistent low-interest rate in Indonesia, the impact of COVID-19, and the decrease in the recoverable amount due to increased provisions of corporate borrowers. For the year ended December 31, 2021, the decrease in the asset's recoverable amount in comparison to the previous year is \$\$\$56,587 million and \$\$\$8,715 million, respectively. The amount of goodwill impairment recognized is included in the non-operating expenses of the consolidated statement of comprehensive income.
- (\*2) Included in general administrative expense and other operating income(expense) of the consolidated statements of comprehensive income.

#### 14. Intangible assets (continued)

			2022		
	Goodwill	Software	Development cost	Others	Total
Beginning balance	₩4,670,134	192,582	229,148	552,918	5,644,782
Acquisition	_	143,766	332,826	211,511	688,103
Business combination					
(Note 47)	—	1,472	2,638	315	4,425
Disposal and write-off	—	(253)	(434)	(236,881)	(237,568)
Amounts transferred from(to) property and					
equipment	—		(6,337)	(579)	(6,916)
Impairment(*1)	(2,258)		(702)	198	(2,762)
Amortization(*2)	—	(74,916)	(102,849)	(120,844)	(298,609)
Effects of changes in foreign exchange rate	16,026	690	(6)	(329)	16,381
Ending balance	₩4,683,902	263,341	454,284	406,309	5,807,836

- (\*1) Goodwill impairment incurred from the cash-generating unit of security sector at PT Shinhan Sekuritas Indonesia. As a result of the impairment test for goodwill of PT Shinhan Sekuritas Indonesia's cashgenerating unit, the Group's interests of the carrying amount exceeding the recoverable amount of the cash-generating unit was recognized as an impairment loss for ₩2,258 million. This is attributable to the continued high prices caused by the prolonged crisis in Ukraine in 2022, the local and global economic downturn, and the increase in the discount rate due to the global high interest rate economic phenomenon, and recoverable amount decreased by ₩1,569 million compared to the previous year. The amount of impairment loss recognized is included in the non-operating expenses, the line item of the consolidated statement of comprehensive income.
- (\*2) Included in general administrative expense and other operating income(expense) of the consolidated statements of comprehensive income.

#### (c) Goodwill

*i)* Goodwill allocated in the Group's CGUs as of December 31, 2021 and 2022 is as follows:

	2021	2022
Banking	₩ 764,883	768,766
Credit card	2,880,383	2,892,610
Securities	5,335	2,993
Life insurance	853,798	853,798
Others	165,735	165,735
	₩4,670,134	4,683,902

#### 14. Intangible assets (continued)

*ii) Changes in goodwill for the years ended December 31, 2021 and 2022 are as follows:* 

	2021	2022
Beginning balance	₩4,689,792	4,670,134
Additional recognition(*1)	13,851	
Impairment losses	(33,509)	(2,258)
Others (*2)		16,026
Ending balance	₩4,670,134	4,683,902

- (\*1) It is the goodwill recognized by Shinhan Financial Plus, a subsidiary acquired in the previous year, from a business transfer for the GF division and IMGA division of Leaders Financial Marketing.
- (\*2) Other changes are due to effects of changes in foreign exchange rate.

#### iii) Goodwill impairment test

- The recoverable amounts of each CGU are evaluated based on their respective value in use.
- Explanation on evaluation method

The discounted cash flow method (DCF) is applied when evaluating the recoverable amounts based on value in use, considering the characteristics of each unit or group of CGU. However, the CGU of life insurance applied an actuarial enterprise valuation methodology based on probabilistically expected cash flows in consideration of the characteristics of the insurance business.

Projection period

When evaluating the value in use, 5.5 years of cash flow estimates are used in projection and the value thereafter is reflected as terminal value. However, 99 years of cash flow estimates for Shinhan Life Insurance Co., Ltd. is applied and the present value of the future cash flows thereafter is not applied as it is not significant.

• Discount rates and terminal growth rates

The required rates of return expected by shareholders are applied to the discount rates. It is calculated in consideration of which comprises a risk-free interest rate, a market risk premium and systemic risk (beta factor). In addition, terminal growth rate is estimated based on inflation rate. However, since the life insurance cash-generating unit reflects the cost of risk in future cash flows, the discount rate based on the risk-free government bond interest rate term structure reflecting only the time value of money was applied.

Discount rates and terminal growth rates applied to each CGU are as follows:

	Discount rate(%)	Terminal growth rate(%)
Banking	7.1 ~ 14.2	$0.0 \sim 2.0$
Credit card	8.7 ~ 13.9	$1.0 \sim 2.0$
Securities	13.6 ~ 13.9	2.0
Others	8.9 ~ 10.9	1.0

In case of the life insurance CGU, a term structure discount rate of 2.37% to 4.95% was applied for each future period corresponding to future cash flows for 99 years.

#### 14. Intangible assets (continued)

#### iv) Key assumptions

Key assumptions used in the discounted cash flow calculations of CGUs (other than life insurance components) are as follows:

	2022	2023	2024	2025	2026	2027
CPI growth(%)	5.50	2.80	0.80	1.00	1.20	1.20
Private consumption growth(%)	3.40	2.20	2.30	2.60	2.80	2.80
Real GDP growth(%)	2.70	2.30	2.60	2.80	2.70	2.70

Key assumptions used in the discounted cash flow calculations of life insurance (Shinhan life insurance) components are as follows:

	Key assumptions
Consumer price index growth rate(Bank of Korea)(%)	2.00
Risk-based confidence level(%)	99.50

*v)* Total recoverable amount and total carrying value of CGUs to which goodwill has been allocated, are as follows:

	Amount
Total recoverable amount	₩55,081,110
Total carrying value(*)	46,383,778
	₩ 8,697,332

(\*) It is the carrying value after reflecting the impairment loss in the securities sector.

#### 15. Investments in associates

(a) Investments in associates as of December 31, 2021 and 2022 are as follows:

	Reporting	Owners	hip (%)
Country	date	2021	2022
Korea	September 30	14.99	14.99
Korea	—	35.34	—
Korea	November 30	25.00	25.00
Korea	December 31	30.00	20.57
Korea	December 31	31.66	31.66
Korea	November 30	50.00	50.00
Korea	December 31	23.89	23.89
Korea	December 31	20.16	20.16
Korea	December 31	20.00	20.00
Korea	December 31	50.00	50.00
	Korea Korea Korea Korea Korea Korea Korea	KoreaSeptember 30Korea—KoreaNovember 30KoreaDecember 31KoreaDecember 31KoreaNovember 30KoreaDecember 31KoreaDecember 31KoreaDecember 31	Countrydate2021KoreaSeptember 3014.99Korea—35.34KoreaNovember 3025.00KoreaDecember 3130.00KoreaDecember 3131.66KoreaNovember 3050.00KoreaDecember 3123.89KoreaDecember 3120.16KoreaDecember 3120.00

investments in associates (continueu)		Doncating	Owners	Ownership (%)	
Investees	Country	Reporting date	2021	2022	
ShinHan – Soo Young Entrepreneur Investment					
Fund No.1	Korea	December 31	24.00	24.00	
Shinhan Praxis K-Growth Global Private Equity					
Fund (*9)	Korea	December 31	18.87	14.15	
Kiwoom Milestone Professional Private Real					
Estate Trust 19	Korea	December 31	50.00	50.00	
AIP EURO Green Private Real Estate Trust					
No.3 (*7)	Korea		21.28		
Shinhan Global Healthcare Fund 1 (*9)	Korea	December 31	4.41	4.4	
KB NA Hickory Private Special Asset Fund	Korea	December 31	37.50	37.50	
Koramco Europe Core Private Placement Real					
Estate Fund No.2-2	Korea	December 31	44.02	44.02	
Shinhan EZ General Insurance, Ltd. (*12)	Korea	_	5.46	85.10	
Hermes Private Investment Equity Fund	Korea	December 31	29.17	29.1	
KDBC-Midas Dong-A Global contents Fund	Korea	December 31	23.26	23.20	
Shinhan-Nvestor Liquidity Solution Fund	Korea	December 31	24.92	24.92	
Shinhan AIM FoF Fund 1-A	Korea	December 31	25.00	25.0	
IGIS Global Credit Fund 150-1	Korea	December 31	25.00	25.0	
Partner One Value up I Private Equity Fund	Korea	December 31	27.91	27.9	
Genesis No.1 Private Equity Fund	Korea	December 31	22.80	22.8	
Korea Omega Project Fund III	Korea	December 31	23.53	23.5	
Soo Delivery Platform Growth Fund (*7)	Korea	—	30.00		
Genesis North America Power Company No.1 PEF	Korea	December 31	40.03	39.1	
SH MAIN Professional Investment Type Private					
Mixed Asset Investment Trust No.3	Korea	December 31	23.33	23.3	
MIEL CO.,LTD.(*3),(*4)	Korea	December 31	28.77	28.7	
AIP Transportation Specialized Privately Placed					
Fund Trust #1	Korea	December 31	35.73	35.7	
E&Healthcare Investment Fund No.6	Korea	December 31	21.05	21.0	
One Shinhan Global Fund 1 (*5)	Korea	December 31	20.56	20.52	
Kiwoom-Shinhan Innovation Fund I (*6)	Korea	December 31	50.00	50.00	
Daishin-K&T New Technology Investment					
Fund (*7)	Korea		31.25		
Midas Asset Global CRE Debt Private Fund No.6	Korea	December 31	41.16	41.10	
Samchully Midstream Private Placement Special					
Asset Fund 5-4	Korea	December 31	42.92	42.92	
SH Senior Loan Professional Investment Type					
Private Mixed Asset Investment Trust No.3 (*1)	Korea	September 30	20.00	20.0	
NH-Amundi Global Infrastructure Trust 14	Korea	December 31	30.00	30.00	
Jarvis Memorial Private Investment Trust 1 (*6)	Korea	December 31	99.01	99.0	
Vestas Qualified Investors Private Real Estate			60.00	<i></i>	
Fund Investment Trust No.37 (*8)	Korea	December 31	60.00	60.0	
Milestone Private Real Estate Fund 3	Korea	December 31	32.06	32.06	
Nomura-Rifa Private Real Estate Investment	17		01.04		
Trust 31	Korea	December 31	31.31	31.31	

		Dong the	Ownership (%)		
Investees	Country	Reporting date	2021	2022	
SH Senior Loan Professional Investment Type					
Private Mixed Asset Investment Trust No.2 (	*1) Korea	September 30	21.27	21.27	
T&F 2019 bearing Private Equity Fund	1) 110100	September 20			
Specializing in Start-up and Venture Busines	s Korea	December 31	28.25	28.25	
Cape IT Fund No.3 (*7)	Korea	_	32.89		
FuturePlay-Shinhan TechInnovation Fund 1 (*6		December 31	50.00	50.00	
Stonebridge Corporate 1st Fund	Korea	December 31	44.12	44.12	
Vogo Realty Partners Private Real Estate Fund		December 31	21.64	21.64	
Korea Credit Bureau (*1),(*9)	Korea	September 30	9.00	9.00	
Goduck Gangil1 PFV Co., Ltd. (*1),(*9)	Korea	September 30	1.04	1.04	
SBC PFV Co., Ltd. (*1),(*10)	Korea	September 30	25.00	25.00	
NH-amundi global infra private fund 16	Korea	December 31	50.00	50.00	
IMM Global Private Equity Fund	Korea	December 31	33.00	33.00	
HANA Alternative Estate Professional	110100	2000000000	22100	0010	
Private122 (*7)	Korea		74.02		
SH Corporate Professional Investment Type	110104				
Private Security Investment Trust No.7 (*7)	Korea		45.96		
SH BNCT Professional Investment Type Private					
Special Asset Investment Trust (*11)	Korea	December 31	72.50	72.50	
Deutsche Global Professional Investment Type	110100	2000000000	/ = 10 0	/	
Private Real Estate Investment Trust No. 24 (	(*8) Korea	December 31	52.28	52.23	
Sparklabs-Shinhan Opportunity Fund 1	Korea	December 31	49.50	49.5	
BNW Tech-Innovation Private Equity Fund	Korea	December 31	29.85	29.8	
IGIS Real-estate Private Investment Trust No.3		December 31	40.86	40.8	
WWG Global Real Estate Investment Trust no.4		December 31	29.55	29.5	
Goduck Gangil10 PFV Co., Ltd. (*1),(*9)	Korea	September 30	19.90	19.90	
Fidelis Global Private Real Estate Trust No.2 (*		December 31	78.26	79.70	
AIP EURO PRIVATE REAL ESTATE TRUST	· · · · · · · · · · · · · · · · · · ·	December 51	70.20	12.10	
No. 12	Korea	December 31	28.70	28.70	
Shinhan Healthcare Fund 2(*9)	Korea	December 31	13.68	13.68	
Pebblestone CGV Private Real Estate Trust	Roica	Determoter 51	15.00	15.00	
No.1 (*7)	Korea		48.53		
SH Corporate Professional Investment Type	norea		10.00		
Private Security Investment Trust No.45 (*7)	Korea		43.65		
Shinhan AIM Real Estate Fund No.2 (*1)	Korea	September 30	30.00	30.00	
Shinhan AIM Real Estate Fund No.1 (*1)	Korea	September 30	21.01	21.0	
SH Daegu Green Power Cogeneration System	norea	September 50	21.01	21.0	
Professional Investment Type Private Special	1				
Asset Investment Trust	Korea	December 31	22.02	22.02	
SH Sangju YC Expressway Professional	Kuita	December 51	22.02	22.01	
Investment Type Private Special Asset					
Investment Trust (*1)	Korea	September 30	29.19	29.19	
SH Global Infrastructure Professional Investme		September 50	47.17	29.15	
Type Private Special Asset Investment Trust	111				
No.7-2 (*1),(*8)	Korea	September 30	71 42	71.43	
10.7-2(1),(10)	NUICa	September 50	71.43	/1.43	

		Reporting	Owners	Ownership (%)		
Investees	Country	date	2021	2022		
Korea Omega-Shinhan Project Fund I (*6)	Korea	December 31	50.00	50.00		
ST-Bonanja Food tech	Korea	December 31	38.83	38.83		
Samsung SRA Real Estate Professional Private 45	Korea	December 31	25.00	25.00		
IBK Global New Renewable Energy Special Asset						
Professional Private2	Korea	December 31	28.98	28.98		
VS Cornerstone Fund	Korea	December 31	41.18	41.18		
Aone Mezzanine Opportunity Professional						
Private (*8)	Korea	December 31	66.09	64.41		
NH-Amundi US Infrastructure Private Fund2	Korea	December 31	25.91	25.91		
KB Distribution Private Real Estate1 (*7)	Korea	—	62.00	—		
SH Japan Photovoltaic Private Special Asset						
Investment Trust No.2 (*1)	Korea	September 30	30.00	30.00		
Kakao-Shinhan 1st TNYT Fund	Korea	December 31	48.62	48.62		
IMM Special Situation 1-2 PRIVATE EQUITY						
FUND	Korea	December 31	20.00	20.00		
Pacific Private Placement Real Estate Fund No.40	Korea	December 31	24.73	24.73		
Mastern Private Real Estate Loan Fund No.2	Korea	December 31	33.57	33.57		
LB Scotland Amazon Fulfillment Center						
Fund 29(*8)	Korea	December 31	70.14	70.14		
JR AMC Hungary Budapest Office Fund 16	Korea	December 31	32.57	32.57		
EDNCENTRAL Co.,Ltd.(*9)	Korea	December 31	19.87	13.47		
Future-Creation Neoplux Venture Capital	17	0 1 20	16.05	16.00		
Fund (*1),(*5)	Korea	September 30	16.25	16.25		
Gyeonggi-Neoplux Superman Fund (*1),(*5)	Korea	September 30	21.76	21.76		
NewWave 6th Fund (*5)	Korea	December 31	30.00	30.00		
KTC-NP Growth Champ 2011-2 Private Equity	IZ	0	E	5.57		
Fund (*1),(*5)	Korea	September 30	5.56	5.56		
Neoplux No.3 Private Equity Fund (*1),(*5)	Korea	September 30 December 31	10.00	10.00		
PCC Amberstone Private Equity Fund I KIAMCO POWERLOAN TRUST 4TH	Korea	December 31 December 31	21.67	21.67		
Mastern Opportunity Seeking Real Estate Fund II	Korea Korea	December 31	47.37 20.00	47.37		
AION ELFIS PROFESSIONAL PRIVATE 1	Korea	December 31	20.00	20.00		
T&F 2020 SS Private Equity Fund Specializing in	Kolea	December 51	20.00	20.00		
Start-up and Venture Business	Korea	December 31	29.68	29.68		
Neoplux Market-Frontier Secondary Fund (*5)	Korea	December 31	29.08 19.74	19.74		
Harvest Private Equity Fund II	Korea	December 31	22.06	22.06		
Synergy Green New Deal 1st New Technology	ixolta	Deteniou 31	22.00	22.00		
Business Investment Fund	Korea	December 31	28.17	28.17		
KAIM Real-estate Private Investment Trust 20	Korea	December 31	38.46	38.46		
KIAMCO Vietnam Solar Special Asset Private	110100	December 51	50.40	50.40		
Investment Trust (*6)	Korea	December 31	50.00	50.00		
Daishin New Technology Investment Fund 5th	Korea	December 31	23.44	23.44		
CSQUARE SNIPER PROFESSIONAL	110100	December 51	23.77	20T-		

		Reporting	Ownership (%)		
Investees	Country	date	2021	2022	
Acurus Hyundai Investment Partners New					
Technology (*7)	Korea	_	26.79		
IGIS GLIP Professional Investment Private Real					
Estate Investment Trust No. 1-1 (*7)	Korea	_	97.10		
IGIS GLIP Professional Investment Private Real					
Estate Investment Trust No. 1-2 (*7)	Korea	_	97.10		
Pacific Sunny Professional Investors Private					
Placement Real Estate Investment Company					
No.45 (*7)	Korea	_	25.00		
SHINHAN-NEO Core Industrial Technology					
Fund (*5)	Korea	December 31	49.75	49.75	
SHBNPP Green New Deal Energy Professional					
Investment Type Private Special Asset					
Investment Trust No.2 (*1)	Korea	September 30	30.00	30.00	
SIMONE Mezzanine Fund No.3	Korea	December 31	29.38	28.9	
Eum Private Equity Fund No.7	Korea	December 31	21.00	21.00	
Kiwoom Private Equity Ant-Man Startup Venture					
Specialized Private Equity Fund (*7)	Korea	—	25.00		
Kiwoom Hero No.4 Private Equity Fund	Korea	December 31	21.05	21.0	
Vogo Canister Professional Trust Private Fund I	Korea	December 31	36.53	36.2	
SW-S Fund	Korea	December 31	30.30	30.3	
CL Buyout 1st PEF	Korea	December 31	21.43	21.4	
Timefolio The Venture-V second	Korea	December 31	20.73	20.7	
Newlake Growth Capital Partners2 PEF (*4)	Korea	November 30	29.91	29.9	
Shinhan Smilegate Global PEF I (*9)	Korea	December 31	14.21	14.2	
Fount Professional Investors Private Investment					
Trust No.3 (*7)	Korea	—	49.98	—	
Genesis Eco No.1 PEF	Korea	December 31	29.01	29.0	
SHINHAN-NEO Market-Frontier 2nd Fund (*5)	Korea	December 31	42.70	42.70	
NH-Synergy Core Industrial New Technology					
Fund	Korea	December 31	36.93	36.9	
J& Moorim Jade Investment Fund	Korea	December 31	24.89	24.8	
Helios-KDBC Digital Contents 1st	Korea	December 31	23.26	23.20	
Ulmus SHC innovation investment fund	Korea	December 31	24.04	24.04	
Mirae Asset Partners X Private Equity Fund	Korea	December 31	35.71	35.7	
T Core Industrial Technology 1st Venture PEF	Korea	December 31	31.47	31.4	
Curious Finale Corporate Recovery Private Equity					
Fund	Korea	December 31	27.78	27.78	
TI First Property Private Investment Trust 1	Korea	December 31	40.00	40.00	
MPLUS Professional Private Real Estate Fund 25	Korea	December 31	41.67	41.6	
IBKC Global Contents Investment Fund	Korea	December 31	24.39	24.39	
Nautic Smart No.6 Private Equity Fund	Korea	December 31	37.74	37.74	
Premier Luminous Private Equity Fund	Korea Korea	December 31 December 31	27.78 22.58	25.12 22.58	
Hanyang-Meritz 1 Fund					

		Reporting	Ownership (%)		
Investees	Country	date	2021	2022	
KNT 2ND PRIVATE EQUITY FUND	Korea	December 31	21.74	21.74	
Kiwoom-Shinhan Innovation Fund 2	Korea	December 31	42.86	42.86	
Maple Mobility Fund	Korea	December 31	20.18	20.18	
SJ ESG Innovative Growth Fund	Korea	December 31	28.57	28.57	
AVES 1st Corporate Recovery Private Equity					
Fund (*6)	Korea	December 31	76.19	76.19	
JS Shinhan Private Equity Fund (*5)	Korea	December 31	3.85	3.85	
NH Kyobo AI Solution Investment Fund	Korea	December 31	26.09	26.09	
Daishin Newgen New Technology Investment					
Fund 1 <sup>st</sup> (*8)	Korea	December 31	50.60	50.60	
META ESG Private Equity Fund I	Korea	December 31	27.40	27.40	
SWFV FUND-1	Korea	December 31	40.25	40.25	
PHAROS DK FUND	Korea	December 31	24.24	24.14	
Shinhan VC tomorrow venture fund 1 (*5)	Korea	December 31	39.62	39.62	
Highland 2021-8 Fund	Korea	December 31	32.67	32.67	
H-IOTA Fund	Korea	December 31	24.81	24.81	
Stonebridge-Shinhan Unicorn Secondary					
Fund (*5)	Korea	December 31	19.92	17.57	
Tres-Yujin Trust (*6)	Korea	December 31	50.00	50.00	
Shinhan-Time mezzanine blind Fund (*6)	Korea	December 31	50.00	50.00	
Capstone REITs No.26 (*6)	Korea	December 31	50.00	50.00	
JB Incheon-Bucheon REITS No.54	Korea	December 31	39.31	39.31	
Hankook Smart Real Asset Investment Trust No.3	Korea	December 31	33.33	33.33	
JB Hwaseong-Hadong REITs No.53	Korea	December 31	31.03	31.03	
KB Oaktree Trust No.3	Korea	December 31	33.33	33.33	
Daehan No.36 Office Asset Management					
Company	Korea	December 31	48.05	48.05	
Rhinos Premier Mezzanine Private Investment					
Fund No.1	Korea	December 31	27.93	27.93	
SH Real Estate Loan Investment Type Private Real					
Estate Investment Trust No.2	Korea	December 31	29.73	29.73	
Shinhan JigaeNamsan Road Private Special Asset					
Investment Trust (*1)	Korea	September 30	24.85	24.85	
SKS-Yozma Fund No.1	Korea	December 31	29.85	29.85	
IBKC-METIS Global Contents Investment Fund	Korea	December 31	36.36	36.36	
Keistone Unicorn Private Equity Fund	Korea	December 31	28.00	28.00	
KB Distribution Private Real Estate 3-1	Korea	December 31		37.50	
Pacific Private Investment Trust No.49-1 (*8)	Korea	December 31		79.28	
KIWOOM Real estate private placement fund for					
normal investors No. 31 (*8)	Korea	December 31		60.00	
RIFA Real estate private placement fund for					
normal investoes No. 51	Korea	December 31		40.00	
Fivetree general private equity fund No.15	Korea	December 31		49.98	
Shinhan-Kunicorn first Fund	Korea	December 31	_	38.31	

#### 15. Investments in associates (continued)

		Reporting	Ownership (%)		
Investees	Country	date	2021	2022	
Harvest Fund No.3	Korea	December 31		44.67	
Shinhan Simone Fund I	Korea	December 31		38.46	
Korea Investment develop seed Trust No.1	Korea	December 31		40.00	
Tiger Green alpah Trust No.29 (*6)	Korea	December 31		95.24	
STIC ALT Global II Private Equity Fund	Korea	December 31		21.74	
NH-Brain EV Fund	Korea	December 31		25.00	
DDI LVC Master Real Estate Investment Trust					
Co., Ltd. (*1),(*9)	Korea	September 30		15.00	
Find-Green New Deal 2nd Equity Fund	Korea	December 31		22.57	
ShinhanFitrin 1st Technology Business Investment					
Association (*5)	Korea	December 31	_	16.17	
PARATUS No.3 Private Equity Fund	Korea	December 31		25.64	
Golden Route 2nd Startup Venture Specialized					
Private Equity Fund	Korea	December 31		22.73	
Koramco Private Real Estate Fund 143	Korea	December 31		30.30	
Korea Investment Top Mezzanine Private Real					
Esate Trust No.1	Korea	December 31		22.22	
LB YoungNam Logistics Private Trust No.40	Korea	December 31		25.00	
Shinhan-Cognitive Start-up Fund L.P.	Korea	December 31		32.74	
IGEN2022 No.1 private Equity Fund	Korea	December 31		27.95	
Cornerstone J&M Fund I	Korea	December 31		26.67	
Logisvalley Shinhan REIT Co.,Ltd. (*1)	Korea	September 30		20.27	
KDB Investment Global Healthcare Private Equity	norea	September 50		20.27	
Fund I	Korea	December 31		24.14	
Korea Investment Green Newdeal Infra Trust No.1	Korea	December 31		27.97	
BTS 2nd Private Equity Fund (*1)	Korea	September 30		26.00	
Shinhan Global Active REIT Co.Ltd	Korea	December 31	_	20.00	
NH-J&-IBKC Label Technology Fund	Korea	December 31	_	27.81	
IMM Global Venture Opportunity, LP	Korea	December 31	_	35.50	
Capstone Develop Frontier Trust	Korea	December 31	_	21.43	
Nextrade Co., Ltd. (*9)	Korea	December 31		8.00	
SH Sustainable Management ESG Short term	Kulta	December 51		8.00	
Bond Security Feeder Investment Trust No.1	Korea	December 31		26.90	
SH 1.5 years Maturity Investment Type Security	Kulta	December 51		20.90	
Investment Trust No.2	Korea	December 31		29.00	
Eventus-IBKC LIB Fund	Korea	December 31		29.00	
	Korea	December 31	_	21.88	
NH-Daishin-Kyobo healthcare 1 Fund IBKC-Behigh Fund 1st	Korea	December 31	_	23.00	
Nautic Green Innovation ESG Co-investment No.1	Notea	December 51		29.13	
	Korea	December 21		24.10	
Private Equity Fund	Korea	December 31 December 31	_	24.10	
ON No.1 Private Equity Fund			—		
Digital New Deal Kappa Private Equity Fund	Korea	December 31		30.12	

(\*1) The financial statements of September 30, 2022 are used for the equity method since the financial statements as of December 31, 2022 are not available. Significant trades and events occurred within the period are properly reflected.

#### SHINHAN FINANCIAL GROUP CO., LTD. AND SUBSIDIARIES

Notes to the Consolidated Financial Statements (In millions of won)

- (\*2) The Group applies the equity method accounting as the Group has a significant influence on the investees through important business transactions.
- (\*3) In the course of the rehabilitation process, the shares were acquired through investment conversion. Although voting rights cannot be exercised during the rehabilitation process, normal voting rights are exercised because the rehabilitation process was completed before December 31, 2022. Also, it has been reclassified into the investments in associates.
- (\*4) The latest financial statements are used for the equity method since the financial statements as of December 31, 2022 are not available. Significant trades and events occurred within the period are properly reflected.
- (\*5) As a managing partner, the Group has a significant influence over the investees.
- (\*6) As a limited partner, the Group does not have an ability to participate in policy-making processes to obtain economic benefit from the investees that would allow the Group to control the entity.
- (\*7) Excluded from the investments in associates due to full or partial disposal of shares, or loss of significant influence.
- (\*8) Although the ownership percentages are more than 50%, the Group applies the equity method accounting as the Group does not have an ability to participate in the financial and operating policy-making process.
- (\*9) Although the ownership percentages are less than 20%, the Group applies the equity method accounting since it participates in policy-making processes and therefore can exercise significant influence on investees.
- (\*10) The rate of Group's voting rights is 4.65%.
- (\*11) Although the Group has a significant influence with ownership percentage more than 50%, the contribution was classified as investments in associates as the Group is not exposed to variable returns due to the payment guarantee for the entire investment amount.
- (\*12) For the year ended December 31, 2022, it is incorporated into the consolidation target as the Group held control due to increased equity ratio and BNP Paribas Cardif General Insurance, Ltd. has changed its name to Shinhan EZ General Insurance, Ltd.
- (b) Changes in investments in associates for the years ended December 31, 2021 and 2022 are as follows:

	2021						
Investees		ginning alance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance
BNP Paribas Cardif Life Insurance	₩	50,600		(660)	(5,918)	_	44,022
Songrim Partners(*1)		—	—	_			—
Partners 4th Growth Investment Fund		11,958	(16,144)	12,525	4,694	—	13,033
KTB Newlake Global Healthcare							
PEF		9,404	—	8			9,412
Daekwang Semiconductor Co., Ltd.		3,631	(3,742)	113	(2)	—	—
Shinhan-Neoplux Energy Newbiz							
Fund		14,470	475	1,087			16,032
Shinhan-Albatross tech investment							
Fund		13,322	(9,000)	6,067		—	10,389
VOGO Debt Strategy Qualified IV							
Private		8,702	(1,733)	210		—	7,179
Shinhan-Midas Donga Secondary							
Fund		4,752	(500)	(301)			3,951

	2021						
Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance	
ShinHan – Soo Young Entrepreneur		·					
Investment Fund No.1	₩ 9,968	(7,879)	2,137	_		4,226	
Shinhan Praxis K-Growth Global	W 9,900	(1,077)	2,157			7,220	
Private Equity Fund	9,945	(2,310)	126			7,761	
Credian Healthcare Private Equity	),)+3	(2,510)	120			7,701	
Fund II	5,835	(5,835)					
Kiwoom Milestone Professional	5,055	(5,055)					
Private Real Estate Trust 19	9,918	(66)	(361)		(4,238)	5,253	
AIP EURO Green Private Real	9,910	(00)	(301)		(4,238)	5,255	
Estate Trust No.3	21,021	(1,335)	10,017			29,703	
Shinhan Global Healthcare Fund	21,021	(1,555)	10,017			27,103	
1(*1)				_	_		
JB Power TL Investment Type					_		
Private Placement Special Asset							
Fund 7	16,186	(15,947)	(239)				
KB NA Hickory Private Special	10,180	(13,947)	(239)				
Asset Fund	34,938	(2,266)	1,704			34,376	
Koramco Europe Core Private	54,958	(2,200)	1,704			54,570	
Placement Real Estate Fund							
No.2-2	18,618	(1,204)	2,078			19,492	
BNP Paribas Cardif General	10,010	(1,204)	2,078			19,492	
Insurance	3,895	176	(708)	(9)		3,354	
	5,695	170	(708)	(9)		5,554	
Hermes Private Investment Equity Fund	6,099	(3,167)	6,850			9,782	
	0,099	(3,107)	0,850			9,762	
Shinhan-Nvestor Liquidity Solution Fund	4,493	331	514			5 220	
			475			5,338	
Shinhan AIM FoF Fund 1-A	8,760	(79)		_	_	9,156	
IGIS Global Credit Fund 150-1	7,282	(3,246)	1,366	_	_	5,402	
Partner One Value up I Private	11 770	(6.022)	2 045			7 001	
Equity Fund	11,779	(6,933)	3,045			7,891	
Genesis No.1 Private Equity Fund	80,113	388	(24,968)			55,533	
Korea Omega Project Fund III	3,563	_	727		_	4,290	
Soo Delivery Platform Growth Fund	4,068	—	1,805	—	—	5,873	
Genesis North America Power	16.000	(5.000)	1 000			10 704	
Company No.1 PEF	16,983	(5,229)	1,982	—	—	13,736	
Hyungje art printing(*2)	—	—	—		—	_	
SH MAIN Professional Investment							
Type Private Mixed Asset	10 503	04 500	6 4 6 7			41 5 40	
Investment Trust No.3	10,582	24,500	6,467		—	41,549	
Korea Finance Security	3,055	—	(61)		—	2,994	
Multimedia Tech Co.Ltd.(*2)	—	—				—	
MIEL CO.,LTD.(*1)		—	—	_			

investments in associates (continued	2021						
Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance	
AIP Transportation Specialized							
Privately Placed Fund Trust #1	₩ 32,993	347	1,348			34,688	
DB Epic Convertiblebond Private		017	1,010			2 .,000	
Trust No.2	5,785	(5,538)	(247)				
E&Healthcare Investment Fund No.6	15,163	(3,431)	(4,866)			6,866	
One Shinhan Global Fund 1	4,029	(519)	263			3,773	
Kiwoom-Shinhan Innovation Fund I	15,969	(5,150)	912			11,731	
Daishin-K&T New Technology	10,707	(5,150)	12			11,701	
Investment Fund	7,000		991			7,991	
Midas Asset Global CRE Debt	7,000		<i>))</i> ]			7,991	
Private Fund No.6	47,389	(2,701)	3,617			48,305	
Richmond Private Investment Trust	17,507	(2,701)	5,017			10,505	
No.82	15,049	(19,411)	4,362	_			
Tiger Alternative Real Estate	15,047	(1),+11)	4,502				
Professional Private5	18,499	(20,848)	2,349	_			
Samchully Midstream Private	10,477	(20,040)	2,547				
Placement Special Asset Fund 5-4	28,818	(843)	(504)	_		27,471	
SH Senior Loan Professional	20,010	(0+3)	(504)			27,771	
Investment Type Private Mixed							
Asset Investment Trust No.3	65,616	(41,622)	1,210			25,204	
NH-Amundi Global Infrastructure	05,010	(+1,022)	1,210			23,204	
Trust 14	18,819	(1,609)	1,091			18,301	
Jarvis Memorial Private Investment	10,019	(1,009)	1,091			10,501	
Trust 1	10,043	(700)	766			10,109	
Mastern Private Private Investment	10,045	(700)	700			10,109	
Trust 68	10,010	(10,332)	322				
Vestas Qualified Investors Private	10,010	(10,332)	522				
Real Estate Fund Investors Filvate							
No.37	35,641	(4,981)	2 402			22 152	
Milestone Private Real Estate Fund 3	18,528	× , , ,	2,493 488			33,153	
	18,328	(472)	488		_	18,544	
IGIS Private Real Estate Investment	0 0 1 1	(0, 176)	222				
Trust 286	8,844	(9,176)	332	_			
Nomura-Rifa Private Real Estate	0.407	(705)	200			7.000	
Investment Trust 31	8,407	(705)	200	—		7,902	
SH Senior Loan Professional							
Investment Type Private Mixed							
Asset Investment Trust No.2	13,323	(3,511)	424			10,236	
Hana Semiconductor New							
Technology Fund	24,131	(26,129)	1,998	—	—		
J&Magnet Startup Venture							
Specialized Private Equity Fund	5,935	(7,247)	1,312	—		—	
Cape IT Fund No.3	10,649	(580)	(4)		—	10,065	

2021						
Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance
FuturePlay-Shinhan TechInnovation						
Fund 1	₩ 4,295	3,025	(171)		_	7,149
Stonebridge Corporate 1st Fund	3,239		(275)		_	2,964
Vogo Realty Partners Private Real	-,					)
Estate Fund V	10,827	(681)	620	_	_	10,766
Korea Credit Bureau	6,976	(90)	809		_	7,695
Goduck Gangil1 PFV Co., Ltd.(*1)			_		_	
SBC PFV Co., Ltd.	18,208	12,499	(1, 121)		_	29,586
NH-amundi global infra private			,			
fund 16	43,839	346	7,823		_	52,008
IMM Global Private Equity Fund	120,855	(10,462)	8,222		_	118,615
HANA Alternative Estate						
Professional Private122	29,631	(1,001)	859	_	_	29,489
Hanwha-Incus Plus New Technology						
Fund No.1	11,026	(8,284)	(2,742)	—	—	
SH Corporate Professional						
Investment Type Private Security						
Investment Trust No.7	51,210	(1,518)	207	_	—	49,899
SH BNCT Professional Investment						
Type Private Special Asset						
Investment Trust	286,531	(15,191)	10,859	_	—	282,199
PSA EMP Private Equity Fund	9,814	(9,755)	(59)	_	—	—
Deutsche Global Professional						
Investment Type Private Real						
Estate Investment Trust No. 24	29,401	(2,630)	1,541	_	—	28,312
BRAIN DO PROFESSIONALE						
PRIVATE No. 27	3,441	(3,048)	583	_	_	976
UI Venture Fund 7th	3,279	(3,269)	(10)	—	—	—
Sparklabs-Shinhan Opportunity						
Fund 1	4,832	—	(192)	—	—	4,640
BNW Tech-Innovation Private						
Equity Fund	5,942	—	(61)	—	—	5,881
IGIS Real-estate Private Investment						
Trust No.33	14,099	(714)	499	—	—	13,884
Findvalue PreIPO 6th Professional						
Investment Type Private						
Investment Trust	3,002	(3,301)	299	—	—	—
WWG Global Real Estate Investment						
Trust no.4	17,752	(7,855)	747		—	10,644
Goduck Gangil10 PFV Co., Ltd(*1)	32	—	(32)		—	—
Fidelis Global Private Real Estate						
Trust No.2	19,485	(911)	1,199		—	19,773

	2021						
Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance	
IGIS PRIVATE REAL ESTATE							
TRUST NO.331	₩ 3,765	(3,765)			_		
AIP EURO PRIVATE REAL		(0,, 00)					
ESTATE TRUST No. 12	48,344	(5,436)	6,309		_	49,217	
Shinhan Healthcare Fund 2(*1)	986	(c, c)	(75)	_	(911)		
Pebblestone CGV Private Real Estate							
Trust No.1	13,346	(748)	1,112	_		13,710	
SH Corporate Professional	,	~ /	,			,	
Investment Type Private Security							
Investment Trust No.45		174,154	(199)			173,955	
Shinhan AIM Real Estate Fund No.2	22,464	1,911	(1,100)			23,275	
Shinhan AIM Real Estate Fund No.1	46,945	(4,412)	1,779	_		44,312	
SH Daegu Green Power Cogeneration System Professional Investment Type Private Special	,		,			,	
Asset Investment Trust	32,944	(911)	915	_		32,948	
SH Sangju YC Expressway Professional Investment Type Private Special Asset Investment		(//				,	
Trust	20,902	7	(359)			20,550	
SH Global Infrastructure	20,902	/	(557)			20,550	
Professional Investment Type Private Special Asset Investment Trust No.7-2	6,692	13,667	(1,504)	_	_	18,855	
SH Japan Photovoltaic Private Special Asset Investment Trust	,	,				,	
No.1	4,845	(4,845)					
Korea Omega-Shinhan Project							
Fund I	5,931	2,000	(687)	_		7,244	
ST-Bonanja Food tech	1,993	_	1,366		_	3,359	
New Green Shinhan Mezzanine Fund KORAMKO-Daum Professional	4,916	(5,622)	706		—		
Private Investment Trust No.12 Samsung SRA Real Estate	7,528	(7,756)	228		—		
Professional Private 45 IBK Global New Renewable Energy Special Asset Professional	10,666	2,656	(442)	—	_	12,880	
Private2	32,349	(1,988)	1,526	_		31,887	
VS Cornerstone Fund	3,464		(54)	_		3,410	
			``'			, -	
Aone Mezzanine Opportunity							

	2021						
Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance	
KiwoomUnicorn3 New Technology							
Business Investment Fund	₩ 4,283	(3,633)	(650)		_		
Multi Asset The United States							
Thortons Professional Private1	41,440	(41,607)	167		_		
Kiwoom Milestone US Real Estate							
Professional Private20	51,512	(51,512)					
NH-Amundi US Infrastructure							
Private Fund2	25,430	207	1,387			27,024	
KB Distribution Private Real Estate1	30,698	(1,423)	1,419			30,694	
SH Jigae Namsan BTO professional							
Investment Type Private Special							
Asset Investment Trust	20,712	(22,293)	1,581				
SH Japan Photovoltaic Private							
Special Asset Investment Trust							
No.2	29,149	(16,798)	665	—	—	13,016	
Kakao-Shinhan 1st TNYT Fund	5,681	9,000	(184)		—	14,497	
MM Special Situation 1-2							
PRIVATE EQUITY FUND	10,870	(160)	883	—	—	11,593	
Pacific Private Placement Real Estate							
Fund No.40	11,647	(747)	698		—	11,598	
Mastern Private Real Estate Loan							
Fund No.2	5,692	1,429	370			7,491	
LB Scotland Amazon Fulfillment							
Center Fund 29	31,182	(1,734)	1,820	—	—	31,268	
IR AMC Hungary Budapest Office							
Fund 16	12,204	(821)	757		—	12,140	
IGIS 372 Real Estate Professional							
Private	56,835	(56,835)		—			
EDNCENTRAL Co.,Ltd.(*1)	1,040		(1,040)	_			
KoFC-Neoplux R&D-Biz Creation							
2013-1 Venture Capital Fund	3,830	(8,388)	4,558	_			
Future-Creation Neoplux Venture							
Capital Fund	3,796	(995)	216	_		3,017	
Gyeonggi-Neoplux Superman Fund	6,399	(2,257)	3,736			7,878	
NewWave 6th Fund	6,150	7,575	730			14,455	
KTC-NP Growth Champ 2011-2							
Private Equity Fund	2,853	—	1,137		—	3,990	
Neoplux No.3 Private Equity Fund PCC Amberstone Private Equity	10,295	10,182	2,124	—	—	22,601	
Fund I	22,480	(2,356)	2,666		_	22,790	
KIAMCO POWERLOAN TRUST	22,700	(2,550)	2,000	—	-	22,790	
4TH	43,955	(164)	1,510			45,301	
T I I I	тэ,эээ	(104)	1,510			-5,501	

	2021						
Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance	
Mastern Opportunity Seeking Real							
Estate Fund II	₩19,799	(737)	2,255			21,317	
AION ELFIS PROFESSIONAL		()	_,			,	
PRIVATE 1	5,528	(1,350)	244			4,422	
T&F 2020 SS Private Equity Fund	,					,	
Specializing in Start-up and							
Venture Business	4,453		(93)	_		4,360	
Neoplux Market-Frontier Secondary							
Fund	11,545	(614)	382			11,313	
Harvest Private Equity Fund II	2,982	_	499		_	3,481	
Synergy Green New Deal 1st New							
Technology Business Investment							
Fund	10,008	(247)	(77)		—	9,684	
KAIM Real-estate Private							
Investment Trust 20	5,098	(350)	300			5,048	
KIAMCO Vietnam Solar Special							
Asset Private Investment Trust	7,948	(1,112)	691	—		7,527	
Daishin New Technology Investment							
Fund 5th	2,850	—	1,589	—	—	4,439	
CSQUARE SNIPER							
PROFESSIONAL PRIVATE 10	3,125		122			3,247	
Acurus Hyundai Investment Partners	2 0 2 7		1 202			4 7 1 4	
New Technology	2,927	—	1,787			4,714	
IGIS GLIP Professional Investment							
Private Real Estate Investment	44.504	4 102	11 271	2.076		(2.044	
Trust No. 1-1	44,594	4,103	11,371	3,876		63,944	
IGIS GLIP Professional Investment							
Private Real Estate Investment	14 504	4 102	11 271	2 076		63,944	
Trust No. 1-2 Pacific Suppy Professional Investors	44,594	4,103	11,371	3,876		05,944	
Pacific Sunny Professional Investors Private Placement Real Estate							
Investment Company No.45	15,855		(1,077)			14,778	
IGIS Professional Investors Private	13,033	_	(1,077)		_	14,//0	
Investment Real Estate Investment							
LLC No.395	29,644	(29,644)	_		_		
SHINHAN-NEO Core Industrial	29,044	(29,044)					
Technology Fund	1,979	3,960	(248)			5,691	
SHBNPP Green New Deal Energy	1,779	5,700	(270)		-	5,071	
Professional Investment Type							
Private Special Asset Investment							
Trust No.2	21,142	5,271	830			27,243	
		2,211	050			-,, <i>-</i> ,,	

	2021							
Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance		
Eum Private Equity Fund No.7	₩ 7,872	121	(120)			7,873		
Kiwoom Private Equity Ant-Man			()			.,		
Startup Venture Specialized Private Equity Fund	5,034		2,560			7,594		
Kiwoom Hero No.4 Private Equity	5,054		2,500			7,394		
Fund	4,707		(402)			4,305		
Vogo Canister Professional Trust	.,		()			.,= ==		
Private Fund I	43,975	(4,712)	1,809	_		41,072		
SW-S Fund		7,000	(276)	_	_	6,724		
CL Buyout 1st PEF		13,875	(84)		_	13,791		
Timefolio The Venture-V second		4,000	572			4,572		
Newlake Growth Capital Partners2								
PEF		13,000	(79)		_	12,921		
Shinhan Smilegate Global PEF I		3,376	(40)	_	_	3,336		
Fount Professional Investors Private								
Investment Trust No.3		5,000	197		_	5,197		
Genesis Eco No.1 PEF	—	11,292	(162)	—		11,130		
SHINHAN-NEO Market-Frontier								
2nd Fund(*3)		25,620	(1,014)	—	—	24,606		
NH-Synergy Core Industrial New								
Technology Fund		6,500	(63)	_		6,437		
& Moorim Jade Investment Fund		5,500	40	_	—	5,540		
Ulmus SHC innovation investment								
fund	—	5,000	192	—	—	5,192		
Mirae Asset Partners X Private		_						
Equity Fund		8,000	(142)		—	7,858		
Γ Core Industrial Technology 1st								
Venture PEF	—	4,500	35		—	4,535		
Curious Finale Corporate Recovery						<b>a</b> <i>i i i i</i>		
Private Equity Fund		3,377	313		_	3,690		
TI First Property Private Investment		0.070	176			2 0 5 5		
Trust 1	_	2,879	176		—	3,055		
MPLUS Professional Private Real		2 0 1 0	000			2 200		
Estate Fund 25		3,010	280		_	3,290		
IBKC Global Contents Investment		5 000				4.0.42		
Fund		5,000	(57)	—	—	4,943		
Nautic Smart No.6 Private Equity		1 000				2.07.4		
Fund		4,000	(26)		_	3,974		
Premier Luminous Private Equity		7.005	(104)			6 00 1		
Fund Hanyang-Meritz 1 Fund		7,095 3,500	(104) (17)			6,991		
						3,483		

#### 15. Investments in associates (continued)

			2	2021		
Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance
KNT 2ND PRIVATE EQUITY						
FUND	₩ —	3,000	1,157			4,157
Maple Mobility Fund	···	9,274	(591)			8,683
AVES 1st Corporate Recovery		,274	(371)			0,005
Private Equity Fund		4,800	(64)			4,736
JS Shinhan Private Equity Fund		4,800 5,076	(39)			5,037
Daishin Newgen New Technology		5,070	(39)	_		5,057
Investment Fund 1 <sup>st</sup>		8,000	4,169			12,169
		8,000 5,726	(49)			5,677
META ESG Private Equity Fund I			. ,		_	
SWFV FUND-1	_	9,700	(54)			9,646
PHAROS DK FUND		4,000	(51)			3,949
Shinhan VC tomorrow venture		0 1 1 2	(71)			0.040
fund 1	—	9,113	(71)			9,042
Highland 2021-8 Fund	—	4,900	(1)			4,899
Medicii 2021-3 Fund	—	9,752	(24)			9,728
Tres-Yujin Trust	—	10,000	(5)			9,995
Shinhan-Time mezzanine blind Fund	—	15,000	(58)			14,942
Capstone REITs No.26	—	4,849	(454)			4,395
JB Incheon-Bucheon REITS No.54	—	5,000	(1)	·		4,999
Hankook Smart Real Asset						
Investment Trust No.3	—	4,173	169	—		4,342
JB Hwaseong-Hadong REITs No.53	—	5,000	(1)			4,999
KB Oaktree Trust No.3	—	3,141	18	—		3,159
Daehan No.36 Office Asset						
Management Company		21,500				21,500
Rhinos Premier Mezzanine Private						
Investment Fund No.1	_	3,000	5			3,005
SH Real Estate Loan Investment						
Type Private Real Estate						
Investment Trust No.2		19,426	477			19,903
Shinhan JigaeNamsan Road Private		,				,
Special Asset Investment Trust		39,996	109			40,105
SKS-Yozma Fund No.1	_	6,000	(55)			5,945
IBKC-METIS Global Contents		0,000	(00)			0,710
Investment Fund		4,000				4,000
Keistone Unicorn Private Equity		1,000				1,000
Fund		6,300				6,300
Others	121,040		5,881	(3)	(5,570)	185,077
~						
	₩ 2,657,768	101,582	158,600	6,514	(10,719)	2,913,745

(\*1) The Group has stopped recognizing its equity method income or loss due to the carrying value of '0' resulting from the investees' cumulative loss.

#### 15. Investments in associates (continued)

(\*2) For the year ended December 31, 2021, the Group has stopped recognizing its equity method income or loss to accumulated deficits and the shares are retired for the year ended December 31, 2021. (\*3) Classified as investments in associates without cash transactions.

			2	2022		
Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance
BNP Paribas Cardif Life Insurance	₩ 44,022	_	(1,774)	(12,079)	_	30,169
Songrim Partners		_				_
Partners 4th Growth Investment Fund KTB Newlake Global Healthcare	13,033	(1,714)	6,917	(4,694)	—	13,542
PEF Shinhan-Neoplux Energy Newbiz	9,412	(5,832)	729		—	4,309
Fund Shinhan-Albatross tech investment	16,032	(391)	5,196	—	—	20,837
Fund Meritz AI-SingA330-A Investment	10,389	(1,800)	3,792	(128)	—	12,253
Type Private Placement Special Asset Fund Meritz AI-SingA330-B Investment	_	676	34	_	3,522	4,232
Type Private Placement Special Asset Fund	—	1,471		_	255	1,726
VOGO Debt Strategy Qualified IV Private	7,179	(1,433)	339	_	_	6,085
Shinhan -Midas Dong-A Secondary Fund	3,951	(1,025)	1,505	_		4,431
ShinHan – Soo Young Entrepreneur Investment Fund No.1	4,226	_	188	_	_	4,414
Shinhan Praxis K-Growth Global Private Equity Fund Kiwoom Milestone Professional	7,761	(8,512)	4,442			3,691
Private Real Estate Trust 19 AIP EURO Green Private Real Estate	5,253	—	(150)	—	(1,142)	3,961
Trust No.3 Shinhan Global Healthcare	29,703	(29,008)	(695)	—	—	
Fund 1 (*1)	—	_	_	—	_	_
KB NA Hickory Private Special Asset Fund	34,376	(1,545)	1,508		_	34,339
Koramco Europe Core Private Placement Real Estate Fund No.2-2 Shinhan EZ General Insurance,	19,492	(464)	208	_	_	19,236
Ltd. (*2)	3,354	(3,181)	(182)	9		—
Hermes Private Investment Equity Fund	9,782	—	(4,220)	—		5,562

Investments in associates (continueu)					2022		
Investees		inning lance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance
KDBC-Midas Dong-A Global							
contents Fund	₩	2,955		1,322			4,277
Shinhan-Nyestor Liquidity Solution		2,755		1,522			1,277
Fund		5,338	700	400			6,438
Shinhan AIM FoF Fund 1-A		9,156	51	903			10,110
IGIS Global Credit Fund 150-1		5,402	(1,267)	557			4,692
Partner One Value up I Private Equity		- , -	())				y
Fund		7,891		(2,747)			5,144
Genesis No.1 Private Equity Fund		55,533	408	3,983			59,924
Korea Omega Project Fund III		4,290		(616)			3,674
Soo Delivery Platform Growth Fund		5,873	(6,093)	220	_		
Genesis North America Power		,					
Company No.1 PEF		13,736	(12,629)	7,011	_		8,118
SHBNPP MAIN Professional			· · · ·				
Investment Type Private Mixed							
Asset Investment Trust No.3		41,549	12,056	(10,361)			43,244
MIEL CO.,LTD. (*1)					_		
AIP Transportation Specialized							
Privately Placed Fund Trust #1		34,688	5,527	4,606			44,821
E&Healthcare Investment Fund No.6		6,866	(3,190)	(3,079)			597
One Shinhan Global Fund 1		3,773		(1,183)		(642)	1,948
Kiwoom-Shinhan Innovation Fund I		11,731	(1,500)	(790)		_	9,441
Daishin-K&T New Technology							
Investment Fund		7,991	(7,430)	(561)			
Midas Asset Global CRE Debt							
Private Fund No.6		48,305	5,873	2,851			57,029
Samchully Midstream Private							
Placement Special Asset Fund 5-4		27,471	5,033	(1,880)			30,624
SHBNPP Senior Loan Professional							
Investment Type Private Mixed							
Asset Investment Trust No.3		25,204	(912)	200	_		24,492
NH-Amundi Global Infrastructure							
Trust 14		18,301	1,714	960	_		20,975
Jarvis Memorial Private Investment							
Trust 1		10,109	(700)	377	_		9,786
Vestas Qualified Investors Private							
Real Estate Fund Investment Trust							
No.37		33,153	(22)	226		_	33,357
Milestone Private Real Estate Fund 3			. /				
(Derivative Type)		18,544	(201)	728		_	19,071
RIFA Real estate private placement			```				*
fund for normal investors No. 31		7,902	(607)	69		_	7,364
		,	(/)				,

			2	2022		
Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance
SHBNPP Senior Loan Professional						
Investment Type Private Mixed						
Asset Investment Trust No.2	₩ 10,236	(5,292)	(1,975)			2,969
T&F 2019 bearing Private Equity						
Fund Specializing in Start-up and						
Venture Business	2,864		367		_	3,231
Cape IT Fund No.3	10,065	(10,580)	515		_	_
FuturePlay-Shinhan TechInnovation						
Fund 1	7,149	—	(233)	_	_	6,916
Stonebridge Corporate 1st Fund	2,964		658	—	_	3,622
Vogo Realty Partners Private Real						
Estate Fund V	10,766	(638)	787	—	_	10,915
Korea Credit Bureau	7,695	_	(2,656)	—	_	5,039
Goduck Gangil1 PFV Co., Ltd.			60	—	_	60
SBC PFV Co., Ltd.	29,586		(1,118)		—	28,468
NH-amundi global infra private						
fund 16	52,008	(15,362)	19,565		—	56,211
IMM Global Private Equity Fund	118,615	19,045	9,724		—	147,384
HANA Alternative Eastate						
Professional Private122	29,489	(28,570)	(918)		—	1
SHBNPP Corporate Professional						
Investment Type Private Security						
Investment Trust No.7	49,899	(50,540)	641		—	—
SHBNPP BNCT Professional						
Investment Type Private Special						
Asset Investment Trust	282,199	(24,838)	5,691		—	263,052
Deutsche Global Professional						
Investment Type Private Real						
Estate Investment Trust No. 24	28,312	(6,937)	1,308		—	22,683
Sparklabs-Shinhan Opportunity						
Fund 1	4,640	(826)	817		—	4,631
BNW Tech-Innovation Private Equity						
Fund	5,881	—	(48)		—	5,833
IGIS Real-estate Private Investment						
Trust No.33	13,884	(715)	1,383		—	14,552
WWG Global Real Estate Investment						
Trust no.4	10,644	(659)	346		—	10,331
Goduck Gangil10 PFV Co., Ltd.			3,236		—	3,236
Fidelis Global Private Real Estate						
Trust No.2	19,773	2,183	(11)	—	—	21,945
AIP EURO PRIVATE REAL						
ESTATE TRUST No. 12	49,217	(5,640)	4,850		—	48,427

Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance
Shinhan Global Healthcare						
Fund 2 (*1)	₩ —					
Pebblestone CGV Private Real Estate	**					
Trust No.1	13,710	(13,971)	261			
SH Corporate Professional	13,710	(13,771)	201			
Investment Type Private Security						
Investment Trust No.45	173,955	(173,955)				
Shinhan AIM Real Estate Fund No.2	23,275	3,346	(1,378)	_		25,243
Shinhan AIM Real Estate Fund No.2 Shinhan AIM Real Estate Fund No.1			,			
	44,312	(2,176)	2,506			44,642
SHBNPP Daegu Green Power						
Cogeneration System Professional						
Investment Type Private Special	22.049	(015)	50.4			22 (27
Asset Investment Trust	32,948	(915)	594			32,627
SHBNPP Sangju YC Expressway						
Professional Investment Type						
Private Special Asset Investment						
Trust	20,550	6	(1,260)	—		19,296
SHBNPP Global Infrastructure						
Professional Investment Type						
Private Special Asset Investment						
Trust No.7-2	18,855	5,114	629			24,598
Korea Omega-Shinhan Project Fund I	7,244	2,000	778			10,022
ST-Bonanja Food tech	3,359	(621)	(107)	—		2,631
Samsung SRA Real Estate						
Professional Private 45[FoFs]	12,880	5,279	3,491	—		21,650
IBK Global New Renewable Energy						
Special Asset Professional Private2	31,887	(2,516)	4,041	—		33,412
VS Cornerstone Fund	3,410		(75)	—	—	3,335
Aone Mezzanine Opportunity						
Professional Private	9,540	(5,084)	553		_	5,009
NH-Amundi US Infrastructure						
Private Fund2	27,024	2,446	2,471		_	31,941
KB Distribution Private Real Estate1	30,694	(30,694)				
SHBNPP Japan Photovoltaic Private	-					
Special Asset Investment Trust						
No.2	13,016	(7,291)	607			6,332
Kakao-Shinhan 1st TNYT Fund	14,497		6,833			21,330
IMM Special Situation 1-2 PRIVATE	, . , ,		2,500			,000
EQUITY FUND	11,593	(8,690)	(300)		_	2,603
Pacific Private Placement Real Estate	11,070	(0,070)	(500)			2,005
Fund No.40	11,598	(748)	772		_	11,622
Mastern Private Real Estate Loan	11,570	(740)	114			11,022
Fund No.2	7,491	(1,359)	255		_	6,387
1 unu 110.2	7,471	(1,559)	233			0,507

	2022								
Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance			
LB Scotland Amazon Fulfillment									
Center Fund 29	₩31,268	(2,189)	558			29,637			
JR AMC Hungary Budapest Office		(2,10))	220			27,007			
Fund 16	12,140	(821)	1,138			12,457			
EDNCENTRAL Co.,Ltd. (*1)		(0=1)							
Future-Creation Neoplux Venture									
Capital Fund	3,017	_	1,234			4,251			
Gyeonggi-Neoplux Superman Fund	7,878	(1,195)	(1,216)			5,467			
NewWave 6th Fund	14,455	(1,1)¢)	(915)			13,540			
KTC-NP Growth Champ 2011-2	11,100		()10)			10,010			
Private Equity Fund	3,990	(2,490)	(293)			1,207			
Neoplux No.3 Private Equity Fund	22,601	(2,190)	(2,145)			20,454			
PCC Amberstone Private Equity	,001	(-)	(_,1 !!!)			20,10			
Fund I	22,790	(2,509)	(1,496)			18,785			
KIAMCO POWERLOAN TRUST	,,,,,,	(_,00))	(1,1)0)			10,700			
4TH	45,301	(2,305)	528			43,524			
Mastern Opportunity Seeking Real	10,001	(2,505)	020			10,021			
Estate Fund II	21,317	(6,457)	(150)			14,710			
AION ELFIS PROFESSIONAL	21,917	(0,107)	(150)			11,710			
PRIVATE 1	4,422	232	(1,088)			3,566			
T&F 2020 SS Private Equity Fund	.,		(1,000)			2,200			
Specializing in Start-up and									
Venture Business	4,360	(1,732)	3,081			5,709			
Neoplux Market-Frontier Secondary	.,	(1,,,,,,,)	0,001			0,707			
Fund	11,313	(653)	3,300			13,960			
Harvest Private Equity Fund II	3,481	(159)	(183)			3,139			
Synergy Green New Deal 1st New	5,101	(10))	(105)			5,157			
Technology Business Investment									
Fund	9,684	(146)	1,094			10,632			
KAIM Real-estate Private Investment	2,001	(110)	1,071			10,052			
Trust 20	5,048	(4,176)	315			1,187			
KIAMCO Vietnam Solar Special	5,010	(1,170)	515			1,107			
Asset Private Investment Trust	7,527	(2,019)	1 2 1 9			6,727			
Daishin New Technology Investment	1,521	(2,01))	1,21)		-	0,727			
Fund 5th	4,439	(844)	(1,165)			2,430			
CSQUARE SNIPER	+,+39	(044)	(1,103)			2,430			
PROFESSIONAL PRIVATE 10	3,247	(3,806)	559						
Acurus Hyundai Investment Partners	3,247	(3,000)	559		_				
	1711	(3,070)	(725)						
New Technology	4,714	(3,979)	(735)		_	_			
IGIS GLIP Professional Investment									
Private Real Estate Investment	62 044	(60.270)		(2,665)					
Trust No. 1-1	63,944	(60,279)	_	(3,665)	_				

	2022								
Investees		ginning alance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance		
IGIS GLIP Professional Investment									
Private Real Estate Investment									
Trust No. 1-2	₩	63,944	(60,279)	_	(3,665)				
Pacific Sunny Professional Investors									
Private Placement Real Estate									
Investment Company No.45		14,778	(14,778)	—					
SHINHAN-NEO Core Industrial									
Technology Fund		5,691	3,960	(242)			9,409		
SHBNPP Green New Deal Energy									
Professional Investment Type									
Private Special Asset Investment									
Trust No.2		27,243	(2,559)	340	—		25,024		
SIMONE Mezzanine Fund No.3		3,054		(41)			3,017		
Eum Private Equity Fund No.7		7,873	(86)	1,383			9,170		
Kiwoom Private Equity Ant-Man									
Startup Venture Specialized									
Private Equity Fund		7,594	(4,870)	(2,724)		—			
Kiwoom Hero No.4 Private Equity									
Fund		4,305	—	(788)		—	3,517		
Vogo Canister Professional Trust									
Private Fund I		41,072	2,103	3,154	—		46,329		
SW-S Fund		6,724		524			7,248		
CL Buyout 1st PEF		13,791	273	(1,222)			12,842		
Timefolio The Venture-V second		4,572		(476)			4,096		
Newlake Growth Capital Partners2		10.001	(1.55)	(2.40)			10 10 6		
PEF		12,921	(177)	(248)		—	12,496		
Shinhan Smilegate Global PEF I		3,336	(1,828)	2,263		—	3,771		
Fount Professional Investors Private		5 105	(5.105)						
Investment Trust No.3		5,197	(5,197)				11 410		
Genesis Eco No.1 PEF		11,130	195	93			11,418		
SHINHAN-NEO Market-Frontier		24 (0)	0 5 40	1 074			24 420		
2nd Fund		24,606	8,540	1,274	_		34,420		
NH-Synergy Core Industrial New		6 127		((0))			6 277		
Technology Fund		6,437	(205)	(60)		_	6,377		
J& Moorim Jade Investment Fund		5,540	(385)	279			5,434		
Helios-KDBC Digital Contents 1st Ulmus SHC innovation investment		1,695	1,720	(59)			3,356		
fund		5 102		(206)			1 006		
		5,192		(306)			4,886		
Mirae Asset Partners X Private		7 050		(66)			7 702		
Equity Fund		7,858	_	(66)		_	7,792		
T Core Industrial Technology 1st Venture PEF		4,535		(6)		_	4,529		
venture i Li		т,555		(0)			т,529		

•	investments in associates (continued	2022							
	Investees		ginning alance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance	
	Curious Finale Corporate Recovery								
	Private Equity Fund	₩	3,690	(245)	146			3,591	
	TI First Property Private Investment								
	Trust 1		3,055	(101)	173	_		3,127	
	MPLUS Professional Private Real								
	Estate Fund 25		3,290	655	286			4,231	
	IBKC Global Contents Investment								
	Fund		4,943	_	(391)			4,552	
	Nautic Smart No.6 Private Equity								
	Fund		3,974	(3,752)	956		—	1,178	
	Premier Luminous Private Equity								
	Fund		6,991	(2,314)	4,289			8,966	
	Hanyang-Meritz 1 Fund		3,483	—	(17)	—		3,466	
	KNT 2ND PRIVATE EQUITY								
	FUND		4,157	(3,000)	(207)			950	
	Kiwoom-Shinhan Innovation Fund 2		2,677	9,000	(406)			11,271	
	Maple Mobility Fund		8,683	91	8,085	—		16,859	
	SJ ESG Innovative Growth Fund		2,998	—	1,199	—		4,197	
	AVES 1st Corporate Recovery								
	Private Equity Fund		4,736	—	321	_	_	5,057	
	JS Shinhan Private Equity Fund		5,037	—	(84)		—	4,953	
	NH Kyobo AI Solution Investment								
	Fund		2,973	—	315	—	—	3,288	
	Daishin Newgen New Technology								
	Investment Fund 1st		12,169	(2,277)	(4,188)		—	5,704	
	META ESG Private Equity Fund I		5,677	—	180	—		5,857	
	SWFV FUND-1		9,646	—	(518)			9,128	
	PHAROS DK FUND		3,949		(114)		_	3,835	
	Shinhan VC tomorrow venture fund 1		9,042	18,226	(342)			26,926	
	Highland 2021-8 Fund		4,899		(73)			4,826	
	H-IOTA Fund		9,728	(88)	(17)			9,623	
	Stonebridge-Shinhan Unicorn		0.074	4.1.00	(1.50)			6.000	
	Secondary Fund		2,074	4,160	(152)			6,082	
	Tres-Yujin Trust		9,995	(546)	555			10,004	
	Shinhan-Time mezzanine blind Fund		14,942	(200)	(1,630)			13,312	
	Capstone REITs No.26		4,395	(300)	(243)			3,852	
	JB Incheon-Bucheon REITS No.54		4,999	—	(10)		—	4,989	
	Hankook Smart Real Asset		4 2 4 2	0 105	1.5.5			6.000	
	Investment Trust No.3		4,342	2,195	456		—	6,993	
	JB Hwaseong-Hadong REITs No.53		4,999		(8)		—	4,991	
	KB Oaktree Trust No.3		3,159	5,376	70		—	8,605	
	Daehan No.36 Office Asset		01 500	(()=)	1 102			22.050	
	Management Company		21,500	(635)	1,193		_	22,058	

	2022							
Investees		eginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance	
Rhinos Premier Mezzanine Private								
Investment Fund No.1	₩	3,005	_	(132)		—	2,873	
SH Real Estate Loan Investment								
Type Private Real Estate								
Investment Trust No.2		19,903	35,762	1,669	—	—	57,334	
Shinhan JigaeNamsan Road Private								
Special Asset Investment Trust		40,105	(795)	1,261		_	40,571	
SKS-Yozma Fund No.1		5,945	—	654	—	—	6,599	
IBKC-METIS Global Contents		4 000		550			4.550	
Investment Fund		4,000		550	_	_	4,550	
Keistone Unicorn Private Equity Fund		6,300		(51)			6,249	
KB Distribution Private Real		0,500		(51)			0,249	
Estate 3-1			24,000	2,651			26,651	
Pacific Private Investment Trust			24,000	2,031			20,031	
No.49-1			28,000	641			28,641	
KIWOOM Real estate private			20,000	011			20,011	
placement fund for normal								
investors No. 31			8,474	84	_		8,558	
RIFA Real estate private placement			,				,	
fund for normal investoes No. 51			5,650	76			5,726	
Fivetree general private equity fund								
No.15			11,995	286			12,281	
Shinhan-Kunicorn first Fund			10,000	(169)		—	9,831	
Harvest Fund No.3			13,000	2,854		—	15,854	
Shinhan Simone Fund I			5,000	(204)	—	—	4,796	
Korea Investment develop seed Trust								
No.1			9,562	680		_	10,242	
Tiger Green alpah Trust No.29			26,180	626		_	26,806	
STIC ALT Global II Private Equity								
Fund			10,000	(141)		—	9,859	
NH-Brain EV Fund			13,000	(1,408)	—	—	11,592	
DDI LVC Master Real Estate			( ( ) =	(220)			< 10 F	
Investment Trust Co., Ltd.			6,625	(220)	—	—	6,405	
Find-Green New Deal 2nd Equity			4 5 40	(41)			4 500	
Fund			4,549	(41)		—	4,508	
ShinhanFitrin 1st Technology			4.950	(412)			4 427	
Business Investment Association			4,850	(413)		_	4,437	
PARATUS No.3 Private Equity Fund			5,000	(64)	—	_	4,936	
Golden Route 2nd Startup Venture			2 000	2			2 002	
Specialized Private Equity Fund Koramco Private Real Estate		_	3,000	3	_	_	3,003	
Fund 143			3,030				3,030	
1 ullu 143		_	5,050		_	_	3,030	

#### 15. Investments in associates (continued)

	2022					
Investees	Beginning balance	Investment and dividend	Equity method income (loss)	Change in other comprehensive income	Impairment loss	Ending balance
Korea Investment Top Mezzanine						
Private Real Esate Trust No.1 LB YoungNam Logistics Private	₩ —	8,884	1,001	_	—	9,885
Trust No.40		9,706	42			9,748
Shinhan-Cognitive Start-up Fund L.P.		9,200	753			9,953
IGEN2022 No.1 private Equity Fund		8,280	765			9,045
Cornerstone J&M Fund I		3,600	(39)			3,561
Logisvalley Shinhan REIT Co.,Ltd.		3,880	(60)		_	3,804
KDB Investment Global Healthcare Private Equity Fund I	_	35,000	(532)		_	34,468
Korea Investment Green Newdeal						
Infra Trust No.1		5,734	(20)			5,714
BTS 2nd Private Equity Fund		3,934	(162)			3,772
Shinhan Global Active REIT Co.Ltd. NH-J&-IBKC Label Technology		19,900	(678)	·	—	19,222
Fund		9,976	(110)			9,866
IMM Global Venture Opportunity,						
LP		3,115	_			3,115
Capstone Develop Frontier Trust		6,857		_		6,857
Nextrade Co., Ltd.		9,700		_		9,700
SH Sustainable Management ESG Short term Bond Security Feeder						
Investment Trust No.1 SH 1.5years Maturity Investment Type Security Investment Trust		3,000	11	_		3,011
No.2		4,600	1	_		4,601
Eventus-IBKC LIB Fund		7,000	(965)			6,035
NH-Daishin-Kyobo healthcare 1		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(200)			0,000
Fund		4,000	(52)			3,948
IBKC-Behigh Fund 1st		3,300	(32)			3,268
Nautic Green Innovation ESG Co-investment No.1 Private Equity		- ,	(			-,
Fund		4,000	(44)			3,956
ON No.1 Private Equity Fund		6,000	(638)			5,362
Digital New Deal Kappa Private		,	~ /			,
Equity Fund		5,000	(54)		_	4,946
Others	170,811	50,920	12,089		(3,598)	230,222
	₩2,913,745	(105, 125)		(24,238)	(1,605)	2,904,474
	w 2,913,743	(103,123)	121,097	(24,230)	(1,005)	2,704,474

(\*1) The Group has stopped recognizing its equity method income or loss due to the carrying value of '0' resulting from the investees' cumulative loss.

(\*2) For the year ended December 31, 2022, it is incorporated into the consolidation target as the Group held control due to increased equity ratio and BNP Paribas Cardif General Insurance, Ltd. has changed its name to Shinhan EZ General Insurance, Ltd.

### 15. Investments in associates (continued)

(c) The statement of financial information as of and for the years ended December 31, 2021 and 2022 are as follows:

	2021					
Investees	Asset	Liability	Operating revenue	Net profit (loss)	Other comprehen- sive income (loss)	Total comprehen- sive income (loss)
BNP Paribas Cardif Life Insurance	₩ 3,268,153	2,974,519	48,207	(4,499)	(39,454)	(43,953)
Songrim Partners	1,003	1,065		_	_	
Partners 4th Growth Investment						
Fund	60,073	7,939	52,019	50,100	18,774	68,874
KTB Newlake Global Healthcare						
PEF	30,969	161	552	27	—	27
Shinhan-Neoplux Energy Newbiz						
Fund	66,213	1,002	20,575	18,016	—	18,016
Shinhan-Albatross tech investment	20 (77		10.050	10.010		10.010
Fund	20,677	464	12,058	10,912	—	10,912
VOGO Debt Strategy Qualified IV	25.010	22	5 202	1 1 2 0		1 1 2 0
Private Shinhan Midas Danga Sacandamy	35,919	23	5,393	1,138	_	1,138
Shinhan-Midas Donga Secondary Fund	7,902		72	(602)		(602)
ShinHan – Soo Young Entrepreneur			12	(002)		(002)
Investment Fund No.1	17,960	352	27,318	8,906		8,906
Shinhan Praxis K-Growth Global	17,900	552	27,510	0,700		0,700
Private Equity Fund	41,193	60	1,217	669		669
Kiwoom Milestone Professional			_,,			
Private Real Estate Trust 19	49,101	38,596	2,505	(9,199)	_	(9,199)
AIP EURO Green Private Real						
Estate Trust No.3	219,110	79,534	52,789	47,070		47,070
Shinhan Global Healthcare Fund 1	43	3,507	_	(1,414)		(1,414)
KB NA Hickory Private Special						
Asset Fund	91,752	84	15,540	4,502	—	4,502
Koramco Europe Core Private						
Placement Real Estate Fund						
No.2-2	46,169	1,894	7,743	4,719	—	4,719
BNP Paribas Cardif General			<	(f 0 )	(8.0)	(6.0.0.0)
Insurance	140,179	78,748	61,951	(6,872)	(28)	(6,900)
Hermes Private Investment Equity	22 545	0	00 506	02 496		22.407
Fund	33,545	8	23,536	23,486		23,486
Shinhan-Nvestor Liquidity Solution	21.420		2 1 6 0	2.064		2.064
Fund Shinhan ADA EaE Fund 1 A	21,420		2,169	2,064		2,064
Shinhan AIM FoF Fund 1-A IGIS Global Credit Fund 150-1	36,651	28 16	4,527	(1,466) 1,763		(1,466)
Partner One Value up I Private	21,625	10	3,138	1,703	_	1,763
Equity Fund	28,273		304	10,910		10,910
Genesis No.1 Private Equity Fund	243,534			(109,494)	_	(109,494)
Concoro i tori i invato Equity i unu	275,55 <b>7</b>	-		(107,777)		(107,777)

investments in associates (continu		2021								
Investees		Asset	Liability	Operating revenue	Net profit (loss)	Other comprehen- sive income (loss)	Total comprehen- sive income (loss)			
Korea Omega Project Fund III	₩	18,234		3,154	3,093		3,093			
Soo Delivery Platform Growth										
Fund		19,578	_	6,243	6,018		6,018			
Genesis North America Power										
Company No.1 PEF		34,626	316	11,654	4,951		4,951			
SH MAIN Professional Investment										
Type Private Mixed Asset										
Investment Trust No.3		178,427	358		27,719	—	27,719			
Korea Finance Security		35,044	14,966		(412)	—	(412)			
MIEL CO.,LTD.		491	632	36	(56)	—	(56)			
AIP Transportation Specialized										
Privately Placed Fund Trust #1		104,512	7,415	16,239	3,773		3,773			
E&Healthcare Investment Fund		22 (15		17 100	(22.11()		(22,11.0)			
No.6		32,615		17,133	(23,116)	—	(23,116)			
One Shinhan Global Fund 1		15,799	41	8,276	(1,280)	—	(1,280)			
Kiwoom-Shinhan Innovation		22 (12	151	4 002	1 0 0 0		1 0 2 2			
Fund I		23,613	151	4,803	1,823	_	1,823			
Daishin-K&T New Technology Investment Fund		25 627	((	0 (20	2 171		2 171			
Midas Asset Global CRE Debt		25,637	66	8,639	3,171		3,171			
Private Fund No.6		117,396	49	2,817	1,451		1,451			
Samchully Midstream Private		117,390	49	2,017	1,431		1,451			
Placement Special Asset										
Fund 5-4		65,966	35	11,141	(4,113)		(4,113)			
SH Senior Loan Professional		05,700	55	11,141	(4,115)		(4,115)			
Investment Type Private Mixed										
Asset Investment Trust No.3		126,043	23	6,544	6,048		6,048			
NH-Amundi Global Infrastructure		120,010	20	0,011	0,010		0,010			
Trust 14		61,005	1	4,134	4		4			
Jarvis Memorial Private Investment	t	01,000		.,	•					
Trust 1	-	10,214	4	39	35		35			
Vestas Qualified Investors Private		- )								
Real Estate Fund Investment										
Trust No.37		55,273	19	6,500	23	_	23			
Milestone Private Real Estate										
Fund 3		57,956	114	1,880	1,522		1,522			
Nomura-Rifa Private Real Estate		·								
Investment Trust 31		97,211	72,103	7,364	639		639			
SH Senior Loan Professional										
Investment Type Private Mixed										
Asset Investment Trust No.2		48,157	33	2,106	1,991		1,991			
Cape IT Fund No.3		30,651	52	2,100	(11)		(11)			

investments in associates (continueu	2021						
Investees	Asset	Liability	Operating revenue	Net profit (loss)	Other comprehen- sive income (loss)	Total comprehen- sive income (loss)	
FuturePlay-Shinhan TechInnovation				(	(,	( ) )	
Fund 1	₩ 14,297		3	(342)		(342)	
Stonebridge Corporate 1st Fund	6,718		1	(622)		(622)	
Vogo Realty Partners Private Real	0,710	_	1	(022)	_	(022)	
Estate Fund V	49,842	82	2,110	(2,066)		(2,066)	
Korea Credit Bureau	129,478	43,981	121,982	8,988		8,988	
Goduck Gangil1 PFV Co., Ltd	301,513	317,276		(1,835)		(1,835)	
SBC PFV Co., Ltd.	334,262	175,976		(4,462)		(4,462)	
NH-amundi global infra private	551,202	175,770		(1,102)		(1,102)	
fund 16	297,837	193,821	25,560	14,770		14,770	
IMM Global Private Equity Fund	362,514	3,099	50,060	24,933		24,933	
HANA Alternative Estate		-,	2 0,0 0 0	_ ,,,		,> = e	
Professional Private122	39,878	38	2,608	1,160		1,160	
SH Corporate Professional	,		,	,		,	
Investment Type Private Security							
Investment Trust No.7	268,037	167,939	3,231	415		415	
SH BNCT Professional Investment	*	*	,				
Type Private Special Asset							
Investment Trust	389,240		14,978	14,978		14,978	
Deutsche Global Professional							
Investment Type Private Real							
Estate Investment Trust No. 24	54,914	756	23,920	2,948		2,948	
BRAIN DO PROFESSIONALE							
PRIVATE No. 27	3,351	—	2,002	2,002		2,002	
Sparklabs-Shinhan Opportunity							
Fund 1	9,372		—	(388)		(388)	
BNW Tech-Innovation Private Equity							
Fund	20,215	513	95	(204)		(204)	
IGIS Real-estate Private Investment							
Trust No.33	87,790	53,808	1,123	440		440	
WWG Global Real Estate Investment							
Trust no.4	36,030	11	2,538	293		293	
Goduck Gangil10 PFV Co., Ltd	253,607	261,969	—	(8,526)		(8,526)	
Fidelis Global Private Real Estate							
Trust No.2	25,271	6	1,575	1,532	—	1,532	
AIP EURO PRIVATE REAL							
ESTATE TRUST No. 12	172,398	909		21,983	—	21,983	
Shinhan Healthcare Fund 2	35	138	340	(7,310)		(7,310)	
Pebblestone CGV Private Real Estate							
Trust No.1	64,667	36,415	7,147	2,350	—	2,350	
Shinhan AIM Real Estate Fund No.2	79,162	1,580		(3,666)	—	(3,666)	
Shinhan AIM Real Estate Fund No.1	226,809	15,901	20,209	8,467		8,467	

	2021					
Investees	Asset	Liability	Operating revenue	Net profit (loss)	Other comprehen- sive income (loss)	Total comprehen- sive income (loss)
SH Daegu Green Power Cogeneration System Professional Investment Type Private Special Asset						
Investment Trust SH Sangju YC Expressway Professional Investment Type Private Special Asset Investment	₩149,702	75	4,451	4,152	—	4,152
Trust SH Global Infrastructure Professional Investment Type Private Special	70,637	236		(1,231)	—	(1,231)
Asset Investment Trust No.7-2	26,429	33	2,310	(2,105)		(2,105)
Korea Omega-Shinhan Project Fund I	14,488			(1,373)		(1,373)
ST-Bonanja Food tech Samsung SRA Real Estate	8,650		3,666	3,519	—	3,519
Professional Private 45 IBK Global New Renewable Energy	56,083	4,564	3,833	(1,769)	—	(1,769)
Special Asset Professional Private2	114,645	4,633	5,520	5,265		5,265
VS Cornerstone Fund Aone Mezzanine Opportunity	8,281		2	(132)	—	(132)
Professional Private NH-Amundi US Infrastructure Private	15,247	800	1,409	(18)	_	(18)
Fund2	104,374	61	6,769	5,351	—	5,351
KB Distribution Private Real Estate1 SH Japan Photovoltaic Private Special	50,014	508	2,335	2,289	—	2,289
Asset Investment Trust No.2	43,540	155	7,216	2,216		2,216
Kakao-Shinhan 1st TNYT Fund IMM Special Situation 1-2 PRIVATE	29,948	133	8	(379)	_	(379)
EQUITY FUND Pacific Private Placement Real Estate	57,965	3	4,610	4,418		4,418
Fund No.40 Mastern Private Real Estate Loan	46,898		398	398		398
Fund No.2 LB Scotland Amazon Fulfillment	22,453	139	549	410	—	410
Center Fund 29 JR AMC Hungary Budapest Office	44,614	37	5,177	3,345	—	3,345
Fund 16	38,545	1,271	—			
EDNCENTRAL Co.,Ltd. Future-Creation Neoplux Venture	94,405	96,892	1,381	(5,093)	_	(5,093)
Capital Fund	22,488	3,919	10,294	1,332		1,332
Gyeonggi-Neoplux Superman Fund	36,815	620	21,349	17,163		17,163
NewWave 6th Fund	48,185	—	4,009	2,434	—	2,434

investments in associates (continued	<u>/</u>			2021		
Investees	Asset	Liability	Operating revenue	Net profit (loss)	Other comprehen- sive income (loss)	Total comprehen- sive income (loss)
KTC-NP Growth Champ 2011-2						
Private Equity Fund	₩ 80,853	9,024	20,479	20,472		20,472
Neoplux No.3 Private Equity Fund	226,970	962	38,467	21,233		21,233
PCC Amberstone Private Equity	220,970	702	50,107	21,233		21,235
Fund I	105,169		12,174	12,302		12,302
KIAMCO POWERLOAN TRUST	100,109			12,002		12,002
4TH	95,658	24	3,282	3,188		3,188
Mastern Opportunity Seeking Real	,		- , -	-,		-,
Estate Fund II	111,276	4,692	11,332	11,274		11,274
AION ELFIS PROFESSIONAL	,	*	*	,		,
PRIVATE 1	22,143	31	4,212	1,219		1,219
T&F 2020 SS Private Equity Fund						
Specializing in Start-up and						
Venture Business	15,062	374		(312)		(312)
Neoplux Market-Frontier Secondary						
Fund	58,273	954	7,913	1,932		1,932
Harvest Private Equity Fund II	15,877	97	2,496	2,262		2,262
Synergy Green New Deal 1st New						
Technology Business Investment						
Fund	34,379	—	977	(272)		(272)
KAIM Real-estate Private Investment						
Trust 20	13,125		125	125		125
KIAMCO Vietnam Solar Special						
Asset Private Investment Trust	15,065	12	—		—	—
Daishin New Technology Investment						
Fund 5th	18,970	30	6,903	6,778		6,778
CSQUARE SNIPER						
PROFESSIONAL PRIVATE 10	5,269	75	425	195		195
Acurus Hyundai Investment Partners			6.004	< < <b>-</b> 0		< < <b>-</b> 0
New Technology	17,642	42	6,881	6,679		6,679
IGIS GLIP Professional Investment						
Private Real Estate Investment	(0 <b>7</b> 40	50		( ()7	0.000	0.07(
Trust No. 1-1	60,740	59	6,767	6,637	2,339	8,976
IGIS GLIP Professional Investment						
Private Real Estate Investment	(0.740	50		( ()7	0.000	0.076
Trust No. 1-2	60,740	59	6,767	6,637	2,339	8,976
Pacific Sunny Professional Investors						
Private Placement Real Estate	124 667	04 292	6	(0,000)		(8,000)
Investment Company No.45 SHINHAN-NEO Core Industrial	134,667	94,282	6	(8,090)		(8,090)
	11 420		5	(400)		(400)
Technology Fund	11,439		5	(499)		(499)

	2021					
Investees	Asset	Liability	Operating revenue	Net profit (loss)	Other comprehen- sive income (loss)	Total comprehen- sive income (loss)
SHBNPP Green New Deal Energy						
Professional Investment Type						
Private Special Asset Investment						
Trust No.2	₩ 90,848	38	3,650	2,767		2,767
SIMONE Mezzanine Fund No.3	10,404	9	345	253		253
Eum Private Equity Fund No.7	37,495			(573)		(573)
Kiwoom Private Equity Ant-Man						
Startup Venture Specialized Private						
Equity Fund	30,434	59	10,475	10,241		10,241
Kiwoom Hero No.4 Private Equity						
Fund	20,478	29	1	(1,908)		(1,908)
Vogo Canister Professional Trust	,					
Private Fund I	112,505	72	16,029	4,949		4,949
SW-S Fund	22,191			(909)		(909)
CL Buyout 1st PEF	64,518	159	1	(390)		(390)
Timefolio The Venture-V second	22,829	769	3,361	2,941		2,941
Newlake Growth Capital Partners2	,		- )	<i>y</i> -		7-
PEF	43,187		290	(263)		(263)
Shinhan Smilegate Global PEF I	23,469			(281)		(281)
Fount Professional Investors Private	-,					
Investment Trust No.3	10,416	17	411	394		394
Genesis Eco No.1 PEF	38,369	4	308	(377)		(377)
SHINHAN-NEO Market-Frontier 2nd	,,			(2)		(2)
Fund	58,138	513	1,466	(2,375)		(2,375)
NH-Synergy Core Industrial New			-,	(_,_ ,_ , _ , _ ,		(_,_ ,_ , _ , _ ,
Technology Fund	17,430			(170)		(170)
J& Moorim Jade Investment Fund	22,265	6	356	160		160
Ulmus SHC innovation investment	,_ • • •					
fund	21,601		956	801		801
Mirae Asset Partners X Private Equity	_1,001		200	001		001
Fund	22,035	33	1	(398)		(398)
T Core Industrial Technology 1st	,000		-	(0)0)		(0)0)
Venture PEF	14,418	5	197	113		113
Curious Finale Corporate Recovery	1,110	5	177	110		110
Private Equity Fund	13,346	61	1,275	1,126		1,126
TI First Property Private Investment	15,510	01	1,275	1,120		1,120
Trust 1	7,654	17	156	139		139
MPLUS Professional Private Real	7,00-	1/	150	157		137
Estate Fund 25	8,186	290	451	396		396
IBKC Global Contents Investment	0,100	270	1.71	570		570
Fund	20,265			(235)		(235)
i unu	20,205			(233)		(233)

#### 15. Investments in associates (continued)

	2021						
Investees	Asset	Liability	Operating revenue	Net profit (loss)	Other comprehen- sive income (loss)	Total comprehen- sive income (loss)	
Nautic Smart No.6 Private Equity							
Fund	₩ 10,565	32	50	(68)		(68)	
Premier Luminous Private Equity	10,505	52	50	(00)		(00)	
Fund	25,170	3	_	(375)		(375)	
Hanyang-Meritz 1 Fund KNT 2ND PRIVATE EQUITY	15,423	_		(77)	—	(77)	
FUND	19,133	9	5,402	5,324		5,324	
Maple Mobility Fund	43,024	1	5,402	(2,930)	_	(2,930)	
AVES 1st Corporate Recovery Private	45,024	1		(2,950)	_	(2,950)	
Equity Fund	6,215			(85)		(85)	
JS Shinhan Private Equity Fund	130,967	1		(1,036)	_	(1,036)	
Daishin Newgen New Technology	150,907	1	1	(1,050)		(1,050)	
Investment Fund 1 <sup>st</sup>	24,050	2	1	8,238		8,238	
META ESG Private Equity Fund I	21,722		1	(178)		(178)	
SWFV FUND-1	24,055	90		(176)		(176)	
PHAROS DK FUND	16,349	60	_	(133)	_	(133)	
Shinhan VC tomorrow venture fund 1	22,603		23	(397)	_	(397)	
Highland 2021-8 Fund	15,000	2		(2)		(2)	
Medicii 2021-3 Fund	39,217	15		(98)		(98)	
Tres-Yujin Trust	20,000	11		(11)		(11)	
Shinhan-Time mezzanine blind Fund	29,885			(115)		(11)	
Capstone REITs No.26	12,223	3,433					
JB Incheon-Bucheon REITS No.54	12,718	2		(2)		(2)	
Hankook Smart Real Asset Investment		-		(-)		(-)	
Trust No.3	13,146	120	532	506		506	
JB Hwaseong-Hadong REITs No.53	16,113	2		(2)		(2)	
KB Oaktree Trust No.3	9,552	77	130	52		52	
Daehan No.36 Office Asset	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		100	02		02	
Management Company	133,884	95,993	1,000	111		111	
Rhinos Premier Mezzanine Private			-,				
Investment Fund No.1	10,759		19	17		17	
SH Real Estate Loan Investment Type Private Real Estate Investment	,		- /				
Trust No.2	66,959	12	1,617	1,605	_	1,605	
Shinhan JigaeNamsan Road Private							
Special Asset Investment Trust	161,417	27	467	440	—	440	
SKS-Yozma Fund No.1	19,915	—	1	(185)		(185)	

(\*) Excluded the financial information of associates that are not subject to equity method due to disposal or of which the financial information is not available as of end of the year.

`			2			
Investees	Asset	Liability	Operating revenue	Net profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)
BNP Paribas Cardif Life						
Insurance	₩2,528,558	2,327,352	47,631	(11,901)	(80,527)	(92,428)
Partners 4th Growth		_,0,00_	.,,001	(11,501)	(00,027)	()_,0)
Investment Fund	54,661	496	14,432	27,663	(18,774)	8,889
KTB Newlake Global	,	., .	,	_,,	(	-,
Healthcare PEF	21,000	55	3,091	2,996		2,996
Shinhan-Neoplux Energy	,		,	,		,
Newbiz Fund	66,792	978	3,371	21,618		21,618
Shinhan-Albatross tech	,		,	,		,
investment Fund	24,870	363	1,469	10,429	(383)	10,046
Meritz AI-SingA330-A						
Investment Type Private						
Placement Special Asset						
Fund	17,718	2	14,888	14,888		14,888
Meritz AI-SingA330-B						
Investment Type Private						
Placement Special Asset						
Fund	8,569	6	1,267	1,265		1,265
VOGO Debt Strategy						
Qualified IV Private	30,440	20	3,963	1,691		1,691
Shinhan -Midas Dong-A	,		,	,		,
Secondary Fund	8,863		3,749	3,011		3,011
ShinHan – Soo Young	,		,	,		,
Entrepreneur Investment						
Fund No.1	18,660	269	1,056	784		784
Shinhan Praxis K-Growth	,		-,			
Global Private Equity						
Fund	26,086	4	32,477	31,394		31,394
Kiwoom Milestone	,			,-,-		,
Professional Private Real						
Estate Trust 19	46,585	38,663	2,605	(2,584)		(2,584)
Shinhan Global Healthcare	10,000	50,005	2,005	(2,501)		(2,501)
Fund 1	40	4,558		(1,406)		(1,406)
KB NA Hickory Private	10	1,000		(1,100)		(1,100)
Special Asset Fund	91,617	45	17,394	8,543		8,543
Koramco Europe Core	51,017	-15	17,574	0,545		0,545
Private Placement Real						
Estate Fund No.2-2	45,492	1,798	7,431	574		574
Hermes Private Investment	тЈ,т/2	1,770	7,751	514		574
Equity Fund	19,078	7		(14,465)		(14,465)
KDBC-Midas Dong-A	19,070	/		(14,403)		(14,403)
Global contents Fund	18,412	19	7,110	5,689		5,689
Giobal contents Fund	10,412	19	7,110	5,009		5,009

mvestments in associates (	2022							
Investees	Asset	Liability	Operating revenue	Net profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)		
Shinhan-Nvestor Liquidity								
Solution Fund	₩ 26,085	5 249	2,297	1,607		1,607		
Shinhan AIM FoF								
Fund 1-A	40,47	1 27	16,497	3,617		3,617		
IGIS Global Credit								
Fund 150-1	18,779	9 14	5,436	2,223		2,223		
Partner One Value up I								
Private Equity Fund	18,490	668	1,281	(9,798)		(9,798)		
Genesis No.1 Private								
Equity Fund	262,825	5 2	19,226	17,898		17,898		
Korea Omega Project	15 (1)	2		(2, (2, 4))		(2 (24)		
Fund III	15,610	) —		(2,624)		(2,624)		
Genesis North America								
Power Company No.1 PEF	20,898	3 138	20,864	20,155		20,155		
SHBNPP MAIN	20,896	5 156	20,004	20,155		20,155		
Professional Investment								
Type Private Mixed								
Asset Investment Trust								
No.3	185,77	7 444		(44,452)		(44,452)		
MIEL CO.,LTD.	422		36	(1)		(1)		
AIP Transportation				(-)		(-)		
Specialized Privately								
Placed Fund Trust #1	125,545	5 86	7,398	(3,978)		(3,978)		
E&Healthcare Investment								
Fund No.6	2,839	) —	3,243	(14,623)		(14,623)		
One Shinhan Global Fund 1	9,575	5 80		(6,263)		(6,263)		
Kiwoom-Shinhan								
Innovation Fund I	19,130	) 249	1,545	(1,581)	—	(1,581)		
Midas Asset Global CRE								
Debt Private Fund No.6	139,200	662	10,515	6,925		6,925		
Samchully Midstream								
Private Placement								
Special Asset Fund 5-4	71,399	9 47	16,238	(4,512)		(4,512)		
SHBNPP Senior Loan								
Professional Investment								
Type Private Mixed								
Asset Investment Trust No.3	100 470		1 521	1 007		1 007		
NO.3 NH-Amundi Global	122,479	9 23	4,534	1,007		1,007		
Infrastructure Trust 14	69,93	3 14	14,823	3,201		3,201		
milasu uctule 11ust 14	09,93.	5 14	17,023	5,201		5,201		

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mvestments m associates (	2022							
Investees		Asset	Liability	Operating revenue	Net profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)	
Sparklabs-Shinhan								
Opportunity Fund 1	₩	9,356		1,951	1,652	_	1,652	
BNW Tech-Innovation								
Private Equity Fund		20,303	763	92	(161)		(161)	
IGIS Real-estate Private								
Investment Trust No.33		89,582	53,964	5,202	3,387		3,387	
WWG Global Real Estate								
Investment Trust no.4		34,970	11	4,402	1,169		1,169	
Goduck Gangil10 PFV Co.,								
Ltd.		179,923	163,660	210,961	24,625		24,625	
Fidelis Global Private Real								
Estate Trust No.2		30,217	32	—	(821)	—	(821)	
AIP EURO PRIVATE								
REAL ESTATE TRUST		1 60 50 4	0.60	15.000	10 51 4		10 51 4	
No. 12		169,704	969	17,932	13,514		13,514	
Shinhan Global Healthcare		22	102	1	(75)		(75)	
Fund 2 Shinken ADA Deel Estate		32	192	1	(75)		(75)	
Shinhan AIM Real Estate		94 046	206	10.262	(1 505)		(4.505)	
Fund No.2 Shinhan AIM Real Estate		84,946	806	10,262	(4,595)	_	(4,595)	
Fund No.1		239,734	27,259	15,006	11,925		11,925	
SHBNPP Daegu Green		239,734	21,239	15,000	11,923		11,923	
Power Cogeneration								
System Professional								
Investment Type Private								
Special Asset Investment								
Trust		148,236	75	4,456	2,688		2,688	
SHBNPP Sangju YC		110,200	10	1,100	2,000		2,000	
Expressway Professional								
Investment Type Private								
Special Asset Investment								
Trust		66,408	301	655	(4,315)		(4,315)	
SHBNPP Global		,			( ) )			
Infrastructure								
Professional Investment								
Type Private Special								
Asset Investment Trust								
No.7-2		34,479	42	4,149	2,310		2,310	
Korea Omega-Shinhan								
Project Fund I		20,043	—	1,776	1,555	_	1,555	
ST-Bonanja Food tech		6,775	—	202	(275)	—	(275)	
Samsung SRA Real Estate								
Professional Private								
45[FoFs]		93,284	7,161	5,721	(7,106)	—	(7,106)	

					2022		
Investees		Asset	Liability	Operating revenue	Net profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)
IBK Global New							
Renewable Energy							
Special Asset							
Professional Private2	₩	115,311	41	8,791	8,504		8,504
VS Cornerstone Fund		8,098	_	1	(131)		(131)
Aone Mezzanine							
<b>Opportunity Professional</b>							
Private		8,006	229	992	729		729
NH-Amundi US							
Infrastructure Private							
Fund2		123,363	72	32,302	9,571		9,571
SHBNPP Japan							
Photovoltaic Private							
Special Asset Investment							
Trust No.2		21,202	99	6,709	2,901	—	2,901
Kakao-Shinhan 1st TNYT							
Fund		44,003	134	14,778	14,054		14,054
IMM Special Situation 1-2							
PRIVATE EQUITY							
FUND		13,058	39	6,499	(1,494)		(1,494)
Pacific Private Placement							
Real Estate Fund No.40		145,569	98,572	4,155	3,122		3,122
Mastern Private Real Estate							
Loan Fund No.2		19,200	175	919	759	—	759
LB Scotland Amazon							
Fulfillment Center							
Fund 29		42,291	39	2,226	795		795
JR AMC Hungary Budapest							
Office Fund 16		38,247	—	3,493	3,493	—	3,493
EDNCENTRAL Co.,Ltd.		114,856	138,293	1,193	(9,338)	—	(9,338)
Future-Creation Neoplux							
Venture Capital Fund		30,109	3,949	13,584	7,591	—	7,591
Gyeonggi-Neoplux							
Superman Fund		25,739	623	12,768	(5,587)	—	(5,587)
NewWave 6th Fund		45,981	849	2,167	(3,053)	—	(3,053)
KTC-NP Growth Champ							
2011-2 Private Equity					(		
Fund		27,070	5,349	463	(5,288)	—	(5,288)
Neoplux No.3 Private				10 50 5	(a.t		
Equity Fund		207,723	3,194	10,686	(21,454)	—	(21,454)
PCC Amberstone Private		00	<b>e</b> 005	0.175	(10.005)		(10.007)
Equity Fund I		89,577	2,892	9,177	(10,097)		(10,097)

mvestments massociates (e		<u>ucu)</u>			2022		
Investees		Asset	Liability	Operating revenue	Net profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)
KIAMCO POWERLOAN							
TRUST 4TH	₩	91,908	24	5,024	1,117	_	1,117
Mastern Opportunity							
Seeking Real Estate Fund							
II		73,584	40	13,201	(2,950)	—	(2,950)
AION ELFIS							
PROFESSIONAL		17.022	2	205	(1.200)		(4.290)
PRIVATE 1 T&F 2020 SS Private		17,833	2	395	(4,280)	_	(4,280)
Equity Fund Specializing							
in Start-up and Venture							
Business		19,257	22	10,655	10,381		10,381
Neoplux Market-Frontier		- ,		- )	- )		- ,
Secondary Fund		71,633	904	29,131	16,720		16,720
Harvest Private Equity							
Fund II		14,387	157	119	(831)	—	(831)
Synergy Green New Deal							
1st New Technology							
Business Investment		27 7 42		4 202	2 002		2 002
Fund KAIM Real-estate Private		37,743	_	4,283	3,883		3,883
Investment Trust 20		3,089		820	820		820
KIAMCO Vietnam Solar		5,007		020	020		020
Special Asset Private							
Investment Trust		13,473	18	5,271	2,438	_	2,438
Daishin New Technology							
Investment Fund 5th		10,384	15	227	107		107
SHINHAN-NEO Core							
Industrial Technology				101	(10.0)		(10.0)
Fund		19,037	124	136	(486)	—	(486)
SHBNPP Green New Deal							
Energy Professional Investment Type Private							
Special Asset Investment							
Trust No.2		83,453	36	3,580	1,158		1,158
SIMONE Mezzanine Fund		05,155	50	5,500	1,150		1,150
No.3		10,427	8	120	(129)		(129)
Eum Private Equity Fund					```		~ /
No.7		43,679	6	7,116	6,587	_	6,587
Kiwoom Hero No.4 Private							
Equity Fund		16,731	26	399	191	(3,936)	(3,745)
Vogo Canister Professional		107.000		00 700	0 7 4 2		0.742
Trust Private Fund I		127,808	61	22,709	8,743	—	8,743

Investments in associates (	CONTR	iiuuu)			2022		
Investees		Asset	Liability	Operating revenue	Net profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)
SW-S Fund	₩	23,919		1,978	1,728		1,728
CL Buyout 1st PEF		60,144	214	1,970	(5,704)		(5,704)
Timefolio The Venture-V		00,111			(0,701)		(0,701)
second		19,764		_	(2,296)		(2,296)
Newlake Growth Capital		17,701			(_,_> 0)		(_,_> 0)
Partners2 PEF		42,358	592	_	(829)		(829)
Shinhan Smilegate Global		,	0/2		(0_))		(0=))
PEF I		28,792		6,610	6,118		6,118
Genesis Eco No.1 PEF		39,363	4	657	1,400		1,400
SHINHAN-NEO Market-		57,505	·	057	1,100		1,100
Frontier 2nd Fund		81,123	513	8,166	2,985		2,985
NH-Synergy Core		01,125	515	0,100	2,705		2,705
Industrial New							
Technology Fund		17,269			100		100
J& Moorim Jade		17,209		_	100	_	100
Investment Fund		21,837	1	1,134	969		969
		21,037	1	1,134	909		909
Helios-KDBC Digital Contents 1st		14510	87	2 5 2 0	2 272		2 272
		14,518	87	3,529	3,272	_	3,272
Ulmus SHC innovation		20.226		1	(1, 275)		(1, 275)
investment fund		20,326		1	(1,275)		(1,275)
Mirae Asset Partners X		21.050	22	2	(105)		(105)
Private Equity Fund		21,850	33	2	(185)		(185)
T Core Industrial							
Technology 1st Venture		14.405	10	200			
PEF		14,405	12	208	(20)		(20)
Curious Finale Corporate							
Recovery Private Equity		10.000	<i>c</i> 1	0.17	500		500
Fund		12,986	61	946	522		522
TI First Property Private					(		
Investment Trust 1		7,817		432	432	—	432
MPLUS Professional							
Private Real Estate							
Fund 25		12,395	2,242	686	686		686
IBKC Global Contents							
Investment Fund		18,739	78	—	(1,603)		(1,603)
Nautic Smart No.6 Private							
Equity Fund		3,212	91	2,718	2,531	—	2,531
Premier Luminous Private							
Equity Fund		35,763	63	10,762	10,534		10,534
Hanyang-Meritz 1 Fund		15,348	—	41	(74)	—	(74)
KNT 2ND PRIVATE							
EQUITY FUND		5,182	5	6,186	5,983		5,983
-							

Investments in associates (	<u>continueu)</u>			2022		
Investees	Asset	Liability	Operating revenue	Net profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)
Kiwoom-Shinhan						
Innovation Fund 2	₩ 26,475	176	16	(947)		(947)
Maple Mobility Fund	83,540	1	40,442	40,066		40,066
SJ ESG Innovative Growth	00,010	1	10,112	10,000		10,000
Fund	14,689		4,319	4,195		4,195
AVES 1st Corporate	1,000		1,017	.,170		.,
Recovery Private Equity						
Fund	6,641	3	431	422		422
JS Shinhan Private Equity	-,	-				
Fund	128,728	1	12	(2,098)		(2,098)
NH Kyobo AI Solution	- )			( ))		( )/
Investment Fund	12,601		2,182	2,002		2,002
Daishin Newgen New	12,001		_,10_	_,00_		_,
Technology Investment						
Fund 1st	11,298	25	184	38	(8,314)	(8,276)
META ESG Private Equity	,				(0,0 - 0)	(0,2.0)
Fund I	21,380		2	(341)		(341)
SWFV FUND-1	22,678		_	(1,287)		(1,287)
PHAROS DK FUND	15,918	32	_	(403)		(403)
Shinhan VC tomorrow	- )					
venture fund 1	68,808	850	2,775	(645)		(645)
Highland 2021-8 Fund	14,924	154		(228)		(228)
H-IOTA Fund	38,933	149	356	(64)		(64)
Stonebridge-Shinhan	)					
Unicorn Secondary Fund	34,621		3	(866)		(866)
Tres-Yujin Trust	20,010	3	1,114	1,111		1,111
Shinhan-Time mezzanine	- )		,	,		,
blind Fund	26,625		42	(3,260)		(3,260)
Capstone REITs No.26	16,709	9,006	_	(486)		(486)
JB Incheon-Bucheon	- )	- ,		()		
REITS No.54	12,695	5	2	(26)		(26)
Hankook Smart Real Asset	)					
Investment Trust No.3	21,085	105	1,408	1,368		1,368
JB Hwaseong-Hadong	,		-,	-,		-,
REITs No.53	16,090	6	2	(27)		(27)
KB Oaktree Trust No.3	25,822	8	3,266	210		210
Daehan No.36 Office Asset	,		-,			
Management Company	141,037	96,073	5,231	2,047		2,047
Rhinos Premier Mezzanine	)	,	- , -	,		,
Private Investment Fund						
No.1	2,880	7	1,137	1,073		1,073
SH Real Estate Loan	_,		, ,	,		-,
Investment Type Private						
Real Estate Investment						
Trust No.2	192,904	53	11,005	5,638		5,638
		20	,	- ,		-,

					2022		
Investees		Asset	Liability	Operating revenue	Net profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)
Shinhan JigaeNamsan Road							
Private Special Asset							
Investment Trust	₩	163,349	82	5,679	5,076		5,076
SKS-Yozma Fund No.1		22,110	_	2,505	2,196		2,196
IBKC-METIS Global							
Contents Investment							
Fund		12,513	_	1	1,513		1,513
Keistone Unicorn Private							
Equity Fund		22,318	_	—	(176)		(176)
KB Distribution Private							
Real Estate 3-1		71,093	24	85	14		14
Pacific Private Investment							
Trust No.49-1		36,126	—	—	(23)	—	(23)
KIWOOM Real estate							
private placement fund							
for normal investors							
No. 31		14,278	14	435	260	—	260
RIFA Real estate private							
placement fund for							
normal investoes No. 51		14,343	28	218	170	—	170
Fivetree general private							
equity fund No.15		24,606	33	2,003	1,920		1,920
Shinhan-Kunicorn first							
Fund		25,658	—	10	(442)		(442)
Harvest Fund No.3		35,577	89	6,855	6,388		6,388
Shinhan Simone Fund I		12,468	—	24	(532)	—	(532)
Korea Investment develop							
seed Trust No.1		26,334	730	1,806	1,702		1,702
Tiger Green alpah Trust							
No.29		28,200	54	1,431	658	—	658
STIC ALT Global II							
Private Equity Fund		45,480	130	2	(649)		(649)
NH-Brain EV Fund		46,369	—	2	(5,631)	—	(5,631)
DDI LVC Master Real							
Estate Investment Trust							
Co., Ltd.		42,665	43	—	(1,466)		(1,466)
Find-Green New Deal 2nd							
Equity Fund		19,969	—	26	(181)		(181)
ShinhanFitrin 1st							
Technology Business					(a ==		( <b>a - - -</b> )
Investment Association		27,520	76	1	(2,556)		(2,556)

	2022									
Investees	Asset	Liability	Operating revenue	Net profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)				
PARATUS No.3 Private										
Equity Fund Golden Route 2nd Startup Venture Specialized	₩ 19,372	123	—	(250)	_	(250)				
Private Equity Fund Koramco Private Real	13,272	58	73	14	—	14				
Estate Fund 143 Korea Investment Top Mezzanine Private Real	10,006	6	4	_	_	_				
Esate Trust No.1 LB YoungNam Logistics	45,126	649	4,554	4,499		4,499				
Private Trust No.40 Shinhan-Cognitive Start-up	39,001	9	191	169	—	169				
Fund L.P. IGEN2022 No.1 private	30,744	386	899	384	—	384				
Equity Fund	32,483	122	3,166	2,737		2,737				
Cornerstone J&M Fund I Logisvalley Shinhan REIT	13,355	2	1	(147)	—	(147)				
Co.,Ltd. KDB Investment Global Healthcare Private	79,248	55,619	1,000	(296)	_	(296)				
Equity Fund I Korea Investment Green Newdeal Infra Trust	143,070	276	_	(2,206)	—	(2,206)				
No.1 BTS 2nd Private Equity	20,438	7	_	(70)	—	(70)				
Fund Shinhan Global Active	15,018	513	1	(625)	—	(625)				
REIT Co.Ltd. NH-J&-IBKC Label	192,742	98,372		(1,703)	—	(1,703)				
Technology Fund IMM Global Venture	35,481	4	2	(123)	_	(123)				
Opportunity, LP Capstone Develop Frontier	8,775	—		—	_	_				
Trust Nextrade Co., Ltd. SH Sustainable Management ESG Short term Bond Security Feeder Investment Trust	32,000 141,561	 140	_	(2,323)		(2,323)				
No.1	11,196	2	72	49		49				

#### 15. Investments in associates (continued)

	2022										
Investees	Asset		Liability	Operating revenue	Net profit (loss)	Other comprehensive income (loss)	Total comprehensive income (loss)				
SH 1.5 years Maturity											
Investment Type											
Security Investment											
Trust No.2	₩	15,865		4	4		4				
Eventus-IBKC LIB Fund		27,617	27	6	(4,409)		(4,409)				
NH-Daishin-Kyobo											
healthcare 1 Fund		15,792	—	17	(208)		(208)				
IBKC-Behigh Fund 1st		10,992	—	1	(108)		(108)				
Nautic Green Innovation											
ESG Co-investment No.1											
Private Equity Fund		16,569	150	1	(181)	—	(181)				
ON No.1 Private Equity											
Fund		18,767	—	—	(2,233)		(2,233)				
Digital New Deal Kappa											
Private Equity Fund		16,569	149	1	(180)	—	(180)				

(\*) Excluded the financial information of associates that are not subject to equity method due to disposal or of which the financial information is not available as of end of the year.

(d) Reconciliation of the financial information to the carrying value of its interests in the associates as of December 31, 2021 and 2022 are as follows:

			202	t		
Investees	Net assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value
BNP Paribas Cardif Life Insurance	₩293,634	14.99	44,039	(17)		44,022
Songrim Partners(*1)	(62)	35.34	(22)	) —	22	_
Partners 4th Growth Investment Fund	52,134	25.00	13,033	_		13,033
KTB Newlake Global Healthcare PEF(*1)	30,808	30.00	9,299	_	113	9,412
Shinhan-Neoplux Energy Newbiz Fund	65,211	31.66	16,032	_		16,032
Shinhan-Albatross tech investment Fund	20,213	50.00	10,389	_		10,389
VOGO Debt Strategy Qualified IV Private	35,896	20.00	7,179	—		7,179
Shinhan-Midas Donga Secondary Fund	7,902	50.00	3,951	—		3,951
ShinHan – Soo Young Entrepreneur Investment Fund No.1	17,608	24.00	4,226	_		4,226
Shinhan Praxis K-Growth Global Private						
Equity Fund	41,133	18.87	7,761			7,761
Kiwoom Milestone Professional Private Real						
Estate Trust 19	10,505	50.00	5,253	—		5,253
AIP EURO Green Private Real Estate Trust	120 576	01.00	20 702			20 702
No.3	139,576	21.28	29,703		1.50	29,703
Shinhan Global Healthcare Fund 1(*1)	(3,464)	4.41	(153)	) —	153	

			2021	1		
Investees	Net assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value
KB NA Hickory Private Special Asset Fund	₩ 91,668	37.50	34,376		_	34,376
Koramco Europe Core Private Placement Real	44.075	44.00	10.400			10.400
Estate Fund No.2-2	44,275	44.02	19,492	—		19,492
BNP Paribas Cardif General Insurance	61,431	5.46	3,354			3,354
Hermes Private Investment Equity Fund	33,537	29.17	9,782			9,782
Shinhan-Nyestor Liquidity Solution Fund	21,420	24.92	5,338			5,338
Shinhan AIM FoF Fund 1-A	36,623	25.00	9,156	—		9,156
GIS Global Credit Fund 150-1	21,609	25.00	5,402			5,402
Partner One Value up I Private Equity Fund	28,273	27.91	7,891			7,891
Genesis No.1 Private Equity Fund	243,534	22.80	55,533			55,533
Korea Omega Project Fund III	18,234	23.53	4,290			4,290
Soo Delivery Platform Growth Fund	19,578	30.00	5,873			5,873
Genesis North America Power Company No.1	24.210	40.02	10 706			10 70
PEF	34,310	40.03	13,736			13,736
SH MAIN Professional Investment Type	150.040	22.22	41 540			41 5 40
Private Mixed Asset Investment Trust No.3	178,069	23.33	41,549			41,549
Korea Finance Security	20,078	14.91	2,994			2,994
MIEL CO.,LTD.(*1)	(141)	28.77	(41)		41	
AIP Transportation Specialized Privately			24 600			24.600
Placed Fund Trust #1	97,097	35.73	34,688			34,688
E&Healthcare Investment Fund No.6	32,615	21.05	6,866	—		6,866
One Shinhan Global Fund 1	15,758	20.56	3,773	—		3,773
Kiwoom-Shinhan Innovation Fund I	23,462	50.00	11,731			11,731
Daishin-K&T New Technology Investment						
Fund	25,571	31.25	7,991			7,991
Midas Asset Global CRE Debt Private Fund						
No.6	117,347	41.16	48,305			48,305
Samchully Midstream Private Placement						
Special Asset Fund 5-4	65,931	42.92	27,471			27,471
SH Senior Loan Professional Investment Type						
Private Mixed Asset Investment Trust No.3	126,020	20.00	25,204			25,204
NH-Amundi Global Infrastructure Trust 14	61,004	30.00	18,301			18,301
Jarvis Memorial Private Investment Trust 1	10,210	99.01	10,109			10,109
Vestas Qualified Investors Private Real Estate						
Fund Investment Trust No.37	55,254	60.00	33,153			33,153
Milestone Private Real Estate Fund 3	57,842	32.06	18,544			18,544
Nomura-Rifa Private Real Estate Investment						
Trust 31	25,108	31.31	7,902			7,902
SH Senior Loan Professional Investment Type						
Private Mixed Asset Investment Trust No.2	48,124	21.27	10,236	—		10,236
Cape IT Fund No.3	30,599	32.89	10,065	—		10,065
FuturePlay-Shinhan TechInnovation Fund 1	14,297	50.00	7,149	—		7,149
Stonebridge Corporate 1st Fund	6,718	44.12	2,964			2,964
Vogo Realty Partners Private Real Estate						
	49,760	21.64	10,766			10,766

			2021	l		
Investees	Net assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value
Korea Credit Bureau	₩ 85,497	9.00	7,695		_	7,695
Goduck Gangil1 PFV Co., Ltd(*1)	(15,763)		(164)		164	
SBC PFV Co., Ltd.(*2)	158,286	25.00	34,581	_	(4,995)	29,586
NH-amundi global infra private fund 16	104,016	50.00	52,008			52,008
IMM Global Private Equity Fund	359,415	33.00	118,615			118,615
HANA Alternative Estate Professional						
Private122 SH Corporate Professional Investment Type	39,840	74.02	29,489	—		29,489
Private Security Investment Trust No.7	100,098	45.96	49,899			49,899
SH BNCT Professional Investment Type	100,098	43.90	49,099			49,099
Private Special Asset Investment Trust	389,240	72.50	282,199			282,199
Deutsche Global Professional Investment Type	567,240	72.50	202,177			202,177
Private Real Estate Investment Trust No. 24 BRAIN DO PROFESSIONALE PRIVATE	54,158	52.28	28,312	_	_	28,312
No. 27	3,351	29.13	976	_		976
Sparklabs-Shinhan Opportunity Fund 1	9,372	49.50	4,640		_	4,640
BNW Tech-Innovation Private Equity Fund	19,702	29.85	5,881	_		5,881
IGIS Real-estate Private Investment Trust			5,001	_		5,001
No.33	33,982	40.86	13,884	—	—	13,884
WWG Global Real Estate Investment Trust						
no.4	36,019	29.55	10,644			10,644
Goduck Gangil10 PFV Co., Ltd(*1)	(8,362)		(1,664)		1,664	—
Fidelis Global Private Real Estate Trust No.2 AIP EURO PRIVATE REAL ESTATE TRUST	25,265	78.26	19,773		—	19,773
No. 12	171,489	28.70	49,217			49,217
Shinhan Healthcare Fund 2(*1)	(103)	13.68	(14)		14	
Pebblestone CGV Private Real Estate Trust						
No.1	28,252	48.53	13,710			13,710
Shinhan AIM Real Estate Fund No.2	77,582	30.00	23,275			23,275
Shinhan AIM Real Estate Fund No.1	210,908	21.01	44,312			44,312
SH Daegu Green Power Cogeneration System						
Professional Investment Type Private Special						
Asset Investment Trust	149,627	22.02	32,948			32,948
SH Sangju YC Expressway Professional Investment Type Private Special Asset						
Investment Trust	70,401	29.19	20,550			20,550
SH Global Infrastructure Professional	70,401	29.19	20,550			20,550
Investment Type Private Special Asset						
Investment Trust No.7-2	26 206	71 42	10 055			10 055
	26,396	71.43	18,855	_	_	18,855
Korea Omega-Shinhan Project Fund I	14,488	50.00	7,244	_		7,244
ST-Bonanja Food tech Samsung SRA Real Estate Professional Private	8,650	38.83	3,359	_	_	3,359
45	51,519	25.00	12,880		—	12,880
IBK Global New Renewable Energy Special Asset Professional Private2	110,012	28.98	31,887		_	31,887
	,		,			, -

investments in associates (continued)				202	L		
Investees	N	et assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value
VS Cornerstone Fund	₩	8,281	41.18	3,410			3,410
Aone Mezzanine Opportunity Professional	**	0,201	41.10	5,410			3,410
Private		14,447	66.09	9,540	_		9,540
NH-Amundi US Infrastructure Private Fund2		104,313	25.91	27,024			27,024
KB Distribution Private Real Estate1		49,506	62.00	30,694			30,694
SH Japan Photovoltaic Private Special Asset				, - ,			
Investment Trust No.2		43,385	30.00	13,016			13,016
Kakao-Shinhan 1st TNYT Fund		29,815	48.62	14,497			14,497
IMM Special Situation 1-2 PRIVATE EQUITY							
FUND		57,962	20.00	11,593			11,593
Pacific Private Placement Real Estate Fund							
No.40		46,898	24.73	11,598			11,598
Mastern Private Real Estate Loan Fund No.2		22,314	33.57	7,491		_	7,491
LB Scotland Amazon Fulfillment Center Fund							
29		44,577	70.14	31,268			31,268
JR AMC Hungary Budapest Office Fund 16		37,274	32.57	12,140			12,140
EDNCENTRAL Co.,Ltd.(*1)		(2,487)	19.87	(494)	) —	494	_
Future-Creation Neoplux Venture Capital Fund		18,569	16.25	3,017			3,017
Gyeonggi-Neoplux Superman Fund		36,195	21.76	7,878		—	7,878
NewWave 6th Fund		48,185	30.00	14,455	_	_	14,455
KTC-NP Growth Champ 2011-2 Private Equity							
Fund		71,829	5.56	3,990		—	3,990
Neoplux No.3 Private Equity Fund		226,008	10.00	22,601		—	22,601
PCC Amberstone Private Equity Fund I		105,169	21.67	22,790		—	22,790
KIAMCO POWERLOAN TRUST 4TH		95,634	47.37	45,301			45,301
Mastern Opportunity Seeking Real Estate Fund							
II		106,584	20.00	21,317		—	21,317
AION ELFIS PROFESSIONAL PRIVATE 1		22,112	20.00	4,422			4,422
T&F 2020 SS Private Equity Fund Specializing							
in Start-up and Venture Business		14,688	29.68	4,360	_	—	4,360
Neoplux Market-Frontier Secondary Fund		57,319	19.74	11,313			11,313
Harvest Private Equity Fund II		15,780	22.06	3,481			3,481
Synergy Green New Deal 1st New Technology		24.270	00.17	0.604			0.604
Business Investment Fund		34,379	28.17	9,684		_	9,684
KAIM Real-estate Private Investment Trust 20		13,125	38.46	5,048	—	_	5,048
KIAMCO Vietnam Solar Special Asset Private		15.052	50.00				
Investment Trust		15,053	50.00	7,527		_	7,527
Daishin New Technology Investment Fund 5th		18,940	23.44	4,439			4,439
CSQUARE SNIPER PROFESSIONAL		5 10 4	(0.50)	2.2.47			2.2.47
PRIVATE 10		5,194	62.50	3,247			3,247
Acurus Hyundai Investment Partners New		17 (00	0( 70	4 7 1 4			4 7 1 4
Technology		17,600	26.79	4,714			4,714
IGIS GLIP Professional Investment Private		(0 (01	07 10	62 044			62 0 4 4
Real Estate Investment Trust No. 1-1		60,681	97.10	63,944	—		63,944
IGIS GLIP Professional Investment Private		60 60 1	07 10	62 044			62 044
Real Estate Investment Trust No. 1-2		60,681	97.10	63,944	_		63,944

investments in associates (continueu)				2021			
Investees	N	let assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value
		(4)	(~)	(4) (5)		<u> </u>	
Pacific Sunny Professional Investors Private Placement Real Estate							
	₩	40,385	25.00	14,778			14,778
Investment Company No.45 SHINHAN-NEO Core Industrial	vv	40,565	23.00	14,770	_		14,770
Technology Fund		11,439	49.75	5,691			5,691
SHBNPP Green New Deal Energy		11,439	49.75	5,091			5,091
Professional Investment Type Private							
Special Asset Investment Trust No.2		90,810	30.00	27,243			27,243
SIMONE Mezzanine Fund No.3		10,395	29.38	3,054			3,054
Eum Private Equity Fund No.7		37,495	29.38	7,873			7,873
Kiwoom Private Equity Fund No.7		57,495	21.00	1,015			1,075
Venture Specialized Private Equity Fund		30,375	25.00	7,594			7,594
Kiwoom Hero No.4 Private Equity Fund		20,449	23.00	4,305		_	4,305
Vogo Canister Professional Trust Private		20,449	21.05	4,303			4,505
Fund I		112,433	36.53	41,072			41,072
SW-S Fund		22,191	30.33	6,724	_		6,724
CL Buyout 1st PEF		64,359	21.43	13,791	_		13,791
Timefolio The Venture-V second		22,060	20.73	4,572		_	4,572
Newlake Growth Capital Partners2 PEF		43,187	29.91	12,921	_		12,921
Shinhan Smilegate Global PEF I		23,469	14.21	3,336			3,336
Fount Professional Investors Private		25,407	14.21	5,550			5,550
Investment Trust No.3		10,399	49.98	5,197			5,197
Genesis Eco No.1 PEF		38,365	29.01	11,130	_	_	11,130
SHINHAN-NEO Market-Frontier 2nd		50,505	27.01	11,150			11,150
Fund		57,625	42.70	24,606			24,606
NH-Synergy Core Industrial New		57,025	12.70	21,000			21,000
Technology Fund		17,430	36.93	6,437			6,437
J& Moorim Jade Investment Fund		22,259	24.89	5,540			5,540
Ulmus SHC innovation investment fund		21,601	24.04	5,192	_		5,192
Mirae Asset Partners X Private Equity		21,001	21.01	5,172			5,172
Fund		22,002	35.71	7,858			7,858
T Core Industrial Technology 1st Venture		,00	00111	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
PEF		14,413	31.47	4,535			4,535
Curious Finale Corporate Recovery Private		, -		,			,
Equity Fund		13,285	27.78	3,690			3,690
TI First Property Private Investment Trust		,		-,-, -			-,-,-
1		7,637	40.00	3,055			3,055
MPLUS Professional Private Real Estate		.,		- ,			- ,
Fund 25		7,896	41.67	3,290			3,290
IBKC Global Contents Investment Fund		20,265	24.39	4,943			4,943
Nautic Smart No.6 Private Equity Fund		10,533	37.74	3,974			3,974
Premier Luminous Private Equity Fund		25,167	27.78	6,991	_		6,991
Hanyang-Meritz 1 Fund		15,423	22.58	3,483	_		3,483
KNT 2ND PRIVATE EQUITY FUND		19,124		4,157	_		4,157
		,		, .			, .

#### 15. Investments in associates (continued)

				2021			
Investees	N	et assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value
Maple Mobility Fund	₩	43,023	20.18	8,683		_	8,683
AVES 1st Corporate Recovery Private							
Equity Fund		6,215	76.19	4,736		_	4,736
JS Shinhan Private Equity Fund		130,966	3.85	5,037			5,037
Daishin Newgen New Technology							
Investment Fund 1st		24,048	50.60	12,169			12,169
META ESG Private Equity Fund I		21,722	27.40	5,677			5,677
SWFV FUND-1		23,965	40.25	9,646			9,646
PHAROS DK FUND		16,289	24.24	3,949			3,949
Shinhan VC tomorrow venture fund 1		22,603	39.62	9,042			9,042
Highland 2021-8 Fund		14,998	32.67	4,899			4,899
Medicii 2021-3 Fund		39,202	24.81	9,728			9,728
Tres-Yujin Trust		19,989	50.00	9,995			9,995
Shinhan-Time mezzanine blind Fund		29,885	50.00	14,942			14,942
Capstone REITs No.26		8,790	50.00	4,395			4,395
JB Incheon-Bucheon REITS No.54		12,716	39.31	4,999		_	4,999
Hankook Smart Real Asset Investment							
Trust No.3		13,026	33.33	4,342			4,342
JB Hwaseong-Hadong REITs No.53		16,111	31.03	4,999			4,999
KB Oaktree Trust No.3		9,475	33.33	3,159			3,159
Daehan No.36 Office Asset Management		,		,			,
Company(*1)		37,891	48.05	18,206		3,294	21,500
Rhinos Premier Mezzanine Private		,		,		<i>,</i>	,
Investment Fund No.1		10,759	27.93	3,005			3,005
SH Real Estate Loan Investment Type		,		,			,
Private Real Estate Investment Trust							
No.2		66,947	29.73	19,903			19,903
Shinhan JigaeNamsan Road Private		,		,			,
Special Asset Investment Trust		161,390	24.85	40,105	_		40,105
SKS-Yozma Fund No.1		19,915		5,945	_		5,945
Others		666,941		367,840	_	1,492	369,332
	₩8	,508,993		2,911,306	(17)	2,456	2,913,745

(\*1) Other represents the adjustments of fair value when acquired.

(\*2) The adjustments for others are the unrecognized equity method for preferred stocks without voting rights issued by the invested company.

	2022								
Investees	Net assets (a)	S (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value			
BNP Paribas Cardif Life									
Insurance	₩ 201,2	05 14.99	30,161	8	_	30,169			
Partners 4th Growth Investment			00,101	0		00,107			
Fund	54,1	65 25.00	13,542			13,542			
KTB Newlake Global Healthcare	,-		,						
PEF	20,9	45 20.57	4,309			4,309			
Shinhan-Neoplux Energy Newbiz	_ • ,,		.,= .,			.,			
Fund	65,8	14 31.66	20,837			20,837			
Shinhan-Albatross tech	00,0		20,007			20,007			
investment Fund	24,5	07 50.00	12,253		_	12,253			
Meritz AI-SingA330-A	2.,0	0, 00,000	12,200			12,200			
Investment Type Private									
Placement Special Asset Fund	17,7	16 23.89	4,232			4,232			
Meritz AI-SingA330-B	17,7	10 20.09	1,232			1,232			
Investment Type Private									
Placement Special Asset Fund	8,5	63 20.16	1,726	_		1,726			
VOGO Debt Strategy Qualified	0,5	20.10	1,720			1,720			
IV Private	30,4	20 20.00	6,085			6,085			
Shinhan -Midas Dong-A	50,4	20 20.00	0,005			0,005			
Secondary Fund	8,8	63 50.00	4,431	_	_	4,431			
ShinHan – Soo Young	0,0	05 50.00	-,-51			7,751			
Entrepreneur Investment Fund									
No.1	18,3	91 24.00	4,414			4,414			
Shinhan Praxis K-Growth Global	10,5	24.00	-,-1-			7,717			
Private Equity Fund	26,0	82 14.15	3,691			3,691			
Kiwoom Milestone Professional	20,0	02 14.15	5,071			5,071			
Private Real Estate Trust 19	7,9	22 50.00	3,961			3,961			
Shinhan Global Healthcare	1,9	22 30.00	5,901			5,901			
Fund 1 (*2)	(4,5	18) 4.41	(199)		199				
KB NA Hickory Private Special	(4,5	16) 4.41	(199)		199				
Asset Fund	91,5	72 37.50	34,339			34,339			
	91,5	12 51.30	54,559		_	54,559			
Koramco Europe Core Private Placement Real Estate Fund									
	126	04 44 02	10.226			10 226			
No.2-2 Hermes Private Investment	43,6	94 44.02	19,236			19,236			
	10.0	71 20 17	5 5 6 0			5 5 6 0			
Equity Fund	19,0	71 29.17	5,562	_		5,562			
KDBC-Midas Dong-A Global	10.2		4 077			4 077			
contents Fund	18,3	93 23.26	4,277			4,277			
Shinhan-Nvestor Liquidity	05.0	26 24.02	6 420			C 400			
Solution Fund	25,8		6,438		_	6,438			
Shinhan AIM FoF Fund 1-A	40,4		10,110		—	10,110			
IGIS Global Credit Fund 150-1	18,7	65 25.00	4,692	_		4,692			

	2022							
Investees	Net assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value		
Partner One Value up I Private					'			
Equity Fund	₩ 18,428	27.91	5,144			5,144		
Genesis No.1 Private Equity Fund	262,823	22.80	59,924			59,924		
Korea Omega Project Fund III	15,610	23.53	3,674			3,674		
Genesis North America Power	15,010	20.00	3,071			5,071		
Company No.1 PEF	20,760	39.11	8,118			8,118		
SHBNPP MAIN Professional	20,700	57.11	0,110			0,110		
Investment Type Private Mixed								
Asset Investment Trust No.3	185,333	23.33	43,244			43,244		
MIEL CO.,LTD. (*2)	(143)		(41)		41			
AIP Transportation Specialized	(145)	20.77	(41)		71			
Privately Placed Fund Trust #1	125,459	35.73	44,821			44,821		
E&Healthcare Investment Fund	125,459	55.75	44,021	_		44,021		
No.6	2,839	21.05	597			597		
One Shinhan Global Fund 1	2,839 9,495	20.52	1,948	_		1,948		
Kiwoom-Shinhan Innovation	9,493	20.52	1,940	_		1,940		
Fund I	18,881	50.00	9,441			9,441		
Midas Asset Global CRE Debt	10,001	50.00	9,441			9,441		
Private Fund No.6	138,538	41.16	57,029			57,029		
Samchully Midstream Private	150,550	41.10	57,029			57,029		
Placement Special Asset Fund								
5-4	71,352	42.02	20 624			20 624		
	/1,552	42.92	30,624		_	30,624		
SHBNPP Senior Loan								
Professional Investment Type								
Private Mixed Asset	100 450	20.00	24 402			24 402		
Investment Trust No.3	122,456	20.00	24,492	—		24,492		
NH-Amundi Global Infrastructure	(0.010	20.00	20.075			20.075		
Trust 14	69,919	30.00	20,975		_	20,975		
Jarvis Memorial Private	0.002	00.01	0.706			0.706		
Investment Trust 1	9,883	99.01	9,786		_	9,786		
Vestas Qualified Investors Private								
Real Estate Fund Investment		60.00	~~~~			22.255		
Trust No.37	55,598	60.00	33,357		_	33,357		
Milestone Private Real Estate								
Fund 3 (Derivative Type)	59,485	32.06	19,071	—		19,071		
RIFA Real estate private								
placement fund for normal								
investors No. 31	23,519	31.31	7,364	—	—	7,364		
SHBNPP Senior Loan								
Professional Investment Type								
Private Mixed Asset								
Investment Trust No.2	13,961	21.27	2,969		—	2,969		
T&F 2019 bearing Private Equity								
Fund Specializing in Start-up								
and Venture Business	11,440	28.25	3,231	—	—	3,231		

			20	022		
Investees	Net assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value
FuturePlay-Shinhan						
TechInnovation Fund 1	₩ 13,832	50.00	6,916			6,916
Stonebridge Corporate 1st Fund	8,211	44.12	3,622			3,622
Vogo Realty Partners Private	0,211	11112	3,022			3,022
Real Estate Fund V	50,446	21.64	10,915			10,915
Korea Credit Bureau	55,999	9.00	5,039			5,039
Goduck Gangil1 PFV Co., Ltd.	5,715	1.04	60	_		60
SBC PFV Co., Ltd. (*3)	133,851	25.00	33,463		(4,995)	28,468
NH-amundi global infra private	155,651	25.00	55,405		(4,775)	20,400
fund 16	112,423	50.00	56,211			56,211
IMM Global Private Equity Fund SHBNPP BNCT Professional Investment Type Private	446,586	33.00	147,384			147,384
Special Asset Investment Trust Deutsche Global Professional	362,830	72.50	263,052		—	263,052
Investment Type Private Real Estate Investment Trust No. 24	43,389	52.28	22,683	_	_	22,683
Sparklabs-Shinhan Opportunity Fund 1	9,356	49.50	4,631	_	_	4,631
BNW Tech-Innovation Private Equity Fund IGIS Real-estate Private	19,540	29.85	5,833		—	5,833
Investment Trust No.33 WWG Global Real Estate	35,618	40.86	14,552			14,552
Investment Trust no.4	34,959	29.55	10,331			10,331
Goduck Gangil10 PFV Co., Ltd.	16,263	19.90	3,236			3,236
Fidelis Global Private Real Estate	10,205	17.70	5,250			5,250
Trust No.2 (*1)	30,185	79.70	24,055	—	(2,110)	21,945
AIP EURO PRIVATE REAL	1 (0 505		10 105			10 105
ESTATE TRUST No. 12 Shinhan Global Healthcare Fund	168,735	28.70	48,427	—		48,427
2 (*2)	(160)	13.68	(22)		22	
Shinhan AIM Real Estate Fund						
No.2	84,140	30.00	25,243			25,243
Shinhan AIM Real Estate Fund	,		,			,
No.1	212,475	21.01	44,642			44,642
SHBNPP Daegu Green Power Cogeneration System Professional Investment Type Private Special Asset	,e					,0 .2
Investment Trust SHBNPP Sangju YC Expressway Professional Investment Type Private Special Asset	148,161	22.02	32,627	_	_	32,627
Investment Trust	66,107	29.19	19,296	—	—	19,296

	2022							
Investees	N	et assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value	
SHBNPP Global Infrastructure								
Professional Investment Type								
Private Special Asset								
Investment Trust No.7-2	₩	34,437	71.43	24,598	—	—	24,598	
Korea Omega-Shinhan Project								
Fund I		20,043	50.00	10,022		—	10,022	
ST-Bonanja Food tech		6,775	38.83	2,631	—	—	2,631	
Samsung SRA Real Estate								
Professional Private								
45[FoFs] (*1)		86,123	25.00	21,531	—	119	21,650	
IBK Global New Renewable								
Energy Special Asset								
Professional Private2		115,270	28.98	33,412	—	—	33,412	
VS Cornerstone Fund		8,098	41.18	3,335	—	—	3,335	
Aone Mezzanine Opportunity								
Professional Private		7,777	64.41	5,009	—	—	5,009	
NH-Amundi US Infrastructure								
Private Fund2		123,291	25.91	31,941	—	—	31,941	
SHBNPP Japan Photovoltaic								
Private Special Asset								
Investment Trust No.2		21,103	30.00	6,332	—	—	6,332	
Kakao-Shinhan 1st TNYT Fund		43,869	48.62	21,330		—	21,330	
IMM Special Situation 1-2								
PRIVATE EQUITY FUND		13,019	20.00	2,603	—	—	2,603	
Pacific Private Placement Real								
Estate Fund No.40		46,997	24.73	11,622	—	—	11,622	
Mastern Private Real Estate Loan								
Fund No.2		19,025	33.57	6,387	—	—	6,387	
LB Scotland Amazon Fulfillment								
Center Fund 29		42,252	70.14	29,637	—	—	29,637	
JR AMC Hungary Budapest								
Office Fund 16		38,247	32.57	12,457	—	—	12,457	
EDNCENTRAL Co.,Ltd. (*2)		(23,437)	13.47	(3,156)		3,156	—	
Future-Creation Neoplux Venture								
Capital Fund		26,160	16.25	4,251	—	—	4,251	
Gyeonggi-Neoplux Superman								
Fund		25,116	21.76	5,467	—	—	5,467	
NewWave 6th Fund		45,132	30.00	13,540		—	13,540	
KTC-NP Growth Champ 2011-2								
Private Equity Fund		21,721	5.56	1,207	—	—	1,207	
Neoplux No.3 Private Equity								
Fund		204,529	10.00	20,454	—		20,454	

				20	022		
Investees	N	et assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value
PCC Amberstone Private Equity							
Fund I	₩	86,685	21.67	18,785			18,785
KIAMCO POWERLOAN							
TRUST 4TH		91,884	47.37	43,524			43,524
Mastern Opportunity Seeking							
Real Estate Fund II		73,544	20.00	14,710			14,710
AION ELFIS PROFESSIONAL							
PRIVATE 1		17,831	20.00	3,566			3,566
T&F 2020 SS Private Equity							
Fund Specializing in Start-up							
and Venture Business		19,235	29.68	5,709	_		5,709
Neoplux Market-Frontier		,		,			,
Secondary Fund		70,729	19.74	13,960		_	13,960
Harvest Private Equity Fund II		14,230	22.06	3,139		_	3,139
Synergy Green New Deal 1st		,		,			,
New Technology Business							
Investment Fund		37,743	28.17	10,632			10,632
KAIM Real-estate Private		,		- ,			- )
Investment Trust 20		3,089	38.46	1,187			1,187
KIAMCO Vietnam Solar Special		- )		,			,
Asset Private Investment Trust		13,455	50.00	6,727			6,727
Daishin New Technology		-,		- / -			- )
Investment Fund 5 <sup>th</sup>		10,369	23.44	2,430			2,430
SHINHAN-NEO Core Industrial		,		,			,
Technology Fund		18,913	49.75	9,409		_	9,409
SHBNPP Green New Deal		,		,			,
Energy Professional							
Investment Type Private							
Special Asset Investment Trust							
No.2		83,417	30.00	25,024			25,024
SIMONE Mezzanine Fund No.3		10,419	28.97	3,017			3,017
Eum Private Equity Fund No.7		43,673	21.00	9,170			9,170
Kiwoom Hero No.4 Private		.0,070	_1100	,,,,,			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Equity Fund		16,705	21.05	3,517		_	3,517
Vogo Canister Professional Trust		10,700	21.00	5,517			5,517
Private Fund I		127,747	36.27	46,329			46,329
SW-S Fund		23,919	30.30	7,248			7,248
CL Buyout 1st PEF		59,930	21.43	12,842			12,842
Timefolio The Venture-V second		19,764	20.73	4,096			4,096
Newlake Growth Capital		17,704	20.15	т,090			+,090
Partners2 PEF		41,766	29.91	12,496			12,496
		41,700	27.71	12,490	_	_	12,490

	2022								
Investees	Net assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value			
Shinhan Smilegate Global									
PEF I (*1)	₩ 28,792	14.21	4,091		(320)	3,771			
Genesis Eco No.1 PEF	39,359		11,418		(0=0)	11,418			
SHINHAN-NEO Market-Frontier	0,000		11,110			11,.10			
2nd Fund	80,610	42.70	34,420			34,420			
NH-Synergy Core Industrial New	00,010	12.70	51,120			51,120			
Technology Fund	17,269	36.93	6,377			6,377			
J& Moorim Jade Investment Fund	21,836		5,434			5,434			
Helios-KDBC Digital Contents 1 <sup>st</sup>	14,431		3,356	_	_	3,356			
Ulmus SHC innovation	14,451	25.20	5,550			5,550			
investment fund	20,326	24.04	4,886			4,886			
Mirae Asset Partners X Private	20,520	24.04	4,000			4,000			
Equity Fund	21,817	35.71	7,792			7,792			
T Core Industrial Technology 1st	21,017	55.71	1,172			1,172			
Venture PEF	14,393	31.47	4,529			4,529			
Curious Finale Corporate	17,575	51.77	т,527			ч,527			
Recovery Private Equity Fund	12,925	27.78	3,591			3,591			
TI First Property Private	12,923	21.10	5,591			5,591			
Investment Trust 1	7,817	40.00	3,127			3,127			
MPLUS Professional Private Real	7,017	40.00	5,127			5,127			
Estate Fund 25	10,153	41.67	4,231			4,231			
IBKC Global Contents	10,155	41.07	4,231			4,231			
Investment Fund	18,661	24.39	4,552			4,552			
	18,001	24.39	4,552			4,332			
Nautic Smart No.6 Private Equity Fund	3,121	37.74	1,178			1,178			
	5,121	37.74	1,170			1,170			
Premier Luminous Private Equity	25 700	25.12	066			0 066			
Fund	35,700		8,966		_	8,966			
Hanyang-Meritz 1 Fund	15,348	22.58	3,466	_		3,466			
KNT 2ND PRIVATE EQUITY	5 177	21.74	1 1 2 4		(174)	050			
FUND (*1)	5,177	21.74	1,124	_	(174)	950			
Kiwoom-Shinhan Innovation	26.200	12.96	11 071			11 071			
Fund 2	26,299		11,271	_		11,271			
Maple Mobility Fund	83,539		16,859			16,859			
SJ ESG Innovative Growth Fund	14,689	28.57	4,197			4,197			
AVES 1st Corporate Recovery	( (2)	<b>T</b> ( 10	5.057			5.057			
Private Equity Fund	6,638		5,057	—	—	5,057			
JS Shinhan Private Equity Fund	128,727	3.85	4,953		—	4,953			
NH Kyobo AI Solution	10 (0)	0 ( 00	0.000						
Investment Fund	12,601	26.09	3,288		—	3,288			
Daishin Newgen New									
Technology Investment		<b>FO</b> 50				<b>- - - - :</b>			
Fund 1st	11,273	50.60	5,704			5,704			

	2022						
Investees	Net assets	Ownership 5 (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value	
	(a)	(0)	<u>(a)*(b)</u>	transactions	Other	value	
META ESG Private Equity							
Fund I	₩ 21,3		5,857		_	5,857	
SWFV FUND-1	22,6		9,128		—	9,128	
PHAROS DK FUND	15,8	86 24.14	3,835		—	3,835	
Shinhan VC tomorrow venture							
fund 1	67,9		26,926			26,926	
Highland 2021-8 Fund	14,7		4,826	—	—	4,826	
H-IOTA Fund	38,7	84 24.81	9,623		—	9,623	
Stonebridge-Shinhan Unicorn							
Secondary Fund	34,6	21 17.57	6,082			6,082	
Tres-Yujin Trust	20,0	07 50.00	10,004			10,004	
Shinhan-Time mezzanine blind							
Fund	26,6	25 50.00	13,312			13,312	
Capstone REITs No.26	7,7	03 50.00	3,852			3,852	
JB Incheon-Bucheon REITS							
No.54	12,6	90 39.31	4,989			4,989	
Hankook Smart Real Asset							
Investment Trust No.3	20,9	80 33.33	6,993			6,993	
JB Hwaseong-Hadong REITs							
No.53	16,0	84 31.03	4,991	_	_	4,991	
KB Oaktree Trust No.3	25,8		8,605			8,605	
Daehan No.36 Office Asset	- ,-		- ,			-,	
Management Company (*1)	44,9	64 48.05	21,604		454	22,058	
Rhinos Premier Mezzanine	, -		,			,	
Private Investment Fund							
No.1 (*1)	2,8	73 27.93	802		2,071	2,873	
SH Real Estate Loan Investment	2,0	21.75	002		-,071	2,075	
Type Private Real Estate							
Investment Trust No.2	192,8	51 29.73	57,334			57,334	
Shinhan JigaeNamsan Road	192,0	51 47.15	51,554			57,554	
Private Special Asset							
Investment Trust	163,2	67 24.85	40 571			40,571	
			40,571		_		
SKS-Yozma Fund No.1 IBKC-METIS Global Contents	22,1	10 29.83	6,599	_	_	6,599	
	10 5	12 2626	1 550			1 550	
Investment Fund	12,5	13 36.36	4,550		_	4,550	
Keistone Unicorn Private Equity	22.2	10 00 00	6.040			6.040	
Fund	22,3	18 28.00	6,249		—	6,249	
KB Distribution Private Real	<b>-</b>	60 <b>07 7</b> 0				A	
Estate 3-1	71,0	69 37.50	26,651	—	—	26,651	
Pacific Private Investment Trust							
No.49-1	36,1	26 79.28	28,641	—	—	28,641	

	2022							
Investees	Ne	et assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value	
KIWOOM Real estate private								
placement fund for normal								
investors No. 31	₩	14,264	60.00	8,558			8,558	
RIFA Real estate private								
placement fund for normal								
investoes No. 51		14,315	40.00	5,726			5,726	
Fivetree general private equity								
fund No.15		24,573	49.98	12,281			12,281	
Shinhan-Kunicorn first Fund		25,658	38.31	9,831			9,831	
Harvest Fund No.3		35,488	44.67	15,854		_	15,854	
Shinhan Simone Fund I		12,468	38.46	4,796			4,796	
Korea Investment develop seed		,		,			,	
Trust No.1		25,604	40.00	10,242			10,242	
Tiger Green alpah Trust No.29		28,146	95.24	26,806			26,806	
STIC ALT Global II Private				_ 0,000			_ 0,000	
Equity Fund		45,350	21.74	9,859			9,859	
NH-Brain EV Fund		46,369	25.00	11,592			11,592	
DDI LVC Master Real Estate		10,207	20.00	11,002			11,072	
Investment Trust Co., Ltd. (*1)		42,622	15.00	6,393		12	6,405	
Find-Green New Deal 2nd Equity		12,022	15.00	0,575		12	0,100	
Fund		19,969	22.57	4,508			4,508	
ShinhanFitrin 1st Technology		17,707	22.01	1,500			1,500	
Business Investment								
Association		27,444	16.17	4,437			4,437	
PARATUS No.3 Private Equity		27,777	10.17	т,т57			т,т.) /	
Fund		19,249	25.64	4,936			4,936	
Golden Route 2nd Startup		19,249	23.04	4,950			4,950	
Venture Specialized Private								
Equity Fund		13,214	22.73	3,003			3,003	
Koramco Private Real Estate		13,214	22.15	5,005			5,005	
Fund 143		10,000	30.30	2 0 2 0			2 020	
		10,000	50.50	3,030		_	3,030	
Korea Investment Top Mezzanine	5	11 177	22.22	0 995			0.004	
Private Real Esate Trust No.1		44,477	<i>LL.LL</i>	9,885		_	9,885	
LB YoungNam Logistics Private Trust No.40		20 002	25.00	0 740			0740	
		38,992	25.00	9,748	—		9,748	
Shinhan-Cognitive Start-up Fund		20.250	22.74	0.020		1 /	0.052	
L.P. (*1)		30,358	32.74	9,939	—	14	9,953	
IGEN2022 No.1 private Equity		22.261	27.05	0.045			0.044	
Fund		32,361	27.95	9,045	—	—	9,045	
Cornerstone J&M Fund I		13,353	26.67	3,561		—	3,561	
Logisvalley Shinhan REIT Co.,Ltd. (*1)		23,629	20.27	4,790		(986)	3,804	

#### **15.** Investments in associates (continued)

	2022						
Investees	Net assets (a)	Ownership (%) (b)	Interests in the net assets (a)*(b)	Intra-group transactions	Other	Carrying value	
KDB Investment Global							
Healthcare Private Equity							
Fund I	₩ 142,794	24.14	34,468	—		34,468	
Korea Investment Green Newdeal							
Infra Trust No.1	20,431	27.97	5,714		—	5,714	
BTS 2nd Private Equity Fund	14,505	26.00	3,772		—	3,772	
Shinhan Global Active REIT							
Co.Ltd.	94,370	20.37	19,222	_	_	19,222	
NH-J&-IBKC Label Technology							
Fund	35,477	27.81	9,866	_	_	9,866	
IMM Global Venture							
Opportunity, LP	8,775	35.50	3,115	_	_	3,115	
Capstone Develop Frontier Trust	32,000	21.43	6,857		_	6,857	
Nextrade Co., Ltd. (*1)	141,421	8.00	11,314	_	(1,614)	9,700	
SH Sustainable Management ESG							
Short term Bond Security							
Feeder Investment Trust No.1	11,194	26.90	3,011		_	3,011	
SH 1.5years Maturity Investment							
Type Security Investment Trust							
No.2	15,865	29.00	4,601			4,601	
Eventus-IBKC LIB Fund	27,590	21.88	6,035			6,035	
NH-Daishin-Kyobo healthcare 1							
Fund	15,792	25.00	3,948			3,948	
IBKC-Behigh Fund 1st	10,992	29.73	3,268			3,268	
Nautic Green Innovation ESG							
Co-investment No.1 Private							
Equity Fund	16,419	24.10	3,956		_	3,956	
ON No.1 Private Equity Fund	18,767		5,362		_	5,362	
Digital New Deal Kappa Private							
Equity Fund	16,420	30.12	4,946			4,946	
Others	797,590		228,801		1,422	230,223	
	₩9,416,618		2,907,155	8	(2,689)	2,904,474	

(\*1) Other represents the adjustments of fair value when acquired.

(\*2) Others are the amount of fair value adjustments that occurred at the time of acquisition and accumulated losses that were not recognized due to the suspension of equity method recognition as the investment account balance became "0" due to the accumulation of losses for the current period.

(\*3) The adjustments for others are the unrecognized equity method for preferred stocks without voting rights issued by the invested company.

#### 15. Investments in associates (continued)

(e) The unrecognized equity method losses as of and for the years ended December 31, 2021 and 2022 are as follows:

	2021					
Investees	Unrecognized equity method losses	Cumulative unrecognized equity method losses				
Songrim Partners	₩ —	(22)				
MIEL CO.,LTD.	(16)	(41)				
Goduck Gangil1 PFV Co.,Ltd.	(19)	(164)				
Goduck Gangil10 PFV Co.,Ltd.	(1,664)	(1,664)				
Shinhan Global Healthcare Fund 1	(153)	(153)				
Shinhan Global Healthcare Fund 2	(14)	(14)				
EDNCENTRAL Co.,Ltd.	(494)	(494)				
	₩(2,360)	(2,552)				

	2022				
Investees	Unrecognized equity method losses	Cumulative unrecognized equity method losses			
MSTEEL Co.,Ltd.	₩ (371)	(371)			
MIEL CO.,LTD.		(41)			
Shinhan Global Healthcare Fund 1	(61)	(214)			
Shinhan Global Healthcare Fund 2	(82)	(96)			
EDNCENTRAL Co.,Ltd.	(504)	(998)			
	₩(1,018)	(1,720)			

#### **16.** Investment properties

(a) Investment properties as of December 31, 2021 and 2022 are as follows:

	2021	2022
Acquisition cost	₩ 852,458	513,986
Accumulated depreciation	(177,067)	(150,878)
Carrying value	₩ 675,391	363,108

#### 16. Investment properties (continued)

(b) Changes in investment properties for the years ended December 31, 2021 and 2022 are as follows:

	2021	2022
Beginning balance	₩615,235	675,391
Acquisition	8,292	10,090
Disposal	(2,279)	(230,148)
Depreciation	(21,616)	(18,115)
Amounts transferred from (to) property and equipment	73,773	9,554
Amounts transferred from (to) assets held for sale(*)	2,238	(83,664)
Foreign currency adjustment	(252)	
Ending balance	₩675,391	363,108

- (\*) Comprise buildings and land, etc.
- (c) Income and expenses on investment property for the years ended December 31, 2020, 2021 and 2022 are as follows:

	2020	2021	2022
Rental income	₩23,890	35,887	33,366
Direct operating expenses for investment properties that generated			
rental income	11,951	12,033	16,980

(d) The fair value of investment property as of December 31, 2021 and 2022 is as follows:

	2021	2022
Land and buildings(*)	₩1,374,389	1,063,031

(\*) Fair value of investment properties is estimated based in the recent market transaction conditions with an independent third party and certain significant unobservable inputs. Accordingly, fair value of investment properties is classified as level 3.

### 17. Other assets

(a) Other assets as of December 31, 2021 and 2022 are as follows:

	2021	2022
Accounts receivable	₩12,754,436	11,594,139
Domestic exchange settlement debit	6,700,373	6,034,816
Guarantee deposits	1,077,644	1,016,748
Accrued income	2,655,894	3,254,404
Prepaid expense	491,950	784,630
Provisional payments	295,149	378,993
Sundry assets	88,797	96,190
Separate account assets	9,501,135	8,086,147
Advance payments	207,128	288,466
Unamortized deferred acquisition cost	954,949	949,322
Leased assets	1,395,334	1,932,791
Others	125,815	505,230
Discounted present value	(30,614)	(51,864)
Allowances for credit loss of other assets	(244,236)	(362,174)
	₩35,973,754	34,507,838

(b) Changes in unamortized deferred acquisition cost by insurance type for the year ended December 31, 2021 and 2022 are as follows:

	2021					
	Beginning	Acquisition cost incurred			Amortiza	Ending
	balance	Cost	Expensed	Deferral		balance
Individual insurance						
Pure endowment insurance	₩ 37,504	12,386	(3,680)	8,706	(23,468)	22,742
Death insurance	932,922	655,210	(278,147)	377,063	(393,942)	916,043
Endowment insurance	8,925	19,703	(8,382)	11,321	(4,477)	15,769
	979,351	687,299	(290,209)	397,090	(421,887)	954,554
Group insurance						
Pure protection	591	170	(64)	106	(302)	395
	₩979,942	687,469	(290,273)	397,196	(422,189)	954,949

# **17.** Other assets (continued)

	2022						
	Beginning	Acquisition cost incurred		Business combination	Amortiza	Ending	
	balance	Cost	Expensed	Deferral	(Note 47)	-tion	balance
Individual insurance							
Pure endowment insurance	₩ 22,742	10,216	(4,569)	5,647		(12,491)	15,898
Death insurance	916,043	636,753	(247,827)	388,926		(385,664)	919,305
Endowment insurance	15,769	15,139	(11,168)	3,971		(5,974)	13,766
	954,554	662,108	(263,564)	398,544	_	(404,129)	948,969
Group insurance							
Pure protection	395	136	(20)	116	—	(168)	343
General insurance							
Long-term					13	(3)	10
	₩954,949	662,244	(263,584)	398,660	13	(404,300)	949,322

# 18. Leases

(a) Gross investment and present value of minimum lease payment of finance lease as of December 31, 2021 and 2022 are as follows:

	2021				
	Gross investment	Unrealized interest income	Present value of minimum lease payment		
Not later than 1 year	₩ 635,826	65,349	570,477		
$1 \sim 2$ years	470,800	39,631	431,169		
$2 \sim 3$ years	308,999	18,738	290,261		
$3 \sim 4$ years	191,257	6,606	184,651		
$4 \sim 5$ years	113,638	4,417	109,221		
Later than 5 years	5,170	32	5,138		
	₩1,725,690	134,773	1,590,917		
$4 \sim 5$ years	113,638 5,170	4,417	109,221 5,138		

(\*) Interest income on finance lease receivables recognized for the year ended December 31, 2021 is ₩60,475 million.

# **18.** Leases (continued)

	2022				
	Gross investment	Unrealized interest income	Present value of minimum lease payment		
Not later than 1 year	₩ 654,159	82,286	571,873		
$1 \sim 2$ years	477,216	55,860	421,356		
$2 \sim 3$ years	379,998	36,353	343,645		
$3 \sim 4$ years	312,014	20,816	291,198		
$4 \sim 5$ years	250,568	7,415	243,153		
Later than 5 years	1,682	4	1,678		
	₩2,075,637	202,734	1,872,903		

- (\*) Interest income on finance lease receivables recognized for the year ended December 31, 2022 is ₩64,679 million.
- (b) Minimum lease payment receivable schedule for lease contracts of the Group as lessor as of December 31, 2021 and 2022 are as follows:
- *i)* Finance lease

		2021	
	Minimum lease payment	Present value adjustment	Present value of minimum lease payment
Not later than 1 year	₩ 635,826	65,349	570,477
$1 \sim 2$ years	470,800	39,631	431,169
$2 \sim 3$ years	308,999	18,738	290,261
$3 \sim 4$ years	191,257	6,606	184,651
$4 \sim 5$ years	113,638	4,417	109,221
Later than 5 years	5,170	32	5,138
	₩1,725,690	134,773	1,590,917
		2022	
	Minimum lease payment	Present value adjustment	Present value of minimum lease payment
Not later than 1 year	₩ 654,159	82,286	571,873
$1 \sim 2$ years	477,216	55,860	421,356
$2 \sim 3$ years	379,998	36,353	343,645
	212.014	20,816	291,198
$3 \sim 4$ years	312,014	20,010	271,170
$3 \sim 4$ years $4 \sim 5$ years	250,568	7,415	243,153
-			

# 18. Leases (continued)

*ii)* Operating lease

Minimum lease payment		
2021	2022	
₩ 371,521	513,245	
320,603	439,678	
251,720	322,125	
147,134	189,375	
53,879	72,000	
94,143	6,997	
₩1,239,000	1,543,420	
	2021 ₩ 371,521 320,603 251,720 147,134 53,879 94,143	

(c) Changes in operating lease assets for the years ended December 31, 2021 and 2022 are as follows:

	2021	2022
Beginning balance	₩1,014,300	1,393,738
Acquisition	691,192	1,017,137
Disposal	(54,721)	(128,950)
Depreciation	(257,033)	(351,208)
Amounts transferred from(to) property and equipment		(214)
Ending balance	₩1,393,738	1,930,503

(d) The details of the right-of-use assets by the lessee's underlying asset type as of December 31, 2021 and 2022 are as follows:

		2021	
	Acquisition cost	Accumulated depreciation	Carrying value
Real estate	₩1,153,021	(578,980)	574,041
Vehicle	45,670	(23,821)	21,849
Others	30,478	(18,241)	12,237
	₩1,229,169	(621,042)	608,127
		2022	
	Acquisition cost	Accumulated depreciation	Carrying value
Real estate	₩1,124,151	(538,076)	586,075
Vehicle	51,644	(29,317)	22,327
Others	32,933	(22,125)	10,808
	₩1,208,728	(589,518)	619,210

### **18.** Leases (continued)

(e) The details of the changes in the right-of-use assets for the years ended December 31, 2021 and 2022 are as follows:

		2021		
	Real estate	Vehicle	Others	Total
Beginning balance	₩ 556,419	20,621	13,377	590,417
Acquisition	295,228	17,524	4,173	316,925
Disposal	(22,829)	(4,070)	(31)	(26,930)
Depreciation(*)	(271,895)	(12,408)	(5,282)	(289,585)
Effects of foreign currency movements	17,118	182		17,300
Ending balance	₩ 574,041	21,849	12,237	608,127
		2022		
	Real estate	Vehicle	Others	Total
Beginning balance	₩ 574,041	21,849	12,237	608,127
Acquisition	350,328	14,834	3,991	369,153
Disposal	(72,323)	(2,404)	(836)	(75,563)
Depreciation(*)	(271,299)	(12,004)	(4,583)	(287,886)
Effects of foreign currency movements	4,277	52	(1)	4,328
Business combination (Note 47)	1,051			1,051
Ending balance	₩ 586,075	22,327	10,808	619,210

(\*) Included in general administrative expense and other operating income(expense) of the consolidated statements of comprehensive income.

(f) The details of the maturity of the lease liability as of December 31, 2021 and 2022 are as follows:

				2021			
	1 month or less	1 month ~ 3 months or less	3 months ~ 6 months or less	6 months ~ 1 year or less	1 year ~ 5 years or less	More than 5 years	Total
Real estate	₩22,890	33,950	46,532	82,467	266,299	121,360	573,498
Vehicle	4,496	1,935	2,536	4,718	12,298	513	26,496
Others	465	650	1,124	2,205	8,226	26	12,696
	₩27,851	36,535	50,192	89,390	286,823	121,899	612,690
				2022			
	1 month or less	1 month ~ 3 months or less	3 months ~ 6 months or less	6 months ~ 1 year or less	1 year ~ 5 years or less	More than 5 years	Total
Real estate	₩26,601	34,980	48,209	84,706	315,267	74,190	583,953
Vehicle	4,999	1,851	2,543	4,566	13,910	92	27,961
Others	463	588	1,151	2,219	6,994	10	11,425
	₩32,063	37,419	51,903	91,491	336,171	74,292	623,339

(\*) The above amounts are based on undiscounted cash flows, and have been classified at the earliest maturity that the Group has the obligation to pay.

### 18. Leases (continued)

(g) The lease payments for low-value assets and short-term leases for the years ended December 31, 2021 and 2022 are as follows:

	2021	2022
Low-value assets	₩5,885	6,888
Short-term lease (*)	766	268
Total	₩6,651	7,156

(\*) The payments for leases with terms less than 1 month are included.

### 19. Pledged assets

(a) Assets pledged as collateral as of December 31, 2021 and 2022 are as follows:

	2021	2022	Reasons for collateral
Securities:			
Securities at FVTPL	₩14,944,525	12,627,388	Customer RP, etc.
Securities at FVOCI	3,244,232	9,282,016	Borrowings, Settlement security for Bank of Korea,
Securities at amortized cost	16,284,795	15,004,325	Borrowing securities, etc. Borrowings, Settlement security for Bank of Korea, Customer RP, etc.
	34,473,552	36,913,729	
Deposits at amortized cost Property and Equipment	958,206	1,883,755	Borrowings, etc. Establishing the right to
(real estate)	300,352	29,288	collateral security, etc.
	₩35,732,110	38,826,772	

- (\*) The carrying values of assets pledged that the pledgees have the right to sell or re-pledge regardless of the Group's default as of December 31, 2021 and 2022 are ₩11,017,362 million and ₩9,754,980 million, respectively.
- (b) The fair value of collateral held that the Group has the right to sell or re-pledge regardless of the pledger's default as of December 31, 2021 and 2022 are as follows:

		2021	2022		
	The fair value of assets received as collateral	The fair value of collateral sold or re-provided as collateral	The fair value of assets received as collateral	The fair value of collateral sold or re-provided as collateral	
Securities	₩2,163,744		3,750,199	—	

# 20. Deposits

Deposits as of December 31, 2021 and 2022 are as follows:

	2021	2022
Demand deposits:		
Korean won	₩151,787,483	132,604,867
Foreign currencies	20,320,241	24,841,409
	172,107,724	157,446,276
Time deposits:		
Korean won	140,651,250	171,355,724
Foreign currencies	20,847,651	24,910,187
	161,498,901	196,265,911
Certificates of deposits	16,576,536	14,921,375
Discount note deposits	5,818,001	6,631,858
СМА	5,246,478	4,634,010
Others	3,649,035	3,111,315
	₩364,896,675	383,010,745

# 21. Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss as of December 31, 2021 and 2022 are as follows:

	2021	2022
Securities sold:		
Stocks	₩ 275,451	278,341
Bonds	505,202	438,689
Others	7,114	7,074
	787,767	724,104
Gold/silver deposits	581,458	422,006
	₩1,369,225	1,146,110

### 22. Financial liabilities designated at fair value through profit or loss

(a) Financial liabilities designated at fair value through profit or loss as of December 31, 2021 and 2022 are as follows:

	2021	2022	Reason for designation
Equity-linked securities sold Securities sold with embedded	₩5,795,071	5,437,434	Compound financial instrument
derivatives	2,228,799	2,882,607	
Debt securities issued		47,327	Fair value measurement and management
	₩8,023,870	8,367,368	

(\*) The Group designated the financial liabilities at the initial recognition(or subsequently) in accordance with paragraph 6.7.1 of IFRS 9 as financial liabilities at fair value through profit or loss.

Maximum credit risk exposure of the financial liabilities designated at fair value through profit or loss amounts to \$8,367,368 million as of December 31, 2022. Decrease in values of the liability due to credit risk changes is \$5,919 million for the year ended December 31, 2022 and the accumulated changes in values are \$(-)7,014 million as of December 31, 2022.

(b) The difference between the carrying value of financial liabilities designated at fair value through profit or loss and the amount required to be paid at contractual maturity as of December 31, 2021 and 2022 are as follows:

	2021	2022
Expiration payment	₩7,325,678	7,733,506
Carrying value	8,023,870	8,367,368
Difference from carrying value	₩ (698,192)	(633,862)

# 23. Borrowings

Borrowings as of December 31, 2021 and 2022 are as follows:

	20	)21	2	2022
	Interest rate (%)	Amount	Interest rate (%)	Amount
Borrowings denominated in Korean won:				
Borrowings from Bank of	0.05 0.05	W. 5 050 001	0.05 1.55	W. 5 100 225
Korea	0.25~0.25	₩ 5,278,331	0.25~1.75	₩ 5,100,325
Others	0.00~3.93	18,412,343	0.00~7.60	23,091,971
		23,690,674		28,192,296
Borrowings denominated in foreign currencies:				
Overdraft due from banks	0.00~0.30	42,434	0.00~0.30	48,072
Borrowings from banks	(0.49)~12.29	5,292,872	0.15~21.20	7,811,701
Others	0.00~11.25	1,890,291	0.00~22.65	2,397,605
		7,225,597		10,257,378
Call money	(0.30)~1.52	1,534,611	0.05~6.30	1,276,301
Bill of sale	0.00~1.47	9,032	0.00~3.95	15,057
Bonds sold under repurchase				
agreements	0.00~6.25	10,709,115	0.00~6.80	9,544,536
Deferred origination costs		(1,964)		(6,393)
		₩43,167,065		₩49,279,175

### 24. Debt securities issued

Debt securities issued as of December 31, 2021 and 2022 are as follows:

	2	2021	2	2022
	Interest rate (%)	Amount	Interest rate (%)	Amount
Debt securities issued in Korean won:				
Debt securities issued	0.79~8.00	₩64,419,771	0.05~9.00	₩61,038,481
Subordinated debt securities				
issued	2.20~4.60	5,030,125	2.20~4.17	3,275,225
Gain on fair value hedges		(122,069)	—	(348,700)
Discount on debt securities				
issued	_	(38,845)	—	(37,943)
		69,288,982		63,927,063
Debt securities issued in foreign				
currencies:				
Debt securities issued	0.25~7.59	7,462,087	0.25~7.59	9,586,831
Subordinated debt securities				
issued	3.34~5.10	3,307,306	3.34~5.10	4,145,264
Loss(Gain) on fair value hedges		130,392	—	(324,901)
Discount on debt securities				
issued		(39,404)		(45,474)
		10,860,381		13,361,720
		₩80,149,363		₩77,288,783

# 25. Defined benefit plans

(a) Defined benefit plan assets and obligations

The Group has operated a defined benefit plan and calculates defined benefit obligations based on the employee's pension compensation benefits and service period.

Defined benefit obligations and plan assets as of December 31, 2021 and 2022 are as follows:

	2021	2022
Present value of defined benefit obligations	₩ 2,205,869	1,934,643
Fair value of plan assets	(2,296,685)	(2,539,632)
Recognized liability(asset) for defined benefit obligations(*)	₩ (90,816)	(604,989)

(\*) The liability for defined benefit obligation of ₩90,816 million as of December 31, 2021 is the net defined benefit assets of ₩142,020 million less the net defined liabilities of ₩51,204 million. In addition, the asset for defined benefit obligation of ₩604,989 million as of December 31, 2022 is the net defined benefit assets of ₩619,653 million less the net defined liabilities of ₩14,664 million.

# 25. Defined benefit plans (continued)

(b) Changes in the present value of defined benefit obligation and plan assets for the years ended December 31, 2021 and 2022 are as follows:

	D	ecember 31, 2021	
	Defined benefit obligation	Plan assets	Net defined benefit liability (asset)
Beginning balance	₩2,182,464	(2,138,324)	44,140
Included in profit or loss:			
Current service cost	179,751		179,751
Past service cost	2,570		2,570
Interest expense (income)	64,729	(64,759)	(30)
Settlement gain or loss	(4,844)		(4,844)
	242,206	(64,759)	177,447
Included in other comprehensive income:			
Remeasurement loss (gain):			
- Actuarial losses (gains) arising from :			
Demographic assumptions	(1,642)		(1,642)
Financial assumptions	(87,406)		(87,406)
Experience adjustment	(5,450)	—	(5,450)
- Return on plan assets excluding interest income		35,141	35,141
	(94,498)	35,141	(59,357)
Other:			
Benefits paid by the plan	(122,358)	120,347	(2,011)
Contributions paid into the plan	(10)	(249,099)	(249,109)
Settlement gain or loss	(2,231)	9	(2,222)
Effect of changes in foreign exchange rates	296		296
	(124,303)	(128,743)	(253,046)
Ending balance	₩2,205,869	(2,296,685)	(90,816)

(\*) Profit and loss related to defined benefit plans are all included in the general administrative expense.

# 25. Defined benefit plans (continued)

	December 31, 2022		2
	Defined benefit obligation	Plan assets	Net defined benefit liability (asset)
Beginning balance	₩2,205,869	(2,296,685)	(90,816)
Included in profit or loss:			
Current service cost	170,772		170,772
Past service cost	8,330		8,330
Interest expense (income)	72,307	(78,823)	(6,516)
Settlement gain or loss	(466)		(466)
	250,943	(78,823)	172,120
Included in other comprehensive income:			
Remeasurement loss (gain):			
- Actuarial losses (gains) arising from:			
Demographic assumptions	(938)		(938)
Financial assumptions	(419,764)		(419,764)
Experience adjustment	35,758		35,758
- Return on plan assets excluding interest income		36,725	36,725
	(384,944)	36,725	(348,219)
Other:			
Benefits paid by the plan	(138,290)	145,130	6,840
Contributions paid into the plan		(345,979)	(345,979)
Changes in the scope of consolidation	1,507		1,507
Effect of changes in foreign exchange rates	(442)		(442)
	(137,225)	(200,849)	(338,074)
Ending balance	₩1,934,643	(2,539,632)	(604,989)

(\*) Profit and loss related to defined benefit plans are all included in the general administrative expense.

(c) The composition of plan assets as of December 31, 2021 and 2022 are as follows:

	2021	2022
Plan assets comprise:		
Debt securities	₩ 43,607	31,140
Due from banks	1,915,361	2,220,218
Others	337,717	288,274
	₩2,296,685	2,539,632

### 25. Defined benefit plans (continued)

(d) Actuarial assumptions as of December 31, 2021 and 2022 are as follows:

	2021	2022	Description
Discount rate	3.19%~3.77%	5.05%~5.93%	AA0 corporate bond yields
Future salary increase rate	$1.98\% \sim 5.00\%$	$2.00\% \sim 7.00\%$	
	+ Upgrade rate	+ Upgrade rate	Average for 5 years
Weighted average maturity	7.4 years~	6.7 years~	
	14.8 years	10.9 years	

# (e) Sensitivity analysis

As of December 31, 2021 and 2022, reasonably possible changes in one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below.

	2021	1
	Defined benefi	t obligation
	Increase	Decrease
Discount rate (1%p movement)	₩(197,174)	216,226
Future salary increase rate (1%p movement)	216,450	(200,843)
		_
	2022	2
	2022 Defined benefi	_
		_
Discount rate (1%p movement)	Defined benefi	t obligation

(f) The Group's estimated contribution is \$145,699 million as of December 31, 2023.

# 26. Provisions

(a) Provisions as of December 31, 2021 and 2022 are as follows:

		2021	2022
Asset retirement obligations	₩	82,123	91,571
Expected loss related to litigation		9,693	29,238
Unused credit commitments		300,008	317,590
Guarantee contracts issued		81,922	83,411
Financial guarantee contracts issued		55,344	55,828
Non-financial guarantee contracts issued		26,578	27,583
Others(*)		693,110	744,504
	₩1	,166,856	1,266,314

(\*) As of December 31, 2021 and 2022, the Group recognizes a provision of ₩518,955 million and ₩574,013 million, respectively, an estimated amount which is highly probable to be paid for customer losses expected due to delays in redemption of Lime CI funds, etc.

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# 26. Provisions (continued)

(b) Changes in provision for unused credit commitments and financial guarantee contracts issued for the years ended December 31, 2021 and 2022 are as follows:

	2021						
	Unused	credit com	nitments	Financial gu	arantee cont	racts issued	
	12 months expected credit loss	Life time expected credit loss	Impaired financial asset	12 months expected credit loss	Life time expected credit loss	Impaired financial asset	Total
Beginning balance	₩164,147	140,137	1,435	54,550	7,335	10	367,614
Transfer (from)to 12 months							
expected credit loss	63,335	(63,249)	(86)	2,931	(2,931)	_	_
Transfer (from)to life time							
expected credit loss	(11,889)	11,917	(28)	(3,621)	3,621		_
Transfer (from)to impaired							
financial asset	(274)	(939)	1,213	_	_		_
Provided (reversed)	(66,373)	58,188	(610)	(581)	(178)	5	(9,549)
Change in foreign exchange rate	1,964	1,077	—	1,910	534		5,485
Others(*)	(337)	380		(6,582)	(1,672)	13	(8,198)
Ending balance	₩150,573	147,511	1,924	48,607	6,709		355,352

(\*) Others include effects of the provision from the new financial guarantee contracts measured at fair value, and the expired contracts, the change of discount rate and others.

		2022					
	Unused	credit com	nitments	Financial gu			
	12 months expected credit loss	Life time expected credit loss	Impaired financial asset	12 months expected credit loss	Life time expected credit loss	Impaired financial asset	Total
Beginning balance	₩150,573	147,511	1,924	48,607	6,709	28	355,352
Transfer (from)to 12 months							
expected credit loss	68,226	(67,945)	(281)	2,680	(2,680)		
Transfer (from)to life time							
expected credit loss	(10,794)	10,842	(48)	(3,715)	3,715		
Transfer (from)to impaired							
financial asset	(316)	(1,274)	1,590			—	
Provided (reversed)	(30,016)	50,733	(1,155)	(972)	537	5	19,132
Change in foreign exchange rate	(2,068)	131		910	118		(909)
Others(*)	(43)			603	(712)	(5)	(157)
Ending balance	₩175,562	139,998	2,030	48,113	7,687	28	373,418

(\*) Others include effects of the provision from the new financial guarantee contracts measured at fair value, and the expired contracts, the change of discount rate and others.

### **26. Provisions (continued)**

(c) Changes in provisions for the years ended December 31, 2021 and 2022 are as follows:

			2021		
	Asset retirement	Litigation	Guarantee	Others	Total
Beginning balance	₩ 65,659	12,468	21,956	337,039	437,122
Provision(reversal)	8,185	2,552	3,457	350,090	364,284
Provision used	(3,793)	(5,327)		(37,604)	(46,724)
Change in foreign exchange rate	4		1,265	(1,314)	(45)
Others(*)	12,068		(100)	44,899	56,867
Ending balance	₩ 82,123	9,693	26,578	693,110	811,504

(\*) Others include increase in provisions based on the present value, the effect of changes in discount rate over the period and others.

			2022		
	Asset retirement	Litigation	Guarantee	Others	Total
Beginning balance	₩ 82,123	9,693	26,578	693,110	811,504
Provision(reversal)	27,474	20,733	(410)	127,460	175,257
Provision used	(25,228)	(779)		(75,355)	(101,362)
Change in foreign exchange rate	4		1,352	315	1,671
Others(*)	7,090	(409)	63	(1,026)	5,718
Business combination (Note 47)	108				108
Ending balance	₩ 91,571	29,238	27,583	744,504	892,896

- (\*) Others include increase in provisions based on the present value, the effect of changes in discount rate over the period and others.
  - (d) Asset retirement obligation liabilities represent the estimated cost to restore the existing leased properties which is discounted to the present value using the appropriate discount rate at the end of the reporting period. Disbursements of such costs are expected to incur at the end of lease contract. Such costs are reasonably estimated using the average lease year and the average restoration expenses. The average lease year is calculated based on the past ten-year historical data of the expired leases. The average restoration expense is calculated based on the actual costs incurred for the past three years using the three-year average inflation rate.
  - (e) Allowance for guarantees and acceptances as of December 31, 2021 and 2022 are as follows:

		2021	2022
Outstanding guarantees and acceptances	₩10	),540,968	12,154,088
Contingent guarantees and acceptances	4	,670,771	4,565,829
ABS and ABCP purchase commitments	1	,525,768	1,496,604
Endorsed bill		8,199	10,025
	₩16	5,745,706	18,226,546
Allowance for loss on guarantees and acceptances	₩	81,922	83,411
Ratio		0.49%	0.46

### 27. Liability under insurance contracts

- (a) Overview of the insurance risk Shinhan Life Insurance Co., Ltd.
- i) Overview of the insurance risk
- i-1) Insurance risk and reinsurance

Insurance risk is the likelihood of an insurance event occurring and the uncertainty as to the total amount and timing of benefits paid as a result of the event. The main risk covered by insurance contracts is the risk that the actual claim or benefit payment will exceed the accumulated liability. This risk can occur for the following reasons:

<sup>①</sup> Frequency risk: Possibility that the number of occurrences of the insurance event is different from the expected number

<sup>(2)</sup> Severity risk: The cost of an incident may be different from the expected cost level

Experience shows that more or more similar insurance contracts are less likely to have an unusual effect from some contracts, and the Group forms a sufficiently diversified group of contracts in consideration of this when acquiring the contracts.

Insurance risk includes a lack of risk diversification and relates to geographical location and the nature of the policyholder as well as to the diversification of risk forms or sizes.

If the insurance contract covers death, the catastrophe affects the frequency the most and can affect the frequency of death earlier than expected due to a wide range of causes such as eating habits, smoking, and exercise habits. And if the coverage is survival, medical technology and social conditions can increase the survival rate. The frequency may also be affected by excessive concentration in the coverage area.

Insurance accidents in life insurance include not only the death of the insured (insured) but also survival, disability and hospitalization.

The Group basically classifies the Group's insurance products into individual insurance and group insurance according to the policyholder. Group insurance means a contract under which the insured belongs to a group of a certain size or larger and in which the policyholder is the representative of the Group or organization. The group insurance can be divided into savings and protections. Protection insurance means insurance in which the sum of benefits paid for survival at the base age does not exceed the premium already paid; savings insurance is defined as insurance, except for protection insurance, in which the sum of benefits paid for survival exceeds the premium already paid. Individual insurance can be classified into death insurance in which the insured's death is insured, survival insurance in which the life is insured for a certain period of time, and endowment insurance.

Life insurance products can also be divided into guaranteed fixed rates, floating rates, interest-sensitive, and variable types.

In the guaranteed fixed interest type, since the expected rate does not change from the time the policyholder enters into the contract to the end of the insurance period, the Group assumes the interest rate risk if the asset management yield or market interest rate is lower than the expected rate. Floating interest rate type divides the net insurance premium into the guaranteed portion and the reserve portion, so that the guaranteed portion is applied with the predetermined expected rate, and the reserve portion changes the reserve rate of policy reserve according to asset management yield, and some hedging on interest rate risk is feasible.

### 27. Liability under insurance contracts (continued)

The Group uses acquisition strategies and reinsurance strategies to manage the uncertainty of the total amount and timing of insurance claims paid out as a result of an insured event.

### Acquisition strategy

Acquisition strategy means diversifying the type of risk or the level of benefits that are acquired. For example, a company can balance mortality and survival risks. In addition, the selection of policyholders through regular check-ups is one of the major acquisition strategies.

### <sup>(2)</sup> Reinsurance strategy

The risk to be ceded by the Group is based on the acquired insurance contract, which can be the total amount of risk or risk per contract on a per capita basis or per contract basis. In principle, the reinsurance method provides the risk premium excess reinsurance, but other methods may be used within the scope of the relevant laws as required. The degree of reinsurance held by the Group shall be determined by considering the Group's assets, contract conditions, risk level, and technology for selecting the contract.

Insurance risk can also be affected by the policyholder's right to terminate the contract or exercise annuity conversion rights to reduce or not pay the full premium. As a result, insurance risks may be affected by the policyholder's actions and decisions. The Group's insurance risk can be estimated on the assumption that the policyholder is reasonable. For example, a person who is worse than a person in good health would have less intention of terminating insurance that guarantees death. These factors are also reflected in the assumptions about the Group's insurance liability.

### i-2) Discretionary participation features

The discretionary participation feature is a contractual right to receive additional benefits which have the following characteristics in addition to the unconditional rights of the policyholder or investor, which fulfils all three requirements below. Insurance premiums for investment contracts without discretionary participation feature are recognized as deposits, and premiums for investment contracts with discretionary participation feature are recognized as profit or loss.

- ① It constitutes a significant portion of the total payments in the contract.
- <sup>(2)</sup> The amount or timing is determined at the discretion of the issuer under the contract.
- 3 The contract is based on one or more of the following:
  - The performance arising from specific contract groups or specific contract types;

- Realized or unrealized return on investment arising from the specific asset group held by the issuer; or

- Profit or loss of the entity, fund or other entity that issued the contract;

The Group's participating contract meets all three of the above requirements and includes a discretionary participation feature.

If the actual base rate matches with the expected base rate assumed upon calculation of the insurance premium of the Group, income and expenses are balanced over the insurance period, that the premiums do not fall short. In practice, however, the expected risk, expected interest rate, and projected expense ratio

### 27. Liability under insurance contracts (continued)

applied when calculating premiums will differ from the actual rate where the interest rate or expense ratio changes due to changes in risk rate or economic situation. These differences constitute the Group's profit or losses and, depending on the source, these may consist of mortality risk, interest rate, interest rate risk, and expense rate.

Compared to contracts without discretionary participation feature, in contracts with discretionary participation, the sources of profit or loss below are shared between the policyholders and the Group, thereby reducing the risk.

### ① Gain or losses on mortality risk

It is caused by the difference between the expected risk rate and the actual risk rate. In case of death insurance, if the actual mortality rate is lower than the expected mortality rate, there is a risk difference gain, and vice versa.

### 2 Gain or losses on interest rate risk

It is caused by the difference between the expected interest rate and the actual interest rate. If the actual asset management return is higher than the expected interest rate, interest rate difference is generated, and vice versa.

### 3 Gain or losses on expense rate risk

It is caused by the difference between the business expense and the actual expense. If the actual expense is lower than the business expense, the difference in expense is incurred, and vice versa.

As described above, if the expected base rate used by the Group to calculate the premium is different from the actual, the profits generated from the settlement must be refunded to the policyholder because the profits generated are taken in the calculation of premiums, and the dividend paid to the policyholder is distinguished from the dividend paid to shareholders.

The Group first accumulates policy reserves at the end of each reporting period, and then divides the remainder into gain or losses from participating and non-participating insurance contracts and gain or losses on management of the capital account. Gain or losses from non-participating insurance and management of the capital account are treated as the shareholder's interest, shareholder's interest for the gain or losses on participating insurance is less than 10th of 100th, and the remaining portion shall be treated as the policyholder's interest. Policyholder's shares may not be used or accumulated for purpose other than the financial resources for policyholder dividends and the purpose of accumulating excess participating policyholder dividend reserve.

Policyholder dividends represent amounts payable to policyholders due to interest rate difference, long-term duration, mortality rate difference, and expense rate difference, and the reserve for policyholder dividends is divided into policyholder dividend reserve and excess participating policyholder dividend reserve. Excess participating policyholder dividend reserve is the amount to be accumulated in the total amount to be used for future policyholder dividends if there is surplus after accumulating the reserve for loss from participating insurance and the policyholder dividend reserve from the policyholders' interest of participating interest in the year.

The policyholder dividend reserve is a defined dividend reserve that determines the amount to be paid for each policyholder, whereas the amount of excess participating policyholder dividend reserve is not

### 27. Liability under insurance contracts (continued)

confirmed for each policyholder. The Group should first use the excess participating policyholder dividend reserve accumulated in gross amount prior to the year and the excess participating policyholder dividend reserve accumulated should be used as the policyholder dividend within 5 years from the end of the year.

Reserve for loss from participating insurance is the amount that is accumulated for the purpose of preserving the loss of participating insurance according to laws and regulations. Prior to accumulate the policyholder dividend reserve, the dividend reserves of the retained dividends take precedence over the policyholder dividend reserve and the excess participating policyholder dividend reserve.

Reserve for loss from participating insurance is accumulated within 30th of the policyholder's interests, preferentially compensates for losses incurred in participating insurance within 5 years of accumulation, and the remaining amount after compensation is used for the dividends of the policyholder.

### ii) Insurance risk management policy

Unlike other financial instruments, life insurance companies' insurance policies have the characteristics of long-term contracts, which can be exposed to insurance risk that may arise due to an increase in actual claim payments than the risk rate determined at the time of development of the product and interest rate risk that may arise due to differences in interest rates and maturities between insurance liabilities and asset management.

The purpose of the Group's risk management is to generate long-term stable growth and profits by proactively preventing and systematically managing the various risks that may arise in the course of management activities, reflecting these uncertain financial environments and the characteristics of life insurance products with long-term attributes.

To achieve this risk management policy, the Group's risk management strategy measures the risk-based capital stock (RBC) required capital and manages it within acceptable limits. To this end, the Group has established the basic principles of risk management and established and implemented regulations and management systems to implement them. In addition, through the Risk Management Committee and Risk Management Organization, various risk-related decision-making is supported, and risk management procedures are in place to identify and manage risks in a timely manner.

In general, risk management procedures are to recognize exposed risks, measure their size, set acceptable limits, monitor them regularly to report to management, and efficiently control and manage risks in case they exceed their limits.

Management methods by risk type are as follows:

① Insurance risk management: From the time of product development, by setting profitability guidelines, products are developed to ensure proper profitability, and appropriate acceptance criteria are set and operated to prevent reverse selection, and claim payments can be made fairly.

<sup>(2)</sup> Interest rate risk management: Establish a guideline and consider the market interest rate and asset management profit rate to determine the published interest rate and expected interest rate within the guidelines. In addition, the asset management strategy is set considering the interest rate level and maturity of liabilities, after analyzing the attributes of long-term insurance liabilities, the long-term target portfolio is established, and the annual portfolio can be guided by comprehensively considering the risk level and return of the managed asset.

③ Liquidity risk management: Inspect and manage the amount of paid insurance and liquid assets on a daily basis.

### 27. Liability under insurance contracts (continued)

### iii) Standard policy reserve system

The policy reserve is a liability to the policyholder and the faithfulness of the reserve on the basis of the profit or loss account is directly linked to the maintenance of the Group's management integrity and the protection of the policyholder's interests, so it is subject to strict regulatory regulations. Accordingly, the supervisory authorities apply the standard policy reserve system in relation to the method of setting up and calculating the respective policy reserves.

The current method of using the reserve base rate equal to the insurance premium calculation base rate can threaten the financial health of the Group by causing insolvency of the reserve fund in case of liberalization of insurance prices, so the standard policy reserve system is introduced to use objective and conservative basic rates to prevent insolvency of the financial structure that can result from liberalization of insurance premium prices and protect the rights and interests of policyholders.

In other words, the standard policy reserve is an institutional device that dualizes the contract base rate by setting the risk or interest rate applied to calculating the policy reserve in a more conservative manner than the risk or interest rate applied to calculating the insurance premium. In order for the insurance company to calculate the policy reserve, the future expected basic rate, such as the expected interest rate and the expected basic rate, is necessary, and the policy reserve is the estimated amount of the debt estimated by the expected basic rate. Since the real intention of liberalization is not to leave such a policy reserve entirely to the discretion of the insurer after price liberalization, the government needed an objective and certain level of reserve accumulation system to strengthen the financial stability of insurance companies and protection of policyholders, and prevent insurers' insolvency due to price competition such as insurance premium dumping after price liberalization.

According to the Regulation on Supervision of Insurance Business, premium reserves are calculated by applying the standard rate and standard risk rate set by the supervisor authority. In this case, the standard rate is to apply the standard rate of the year in which the insurance contract was signed over the entire insurance period. However, the highest interest rate among the interest rates specified in the insurance premium and policy reserve calculated at the base rate applied when calculating the premium differs from the premium reserve calculated at the standard interest rate and the standard risk rate, a large amount is required to be accumulated as the premium reserve so that more than a certain minimum reserve is accumulated, hence the system tends to protect policyholders by enhancing reserves.

The current reserve for liability is calculated using the evaluation method for the year of issuance. In other words, the basic rate of evaluation of the reserve for liability is applied in the same way as the interest rate and risk rate applied at the time the insurance contract was established until the end of the contract. This method is suitable for a stable situation in which the financial environment at the time of sale of the insurance product and the financial environment during the insurance period are almost unchanged, however, in the event of fluctuations such as market interest rates and the expected risk rate at the time of sale of a contract, it is not possible to react flexibly. Therefore, there is a possibility that the policy reserve may not properly reflect the fair value of the contract. A liability adequacy test system was introduced to compensate for the shortcomings that could not reflect such market changes.

### 27. Liability under insurance contracts (continued)

### iv) Financial risks related to insurance contracts

### iv-1) Form of exposure by each type of risk

Investment contracts that include insurance contracts and discretionary participation feature may be exposed to financial risks although it is an insurance liability, and the form of exposure is as follows:

### ① Credit risk

Credit risk refers to the risk of loss resulting from the borrower's failure to repay a loan or meet contractual obligations. The Group's reinsurance assets and reinsurance receivables are exposed to credit risk as assets that may incur losses if the reinsurer defaults at the time of receipt of the claims and receivables.

### 2 Interest rate risk

Interest rate risk means the risk that arises when the Group's financial position fluctuates unfavorably due to the effect of interest rates on assets and liabilities.

### ③ Liquidity risk

Liquidity risk refers to the risk that assets and liabilities are subject to inconsistency or failure to respond to unexpected cash outflows. Therefore, future cash outflows from investment contracts, including insurance liabilities which account for most of the Company's liabilities and dividend components, are factors used to determine the level of risk associated with the Group's liquidity.

### ④ Market risk

Market risk refers to the risk of loss arising when the Group's financial position fluctuates unfavourably due to adverse price fluctuations such as stock prices and exchange rates. There is no impact on profit or loss or capital due to changes in each liability amount, since fluctuations in stock prices and exchange rates, the prices of investment contracts, including insurance liabilities which account for most of the Group's liabilities and dividend components, do not fluctuate.

### iv-2) The degree to which the discretionary participation feature mitigates or aggravates risk

A relatively high premium is received by setting and producing a relatively conservative base rate compared to a contract without discretionary participation features, and a relatively high premium is later refunded to the contractor through a policyholder dividend for the premium payment based on conservative calculation of the expected base rate. However, contracts without a discretionary participation feature will set the expected optimal base rate, which is not conservative, and receive a relatively low premium when establishing the initial expected base rate. Thereafter, if the expected basic rate is different from the actual result, the Group will assume the profit or loss according to the result. Thus, a contract with a discretionary participation feature is a structure that establishes a conservative base rate and shares the risks associated with the contract with the policyholder, and in the case of a contract without discretionary participation element, the Group assumes the risk for the initial basis set by the Group.

### iv-3) Risks associated with guarantees

The guarantee options inherent in insurance contracts include guaranteed minimum death benefit, guaranteed minimum annuity guarantee benefit, and guaranteed minimum interest rate benefit. These guarantees can increase cash flow outflows when market prices and interest rates fall below a certain level.

### 27. Liability under insurance contracts (continued)

### (b) Overview of the insurance risk – Shinhan EZ General Insurance, Ltd.

Insurance risk is the risk that arises in relation to the acquisition of insurance contracts and payment of insurance claims, which are business of the Group, and is classified into insurance price risk and reserve risk. Insurance price risk refers to the risk of exceeding the expected risk rate and expected expense ratio set at the time of insurance premium calculation, and reserve risk refers to the loss of the Group due to the occurrence of more insurance payments in the future due to insufficient reserves accumulated at the time of evaluation. Reserve risk is measured for general non-life insurance.

### i) Measurement and management

### ① Measurement of insurance risk

The insurance risk is measured by using the standard model (Article 7-2, Paragraph 4 of the Insurance Industry Supervision Regulations) and calculated by dividing the insurance price risk and the reserve risk, and considering the diversification effect on the assumption that the two risks are mutually independent. Insurance price risk is calculated by multiplying the premium held by insurance product category by the risk coefficient, and reserve risk is calculated by multiplying the risk coefficient by the reserve payable by insurance product category of general non-life insurance.

### <sup>(2)</sup> The method of insurance risk management

The Group sets an insurance risk permissible limit every year, monitors compliance with the limit, and executes in accordance with preset countermeasures when the limit is exceeded. In addition, underwriting guidelines, retention, and reinsurance strategies are established and operated so that risks can be retained at an appropriate level for each type of insurance.

### ii) The target of insurance risk management

The insurance risk management targets of the Group are the appropriateness of the insurance price and the adequacy of the reserve, and are identified as follows.

- Appropriateness of insurance price: Changes in the ratio of incurred loss to premium for earned risk (risk loss ratio) are being verified.
- Adequacy of reserve: Based on the insurance industry supervision regulation, an evaluation of conducted for the adequacy of reserves and a report on the review of reserve requirements is submitted to the Financial Supervisory Service.

### iii) Insurance price

The product development department of the Group proceeds with product development according to the product development and approval process so that the related department can fully review and make decisions about possible risks in the development and sale of new products. In addition, pre-analysis and evaluation are conducted, such as analysis of the adequacy of the expected risk rate and expected expense ratio of new products, profit and loss analysis, etc., and a senior actuary confirms the adequacy of the basic documents and related coefficients.

### 27. Liability under insurance contracts (continued)

### iv) Accumulating reserves

The senior accountant regularly verifies the adequacy of the reserve by using the total amount estimation method. Total amount estimation is based on Paid Ladder Development Method (PLDM), Incurred Ladder Development Method (ILDM), Average Payment Method (APM), frequency/severity method, and Bornhuetter-Ferguson method. It is calculated by applying the method allowed under the Supervisory Regulations, etc. In addition, we have submitted a verification opinion on this to the Financial Supervisory Service.

# v) Sensitivity analysis of insurance risk

The Group manages insurance risk by conducting sensitivity analysis based on the discount rate, claim payment rate, retention rate and expense ratio, etc. that are judged to have a significant impact on the amount, timing and uncertainty of the future cash flow of the insurer.

# vi) Concentration of insurance risk and reinsurance

Every year, a reinsurance operation strategy for each item (automotive/general) is established and implemented after deliberation and resolution by the Risk Management Committee. The reinsurance operation strategy is established after reviewing its adequacy based on the Group's underlying assets, insurance risk level, and reinsurance cost.

- Objective of reinsurance transactions
- Setting acceptable risk holding limits and planning for ceding reinsurance
- Monitoring method for adequacy of reinsurance operation
- Method for selecting reinsurers and reinsurance brokers and criteria of security

In principle, reinsurance transactions are executed according to the reinsurance operation strategy, and in the case of underwriting contracts in excess of the holding limit, the Risk Management Committee consider and determine whether or not to underwrite.

# vii) Credit risk from insurance contracts

Credit risk arising from contracts refers to economic losses resulting from the inability to fulfill the obligations specified in the contracts due to default or deterioration of credit ratings of the counterparty, reinsurer. The Group enters into voluntary reinsurance or special contractual reinsurance contracts with reinsurance companies or non-life insurance companies for a part of the total insurance amount. The holding and reinsurance strategy is the risk transfer strategy of the Group. Holding and ceding are determined through the risk evaluation of each contract. When applying the new holding and reinsurance strategy, the expected profit and loss compared to the existing reinsurance strategy, the expected profit and loss against risk, and the cost of financing are calculated. It is decided by the Risk Management Committee.

# viii) Liquidity risk from insurance contracts

Liquidity risk arising from insurance contracts may result in inability to respond to a request for claim payment due to mismatched fund management or loss due to the raising of high-interest financing to resolve such a mismatch of funds or the unfavorable sale of owned assets. The Group the liquidity gap ratio of general accounts to manage liquidity risk.

# 27. Liability under insurance contracts (continued)

(c) Insurance liabilities as of December 31, 2021 and 2022 are as follows:

	2021	2022
Policy reserve	₩54,330,046	54,316,740
Policyholder's equity adjustment	3,452	(1,616)
	₩54,333,498	54,315,124

(d) Policy reserve as of December 31, 2021 and 2022 are as follows:

	2021	2022
Life insurance:		
Variable interest rate	₩29,399,446	27,303,550
Fixed interest rate	24,930,600	26,919,128
	54,330,046	54,222,678
General insurance:		
Automotive		1,880
General		89,297
Long-term		2,885
		94,062
	₩54,330,046	54,316,740

# 27. Liability under insurance contracts (continued)

(e) The details of policy reserves for insurance risk classification as of December 31, 2021 and 2022 are as follows:

				2021				
		Individual insurance	isurance			Group	Group insurance	
	Pure endowment	Death	Endowment	Subtotal	Pure protection	Savings	Subtotal	Total
Premium reserve	<del>W</del> 14,515,676	28,443,718	9,078,015	52,037,409	15,609	64	15,673	52,053,082
Guarantee reserve	24,717	284,474	871	310,062				310,062
Unearned premium reserve	1	1,660		1,661	8		8	1,669
Reserve for outstanding claims	266,157	1,137,858	424,897	1,828,912	14,376		14,376	1,843,288
Interest rate difference guarantee reserve	1,734	130	L	1,871				1,871
Mortality gains reserve	6,894	34,085	88	41,067	7		7	41,069
Interest gains reserve	23,031	242	12	23,285				23,285
Expense gains reserve	6,068	7,595		13,663				13,663
Long term duration dividend reserve	26,799	12,663	L	39,469				39,469
Reserve for policyholder's profit dividend	1,635			1,635				1,635
Reserve for losses on dividend insurance contract	953			953				953
	<del>W</del> 14,873,665	29,922,425	9,503,897	54,299,987	29,995	64	30,059	54,330,046

# 27. <u>Liability under insurance contracts (continued)</u>

			20	22			
		Individual in	isurance		Group insurance		
	Pure endowment	Death	Endowment	Subtotal	Pure protection	Savings	Subtotal
Premium reserve	₩14,123,768	30,270,677	7,589,977	51,984,422	13,556	66	13,622
Guarantee reserve	20,514	278,826	745	300,085	_		
Unearned premium reserve	2	1,642		1,644	1		1
Reserve for outstanding							
claims	275,089	1,182,023	338,747	1,795,859	14,154		14,154
Interest rate difference							
guarantee reserve	1,496	106	6	1,608	_		
Mortality gains reserve	5,932	31,100	70	37,102	2		2
Interest gains reserve	22,202	209	10	22,421	_		
Expense gains reserve	5,490	7,060		12,550	_		
Long term duration dividend							
reserve	24,550	11,881	6	36,437	_		
Reserve for policyholder's							
profit dividend	1,616	_		1,616	_		
Reserve for losses on							
dividend insurance							
contract	1,155	—	_	1,155	—		
	₩14,481,814	31,783,524	7,929,561	54,194,899	27,713	66	27,779

			2022		
		General i	nsurance		
	Automotive	General	Long-term	Subtotal	Total
Premium reserve	₩ —		2,814	2,814	52,000,858
Guarantee reserve		_	—	—	300,085
Unearned premium reserve		86,699	_	86,699	88,344
Reserve for outstanding claims	1,880	2,598	71	4,549	1,814,562
Interest rate difference guarantee reserve		_	_	_	1,608
Mortality gains reserve		_	_	_	37,104
Interest gains reserve		_	_	_	22,421
Expense gains reserve		_	_	_	12,550
Long term duration dividend reserve		_	_	_	36,437
Reserve for policyholder's profit dividend		_	_	_	1,616
Reserve for losses on dividend insurance contract					1,155
	₩1,880	89,297	2,885	94,062	54,316,740

# 27. Liability under insurance contracts (continued)

# (f) Changes in policy reserves

Changes in policy reserves for the year ended December 31, 2021 and 2022 are as follows

		2021		
	Insurance contracts with fixed-interest	Insurance contracts with variable-interest	Total	
Beginning balance	₩23,414,098	29,977,303	53,391,401	
Reserve (*)	1,516,502	(577,857)	938,645	
Ending balance	₩24,930,600	29,399,446	54,330,046	

(\*) This is the amount of provision for insurance contract liabilities less changes in reinsurance assets and includes effects from changes in foreign exchange rate.

	2022							
		Life insurance		General insurance				
	Insurance contracts with fixed-interest	Insurance contracts with variable-interest	Subtotal	Automotive	General	Long-term	Subtotal	Total
Beginning								
balance	₩24,930,600	29,399,446	54,330,046	_			_	54,330,046
Reserve (*)	1,988,528	(2,095,896)	(107,368)	978	20,127	1,551	22,656	(84,712)
Business combinatio	'n							
(Note 47)				902	69,170	1,334	71,406	71,406
Ending								
balance	₩26,919,128	27,303,550	54,222,678	1,880	89,297	2,885	94,062	54,316,740

(\*) This is the amount of provision for insurance contract liabilities less changes in reinsurance assets and includes effects from changes in foreign exchange rate.

(g) Changes in policy reserves by insurance risk classification

				2021				
		Individual i	nsurance			Group	o insurance	
	Pure endowment	Death	Endowment	Subtotal	Pure protection	Savings	Sub total	Total
Beginning								
balance	₩14,936,578	28,074,444	10,346,489	53,357,511	33,828	62	33,890	53,391,401
Reserve								
(reversal) (*)	(62,913)	1,847,981	(842,592)	942,476	(3,833)	_2	(3,831)	938,645
Ending balance	₩14,873,665	29,922,425	9,503,897	54,299,987	29,995	64	30,059	54,330,046

(\*) This is the amount of provision for insurance contract liabilities less changes in reinsurance assets and includes effects from changes in foreign exchange rate.

# 27. Liability under insurance contracts (continued)

2022	Individual insurance Group insurance	Pure         Sub         Pure         Sub         Auto-           endowment         Death         Endowment         total         protection         Savings         total         motive         Gene	29,922,425 9,503,897 54,299,987 29,995 64 30,059 —	) (105,088) (2,282) 2 (2,280) 978		$\frac{31,783,524}{21,783,524}  \frac{7,929,561}{7,929,561}  \frac{54,194,899}{54,194,899}  \frac{27,713}{27,713}  \frac{66}{27,779}  \frac{27,779}{1,880}  \frac{1,880}{89,2}  \frac{89,2}{21,213}  \frac{1}{21,213}  \frac{1}{21,213}$
	General insurance	Long- General term		20,127 1,551	1 334	89,297 2,885
	trance	Sub total Total	54,330,046	22,656 (84,712)		94,062 54,316,740

(\*) This is the amount of provision for insurance contract liabilities less changes in reinsurance assets and includes effects from changes in foreign exchange rate.

# 27. Liability under insurance contracts (continued)

(h) Reinsurance credit risk as of December 31, 2021 and 2022 are as follows:

	20	2021		22
	Reinsurance assets	Reinsurance account receivable	Reinsurance assets	Reinsurance account receivable
AAA	₩		22,687	4,525
AA- to AA+	15,310	23,472	33,859	53,317
A- to A+	31,740	46,615	274,704	93,633
Unrated			118	204
	₩47,050	70,087	331,368	151,679

(i) Income or expenses on insurance for the years ended December 31, 2020, 2021 and 2022 are as follows:

	2020	2021	2022
Insurance income:			
Premium income	₩7,037,308	6,255,872	6,258,858
Reinsurance income (*1)	152,892	153,534	182,566
Provision for insurance liabilities (*1),(*2)	—		342,088
Separate account income	57,553	75,117	107,393
	7,247,753	6,484,523	6,890,905
Insurance expenses:			
Claims paid	5,564,875	5,346,364	6,467,553
Reinsurance premium expenses (*1)	167,215	175,282	456,732
Provision for insurance liabilities (*1),(*2)	1,311,252	933,875	—
Separate account expenses	57,553	75,116	107,394
Acquisition costs	802,942	687,469	662,244
Collection expenses and discount fee	19,922	16,810	18,575
Deferred acquisition costs	(486,972)	(397,196)	(398,660)
Amortization of deferred acquisition costs	414,898	422,189	404,300
	7,851,685	7,259,909	7,718,138
Net loss on insurance	₩ (603,932)	(775,386)	(827,233)

(\*1) It includes reinsurance expenses of ₩244,855 million, reinsurance income of ₩7,314 million and reversal of insurance liabilities of ₩242,071 million due to the joint reinsurance entered during 2022.

(\*2) Interest expenses on savings insurance contracts are included.

### 27. Liability under insurance contracts (continued)

(j) Maturity of premium reserve as of December 31, 2021 and 2022 are as follows:

				2021			
	Less than or equal to 1 year	1 ~ 3 years	3 ~ 7 years	7 ~ 10 years	10 ~ 20 years	More than 20 years	Total
Life insurance:							
Variable interest rate	₩ 906,017	1,492,275	1,420,942	653,388	2,001,348	20,082,744	26,556,714
Fixed interest rate	99,289	471,909	772,549	687,077	2,072,122	21,393,422	25,496,368
Ending balance	₩1,005,306	1,964,184	2,193,491	1,340,465	4,073,470	41,476,166	52,053,082
				2022			
	Less than or equal to 1 year	1 ~ 3 years	3 ~ 7 years	7 ~ 10 years	10 ~ 20 years	More than 20 years	Total
Life insurance:							
Variable interest rate	₩616,479	911,463	856,451	650,770	1,847,433	19,601,653	24,484,249
Fixed interest rate	223,095	546,105	1,011,399	698,021	1,979,082	23,056,093	27,513,795
	839,574	1,457,568	1,867,850	1,348,791	3,826,515	42,657,746	51,998,044
General insurance:							
Long-term				40	2,774		2,814
Ending balance	₩839,574	1,457,568	1,867,850	1,348,831	3,829,289	42,657,746	52,000,858

### (k) Liability adequacy test, LAT

[Shinhan Life Insurance Co., Ltd.]

### i) Scope

Liability adequacy tests were performed on the premium reserve, unearned premium reserve and guarantee reserve for the contracts held at December 31, 2022. The premium reserve considered the amount net level premium reserve less, where appropriate, deferred acquisition cost and Loan on policy in accordance with the Article 6-3 of Regulation on Supervision of Insurance Business Act.

### ii) Output overview

In the debt appraisal system, the insurance premium surplus method is applied to calculate premium deficits. Premium deficiency refers to deficiency when the amount of accumulated reserve is insufficient due to a decrease in the interest rate after the sale of the product or an increase in the risk rate compared with the expected basic rate at the time of product development.

The insurance premium standard inspection method is a method of calculating the reserve amount based on the present value of total income reflecting the interest rate, the risk rate, the business ratio, the cancelation rate, etc. and the present value of the total expenditure, that is, interest rate(discount rate), business ratio, risk rate, and cancelation rate calculated based on the Group's own experience, which reflects company-specific characteristics, and does not reflect subjective factors such as management's willingness to improve management.

### 27. Liability under insurance contracts (continued)

### iii) Assumptions and basis of calculation applied

The assumptions and basis of calculation applied to calculate the estimates of future cash flows when performing liability adequacy test for the years ended December 31, 2021 and 2022 are as follows. The criteria of Insurance contract liability adequacy test were changed during the period, and the Group has applied the change in the accounting policy as it provides more reliable and relevant information on the estimate of future cash flows, and the notes as of December 31, 2021 and January 1, 2021 have been restated.

		Assumptions		
	January 1, 2021	December 31, 2021	December 31, 2022	Assumption applied and calculation method
Discount rate	Shinhan Life Insurance Co., Ltd. -3.623% ~ 23.477% Orange Life Insurance Co., Ltd. -3.623% ~ 23.477%	-3.39% ~ 19.541%	-2.838% ~ 21.144%	The interest rate scenario calculated and presented by the Financial Supervisory Service as a scenario in which a liquidity premium is added to the risk-free rate of return scenario.
Mortality rate	Shinhan Life Insurance Co., Ltd. 10.38% ~ 585.90% Orange Life Insurance Co., Ltd. 15% ~ 255%	16% ~ 751%	9% ~ 771%	<ul> <li>Death due to other causes: Based on the statistics illustrating the past five-year experience, the ratio of premiums to on-level risk premiums by risk collateral and time elapsed.</li> <li>Death due to natural causes: The ratio of actual mortality to the latest expected mortality</li> </ul>
Surrender ratio	Shinhan Life Insurance Co., Ltd. 0.53% ~ 29.83% Orange Life Insurance Co., Ltd. 0% ~ 61%	0% ~ 84%	0% ~ 78%	Lapse rate by sales channel, product, and time elapsed for the past five years.

# 27. Liability under insurance contracts (continued)

*iv) The result of liability adequacy test as of January 1, 2021 and December 31, 2021 and 2022 are as follows:* 

<Shinhan Life Insurance>

		January 1, 2021	
	Provisions for test	LAT base	Premium surplus (loss)
Participating: Fixed interest Variable interest Non- Participating:	<ul><li>₩ 598,793</li><li>915,382</li></ul>	1,371,496 1,062,384	(772,703) (147,002)
Fixed interest Variable interest Variable type	7,230,482 14,456,394 165,259	4,222,670 13,753,963 61,212	3,007,812 702,431 104,047
	₩23,366,310	20,471,725	2,894,585
	I	 December 31, 2021	
	Provisions for test	LAT base	Premium surplus (loss)
Participating: Fixed interest Variable interest Non- Participating: Fixed interest	₩ 1,371,625 2,099,040 18,749,426	2,098,387 3,024,911 8,155,797	(726,762) (925,871) 10,593,629
Variable interest Variable type	23,059,035 109,753	21,378,217 (1,437,388)	1,680,818 1,547,141
	₩45,388,879	33,219,924	12,168,955
	I	December 31, 2022	
	Provisions for test	LAT base	Premium surplus (loss)
Participating: Fixed interest Variable interest Non- Participating:	₩ 1,388,054 2,082,019	1,679,179 2,890,311	(291,125) (808,292)
Fixed interest Variable interest Variable type Co-reinsurance	20,382,784 21,124,126 147,988 240,720 ₩45,365,691	$6,245,441 \\17,994,755 \\(1,104,320) \\\underline{135,465} \\27,840,831$	$ \begin{array}{r} 14,137,343\\3,129,371\\1,252,308\\\underline{105,255}\\17,524,860\end{array} $

### 27. Liability under insurance contracts (continued)

<Orange Life Insurance>

	January 1, 2021			
	Provisions for test	LAT base	Premium surplus (loss)	
Participating:				
Fixed interest	₩ 745,614	793,719	(48,105)	
Variable interest	1,174,807	1,698,984	(524,177)	
Non- Participating:				
Fixed interest	10,061,004	5,850,160	4,210,844	
Variable interest	9,190,507	8,998,793	191,714	
Variable type	(15,032)	(1,548,878)	1,533,846	
	₩21,156,900	15,792,778	5,364,122	

### [Shinhan EZ General Insurance, Ltd.]

# i) Scope

Liability adequacy tests are performed on the premium reserve and unearned premium reserve for the contracts held at December 31, 2022. The premium reserve considered the amount net level premium reserve less, where appropriate, deferred acquisition cost in accordance with the Article 6-3 of Regulation on Supervision of Insurance Business Act.

### ii) Output overview

In the debt appraisal system, the insurance premium surplus method is applied to calculate premium deficits. Premium deficiency refers to deficiency when the amount of accumulated reserve is insufficient due to a decrease in the interest rate after the sale of the product or an increase in the risk rate compared with the expected basic rate at the time of product development.

The insurance premium standard inspection method is a method of calculating the reserve amount based on the present value of total income reflecting the interest rate, the risk rate, the business ratio, the cancelation rate, etc. and the present value of the total expenditure, that is, business ratio, risk rate, and cancelation rate calculated based on the Group's own experience, which reflects company-specific characteristics, and does not reflect subjective factors such as management's willingness to improve management.

# 27. Liability under insurance contracts (continued)

### iii) Assumptions and basis of calculation applied

The assumptions and basis of calculation applied to calculate the estimates of future cash flows when performing liability adequacy test for the year ended December 31, 2022 are as follows.

		Assumptions		
	January 1, 2021	December 31, 2021	December 31, 2022	Assumption applied and calculation method
Long-term (*):				
Discount rate	-3.623%~23.477%	-3.39%~19.541%	-2.838%~21.144%	The interest rate scenario calculated and presented by the Financial Supervisory Service as a scenario in which a liquidity premium is added to the risk-free rate of return scenario.
Loss rate	3%~365%	19%~131%	49%~145%	Due to lack of empirical statistics, the application of long-term non-life insurance industry statistics and risk rates applied to calculating product prices by insurance coverage
Lapse ratio	0%~15%	0%~17%	0%~18%	Due to lack of empirical statistics, the application of long-term non-life insurance industry statistics
General:				
Loss rate	39%	36%	37%	Based on the statistics illustrating the past five-year experience, the ratio of incurred loss to earned premium
Loss Assumed Expense ratio	11%	21%	19%	Based on the statistics illustrating the past three-year experience, the ratio of best estimated LAE(Loss Assumed Expense) ratio
Administration expense ratio	63%	62%	70%	Based on the statistics illustrating the past one-year experience, the ratio of best estimated expense ratio

(\*) Among the expense ratios, the new acquisition cost was calculated based on the amount to be executed in the future in accordance with related regulations such as internal recruitment allowance regulations, and the maintenance cost was calculated for each cost driver based on experience statistics for the last year.

# 27. Liability under insurance contracts (continued)

*iv) The result of liability adequacy test as of January 1, 2021 and December 31, 2021 and 2022 are as follows:* 

	J	anuary 1, 2021	
	Provisions for test	LAT base	Premium surplus (loss)
Long-term	₩ —	(1,610)	1,610
General	21,453	19,188	2,265
	₩21,453	17,578	3,875
	De	cember 31, 202	21
	Provisions for test	LAT base	Premium surplus (loss)
Long-term	₩ 12	2,496	(2,484)
General	53,442	53,663	(221)
	₩53,454	56,159	(2,705)
	De	cember 31, 202	22
	Provisions for test	LAT base	Premium surplus (loss)
Long-term	₩ 16	2,627	(2,611)
General	85,187	86,699	(1,512)
	₩85,203	89,326	(4,123)

### 28. Other liabilities

Other liabilities as of December 31, 2021 and 2022 are as follows:

	2021	2022
Lease liabilities (*)	₩ 612,690	623,339
Accounts payable	14,041,740	12,452,551
Accrued expenses	3,273,939	4,416,908
Dividend payable	32,275	34,698
Advance received	177,121	186,134
Unearned income	397,010	451,757
Withholding value-added tax and other taxes	673,294	750,547
Securities deposit received	1,985,269	2,451,521
Foreign exchange settlement pending	221,521	359,422
Domestic exchange settlement pending	1,890,408	2,308,574
Payable from trust account	5,191,901	6,579,457
Due to agencies	887,400	718,082
Deposits for subscription	133,550	18,931
Separate account liabilities	9,834,895	8,004,363
Sundry liabilities	1,563,832	2,149,043
Others	126,455	81,148
Present value discount	(52,464)	(97,703)
	₩40,990,836	41,488,772

(\*) As of December 31, 2021 and 2022, the Group accounts for the lease liabilities as other liabilities. For the year ended December 31, 2021, the amount of variable lease payments that are not included in the measurement of lease liabilities is ₩79 million, cash outflows from leases are ₩283,470 million, and interest expense on lease liabilities is ₩10,873 million. For the year ended December 31, 2022, the amount of variable lease payments that are not included in the measurement of lease liabilities is ₩12,337 million, cash outflows from leases are ₩279,406 million, and interest expense on lease liabilities is ₩12,337 million.

### 29. Equity

(a) Equity as of December 31, 2021 and 2022 are as follows:

	2021	2022
Capital stock:		
Common stock Preferred stock	₩ 2,608,176 361,465	2,608,176 361,465
	2,969,641	2,969,641
Hybrid bond	3,334,531	4,196,968
Capital surplus:		
Share premium Others	11,352,819 742,224	11,352,819 742,224
	12,095,043	12,095,043
Capital adjustments	(664,429)	(582,859)
Accumulated other comprehensive income, net of tax: Loss on financial assets at fair value through other		
comprehensive income Gain (loss) on financial assets at fair value	(614,872)	(3,053,865)
through profit or loss (Overlay approach) Equity in other comprehensive income of	141,821	(78,276)
associates	7,595	(8,126)
Foreign currency translation adjustments for	(105.010)	(110.000)
foreign operations	(125,219)	
Net loss from cash flow hedges Other comprehensive loss of separate account	(26,471) (22,850)	
Remeasurement of net defined benefit liabilities	(22,850)	(130,037)
(assets)	(343,124)	(91,993)
Changes in own credit risk on financial liabilities designated under fair value option	(1,816)	(5,155)
designated under fair value option	i	
		(3,582,720)
Retained earnings $(*1),(*2),(*3)$	30,541,300	, ,
Non-controlling interest (*4),(*5)		2,691,716
	₩49,538,422	51,130,422

(\*1) As of December 31, 2021 and 2022, profits reserved by the Group as of Article 53 of the Financial Holding Companies Act amounted to ₩2,432,039 million and ₩2,573,435 million, respectively.

(\*2) As of December 31, 2021 and 2022, the regulatory reserves for loan losses the Group appropriated in retained earnings are ₩15,552 million and ₩18,524 million, respectively.

(\*3) As of December 31, 2022, profit dividends within retained earnings of subsidiaries of the Group restricted in accordance with laws, etc. are amounted to ₩7,428,897 million.

(\*4) As of December 31, 2021 and 2022, the total amounts of hybrid bonds that Shinhan Bank, Jeju Bank, Shinhan Capital Co, Ltd. and Shinhan Life Insurance Co., Ltd. have recognized as non-controlling interests are ₩2,035,762 million and ₩2,537,569 million, respectively. And, for the years ended December 31, 2021 and 2022, the amounts of dividends paid for the hybrid bonds by Shinhan Bank, Jeju Bank, Shinhan Capital

### **29.** Equity (continued)

Co, Ltd. and Shinhan Life Insurance Co., Ltd. \$71,746 million and \$81,262 million, respectively, are allocated to profit attributed to non-controlling interest.

(\*5) During the year ended December 31, 2021, non-controlling interests decreased by ₩59,709 million due to the acquisition of the remaining shares by Shinhan Asset Management Co., Ltd. During the year ended December 31, 2022, non-controlling interests decreased by ₩89,912 million due to the acquisition of remaining shares by Shinhan Asset Trust Co., Ltd., and non-controlling interests increased by ₩19,454 million due to paid-in capital increase of Shinhan EZ General Insurance, Ltd.

### (b) Capital stock

Capital stock of the Group as of December 31, 2021 and 2021 are as follows:

Number of authorized shares	1,00	0,000,000
Par value per share in won	₩	5,000
Number of issued common stocks as of December 31, 2021	51	6,599,554
Number of issued common stocks as of December 31, 2022	50	8,784,869
Number of issued preferred stocks as of December 31, 2021		
and 2022	1	7,482,000

The details of changes in the number of common shares outstanding as of December 31, 2021 and 2022 are as follows:

	2021	2022
Beginning balance	₩515,894,758	516,593,202
Increase	700,870	
Decrease	(2,426)	(7,814,685)
Ending balance	₩516,593,202	508,778,517

### (c) The details of preferred stock are as follows:

	The number	Contracted	Conversion request
	of shares	dividend rate	period(*)
Convertible preferred stock	17,482,000	4.0% per year based on issue price (non-cumulative participating)	2020.05.01~2023.04.30

(\*) Preferred stocks that have not been converted for 4 years from the issuance date and until the expiration date of the period of existence are automatically converted to common stocks at the expiration date of the period of existence.

### **29.** Equity (continued)

### (d) Hybrid bonds

Hybrid bonds classified as other equity instruments as of December 31, 2021 and 2022 are as follows:

	Issue date	Maturity date	Interest rate (%)	2021	2022
KRW	June 25, 2015	June 25, 2045	4.38	₩ 199,455	199,455
	September 15, 2017	Perpetual bond	3.77	134,683	
	September 15, 2017	Perpetual bond	4.25	89,783	89,783
	April 13, 2018	Perpetual bond	4.08	134,678	134,678
	April 13, 2018	Perpetual bond	4.56	14,955	14,955
	August 29, 2018	Perpetual bond	4.15	398,679	398,679
	June 28, 2019	Perpetual bond	3.27	199,476	199,476
	September 17, 2020	Perpetual bond	3.12	448,699	448,699
	March 16, 2021	Perpetual bond	2.94	429,009	429,009
	March 16, 2021	Perpetual bond	3.30	169,581	169,581
	January 25, 2022	Perpetual bond	3.90	—	560,438
	January 25, 2022	Perpetual bond	4.00	—	37,853
	August 26, 2022	Perpetual bond	4.93	—	343,026
	August 26, 2022	Perpetual bond	5.15		55,803
USD	August 13, 2018	Perpetual bond	5.88	559,526	559,526
	May 12, 2021	Perpetual bond	2.88	556,007	556,007
				₩3,334,531	4,196,968

# (\*) For the year ended December 31, 2022, the deduction for capital related to hybrid bonds issued is ₩2,880 million.

The hybrid bonds above can be repaid early after 5 or 10 years from the date of issuance, and the controlling company has an unconditional right to extend the maturity under the same condition.

### (e) Capital adjustments

Changes in capital adjustments for the years ended December 31, 2021 and 2022 are as follows:

	2021	2022
Beginning balance	₩(687,935)	(664,429)
Acquisition of treasury stocks	(79)	(300,000)
Disposal and retirement of treasury stocks	23,589	300,000
The acquisition commitment amount for subsidiaries'		
remaining shares	_	86,711
Repayments of hybrid bonds		(317)
Other transactions with owners	(4)	(4,824)
Ending balance	₩(664,429)	(582,859)

# 29. Equity (continued)

(f) Accumulated other comprehensive income

Changes in accumulated other comprehensive income for the years ended December 31, 2021 and 2022 are as follows:

						2021					
	Π	tems that are o	Items that are or may be reclassified to profit or loss	sified to profit	or loss		Items the	t will never be	Items that will never be reclassified to profit or loss	rofit or loss	
	Gain (loss) on securities at fair value through other comprehensive	Gain (loss) on t valuation of financial asset measured at FVTPL e (overlay	Equity in other comprehensive income (loss) of	Foreign currency translation adjustments for foreign	Net gain (loss) s from cash flow	Other Other comprehen-Remeasure sive income -ments of (loss) of the defined separate benefit	Remeasure -ments of the defined benefit	Equity in other comprehensive income (expense) of	Gain (loss) on securities at fair value through other comprehensive	Gain (loss) on financial Liabilities measured at FVTPL attributable to changes in	
	income	approach)	associates	operations	hedges	account	plans	associates	income	credit risk	Total
Beginning balance	<b>W</b> 146,829	161,919	4,875	(377,061)	(48,171) 18,423	18,423	(385,780)	(26)	79,982	(5, 171)	(404, 181)
Change due to fair value Reclassification:	(1, 110, 290)	(31, 924)	6,517			(56,484)		(3)	21,408	(1,526)	(1,172,302)
Change due to impairment											
or disposal	(114, 399)										(114, 399)
Effect of hedge accounting					(209, 869)						(209, 869)
Hedging	10,627			(74,525) 239,800	239,800						175,902
Effects from changes in foreign											
exchange rate				333,059					673		333,732
Remeasurements of the defined											
benefit plans							59,441				59,441
Deferred income taxes	334,391	11,826	(3,769)	(6, 226)	(8, 231)	15,211	(16, 164)	1	(16,061)	(1, 272)	309,706
Transfer to other account									29,421	6,153	35,574
Non-controlling interests	2,547			(466)			(621)				1,460
Ending balance	<del>W</del> (730,295)	141,821	7,623	(125,219)	(26,471)	(22,850)	(343, 124)	(28)	115,423	(1,816)	(984,936)

# 29. Equity (continued)

2022

	Π	Items that are c	that are or may be reclassified to profit or loss	sified to profit	or loss		Items the	it will never be	Items that will never be reclassified to profit or loss	rofit or loss	
	Gain (loss) on Gain (loss) on valuation of securities at financial asset fair value measured at through other FVTPL comprehensive (overlay income approach)	Gain (loss) on valuation of financial asset measured at FVTPL (overlay approach)	Equity in other comprehensive income (loss) of associates	Foreign currency translation adjustments for foreign operations	Net gain (loss) from cash flow hedges	Other Comprehen-Remeasure sive income -ments of (loss) of the defined separate benefit account plans		Equity in other comprehensive income (expense) of associates	Gain (loss) on securities at fair value through other comprehensive income	Gain (loss) on financial Liabilities measured at FVTPL attributable to changes in credit risk	Total
Beginning balance	W (730,295)	141,821	7,623	(125,219)	(26,471)	(22,850)	(343,124)	(28)	115,423	(1,816)	(984,936)
Change due to fair value Reclassification:	(3,340,230) (299,934)	(456,662)	(10,914)			(1460,001)		ע	19,010	(616,C)	(2,190,912)
Change due to impairment											
or disposal	(37, 142)		(7, 333)								(44,475)
Effect of hedge accounting					(190, 372)						(190, 372)
Hedging	63,480			(25, 793)	90,328						128,015
Effects from changes in foreign											
exchange rate				40,679					(823)		39,856
Remeasurements of the defined											
benefit plans							348,248				348,248
Deferred income taxes (*)	866,180	79,837	8,489	(154)	29,550	40,387	(96, 257)	(14)	(11,520)	1,170	917,668
Transfer to other account								42	(2, 134)	1,410	(682)
Non-controlling interests	3,586			(1,796)			(860)				930
Ending balance	$\frac{W(3,174,421)}{=}$	(78,276)	(8,135)	(112,283)	(96,965)	(136,057)	(91,993)	6	120,556	$\frac{(5,155)}{}$	(3,582,720)

(\*) The effect of the tax rate change due to the revision of the tax law at the end of 2022 was reflected.

### 29. Equity (continued)

### (g) Appropriation of retained earnings

The appropriation of retained earnings for the years ended December 31, 2021 and 2022 are as follows:

	2021	2022
Date of appropriation:	March 24, 2022	March 23, 2023
Unappropriated retained earnings:		
Balance at beginning of year	₩5,355,358	5,461,771
Retirement of treasury stock	—	(300,661)
Dividend to hybrid bonds	(116,388)	(156,277)
Interim dividends	(299,082)	(637,598)
Net income	1,413,956	1,249,251
	6,353,844	5,616,486
Appropriation of retained earnings:		
Legal reserve	(141,396)	(124,925)
Dividends		
Dividends on common stocks paid	(723,230)	(440,093)
Dividends on preferred stocks paid	(24,475)	(15,122)
Regulatory reserve for loan losses	(2,972)	(2,554)
Loss on repayments of hybrid bonds		(317)
	(892,073)	(583,011)
Unappropriated retained earnings to be carried over to		
subsequent year	₩5,461,771	5,033,475

(\*) These statements of appropriation of retained earnings are based on the separate financial statements of Shinhan Finance Group.

### (h) Regulatory reserve for loan losses

In accordance with Regulations for the Supervision of Financial Institutions, the Group reserves the difference between allowance for credit losses by IFRS and that as required by the Regulations at the account of regulatory reserve for loan losses in retained earnings.

*i)* Changes in regulatory reserve for loan losses including non-controlling interests as of December 31, 2021 and 2022 are as follows:

	2021	2022
Beginning balance	₩3,329,899	3,699,315
Planned regulatory provision (reversal) of loan losses	369,416	(37,228)
Ending balance	₩3,699,315	3,662,087

### **29.** Equity (continued)

*ii) Profit attributable to equity holders of Shinhan Financial Group and earnings per share after factoring in regulatory reserve for loan losses for the years ended December 31, 2021 and 2022 are as follows:* 

	2021	2022	
Profit attributable to equity holders of Shinhan			
Financial Group	₩4,019,254	4,642,292	
Provision for regulatory reserve for loan losses	(364,882)	37,614	
Profit attributable to equity holders of Shinhan Financial Group adjusted for regulatory reserve	₩3,654,372	4,679,906	
Pasia and diluted cornings per share adjusted for			
Basic and diluted earnings per share adjusted for regulatory reserve in won (*)	6,625	8,525	

(\*) Dividends for hybrid bonds are deducted.

### (i) Treasury stock

The acquisitions of treasury stock for the years ended December 31, 2021 and 2022 are as follows:

	202	21	2022	2 (*)
	The number of share	Carrying value	The number of share	Carrying value
Beginning balance	704,796	₩ 28,215	6,352	₩ 227
Acquisition	2,426	79	7,814,685	300,000
Disposal	(700,870)	(28,067)		
Retirement			(7,814,685)	(300,000)
Ending balance	6,352	₩ 227	6,352	₩ 227

(\*) The controlling company has acquired treasury stocks for retirement for the years ended December 31, 2022 and completed retirement of treasury stocks by retained earnings on April 25 (3,665,423 shares) and November 23, 2022 (4,149,262 shares).

### 30. Dividends

(a) For the year ended December 31, 2022, the interim dividends paid are as follows:

Dividend base date		Amount
March 31, 2022 (1st Quarter)	Common stock (₩400 per share)	₩206,277
	Convertible preferred stock (₩400 per share)	6,993
		₩213,270
June 30, 2022 (2 <sup>nd</sup> Quarter)	Common stock (₩400 per share)	₩205,171
	Convertible preferred stock (₩400 per share)	6,993
		₩212,164
September 30, 2022 (3rd Quarter)	Common stock (₩400 per share)	₩205,171
	Convertible preferred stock (₩400 per share)	6,993
		₩212,164
		₩637,598

(b) Details of dividends recognized as distributions to stockholders for the years ended December 31, 2021 and 2022 are as follows:

	2021		2022(*1)
Common Stock:			
Total number of shares issued and outstanding	5	516,599,554	508,784,869
Par value per share in won		5,000	5,000
Dividend per share in won		1,400	865
Dividends (*2)	₩	723,230	440,093
Dividend rate per share		28.0%	17.3
Preferred Stock:			
Total number of shares issued and			
outstanding		17,482,000	17,482,000
Par value per share in won		5,000	5,000
Dividend per share in won		1,400	865
Dividends	₩	24,475	15,122
Dividend rate per share		28.0%	17.3

(\*1) The current dividend(plan) was decided on March 23, 2023. The amount of dividends was not recognized as a distribution to the owner during the period.

(\*2) Dividends on own shares held by the Group are excluded.

### **30.** Dividends (continued)

(c) The details of dividends paid by the Group related to the preferred stock issued for the years ended December 31, 2021 and 2022 are as follows:

	2021					
	Number of shares	Dividend per share (in won)	Total dividend paid	Issue price per share (in won)	Dividend rate per issue price (%)	
Convertible preferred stock	17,482,000	1,960	34,265	42,900	4.57	
			2022			
	Number of shares	Dividend per share (in won)	Total dividend paid	Issue price per share (in won)	Dividend rate per issue price (%)	
Convertible preferred stock	17,482,000	2,065	36,101	42,900	4.81	

(d) Dividends for hybrid bond is calculated as follows for the years ended December 31, 2021 and 2022:

	2021	2022		
Amount of hybrid bond	₩ 3,347,	,700 4,212,700		
Interest rate	2.88 ~ 5.88% 2.88 ~ 5.88			
Dividends	₩ 116,	388 156,277		

### 31. Net interest income

Net interest income for the years ended December 31, 2020, 2021 and 2022 are as follows:

	2020	2021	2022	
Interest income:				
Cash and due from banks at amortized cost	₩ 128,023	85,846	272,407	
Deposits at FVTPL	13,888	1,298	1,329	
Securities at FVTPL	742,958	659,927	870,441	
Securities at FVOCI	957,817	896,027	1,209,153	
Securities at amortized cost	1,076,849	1,091,974	1,275,368	
Loans at amortized cost	11,697,775	11,889,767	16,316,497	
Loans at FVTPL	73,991	35,587	69,146	
Others	82,695	63,804	94,325	
	14,773,996	14,724,230	20,108,666	
Interest expense:				
Deposits	(2,842,625)	(2,173,804)	(4,642,670)	
Financial liabilities designated at FVTPL	_	_	(1,296)	
Borrowings	(426,607)	(330,548)	(938,641)	
Debt securities issued	(1,554,544)	(1,390,230)	(1,901,458)	
Others	(67,520)	(60,323)	(160,920)	
	(4,891,296)	(3,954,905)	(7,644,985)	
Net interest income	₩ 9,882,700	10,769,325	12,463,681	

### 32. Net fees and commission income

Net fees and commission income for the years ended December 31, 2020, 2021 and 2022 are as follows:

	2020	2021	2022
Fees and commission income:			
Credit placement fees	₩ 94,836	71,480	68,002
Commission received as electronic charge receipt	143,449	148,626	147,727
Brokerage fees	546,236	577,238	341,634
Commission received as agency	145,162	146,662	136,114
Investment banking fees	161,439	188,644	232,512
Commission received in foreign exchange activities	239,467	271,808	295,161
Trust management fees	255,043	310,376	308,353
Credit card fees	1,170,078	1,175,084	1,202,129
Operating lease fees (*)	245,173	365,447	478,374
Others	813,591	884,520	900,570
	3,814,474	4,139,885	4,110,576
Fees and commission expense:			
Credit-related fee	(46,456)	(38,668)	(37,331)
Credit card fees	(849,256)	(836,990)	(895,787)
Others	(535,829)	(589,230)	(651,892)
	(1,431,541)	(1,464,888)	(1,585,010)
Net fees and commission income	₩ 2,382,933	2,674,997	2,525,566

(\*) Among operating lease fees recognized for the years ended December 31, 2020, 2021 and 2022, there is no variable lease fee income which does not vary by index or rate.

### 33. Dividend income

Dividend income for the years ended December 31, 2020, 2021 and 2022 are as follows:

₩76,453	100,315	115,533
21,503	24,216	26,996
₩97,956	124,531	142,529
	21,503	

### 34. Net gain (loss) on financial instruments measured at fair value through profit or loss

Net gain(loss) on financial instruments measured at fair value through profit or loss for the ended December 31, 2020 2021 and 2022 are as follows:

	2020	2021	2022
Net gain (loss) on due from banks measured at FVTPL			
Gain (loss) on valuation	₩ 1,267	(296)	(10,600)
Gain (loss) on sale	28,461	(1,479)	
	29,728	(1,775)	(10,600)
Net gain (loss) on loans measured at FVTPL Loss			
on valuation	(204,702)	(78,416)	(35,652)
Gain on sale	17,516	15,312	14,063
	(187,186)	(63,104)	(21,589)
Net gain (loss) on securities measured at FVTPL Debt securities			
Gain (loss) on valuation	41,208	97,281	(432,967)
Gain (loss) on sale	72,338	(92,230)	(86,011)
Other gains	331,837	506,980	573,600
	445,383	512,031	54,622
Equity securities		100 0 (0	
Gain (loss) on valuation	134,922	180,363	(67,022)
Gain (loss) on sale	283,265	199,702	(124,557)
	418,187	380,065	(191,579)
Other	22 (00	0.216	2 000
Gain on valuation	22,690	9,316	2,089
	886,260	901,412	(134,868)
Net gain (loss) on financial liabilities measured at FVTPL			
Debt securities			
Gain (loss) on valuation	(48,261)	(7,745)	41,317
Gain (loss) on disposal	82,724	(67,522)	53,067
	34,463	(75,267)	94,384
Other	(02.21())		(20.007)
Loss on valuation Gain on disposal	(83,316) 8,313	(26,224) 3,489	(38,997) 2,724
Gain on disposal			
	(75,003)	(22,735)	(36,273)
	(40,540)	(98,002)	58,111
Derivatives:	045 (01	(( 1 100)	(710 760)
Gain (loss) on valuation Gain (loss) on transaction	245,681	(64,128)	(719,766) 524,599
Gain (1088) on transaction	(661,113)	429,228	
	(415,432)	365,100	(195,167)
	₩ 272,830	1,103,631	(304,113)

### 35. Net gain (loss) on financial instruments designated at fair value through profit or loss

Net gain (loss) on financial instruments designated at fair value through profit or loss for the years ended December 31, 2020, 2021 and 2022 are as follows:

	2020	2021	2022
Financial liabilities designated at fair value			
through profit or loss:			
Debt securities issued:			
Gain on valuation	$\Psi$ —		2,673
Compound financial instruments:			
Gain on valuation	241,066	423,914	804,068
Loss on sale and redemption	(42,827)	(512,215)	(229,799)
	198,239	(88,301)	574,269
	₩198,239	(88,301)	576,942

### 36. Reversal of (provision for) credit loss allowance

Reversal of (provision for) credit loss allowance on financial assets for the years ended December 31, 2020, 2021 and 2022 are as follows:

	20	)20	2021	2022
Allowance provided:				
Loans at amortized cost	₩(1,2	90,695)	(907,070)	(1,244,424)
Other financial assets at amortized cost	(	33,785)	(52,162)	(32,779)
Securities at fair value through other				
comprehensive income		(3,829)	(19,697)	
Unused credit line and financial guarantee	(	(52,795)		(19,132)
Securities at amortized cost		(1,075)	(5,305)	
	(1,3	82,179)	(984,234)	(1,296,335)
Allowance reversed:				
Securities at fair value through other				
comprehensive income	₩			3,748
Securities at amortized cost				291
Unused credit commitment and financial				
guarantee			9,549	
			9,549	4,039
	₩(1,3	82,179)	(974,685)	(1,292,296)

### 37. General and administrative expenses

General and administrative expenses for the years ended December 31, 2020, 2021 and 2022 are as follows:

	2020	2021	2022
Employee benefits:			
Salaries	₩3,034,543	3,283,436	3,423,186
Severance benefits:			
Defined contribution	36,660	38,577	38,902
Defined benefit	184,753	192,614	169,882
Termination benefits	94,723	268,089	154,012
	3,350,679	3,782,716	3,785,982
Entertainment	34,963	38,552	46,359
Depreciation	475,506	490,457	516,164
Amortization	129,976	155,202	186,448
Taxes and utility bills	197,996	187,432	226,197
Advertising	204,308	280,780	339,955
Research	20,271	25,320	29,289
Others	798,774	782,629	883,120
	₩5,212,473	5,743,088	6,013,514

### 38. Share-based payments

(a) Performance shares granted as of December 31, 2022 are as follows:

	Expired	Not expired		
Туре	Cash-settled share-bas	ed payment		
Performance conditions	Relative stock price linked (20.0%), management index (80.0%)			
Exercising period	4 years from the commencement date of the year to which the grant date belongs			
Estimated number of shares vested at	-			
December 31, 2022	743,160	2,182,644		
Fair value per share in Korean won (*)	<ul> <li>₩44,222, ₩33,122,</li> <li>₩37,387 and</li> <li>₩37,081 for the expiration of exercising period</li> </ul>			
	from 2019 to 2022	₩35,200		

(\*) Based on performance-based stock compensation, the reference stock price (the arithmetic average of the weighted average share price of transaction volume for the past two month, the previous one month, and the past one week) of four years after the commencement of the grant year is paid in cash, and the fair value of the reference stock to be paid in the future is assessed as the closing price of the settlement.

### 38. Share-based payments (continued)

(b)	Share-based of	compensation cost	s for the years	s ended December	31, 2020	, 2021 and 2022	are as follows:
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		2020		
	Empl	Employees of		
	The controlling company	The subsidiaries	Total	
Stock options granted:				
6 <sup>th</sup>	₩ (1)	(4)	(5)	
7 <sup>th</sup> (*)	(18)	(26)	(44)	
Performance shares	(257)	(3,902)	(4,159)	
	₩(276)	(3,932)	(4,208)	
		2021		
	<b>^</b>	oyees of		
	The controlling company	The subsidiaries	Total	
Stock options granted:				
7 <sup>th</sup> (*)	₩ (1)	(1)	(2)	
Performance shares	4,286	32,899	37,185	
	₩4,285	32,898	37,183	
		2022		
	Emplo	oyees of		
	The controlling company	The subsidiaries	Total	
Stock options granted:				
7 <sup>th</sup> (*)	$\Psi$ —	—		
Performance shares	3,159	25,092	28,251	
	₩3,159	25,092	28,251	

(\*) As of December 31, 2021, all stock options have expired.

(c) Accrued expenses and the intrinsic value as of December 31, 2020, 2021 and 2022 are as follows:

	2020		
	Accrued		
	The controlling company	The subsidiaries	Total
Stock options granted:			
7 <sup>th</sup>	₩ 1	1	2
Performance shares	7,201	60,241	67,442
	₩7,202	60,242	67,444

(\*) The intrinsic value of share-based payments is ₩67,442 million as of December 31, 2020. For the calculation, the quoted market price of ₩32,050 per share is used for stock options and the fair value is considered as intrinsic value for performance shares, respectively.

### **38.** Share-based payments (continued)

		2021(*)			
	Accrued	Accrued expense (*)			
	The controlling company	The subsidiaries	Total		
Performance shares	₩10,598	82,498	93,096		

(\*) As of December 31, 2021, all stock options have expired.

		2022		
	Accrued	l expense		
	The controlling company	The subsidiaries	Total	
Performance shares	₩12,746	91,469	104,215	

### **39.** Net other operating expense

Other operating income and other operating expense for the years ended December 31, 2020, 2021 and 2022 are as follows:

	20	20	2021	_	2022
Other operating income					
Gain on disposal of assets:					
Loans at amortized cost	₩	21,348	18,8	43	33,147
Others:					
Gain on hedged items	5	36,768	501,6	76	1,122,823
Reversal of allowance for guarantees					
and acceptances		2,709	_	_	410
Gain on other trust accounts			44,2		142
Reversal of other allowance	1	850	8,8		13,348
Others		64,999	356,6	11	448,640
	7	05,326	911,4	11	1,585,363
	7	26,674	930,2	54	1,618,510
Other operating expense					
Loss on disposal of assets:					
Loans at amortized cost	(	18,675)	(3-	47)	(5,533)
Others:					
Loss on hedged items	· ·	05,808)	(518,8		(1,089,220)
Fund contribution	(3	67,993)	(397,8	84)	(440,715)
Provision for guarantees and					
acceptances			(3,4		—
Provision for other debt allowances	(	16,862)	(52,1)	23)	(22,721)
Depreciation of operating lease		<b>CR</b> 0.0 C			
assets		63,006)	(257,0)		(351,208)
Others	(9)	24,796)	(1,190,5	46)	(1,458,617)
	(2,0	78,465)	(2,419,9	34)	(3,362,481)
	(2,0	97,140)	(2,420,2	81)	(3,368,014)
Net other operating expenses	₩(1,3	70,466)	(1,490,0	27)	(1,749,504)

### 40. Net other non-operating income

Other non-operating income and other non-operating expense for the years ended December 31, 2020, 2021 and 2022 are as follows:

	2020	2021	2022
Other non-operating income			
Gain on disposal of assets:			
Property and equipment (*1)	₩ 64,427	1,836	67,411
Investment property (*1)	20,701	108	29,305
Assets held for sale (*2)	1,147	16,976 247	448,770
Lease assets Right-of-use assets	2,712 3,415	2,986	36 4,131
Others	24	2,980	4,151
oulois			540 (52
	92,426	22,153	549,653
Investments in associates:			
Gain on disposal	11,325	39,593	8,965
Reversal of impairment loss			5,924
	11,325	39,593	14,889
Others:			
Rental income on investment property	23,890	35,887	33,366
Reversal of impairment losses on intangible asset	119	372	396
Gain from assets contributed	4	20	4
Gain from bargain purchase			12,349
Others	66,268	64,272	75,504
	90,281	100,551	121,619
	194,032	162,297	686,161
Other non-operating expense			
Loss on disposal of assets:			
Property and equipment (*1)	(5,884)	(2,027)	(2,546)
Investment property		(2,111)	
Lease assets	(5,538)		(9)
Right-of-use assets	(1,195)	(2,920)	(737)
Others	(64)	(1,186)	(183)
	(12,681)	(8,244)	(3,475)
Investments in associates:			
Loss on disposal	(5,754)	(11,002)	(19,045)
Impairment loss	(9,407)	(10,719)	(7,529)
•	(15,161)	(21,721)	(26,574)
Otherro		(21,721)	(20,571)
Others: Donations	(86,608)	(64,098)	(67,558)
Depreciation of investment properties	(20,165)	(21,616)	(07,558) (18,115)
Impairment loss on property and equipment	(20,105)	(7,594)	(10,115)
Impairment loss on intangible assets	(41,429)	(34,916)	(3,158)
Write-off of intangible assets	(474)	(1,346)	(1,822)
Expenses on collection of special bonds	(7,978)	(11,275)	(10,259)
Others (*3)	(344,934)	(518,519)	(215,725)
	(501,588)	(659,364)	(316,637)
	(529,430)	(689,329)	(346,686)
Net other non-operating gain (loss)	₩(335,398)	(527,032)	339,475

(In millions of won)

### 40. Net other non-operating income (continued)

- (\*1) Gain and loss on disposal of sale-and-leaseback are included in gain and loss on disposal of property, plant, and equipment and gain on disposal of investment property, respectively. Gain on disposal of sale-and-leaseback for the year ended December 31, 2020 is ₩9,761 million.
- (\*2) Gain and loss on disposal of sale-and-leaseback are included in gain and loss on disposal of property and equipment, gain and loss on disposal of investment property and gain on assets held for sale, respectively. Gain on disposal of sale-and-leaseback for the years ended December 31, 2021 and 2022 are ₩9,761 million and ₩443,780 million, respectively.
- (\*3) It includes ₩284,176 million, ₩466,775 million and ₩168,020 million, respectively, for the years ended December 31, 2020, 2021 and 2022 of estimated claim for damages that are highly probable to be paid in case of customer losses expected due to redemption delays of Lime CI funds, etc.

### 41. Income tax expense

(a) Income tax expense for the years ended December 31, 2020, 2021 and 2022 are as follows:

	2020	2021	2022
Current income tax expense	₩1,131,254	1,498,819	1,666,075
Temporary differences (*)	131,862	(322,279)	(926,268)
Income tax recognized in other comprehensive			
income (*)	(7,321)	294,496	877,281
Income tax expenses	₩1,255,795	1,471,036	1,617,088

- (\*) As the corporate tax rate was changed due to the tax law revision in the end of 2022, the effect of the tax rate change was reflected in deferred tax assets (liabilities) expected to be realized 2023 onward.
- (b) Income tax expense calculated by multiplying net income before tax with the tax rate for the years ended December 31, 2020, 2021 and 2022 are as follows:

	2020	2021	2022
Profit before income taxes	₩4,753,871	5,583,664	6,349,251
Income taxes at statutory tax rates Adjustments:	1,301,836	1,530,030	1,735,682
Non-taxable income	(4,932)	(8,417)	(13,902)
Non-deductible expense	14,529	15,975	16,762
Tax credit	(88)	(159)	(1,233)
Others	(55,550)	(66,393)	(120,221)
Income tax expense	₩1,255,795	1,471,036	1,617,088
Effective tax rate	26.42%	26.35	25.47

### 41. Income tax expense (continued)

(c) Deferred tax expenses by origination and reversal of deferred assets and liabilities and temporary differences for the years ended December 31, 2021 and 2022 are as follows:

	2021				
	Beginning Balance	Profit or loss	Other comprehensive income (loss)	Ending Balance (*)	
Unearned income	₩(328,278)	(12,714)		(340,992)	
Account receivable	(29,078)	2,498		(26,580)	
Financial assets measured at fair value	(142,085)	83,716	325,327	266,958	
Investment in associates and etc.	161,270	22,616	(5,624)	178,262	
Valuation and depreciation of property and					
equipment	(150,786)	14,616		(136,170)	
Derivative asset (liability)	(55,590)	86,234	(8,995)	21,649	
Deposits	27,632	(3,202)		24,430	
Accrued expenses	140,864	13,852		154,716	
Defined benefit obligation	538,654	26,411	(15,115)	549,950	
Plan assets	(553,907)	(47,067)	(870)	(601,844)	
Other provisions	312,278	77,268		389,546	
Allowance for acceptances and					
guarantees	88,050	(55,588)		32,462	
Allowance related to asset revaluation	(49,713)	_		(49,713)	
Allowance for expensing depreciation	(337)	63		(274)	
Accrued contributions	16,618	19,496	—	36,114	
Financial liabilities designated at fair value					
through profit of loss	(28,226)	(46,429)		(74,655)	
Allowances	223,651	(91,412)	—	132,239	
Constructive dividend	16,291	446	—	16,737	
Liability under insurance contracts	1,739	132	—	1,871	
Deficit carried over	311	(311)			
Others	(837,736)	(44,441)	(227)	(882,404)	
	(648,378)	46,184	294,496	(307,698)	
Expired unused tax losses:					
Extinguishment of deposit and insurance					
liabilities	284,067	(17,462)		266,605	
	₩(364,311)	28,722	294,496	(41,093)	

(\*) Deferred tax assets from overseas subsidiaries are increased by ₩939 million due to foreign exchange rate movements.

### 41. Income tax expense (continued)

	2022				
	Beginning Balance	Profit or loss	Other comprehensive income (loss)	Ending Balance (*1)(*2)	
Unearned income	₩(340,992)	(9,780)		(350,772)	
Account receivable	(26,580)	2,885		(23,695)	
Financial assets measured at fair value	266,958	84,474	937,122	1,288,554	
Investment in associates and etc.	178,262	(3,681)	8,829	183,410	
Valuation and depreciation of property					
and equipment	(136,170)	34,750	_	(101,420)	
Derivative asset	21,649	207,136	32,965	261,750	
Deposits	24,430	12,617		37,047	
Accrued expenses	154,716	55,021	(9)	209,728	
Defined benefit obligation	549,950	23,951	(98,124)	475,777	
Plan assets	(601,844)	(36,244)	2,107	(635,981)	
Other provisions	389,546	9,304		398,850	
Allowance for acceptances and					
guarantees	32,462	(8,039)		24,423	
Allowance related to asset revaluation	(49,713)	1,822		(47,891)	
Allowance for expensing depreciation	(274)	72		(202)	
Accrued contributions	36,114	925		37,039	
Financial liabilities designated at fair					
value through profit of loss	(74,655)	(204,434)		(279,089)	
Allowances	132,239	33,839		166,078	
Constructive dividend	16,737	450		17,187	
Liability under insurance contracts	1,871	(15)		1,856	
Others	(882,404)	(111,817)	(5,609)	(999,830)	
	(307,698)	93,236	877,281	662,819	
Expired unused tax losses:					
Extinguishment of deposit and insurance					
liabilities	266,605	(47,047)		219,558	
	₩ (41,093)	46,189	877,281	882,377	

(\*1) Deferred tax assets from overseas subsidiaries are decreased by ₩2,797 million due to foreign exchange rate movements.

(\*2) As the corporate tax rate was changed due to the tax law revision in the end of 2022, the effect of the tax rate change was reflected in deferred tax assets (liabilities) expected to be realized 2023 onward.

(In millions of won)

### 41. Income tax expense (continued)

(d) Deferred tax assets and liabilities that are directly charged or credited to equity for the years ended December 31, 2021 and 2022 are as follows:

		January	1, 2021	Cha	nges	December	31, 2021
		OCI	Tax effect	OCI	Tax effect	OCI	Tax effect
Gain (loss) on valuation of financial assets measured at FVOCI Gain (loss) on financial liabilities	:	₩ 335,800	(108,989)	(1,160,013	) 318,331	(824,213	) 209,342
measured at FVTPL attributable to changes in credit risk Foreign currency translation		(7,133)	1,961	4,627	(1,272	) (2,506	) 689
adjustments for foreign operations		(374,944)					
Gain (loss) on cash flow hedges		(67,935)	19,764	29,931	(8,232	) (38,004	) 11,532
Equity in other comprehensive income of associates The accumulated other comprehensive		6,850	(2,000)	6,512	(3,766	) 13,362	(5,766)
income(loss) in separate account (*) Remeasurements of the defined benefit		25,412	(6,988)	(56,484	) 15,211	(31,072	) 8,223
liability		(532,176)	146,396	58,820	(16,164	) (473,356	) 130,232
Gain (loss) on valuation of financial asset measured at FVTPL (Overlay		(332,170)	140,570	50,020	(10,104	) (475,550	) 150,252
approach)		224,049	(62,130)	(31,924	) 11,826	192,125	(50,304)
		₩(390,077)	(14,103)	(890,463	) 309,708	(1,280,540	) 295,605
	:			()			
		January 1, 2	2022	Chang	jes	December	31, 2022
		January 1, 2 OCI	2022 Tax effect	Chang	ges Tax effect	December OCI	<b>31, 2022</b> Tax effect
Loss on valuation of financial assets measured at FVOCI Loss on financial liabilities measured at FVTPL attributable to changes	₩	OCI	Tax effect		Tax effect	-	Tax effect
measured at FVOCI Loss on financial liabilities measured at FVTPL attributable to changes in credit risk	 ₩	OCI	Tax effect	OCI	Tax effect	OCI	Tax effect
measured at FVOCI Loss on financial liabilities measured at FVTPL attributable to changes	 ₩	OCI (824,213)	Tax effect 209,342	OCI (3,293,654)	Tax effect 854,660	OCI (4,117,867)	Tax effect           1,064,002
measured at FVOCI Loss on financial liabilities measured at FVTPL attributable to changes in credit risk Foreign currency translation adjustments for foreign operations Loss on cash flow hedges Equity in other comprehensive income(loss) of associates The accumulated other	 ₩	OCI (824,213) (2,506) (116,876)	Tax effect 209,342 689 (8,343)	OCI (3,293,654) (4,508) 13,091	Tax effect 854,660 1,170 (155)	OCI (4,117,867) (7,014) (103,785)	Tax effect 1,064,002 1,859 (8,498)
measured at FVOCI Loss on financial liabilities measured at FVTPL attributable to changes in credit risk Foreign currency translation adjustments for foreign operations Loss on cash flow hedges Equity in other comprehensive income(loss) of associates The accumulated other comprehensive loss in separate account(*)	₩	OCI (824,213) (2,506) (116,876) (38,004)	Tax effect 209,342 689 (8,343) 11,532	OCI (3,293,654) (4,508) 13,091 (100,043)	Tax effect 854,660 1,170 (155) 29,551	OCI (4,117,867) (7,014) (103,785) (138,047)	Tax effect 1,064,002 1,859 (8,498) 41,083
<ul> <li>measured at FVOCI</li> <li>Loss on financial liabilities measured at FVTPL attributable to changes in credit risk</li> <li>Foreign currency translation adjustments for foreign operations</li> <li>Loss on cash flow hedges</li> <li>Equity in other comprehensive income(loss) of associates</li> <li>The accumulated other comprehensive loss in separate account(*)</li> <li>Remeasurements of the defined benefit liability</li> <li>Gain (loss) on valuation of financial</li> </ul>	₩	OCI (824,213) (2,506) (116,876) (38,004) 13,362	Tax effect           209,342           689           (8,343)           11,532           (5,766)           8,223	OCI (3,293,654) (4,508) 13,091 (100,043) (24,196)	Tax effect           854,660           1,170           (155)           29,551           8,474	OCI (4,117,867) (7,014) (103,785) (138,047) (10,834)	Tax effect           1,064,002           1,859           (8,498)           41,083           2,708
<ul> <li>measured at FVOCI</li> <li>Loss on financial liabilities measured at FVTPL attributable to changes in credit risk</li> <li>Foreign currency translation adjustments for foreign operations</li> <li>Loss on cash flow hedges</li> <li>Equity in other comprehensive income(loss) of associates</li> <li>The accumulated other comprehensive loss in separate account(*)</li> <li>Remeasurements of the defined benefit liability</li> <li>Gain (loss) on valuation of financial asset measured at FVTPL</li> </ul>	₩	OCI (824,213) (2,506) (116,876) (38,004) 13,362 (31,072) (473,356)	Tax effect           209,342           689           (8,343)           11,532           (5,766)           8,223           130,232	OCI (3,293,654) (4,508) 13,091 (100,043) (24,196) (153,594) 347,388	Tax effect           854,660           1,170           (155)           29,551           8,474           40,387           (96,257)	OCI (4,117,867) (7,014) (103,785) (138,047) (10,834) (184,666) (125,968)	Tax effect           1,064,002           1,859           (8,498)           41,083           2,708           48,610           33,975
<ul> <li>measured at FVOCI</li> <li>Loss on financial liabilities measured at FVTPL attributable to changes in credit risk</li> <li>Foreign currency translation adjustments for foreign operations</li> <li>Loss on cash flow hedges</li> <li>Equity in other comprehensive income(loss) of associates</li> <li>The accumulated other comprehensive loss in separate account(*)</li> <li>Remeasurements of the defined benefit liability</li> <li>Gain (loss) on valuation of financial</li> </ul>		OCI (824,213) (2,506) (116,876) (38,004) 13,362 (31,072)	Tax effect         209,342         689         (8,343)         11,532         (5,766)         8,223         130,232         (50,304)	OCI (3,293,654) (4,508) (13,091 (100,043) (24,196) (153,594)	Tax effect           854,660           1,170           (155)           29,551           8,474           40,387           (96,257)           79,837	OCI (4,117,867) (7,014) (103,785) (138,047) (10,834) (184,666)	Tax effect           1,064,002           1,859           (8,498)           41,083           2,708           48,610

(\*) Deferred tax effects, which are originated from the accumulated other comprehensive income in separate account, are included in the other liabilities of principle and interest guaranteed separate account's financial statement.

### 41. Income tax expense (continued)

(e) The amount of deductible temporary differences that are not recognized as deferred tax assets as of December 31, 2021 and 2022 are as follows:

Temporary differences related to Shinhan EZ General		
Insurance, Ltd. (*)	₩—	119,553

(\*) Shinhan EZ General Insurance, Ltd., a newly incorporated subsidiary for the current period, suffered a net loss for the current period, etc. As of the end of 2022, deferred corporate tax assets were not recognized as it was determined that the temporary difference to be deducted in excess of the temporary difference to be added and the tax loss were not feasible. The expiration date of unused carried tax losses not recognized as deferred tax assets as of the end of the reporting period is as follows:

2021

2022

	Less than 1 year	1~2 years	2~3 years	More than 3 years	Total
Tax loss carried-forward	₩9,207	19,979	9,006	76,230	114,422

(f) The amount of temporary difference regarding investment in subsidiaries that are not recognized as deferred tax liabilities as of December 31, 2021 and 2022 are as follows:

	2021	2022
Investment in subsidiaries, etc.	₩(8,486,919)	(8,888,268)

(g) The Group set off a deferred tax asset against a deferred tax liability of the same taxable entity if, and only if, they relate to income taxes levied by the same taxation authority and the entity has a legally enforceable right to set off current tax assets against current tax liabilities. Deferred tax assets and liabilities presented on a gross basis prior to any offsetting as of December 31, 2021 and 2022 are as follows:

	2021	2022
Deferred tax assets	₩ 593,852	1,072,327
Deferred tax liabilities	(634,945)	(189,950)

(h) As of the end of 2022, the Group is in the process of litigation for cases where tax uncertainty exists (claim amount: ₩30,590 million). The Group determined that there is a high probability of winning the case and reflected it as current corporate tax assets and corporate tax expenses.

### 42. Earnings per share

(a) Basic and diluted earnings per share for the years ended December 31, 2020, 2021 and 2022 are as follows:

	2020	2021	2022
Profit attributable to equity holders of Shinhan Financial Group	₩ 3,414,595	4,019,254	4,642,292
Less:			
Dividends to hybrid bond	(85,327)	(116,388)	(156,277)
Net profit available for common stock	₩ 3,329,268	3,902,866	4,486,015
Weighted average number of common shares outstanding (*1)(*2)	500,343,324	534,049,948	530,638,621
Basic and diluted earnings per share in won	₩ 6,654	7,308	8,454

(\*1) The number of basic ordinary shares outstanding is 508,784,869 shares and the above weightedaverage stocks are calculated by reflecting treasury stocks issued and 17,482,000 shares of convertible preferred shares issued on May 1, 2019.

(\*2) Treasury stock has retired on June 1, 2020.

<sup>(</sup>b) The calculation details of the weighted average number of ordinary shares for the years ended December 31, 2021 and 2022 are as follows:

	2021		
	Number of shares	Number of days	
Number of common shares issued	516,599,554	188,558,837,210	
Shares of convertible preferred stock	17,482,000	6,380,930,000	
Shares of treasury stock	(6,352)	(11,536,338)	
Average number of ordinary shares	534,075,202	194,928,230,872	
Days		365 days	
Weighted average number of ordinary shares		534,049,948	

	2022		
	Number of shares	Number of days	
Number of common shares issued	508,784,869	187,476,994,819	
Shares of convertible preferred stock	17,482,000	6,380,930,000	
Shares of treasury stock	(6,352)	(174,828,329)	
Average number of ordinary shares	526,260,517	193,683,096,490	
Days		365 days	
Weighted average number of ordinary shares		530,638,621	

### 43. Commitments and contingencies

(a) C	Guarantees, acceptances and	l credit commitments a	s of December 31,	, 2021 and 2022 are as follows:
-------	-----------------------------	------------------------	-------------------	---------------------------------

	2021	2022
Guarantees and purchase agreements:		
Outstanding guarantees	₩ 10,540,968	12,154,088
Contingent guarantees	4,670,771	4,565,829
ABS and ABCP purchase agreements	1,525,768	1,496,604
	16,737,507	18,216,521
Commitments to extend credit:		
Loan commitments in won	81,707,963	83,231,840
Loan commitments in foreign currency	19,807,686	25,052,284
Other agreements (*)	92,338,217	96,971,153
	193,853,866	205,255,277
Endorsed bills:		
Secured endorsed bills	8,199	10,025
Unsecured endorsed bills	7,683,165	7,046,806
	7,691,364	7,056,831
	₩218,282,737	230,528,629

(\*) Unused credit commitments provided to the card customers are included, the amounts are ₩86,979,545 million for the year ended December 31, 2021 and ₩90,452,012 million for the year ended December 31, 2022.

### 43. Commitments and contingencies (continued)

### (b) Pending litigations

The Group's pending lawsuits as a defendant as of December 31, 2022 are as follows:

Case	Number of claim	Claim amount	Description	Status
Return of unjust earning	1	₩ 33,096	The Plaintiff believes that the group of lenders including the Group unfairly sold two oil drilling vessels that are the core assets for borrowers and it caused losses to other bankrupt creditors of the borrower. Therefore, the Plaintiff filed a lawsuit for damages.	The first trial is ongoing as of December 31, 2022.
Loss claim	1	64,748	Joint Tort liability and Vicarious liability	The first trial is ongoing as of December 31, 2022.
Loss claim	1	36,436	Joint Tort liability and Vicarious liability	The first trial is ongoing as of December 31, 2022.
Hwaseong Bansong-dong Construction Payment Litigation (Hyosung Heavy Industries, etc. 1)	1	25,507	The plaintiffs, as contractors, claimed unpaid construction costs.	The first trial is ongoing as of December 31, 2022.
Others	588 <u>592</u>	370,892 <u>₩530,679</u>	It includes various cases, such as compensation for loss claim.	

As of the December 31, 2022, the Group has recorded W29,238 million and W3,991 million, respectively, as provisions and insurance contract liabilities (reserve for claims) for litigations, etc., which have been decided to lose at the first trial. The outcome of the remaining litigations other than those accounted for provisions, etc. are not expected to have a material impact on the consolidated financial statements, but additional losses may result from future litigation.

(c) As a Prime Brokerage Service operator, the Group entered into a total return swap agreement ("TRS", derivatives that exchange profits and losses from underlying assets such as stocks, bonds and funds) with a fund operated by Lime Asset Management ("Lime Fund"). Through TRS with the Group, the Lime Fund invested approximately \$200 million in IIG Global Trade Finance Fund, IIG Trade Finance Fund, and IIG Trade Finance Fund-FX Hedge ("IIG Fund") from May 2017 to September 2017. The

### 43. Commitments and contingencies (continued)

Group invested the IIG Fund in LAM Enhanced Finance III L.P ("LAM III Fund") in kind and acquired the LAM III Fund's beneficiary certificates in accordance with the management instructions of Lime Asset Management in 2019. The recoverable value of the LAM III Fund beneficiary certificates is affected by the recoverable value of the IIG Fund invested in kind.

Meanwhile, IIG Fund received cancellation of registration and asset freeze from the US Securities and Exchange Commission in November 2019. The Financial Supervisory Service (FSS) announced in its interim inspection of Lime Fund in February 2020 that the Group is charged of being involved in poor concealment and fraud of Lime Fund while operating TRSs with Lime Fund, and a related prosecution investigation has been under way since then.

Institutional sanctions (banned from the sale of new private equity funds and etc. for six months) against the Group was finalized by the Financial Services Commission on November 12, 2021.

In addition, the prosecution arrested and indicted the former director of Prime Brokerage Services for fraud charges and violation of the Capital Market and Financial Investment Services Act. Finally, the former director of Prime Brokerage Services was found guilty.

The prosecution had indicted the Group and the former director of Prime Brokerage Services on January 22, 2021 for violating 'Financial Investment Services and Capital Markets Act' by applying the joint penal provisions. On March 15, 2023 the Group was fined \$50 million won for negligence in its supervisory duties. The Group has determined the additional legal responsibility that may arise in the future related to the above indictment is not significant.

Considering the board resolutions and the results of the Financial Supervisory Service's dispute settlement committee, the Group has been completed or will be carried out the compensation and liquidity supply for some of the Lime Fund sales in the future.

- (d) The Group has sold Gen2 related trust instruments from May 2014 to November 2019. As of December 31, 2022, approximately ₩420 billion, the entire outstanding balance, is suspended from redemption and delayed in repayment. In accordance with a resolution of the Board of Directors on September 28, 2021, the Group has decided to pay 40% of the investment principal to the customers who have agreed to the suspension of redemption and settle the amount upon investment recovery.
- (e) The Group is responsible for the completion of construction when the contractor fails to fulfill its responsibilities. In case the Group fails to fulfill its responsibility, it is in the process of a responsible-for-completion land trust project (154 cases other than the new residential and commercial apartment project in Jongno-gu, Seoul (excluding completed workplaces)) to compensate for damages incurred to the financial institutions, and for the period ended December 31, 2022, the total PF loans amounted to ₩5,194.9 billion. The amount of claim for damages of the Group is determined after identifying whether it is a damage caused by the Group's failure to fulfill its responsibilities. As of December 31, 2022, the risk of the Group to bear the responsibility to complete the project is low, and the loss cannot be reliably measured, hence this was not reflected in the financial statements for the period ended December 31, 2022. Meanwhile, the process of each business sites will be continuously monitored.

### 44. Statement of cash flows

(a) Cash and cash equivalents in the consolidated statements of cash flows as of December 31, 2020, 2021 and 2022 are as follows:

2020	2021	2022
W122 420 540	00 451 105	20 551 225
₩33,420,549	28,471,127	29,551,335
(2,488,156)	(1,490,600)	(1,886,179)
(4,072,993)	(2,877,084)	(3,663,731)
(6,561,149)	(4,367,684)	(5,549,910)
₩26,859,400	24,103,443	24,001,425
	₩33,420,549 (2,488,156) (4,072,993) (6,561,149)	(2,488,156) $(1,490,600)$ $(4,072,993)$ $(2,877,084)$ $(6,561,149)$ $(4,367,684)$

(b) Significant non-cash activities for the years ended December 31, 2020, 2021 and 2022 are as follows:

	2020	2021	2022
Investment conversion	₩ 58,528	32,239	_
Transfers from construction-in-progress to			
property and equipment	56,575	18,748	33,983
Transfers between property and equipment			
and investment property	4,064	73,773	9,554
Transfers between assets held for sale and			
property and equipment	31,633	1,022	101,757
Transfers between investment property and			
assets held for sale	910	2,238	83,664
Accounts payable for purchase of intangible			
assets, etc.	137,476	137,058	117,743
Transaction for right-of-use assets	281,785	289,995	293,590
Exchange of shares related to acquisition of			
subsidiaries	629,449		
Exchange of shares related to disposal of			
treasury stocks	287,669		

### 44. Statement of cash flows (continued)

(c) Changes in assets and liabilities arising from financing activities for the years ended December 31, 2021 and 2022 are as follows:

	2021				
	Net Derivative liabilities	Borrowings	Debt securities issued	Lease liabilities	Total
Beginning balance	₩(88,784)	41,594,064	75,134,394	594,161	117,233,835
Changes from cash flows	12,667	849,212	4,417,830	(275,273)	5,004,436
Changes from non-cash flows					
Amortization of discount on					
borrowings and debentures	—	(71,390)	9,257	10,873	(51,260)
Changes in foreign currency	—	193,892	779,919	16,235	990,046
Other	(5,290)	601,287	(192,037)	266,694	670,654
Ending balance	₩(81,407)	43,167,065	80,149,363	612,690	123,847,711

	2022					
	Net Derivative liabilities	Borrowings	Debt securities issued	Lease liabilities	Financial liabilities designated at FVTPL	Total
Beginning balance	₩(81,407)	43,167,065	80,149,363	612,690	_	123,847,711
Changes from cash flows	71,629	6,145,271	(2,255,974)	(259,913)	49,993	3,751,006
Changes from non-cash flows						
Amortization of discount						
on borrowings and						
debentures		(94,209)	45,713	13,379		(35,117)
Changes in foreign						
currency		294,867	58,406	19,032		372,305
Other	541,712	(233,819)	(708,725)	237,049	(2,666)	(166,449)
Business combination						
(Note 47)				1,102		1,102
Ending balance	₩531,934	49,279,175	77,288,783	623,339	47,327	127,770,558

### 45. Related parties

Intra-group balances, and income and expenses arising from intra-group transactions are eliminated in preparing the consolidated financial statements. In accordance with IAS 24, the Group defines the retirement benefit plans of the associates, key management and their families, the consolidation group and related parties as the scope of related parties. The amount of profit and loss, bond and debt balance between the Group and the related parties are disclosed. For details of the subsidiaries and associates, refer to 'Note 15'.

## 45. <u>Related parties (continued)</u>

(a) Balances with the related parties as of December 31, 2021 and 2022 are as follows:

Related party	Account	2021	2022
Investments in associates:			
BNP Paribas Cardif Life Insurance	Other assets	₩ 61	38
"	Credit card loans	87	117
"	Deposits	14,870	18,745
"	Unused credit commitments		1
Partners 4th Growth Investment Fund	Deposits	10,096	742
Shinhan EZ General Insurance, Ltd. (*2)	Credit card loans	24	
22	ACL	(2)	
"	Other provisions	4	
"	Deposits	1,455	
Dream High Fund III (*1)	Deposits	4	
Midas Dong-A Snowball Venture Fund 2	Deposits	350	
Incorporated association Finance Saving	1		
Information Center	Deposits	16	2
Nomura-Rifa Private Real Estate	Ī		
Investment Trust No.19	Loans	11,880	11,880
"	Other assets		44
SH MAIN Professional Investment Type			
Private Mixed Asset Investment Trust			
No.3	Other assets	345	427
Korea Finance Security	Deposits	457	415
SHINHAN-CORE TREND GLOBAL	Deposito	157	115
FUND 1 (*1)	Unearned revenue	17	_
Hermes Private Investment Equity Fund	Deposits	246	218
Korea Credit Bureau	Deposits	1,394	721
Goduck Gangil1 PFV Co., Ltd	Loans	12,000	6,825
"	ACL	(52)	(20)
"	Deposits	(52)	3
SBC PFV Co., Ltd	Deposits	33,278	21,163
Sprott Global Renewable Private Equity	Deposits	55,270	21,105
Fund I	Deposits	176	100
IMM Global Private Equity Fund	Loans	800	800
"	ACL	(3)	(3)
"	Deposits	21,543	14,824
Goduck Gangil10 PFV Co., Ltd	Loans	7,600	3,100
"," "Under Gaugino FIV Co., Eta	ACL	(24)	(9)
"	Deposits	72,740	26,880
Shinhan Global Healthcare Fund 2	Deposits	1	20,880
One Shinhan Global Fund 1	Unearned revenue	104	1
IMM Special Situation 1-2 PRIVATE	Ollearned revenue	104	
EQUITY FUND	Deposita	23	151
	Deposits Loans		131
EDNCENTRAL Co.,Ltd.	Accrued income	19,739 9	_
"			_
"	Deposits Unearned revenue	$     \frac{1}{40} $	
	Unearneu revenue	40	
Future-Creation Neoplux Venture Capital Fund	Account receivables	3,919	3,949

### 45. Related parties (continued)

Kelateu parties (continueu)			
Related party	Account	2021	2022
Investments in associates (continued): Neoplux Market-Frontier Secondary			
Fund	Account receivables	₩ 954	904
Gyeonggi-Neoplux Superman Fund	Account receivables	620	623
Shinhan-Neoplux Energy Newbiz Fund SHINHAN-NEO Core Industrial	Account receivables	1,002	978
Technology Fund KTC-NP Growth Champ 2011-2 Private	Account receivables	—	124
Equity Fund	Account receivables	4,512	2,675
Neoplux No.3 Private Equity Fund	Account receivables	662	3,190
NV Station Private Equity Fund	Deposits	41	21
Korea Digital Asset Custody	Deposits	526	153
SW-S Fund	Deposits	115	112
Shinhan Smilegate Global PEF I	Unearned revenue	49	9
WaveTechnology co.Ltd	Deposits	99	41
SHINHAN-NEO Market-Frontier 2nd	-		
Fund	Account receivables	513	513
iPIXEL Co.,Ltd.	Loans	55	
"	Deposits	651	225
CJL No.1 Private Equity Fund	Deposits	779	603
NewWave 6th Fund Nova New Technology Investment Fund	Account receivables	_	849
No.1	Deposits	357	215
DS Power Semicon Private Equity Fund	Deposits	_	100
Genesis No.1 Private Equity Fund DDI LVC Master Real Estate Investment	Deposits	—	19
Trust Co., Ltd.	Deposits	_	59
Newlake Growth Capital Partners2 PEF	Deposits	_	353
Logisvalley Shinhan REIT Co., Ltd.	Loans	_	43,000
,, ,	ACL	_	(28)
"	Account receivables	_	81
"	Deposits	_	1,421
Shinhan-Albatross tech investment Fund	Deposits	_	3,402
Shinhan Global Active REIT Co.Ltd	Deposits	_	393
Shinhan VC tomorrow venture fund 1 SH Sustainable Management ESG Short	Account receivables	—	850
term Bond Security Feeder Investment Trust No.1 SH Global Net Zero Solution Security	Accrued income	_	1
	A comind income		2
Investment Trust SEOKWANG T&I	Accrued income	_	2
	Deposits	_	1
Shinhan Time 1st Investment fund	Deposits	—	238
DeepBlue No.1 Private Equity Fund	Deposits		400
Key management personnel and their immediate relatives:	Loans	6,149	6,561
	Assets	70,850	87,471
	Liabilities	₩159,432	91,731

### 45. Related parties (continued)

- (\*1) Excluded from the associates due to disposal and liquidation for the year ended December 31, 2022.
- (\*2) For the year ended December 31, 2022, it is incorporated into the consolidation target as the Group held control due to increased equity ratio and BNP Paribas Cardif General Insurance, Ltd. has changed its name to Shinhan EZ General Insurance, Ltd.
- (b) Transactions with the related parties for the years ended December 31, 2020, 2021 and 2022 are as follows:

Related party	Account	2020	2021	2022
Investments in associates				
<b>BNP</b> Paribas Cardif Life				
Insurance	Fees and commission income	₩ 3,390	3,023	1,890
"	Interest expense	(5)	(13)	(52)
"	General and administrative			
	expenses	(4)	(2)	(1)
Shinhan Praxis K-Growth	F 1 · · · ·	2(1	222	10
Global Private Equity Fund	Fees and commission income	361	323	42
Shinhan EZ General	Fees and commission income	10	10	2
Insurance, Ltd. (*4)	Reversal for credit loss	10	6	2 5
"	Other operating income	333	0	5
"	Interest expense		(1)	(1)
SM New Technology Business	interest expense		(1)	(1)
Investment Fund I (*2)	Fees and commission income		187	
Partners 4th Growth			107	
Investment Fund	Interest expense	(4)	(11)	(12)
Shinhan-Albatross Technology	Ī			
Investment Fund	Fees and commission income	54	129	146
KDBC Midas Dong-A				
Snowball Venture Fund				
No.2	Interest expense	(2)		_
SHC-K2 Global Material				
Fund (*1)	Fees and commission income	19		
Synergy-Shinhan Mezzanine				
New Technology				
Investment Fund (*1)	Fees and commission income	50		
Shinhan-Midas Dong-A	<b>F</b>	(2)	115	101
Secondary Fund GX Shinhan interest 1st	Fees and commission income	63	115	121
Private Equity Fund (*1)	Fees and commission income	454		
Shinhan-Nyestor Liquidity	rees and commission meome	434		
Solution Fund	Fees and commission income	361	271	181
SHC ULMUS Fund No.1 (*1)	Fees and commission income	39		
Shinhan-PS Investment Fund		57		
No.1	Fees and commission income	20	20	15
Nomura-Rifa Private Real				
Estate Investment Trust				
No.19	Interest income	525	530	522
"	Other operating income	3	_	_

45. <u>Related parties (continued)</u>

Related party	Account	2020	2021	2022
Investments in associates				
(continued):				
SH MAIN Professional				
Investment Type Private				
Mixed Asset Investment				
Trust No.3	Fees and commission income	₩ 2,501	974	1,550
KOREA FINANCE				
SECURITY	Fees and commission income	10	8	6
"	Interest expense	(1)	(1)	
ShinHan – Soo Young				
Entrepreneur Investment				
Fund	Fees and commission income	206	1,028	140
Shinhan-Rhinos 1 Fund (*3)	Fees and commission income	64	47	61
SHINHAN-CORE TREND				
GLOBAL FUND1 (*3)	Fees and commission income	100	106	
Kiwoom-Shinhan Innovation				
Fund I	Fees and commission income	240	240	118
One Shinhan Global Fund1	Fees and commission income	399	208	104
Open-Shinhan Portfolio				
Investment Association				
No. 1	Fees and commission income	59	59	
FuturePlay-Shinhan				
TechInnovation Fund 1	Fees and commission income	218	241	227
Korea Credit Bureau	Fees and commission income	13	14	13
"	Interest expense	(12)	(9)	
Goduck Gangil1 PFV Co., Ltd	Interest income	915	754	377
"	Reversal for credit loss	7	20	31
SBC PFV Co., Ltd	Fees and commission income	732	776	808
"	Interest expense	(5)	(14)	(23)
IMM Global Private Equity				
Fund	Interest income	25	23	29
"	Interest expense	(13)	(49)	(274)
"	Provision for credit loss	—	(1)	
Goduck Gangil10 PFV Co.,				
Ltd	Interest income	299	283	171
"	Fees and commission income	793	_	
"	Interest expense	(4)	(78)	(738)
"	Provision for credit loss	(19)	(4)	14
IGIS PRIVATE REAL				
ESTATE TRUST				
NO.331 (*2)	Interest income	731	—	
"	Other operating expense	(67)	—	
"	Fees and commission income	478	—	—
COSPEC BIM tech (*2)	Interest income		41	—
"	Reversal(provision) for			
	credit loss	(95)	95	—
Korea Omega Project Fund I	Fees and commission income	131	180	180

45. <u>Related parties (continued)</u>

Related party	Account	2020	2021	2022
Investments in associates				
(continued):				
New Green Shinhan		W. 40	22.4	
Mezzanine Fund (*2)	Fees and commission income	₩ 42	334	_
Sparklabs-Shinhan	E	174	202	202
Opportunity Fund 1	Fees and commission income Interest income	174	202	202 267
EDNCENTRAL Co.,Ltd.	Fees and commission income	649 578	1,140 714	
"		(121)	/14	3,212
Shinhan Western T&D	Other operating expense	(121)		
Consignment Management				
Real Estate Investment Co.,				
Ltd (*1)	Fees and commission income	300		
Kakao-Shinhan 1st TNYT	rees and commission meome	500		
Fund	Fees and commission income	165	386	386
KoFC-Neoplux R&D-Biz	rees and commission meetine	105	500	500
Creation 2013-1				
Investment (*2)	Interest income	9	1	
	Fees and commission income	44	5,474	
Future-Creation Neoplux			- ) -	
Venture Capital Fund	Interest income	14	31	74
",	Fees and commission income	116	308	53
Neoplux Market-Frontier				
Secondary Fund	Fees and commission income	416	954	904
Gyeonggi-Neoplux Superman				
Fund	Fees and commission income	149	621	623
Shinhan-Neoplux Energy				
Newbiz Fund	Fees and commission income	308	1,002	978
NewWave 6th Fund	Fees and commission income	303	1,210	1,014
SHINHAN-NEO Core				
Industrial Technology Fund	Fees and commission income	3	498	498
KTC-NP Growth Champ		_		
2011-2 Private Equity Fund	Interest income	5	26	59
	Fees and commission income	86	—	_
Neoplux No.3 Private Equity	<b>E</b>	740	0 422	2 100
Fund De sifie Servere Drofession al	Fees and commission income	748	2,433	3,190
Pacific Sunny Professional Investors Private Placement				
Real Estate Investment				
Company No.45 (*3)	Fees and commission income	1,412	83	
CREDIAN T&F 2020	rees and commission meome	1,412	85	
CORPORATE				
FINANCIAL STABILITY				
PRIVATE EQUITY				
FUND (*1)	Interest expense	(1)		_
Shinhan Smilegate Global		(1)		
PEF I	Fees and commission income	_	189	49
SHINHAN-NEO Market-				-
Frontier 2nd Fund	Fees and commission income		2,026	2,050

# 45. <u>Related parties (continued)</u>

Related party	Account	2020	2021	2022
Investments in associates				
(continued):	T / /	** 7		
Korea Digital Asset Custody SWK-Shinhan New	Interest expense	$\Psi$ —	(2)	_
Technology Investment				
Fund 1st	Fees and commission income		41	76
Ulmus SHC innovation	rees and commission meome		41	70
investment fund	Fees and commission income		63	94
iPIXEL Co.,Ltd.	Interest income		2	1
CJL No.1 Private Equity Fund	Interest expense		(2)	(7)
Reverent-Shinhan Vista Fund	Fees and commission income		90	40
Hermes Private Investment				
Equity Fund	Interest expense	_	(1)	
Kiwoom-Shinhan Innovation	I			
Fund 2	Fees and commission income	_	115	279
ETRI Holdings-Shinhan 1st				
Unicorn Fund	Fees and commission income		32	100
Shinhan-Time mezzanine				
blind Fund	Fees and commission income	—	300	107
Shinhan VC tomorrow venture				
fund 1	Fees and commission income	—	419	3,400
JS Shinhan Private Equity				
Fund	Fees and commission income	—	250	587
Stonebridge-Shinhan Unicorn				501
Secondary Fund	Fees and commission income			591
Shinhan-Kunicorn first Fund	Fees and commission income	—		261
Shinhan-Quantum Startup Fund	Ease and commission income			125
Shinhan Simone Fund I	Fees and commission income Fees and commission income	_	_	123 78
Shinhan Simole Fund I ShinhanFitrin 1st Technology	rees and commission income			70
Business Investment				
Association	Fees and commission income			59
DDI LVC Master Real Estate	r ces and commission meome			57
Investment Trust Co., Ltd.	Interest expense	_		(1)
Logisvalley Shinhan REIT	interest enpense			(-)
Co.,Ltd.	Interest income		_	1,018
"	Fees and commission income	_		458
"	Interest expense	_		(1)
**	Provision(reversal) for credit			
	loss		_	(28)
Shinhan-Albatross tech				
investment Fund	Interest expense	—		(7)
Shinhan-Dev healthcare Fund I	Fees and commission income	—		66
Shinhan-Cognitive Start-up				
Fund L.P.	Fees and commission income		—	192
Global Commerce Fund	Fees and commission income		—	10
Shinhan-HGI Social Enterprise				
Fund	Fees and commission income		—	27

### 45. Related parties (continued)

Related party	Account	2020	2021	2022
Investments in associates				
(continued):				
Shinhan-WWG Energy Fund				
New Technology Venture				
Investment Fund	Fees and commission income	$\Psi$ —	_	22
IGIS-Shinhan New				
Technology Fund 1	Fees and commission income		_	36
Shinhan-G.N.Tech Smart				
Innovation Fund	Fees and commission income		—	81
SH Sustainable Management				
ESG Short term Bond				
Security Feeder Investment				
Trust No.1	Fees and commission income		—	6
SH Global Net Zero Solution				
Security Investment Trust	Fees and commission income		—	82
Newlake Growth Capital				
Partners2 PEF	Interest expense		_	(1)
Shinhan Global Active REIT	-			
Co.Ltd	Interest expense		—	(1)
DeepBlue No.1 Private Equity	-			
Fund	Interest expense		_	(2)
DS SHINHAN Content	-			
Investment Fund 1	Fees and commission income			18
Shinhan Time 1st Investment				
fund	Fees and commission income		_	4
SHINHAN SGC ESG Fund				
No.1	Fees and commission income		_	5
Shinhan-Sneak Peek				
Bio&Healthcare Bounce				
Back Fund	Fees and commission income		_	4
Shinhan-iSquare Venture				
Fund 1st	Fees and commission income			3
Key management personnel and th				
Interest income		126	122	205
			28,589	
		₩18,897	20,309	27,198

(\*1) Excluded from the associates due to disposal and liquidation for the year ended December 31, 2020.

(\*2) Excluded from the associates due to disposal and liquidation for the year ended December 31, 2021.

(\*3) Excluded from the associates due to disposal and liquidation for the year ended December 31, 2022.

(\*4) For the year ended December 31, 2022, it is incorporated into the consolidation target as the Group held control due to increased equity ratio and BNP Paribas Cardif General Insurance, Ltd. has changed its name to Shinhan EZ General Insurance, Ltd. The transaction amount for the years ended December 31, 2020, 2011 and 2022 is the amount before being incorporated into the consolidation target.

### 45. Related parties (continued)

### (c) Key management personnel compensation

Key management personnel compensation for the years ended December 31, 2020, 2021 and 2022 are as follows:

2020	2021	2022
₩23,468	23,972	27,591
651	686	817
2,628	13,886	9,777
₩26,747	38,544	38,185
	₩23,468 651 2,628	₩23,468     23,972       651     686       2,628     13,886

- (\*) The expenses of share-based payment transactions are the renumeration expenses during the vesting period.
- (d) The guarantees provided between the related parties as of December 31, 2021 and 2022 are as follows:

		Amount of g	guarantees	
Guarantor	Guaranteed Parties	2021	2022	Account
Shinhan Bank	BNP Paribas Cardif Life Insurance	₩ 10,000	10,000	Unused loan limit
"	Key Management Personnel	1,607	2,143	"
Shinhan Card	BNP Paribas Cardif Life			
	Insurance	913	883	Unused credit line
"	Shinhan EZ General Insurance,			
	Ltd. (*)	226	_	"
The Group	Structured entities	207,078	296,118	Purchase agreement
		₩219,824	309,144	

(\*) For the year ended December 31, 2022, it is incorporated into the consolidation target as the Group held control due to increased equity ratio and BNP Paribas Cardif General Insurance, Ltd. has changed its name to Shinhan EZ General Insurance, Ltd.

### 45. Related parties (continued)

(e) Details of collaterals provided by the related parties as of December 31, 2021 and 2022 are as follows:

			Amount of assets pledg	
Provided to	Provided by	Pledged assets	2021	2022
Shinhan Bank	BNP Paribas Cardif Life	Government		
	Insurance	bonds	₩12,000	12,400
		Electronic credit		
	iPIXEL Co.,Ltd.	guarantee	190	190
	Logisvalley Shinhan REIT	-		
	Co.,Ltd.	Collateral trust	_	51,600
	Key Management Personnel	Properties	10,012	8,073
	>>	Deposits and etc.	2,011	1,306
	,,	Guarantee	375	3,092
			12,398	12,471
			₩24,588	76,661

(f) Details of significant loan transactions with related parties as of December 31, 2021 and 2022 are as follows:

			Dec	ember 31, 202	21	
Classification	Company	Beginning	Execution	Collection	Others (*)	Ending
Investments in associates	Nomura-Rifa Private Real Estate Investment Trust					
	No.19	₩11,973	_	_	(93)	11,880
	IGIS PRIVATE REAL ESTATE TRUST					
	NO.331	9,688	_	(9,769)	81	
	EDNCENTRAL Co., Ltd.	19,381		_	358	19,739
	Goduck Gangil1 PFV Co.,					
	Ltd.	24,000	_	(12,000)	_	12,000
	Goduck Gangil10 PFV					
	Co., Ltd.	9,400	600	(2,400)		7,600
	IMM Global Private					
	Equity Fund	800	_	—	_	800
	COSPEC BIM tech	151	_	—	(151)	
	iPIXEL Co.,Ltd.	—	71		(16)	55
Key Management Personnel		5,146	5,315	(4,311)		6,150
	Total	₩80,539	5,986	(28,480)	179	58,224

(\*) The effect on changes in allowance for credit loss is included.

### 45. Related parties (continued)

		December 31, 2022				
Classification	Company	Beginning	Execution	Collection	Others (*)	Ending
Investments in associates	Nomura-Rifa Private Real Estate Investment Trust					
	No.19	₩11,880	_	_	_	11,880
	EDNCENTRAL Co.,Ltd. Goduck Gangil1 PFV Co.,	19,739	—	(20,000)	261	—
	Ltd.	12,000		(5,175)	_	6,825
	Goduck Gangil10 PFV					
	Co., Ltd.	7,600	—	(4,500)	—	3,100
	IMM Global Private					
	Equity Fund	800	—	—	—	800
	iPIXEL Co.,Ltd.	55	—	_	(55)	_
	Logisvalley Shinhan REIT					
	Co.,Ltd.	_	43,000	_	_	43,000
Key Management Personnel		6,150	4,590	(4,177)		6,563
	Total	₩58,224	47,590	(33,852)	206	72,168

(\*) The effect on changes in allowance for credit loss is included.

### 46. Interests in unconsolidated structured entities

(a) The nature and extent of interests in unconsolidated structured entities

The Group involved in assets-backed securitization, structured financing, beneficiary certificates (primarily investment funds) and other structured entities and characteristics of these structured entities are as follows:

	Description			
Assets-backed securitization	Securitization vehicles are established to buy assets from originators and issue asset-backed securities in order to facilitate the originators' funding activities and enhance their financial soundness. The Group is involved in the securitization vehicles by purchasing (or committing to purchase) the asset- backed securities issued and/or providing other forms of credit enhancement.			
	The Group does not consolidate a securitization vehicle if (i) the Group is unable to make or approve decisions as to the modification of the terms and conditions of the securities issued by such vehicle or disposal of such vehicles' assets, (ii) (even if the Group is so able) if the Group does not have the exclusive or primary power to do so, or (iii) if the Group does not have exposure, or right, to a significant amount of variable returns from such entity due to the purchase (or commitment to purchase) of asset-backed securities so issued or subordinated obligations or by providing other forms of credit support.			

## 46. Interests in unconsolidated structured entities (continued)

	Description
Structured financing	Structured entities for project financing are established to raise funds and invest in a specific project such as M&A (mergers and acquisitions), BTL (build-transfer-lease), shipping finance, etc. The Group is involved in the structured entities by originating loans, investing in equity, or providing credit enhancement.
Investment fund	Investment fund means an investment trust, a PEF (private equity fund) or a partnership which invests in a group of assets such as stocks or bonds by issuing a type of beneficiary certificates to raise funds from the general public, and distributes its income and capital gains to their investors. The Group manages assets by investing in shares of investment fund or playing a role of an operator or a GP (general partner) of investment fund, on behalf of other investors.

The size of unconsolidated structured entities as of December 31, 2021 and 2022 are as follows:

	2021	2022
Total assets:		
Asset-backed securitization	₩248,200,446	237,920,155
Structured financing	255,854,384	343,752,304
Investment fund	301,241,508	343,504,568
	₩805,296,338	925,177,027

## 46. Interests in unconsolidated structured entities (continued)

## (b) Nature of risks

*i)* The carrying values of the assets and liabilities relating to its interests in unconsolidated structured entities as of December 31, 2021 and 2022 are as follows:

	2021					
	Assets-backed securitization	Structured financing	Investment fund	Total		
Assets under consolidated financial statements:						
Loans measured at fair value through profit or loss Loan at amortized cost Securities at fair value through	₩ 16,352 731,184	156,630 13,548,490	42,231 155,572	215,213 14,435,246		
profit or loss Derivate assets Securities at fair value through	3,752,394 4,343	235,238 16,560	14,014,493	18,002,125 20,903		
other comprehensive income Securities at amortized cost Other assets	2,510,057 6,493,106	215,237  17,280	  177	2,725,294 6,493,106 17,595		
Other assets	138 ₩13,507,574	14,189,435	14,212,473	41,909,482		
Liabilities under consolidated financial statements:						
Derivate liabilities Other liabilities	₩ 3,817 103	48 21,683		3,865 21,786		
	₩ 3,920	21,731		25,651		
		202	2			
	Assets-backed securitization	Structured financing	Investment fund	Total		
Assets under consolidated financial statements: Loans measured at fair value						
through profit or loss Loan at amortized cost Securities at fair value through	₩ 9,269 869,478	693,630 15,725,255	498 183,263	703,397 16,777,996		
profit or loss Derivate assets Securities at fair value through	2,475,307 4,432	250,470	13,767,837	16,493,614 4,432		
other comprehensive income Securities at amortized cost	1,832,987 6,894,241	179,714		2,012,701 6,894,241		
Other assets	4,337 ₩12,090,051	44,448 16,893,517	5,608 13,957,206	54,393 42,940,774		
Liabilities under consolidated financial statements:						
Derivate liabilities	₩ 24,902	91		24,993		
Other liabilities	788	18,840	101	19,729		

## 46. Interests in unconsolidated structured entities (continued)

*ii)* The maximum risk exposure of the Group relating to its interests in unconsolidated structured entities as of December 31, 2021 and 2022 are as follows:

		202	1	
	Assets-backed securitization	Structured financing	Investment fund	Total
Assets held	₩13,507,574	14,189,435	14,212,473	41,909,482
ABS and ABCP purchase agreements	895,273	2,210	2,703,353	3,600,836
Loan commitments	439,843	984,082	6,900	1,430,825
Guarantees	21,200	105,550		126,750
Others		150,579		150,579
	₩14,863,890	15,431,856	16,922,726	47,218,472
		202	2	
	Assets-backed securitization	Structured financing	Investment fund	Total
Assets held	₩12,090,051	16,893,517	13,957,206	42,940,774
ABS and ABCP purchase agreements	1,014,702	104,773	2,257,564	3,377,039
Loan commitments	419,039	988,331		1,407,370
Guarantees	15,000	80,000		95,000
		)		
Others		103,039		103,039

## 47. Business combination

(a) Shinhan EZ General Insurance, Ltd.

## i) General information

On June 30, 2022, the Group obtained control by acquiring 94.54% (The acquisition price of W41 billion) of the total issued shares of Shinhan EZ General Insurance, Ltd. (formerly, BNP Paribas Cardif General Life Insurance Ltd.) after the Financial Services Commission approved the incorporation of subsidiary on June 9, 2022. The main reason for business combination is to secure new business opportunities in the insurance finance area and to achieve synergy between existing businesses.

47. Business combination (continued)

## ii) Identifiable net assets

Fair values of assets acquired and liabilities assumed as of acquisition date are as follows:

	Amount (*1)
Assets:	
Cash and due from banks at amortized cost	₩ 79,723
Securities at fair value through profit or loss	5,977
Securities at fair value through other comprehensive income	24,805
Loans at amortized cost (*2)	98
Property and equipment	1,938
Intangible assets	4,425
Other assets	36,980
	153,946
Liabilities:	
Liabilities under insurance contracts (*3)	71,406
Other liabilities	26,824
	98,230
Fair value of the identifiable net assets	₩ 55,716

(\*1) The accounting for the acquisition of Shinhan EZ General Insurance, Ltd. was determined using the identifiable assets and liabilities recognized by Shinhan EZ General Insurance, Ltd. at the time of business combination.

- (\*2) During the business combination, the Group acquired receivables that were fair value of \\$98 million, and the total contract amount was \\$98 million. There is no contractual cash flow that is not expected to be recovered from the receivables.
- (\*3) VOBA (Value Of Business Acquired) measured separately was adjusted by applying the direct method based on the actuarial appraisal value model to the carrying amount of the acquired company's insurance contract liabilities.

## iii) Gain from bargain purchase

Gain from bargain purchase recognized as a result of business combination is as follows:

	Amount
Transfer cost (*)	₩ 43,367
Fair value of the identifiable net assets	55,716
Gain from bargain purchase	₩(12,349)

(\*) Includes the 5.46% shares Shinhan Life Insurance Co., Ltd. held.

#### iv) Expenses related to business combination

The expenses in connection with the business combination amounts to \$1,259 million, including legal fees and due diligence fees, and the fee was recognized as a fee and commission expense in the consolidated comprehensive income.

## 47. Business combination (continued)

v) Net cash outflows from business combination

	Amount
Consideration paid in cash	₩41,000
Cash and cash equivalent acquired	13,869
Net cash outflows	₩27,131

vi) If Shinhan EZ General Insurance had been consolidated from the beginning of the current year, the operating loss and net loss of Shinhan EZ General Insurance, which would have been recorded in the consolidated statement of comprehensive income, are \$15,242 million and \$15,030 million, respectively.

(b) The merger of Shinhan Asset Management Co., Ltd. and Shinhan Alternative Investment Management Inc.

Shinhan Asset Management Co., Ltd. and Shinhan Alternative Investment Management Inc. have merged on January 5, 2022 to form a holding company named Shinhan Asset Management Co., Ltd. As a result of the merger, the common shareholders as of immediately prior to the merger of Shinhan Alternative Investment Management Inc. (the merged company) are entitled to receive 0.4430946 share of Shinhan Asset Management Co., Ltd. (the surviving company)'s common share (\\$5,000 per share) per common share of Shinhan Alternative Investment Management Inc. There is no further transfer of any such shares except in accordance with the exchange ratio agreed upon by both parties under the merger agreement addressed above.

## 48. Events after reporting period

## (a) Decided to acquire and retire treasury stock

The controlling company decided to acquire and retire treasury stocks that worth \$150 billion through a resolution of the Board of Directors on February 8, 2023, in order to enhance shareholder value.

## 49. Uncertainty due to changes in domestic and global economic conditions

Increased internal and external economic uncertainty, such as inflation and rising market interest rates, and the prolonged COVID-19 are negatively affecting the global economy. The Group uses forward-looking information to estimate expected credit losses in accordance with IFRS 9 'Financial Instruments' and there have been changes in forward-looking information due to the increase in future uncertainty. Accordingly, the probability of default rate for the year ended December 31, 2022 is re-estimated using changed forward-looking information on major variables such as GDP growth rate, consumer price fluctuation rate and unemployment rate to compute the probability of default rate. The Group will continue to monitor internal and external economic uncertainties and the impact of the COVID-19 on the economy.

## 49. Uncertainty due to changes in domestic and global economic conditions (continued)

Risk exposures by major consolidated subsidiaries due to COVID-19 are as follows, figures may significantly vary for industries that are highly affected by future economic conditions:

## (a) Shinhan Bank

				202	21			
	Airlift passenger	Lodging	Oil/ petroleum refinery	Art-related	Movie theater	Clothing manufacturing	Travel	Total
Loans at amortized cost	₩164,904	3,314,684	937,385	219,859	86,241	2,082,545	92,152	6,897,770
Securities at fair value through profit or loss Securities at fair value through other comprehensive	_	—	29,911	—	_	_	2,737	32,648
income	114,158	18,142	264,343		7,123	10,678		414,444
Off-balance accounts	364,351	323,638	2,650,311	20,196	91,622	982,026	37,941	4,470,085
	₩643,413	3,656,464	3,881,950	240,055	184,986	3,075,249	132,830	11,814,947
				20	)22			
	Airlift passenger	Lodging	Oil/ petroleum refinery	Art-related	Movie l theater	Clothing manufacturing	g Travel	Total
Loans at amortized cost	₩154,076	5 3,281,340	) 1,217,228	3 209,652	76,982	2,160,803	56,719	7,156,800
Securities at fair value through other comprehensive income Securities at amortized	123,875	5 18,416	5 211,000	)	_	14,776	_	368,067

comprenensive medine	125,075	10,110	211,000			11,770		500,007
Securities at amortized								
cost	59,997							59,997
Off-balance accounts	435,399	254,076	2,731,899	8,500	76,817	1,162,054	36,784	4,705,529
	₩773,347	3,553,832	4,160,127	218,152	153,799	3,337,633	93,503	12,290,393

## (b) Shinhan Card Co., Ltd.

		20	21	
		Ret	ails	
	Credit sales	Short term card loan	Long term card loan	Total
Loans at amortized cost	₩371,197	152,838	387,318	911,353
Total Exposure	814,598		—	814,598
		202	2	
		Reta	ils	
	Credit sales	Short term card loan	Long term card loan	Total
Loans at amortized cost	₩439,882	187,652	424,445	1,051,979
Total Exposure	870,572		_	870,572

## 49. <u>Uncertainty due to changes in domestic and global economic conditions (continued)</u>

(c) Jeju Bank

					2021				
	Airlift passenger	Lodging	Art-related	Movie theater	Leisure related service industry	Bus business	Bath business	Youth training facilities business	Total
Loans at amortized cost	₩—	295,664	4,161	596	25,432	7,535	17,089	5,466	355,943
Off-balance accounts	4	5,439	161	4	991	197	538	6	7,340
	₩ 4	301,103	4,322	600	26,423	7,732	17,627	5,472	363,283
					2022				
	Airlift passenger	Lodging	Art-related	Movie theater	Leisure related service industry	Bus business	Bath business	Youth training facilities business	Total
<b>T 1</b> .									
Loans at amortized cost	₩—	303,118	4,752	226	11,299	8,152	9,064	5,438	342,049
Coans at amortized cost Off-balance accounts	₩— 1	303,118 <u>6,107</u>	4,752 <u>173</u>	226 4	11,299 <u>841</u>	8,152 384	9,064 339	5,438 <u>4</u>	342,049 7,853

As of December 31, 2021 and 2022, the exposure of the loans applied for moratorium of interest payments and moratorium of repayment in installments is as follows:

## (a) Shinhan Bank

	2021	2022
Moratorium of interest payments	₩ 224,449	165,442
Moratorium of repayment in installments	1,342,366	1,105,481
Moratorium of interest payments and		
moratorium of repayment in installments	65,773	66,218
	₩1,632,588	1,337,141

## (b) Jeju Bank

	2021	2022
Moratorium of interest payments	₩ 348	_
Moratorium of repayment in installments	276,193	351,129
	₩ 276,541	351,129

#### 50. LIBOR Interest rate

The effective interest rate, not the carrying value, is adjusted when replacing the interest rate index of a financial instrument measured at amortized cost in relation to the reform of the interest rate index. It includes exceptions, such as allowing hedge accounting to continue uninterrupted even if an interest rate indicator replacement occurs in a hedging relationship. Regarding the suspension of LIBOR interest rate calculation, the financial instruments that have not been converted to replaced interest rate benchmark among the LIBOR interest rates as of December 31, 2021 and December 31, 2022 are as follows:

(a) Non-derivative financial assets

	2021			
		Carryin	g Value	
	USD LIBOR(*2)	JPY LIBOR	EUR LIBOR	Other LIBORs
Due from banks and loans at amortized cost:				
Loans	₩2,768,972	207,660	49,642	122,104
Securities at fair value through other				
comprehensive income:				
Financial institution bonds	167,167			
Corporate bonds and others	281,949			
	449,116			
Commitments and guarantee contracts (*1)	₩ 280,224	39,148	56,552	13,853

(\*1) The commitments and guarantee contracts are in nominal amount.

(\*2) The instruments that will be matured before the end of June 30, 2023 when USD LIBOR interest rate calculation is discontinued are excluded.

	2022			
	Carrying Value			
	USD LIBOR(*2)	JPY LIBOR	EUR LIBOR	Other LIBORs
Due from banks and loans at amortized cost:				
Loans	₩2,511,050			
Financial assets at fair value through profit or				
loss:				
Corporate bonds and others	253,126			
Securities at fair value through other				
comprehensive income:				
Financial institution bonds	189,047			
Corporate bonds and others	229,030			
	418,077			
Commitments and financial guarantee				
contracts (*1)	₩ 217,839			—

(\*1) The commitments and guarantee contracts are in nominal amount.

(\*2) The instruments that will be matured before the end of June 30, 2023 when USD LIBOR interest rate calculation is discontinued are excluded.

## 50. LIBOR Interest rate (continued)

(b) Non-derivative financial liabilities

	2021				
	Carrying Value				
	USD LIBOR(*)	JPY LIBOR	EUR LIBOR	Other LIBORs	
Financial liabilities at amortized cost:					
Deposits	₩ 200,000				
Borrowings	347,420				
Debt securities issued	986,871				
	₩1,534,291	_			

(\*) The instruments that will be matured before the end of June 30, 2023 when USD LIBOR interest rate calculation is discontinued are excluded.

	2022				
		Carryir	ng Value		
	USD LIBOR(*)	JPY LIBOR	EUR LIBOR	Other LIBORs	
Financial liabilities at amortized cost:					
Deposits	₩ 200,000		_		
Borrowings	50,692			_	
Debt securities issued	1,355,525				
	₩1,606,217	_	_	_	
Financial liabilities designated at fair value through profit or loss					
Derivatives-combined securities	₩ 15,000	—	—	—	

(\*) The instruments that will be matured before the end of June 30, 2023 when USD LIBOR interest rate calculation is discontinued are excluded.

## (c) Derivatives

	2021				
	Notional amount				
	USD LIBOR(*)	JPY LIBOR	EUR LIBOR	Other LIBORs	
Trading:					
Interest rates related	₩10,772,390				
Foreign currency related	10,900,844				
Equity related	268,243				
Credit related	1,108		_		
Others	379,360		_		
	22,321,945	_	_	_	
Hedge:					
Interest rates related	4,150,155		_	_	
Foreign currency related	278,705		_	_	
6					
	₩ 4,428,860				

## 50. LIBOR Interest rate (continued)

(\*) The instruments that will be matured before the end of June 30, 2023 when USD LIBOR interest rate calculation is discontinued are excluded.

	2022					
		Notional amount				
	USD LIBOR(*)	JPY LIBOR	EUR LIBOR	Other LIBORs		
Trading:						
Interest rates related	₩11,488,018					
Foreign currency related	11,718,419					
Equity related	183,779		_	_		
Credit related	2,370		_	_		
Others	405,536			—		
	23,798,122	_	_			
Hedge:						
Interest rates related	4,196,714					
Foreign currency related	258,529					
- •	₩ 4,455,243					
	•• 4,433,243			_		

(\*) The instruments that will be matured before the end of June 30, 2023 when USD LIBOR interest rate calculation is discontinued are excluded.

# 51. Condensed Shinhan Financial Group (Parent Company only) Financial Statements

## STATEMENTS OF FINANCIAL POSITION

	2021		2022
Assets			
Deposits			
Banking subsidiaries	₩	3,913	2,187
Other		41,000	
Receivables from subsidiaries:			
Non-banking subsidiaries	3	3,976,059	4,009,467
Investment (at equity) in subsidiaries:			
Banking subsidiaries	13	3,797,222	13,797,222
Non-banking subsidiaries	16	5,537,819	16,933,142
Financial assets at FVTPL	1	,617,734	1,778,475
Derivative assets		17,933	
Property, equipment and intangible assets, net		10,597	11,411
Other assets			
Banking subsidiaries		326,216	483,688
Non-banking subsidiaries		468,150	384,443
Other		19,250	56,279
Total assets	₩36	5,815,893	37,456,314
Liabilities and equity			
Borrowings	₩		20,000
Debt securities issued	9	9,559,553	9,815,457
Derivative liabilities		6,263	
Accrued expenses & other liabilities		844,701	944,308
Total liabilities	10	),410,517	10,779,765
Equity	26	5,405,376	26,676,549
Total liabilities and equity	₩36	5,815,893	37,456,314

## 51. Condensed Shinhan Financial Group (Parent Company only) Financial Statements (continued)

CONDENSED	STATEMENTS	OF INCOME	

	2020	2021	2022
Income			
Dividends from banking subsidiaries	₩ 892,420	772,420	902,420
Dividends from non-banking subsidiaries	495,110	807,803	568,474
Interest income from banking subsidiaries	194	173	236
Interest income from non-banking subsidiaries	68,914	75,013	87,215
Other income	268,784	235,746	251,999
Total income	1,725,422	1,891,155	1,810,344
Expenses			
Interest expense	(231,205)	(210,535)	(222,413)
Other expense	(216,708)	(259,188)	(367,015)
Total expenses	(447,913)	(469,723)	(589,428)
Profit before income tax expense	1,277,509	1,421,432	1,220,916
Income tax expense	3,066	7,476	(28,335)
Profit for the year	₩1,274,443	1,413,956	1,249,251

# 51. <u>Condensed Shinhan Financial Group (Parent Company only) Financial Statements (continued)</u>

## CONDENSED STATEMENTS OF CASH FLOWS

	2020		2021	2022
Cash flows from operating activities				
Profit before income taxes	₩ 1,277,5	09	1,421,432	1,220,916
Non-cash items included in profit before tax	(1,313,9	67)	(1,456,374)	(1,245,848)
Changes in operating assets and liabilities	(1,272,7	38)	605,089	163,179
Net interest paid	(165,5	70)	(134,269)	(127,247)
Dividend received from subsidiaries	1,386,8	43	1,578,920	1,470,400
Income tax paid		_	(1,102)	(3,487)
Net cash provided by (used in) operating activities	(87,9	23)	2,013,696	1,477,913
Cash flows from investing activities				
Net loan origination to non-banking subsidiaries	(1,073,6	57)	(649,384)	68,000
Acquisition of subsidiary	(73,3	35)	(379,857)	(374,126)
Disposal of investments in subsidiaries	-	_		20,354
Other, net	(100,8	75)	(452,672)	(403,743)
Net cash used in investing activities	(1,247,8	67)	(1,481,913)	(689,515)
Cash flows from financing activities				
Issuance of common stocks	1,154,3	47		—
Issuance of hybrid bonds	448,6	99	1,154,597	997,120
Repayments of hybrid bonds	_	_		(135,000)
Net changes in borrowings	-	_		20,000
Issuance of debt securities issued	2,240,5		1,428,704	2,206,672
Repayments of debt securities issued	(1,384,0		(1,890,000)	(2,036,000)
Dividend paid			(1,218,761)	
Acquisition of treasury stock	(150,4		(79)	(300,600)
Disposition of and incineration cost of treasury stock	(3,0	33)		(60)
Payment of stock issuance costs	_		(605)	
Redemption of lease liabilities	(1,6	<u>73</u> )	(1,701)	(1,431)
Net cash provided by (used in) financing activities	1,335,6	26	(527,845)	(790,170)
Effect of exchange rate changes on cash and cash equivalents held		_	23	(3)
Net increase (decrease) in cash and cash equivalents	(1	64)	3,961	(1,775)
Cash and cash equivalents at beginning of year	1	64		3,961
Cash and cash equivalents at end of year	₩ -	_	3,961	2,186

## **Ехнівіт 1.1**

[Translation]

### ARTICLES OF INCORPORATION

## CHAPTER I GENERAL PROVISIONS

## Article 1 (Corporate Name)

The name of this company shall be "Chusik Hoesa Shinhan-Kumyoong-Jijoo-Hoesa" (the "Company"), which shall be "Shinhan Financial Group Co., Ltd." in English.

## Article 2 (Objective)

The objective of the Company shall be to engage in the following business activities:

- (1) To control or manage a financial company or a company having close relation with the financial business;
- (2) To provide financial support to its subsidiary, etc. (which expression shall include the subsidiary, sub-subsidiary, and the company under the control of sub-subsidiary; hereinafter the same shall apply);
- (3) To invest in the subsidiary or to raise funds for the financial support of its subsidiary, etc.;
- (4) To develop and sell joint products with its subsidiary, etc., and to provide the necessary resources for the business operation of its subsidiary, etc.;
- (5) To provide business support including computer, legal, accounting support, etc., entrusted by its subsidiary, etc.;
- (6) To engage in the other business incidental or related to the foregoing.

## Article 3 (Location of Head Office and Establishment of Branch, etc.)

- (1) The Company shall have its head office in Seoul.
- (2) The Company may establish branches, liaison offices, representative offices or subsidiaries within or outside Korea, by the resolution of the Board of Directors, when it deems necessary.

## **Article 4 (Method of Public Notices)**

Public notices of the Company shall be published on its internet homepage (<u>http://www.shinhangroup.com</u>). Provided, however, that if technical difficulties or other issues disrupt publication of notices on the Company's internet homepage, notices will be published in Hankuk Kyongje Shinmun and Maeil Kyongje Shinmun, daily newspapers published in Seoul.

## CHAPTER II SHARES OF STOCK

## Article 5 (Total Number of Authorized Shares)

The total number of shares to be issued by the Company shall be 1,000,000,000 shares.

## Article 6 (Par Value per Share)

The par value per share to be issued by the Company shall be five thousand (5,000) Won.

#### Article 7 (Number of Shares Issued at the Time of Incorporation)

The total number of shares issued at the time of incorporation of the Company shall be \_284,453,152 shares of common stock in registered form plus the number of common shares in registered form to be issued and delivered upon the exercise of warrant by the holders of the bonds with warrants issued by Shinhan Bank on December 2, 1998 during the period from July 15, 2001 to August 31, 2001.

### **Article 8 (Types of Shares)**

- (1) The shares to be issued by the Company shall be common shares in registered form and preferred shares in registered form.
- (2) Registered preferred shares shall have preference over common shares in dividend distribution and liquidation of assets of the Company. The amount of distribution upon liquidation of the Company to preferred shares with liquidation preference shall be no greater than the sum of their initial issue price and accrued but unpaid dividend.

#### Article 9 (Number and Terms and Conditions of Preferred Shares)

- (1) Preferred shares to be issued by the Company shall be non-voting, and the number thereof shall not exceed one half (1/2) of the total number of issued and outstanding shares.
- (2) The dividends on non-voting preferred shares shall be determined by the Board of Directors at the time of issuance; provided that when issuing preferred shares whose dividend ratio may be adjusted, the following must be determined at the time of issuance: acknowledgement of the fact that the Board of Directors may adjust the preferred dividend ratio, the reasons for such adjustment, the base date for adjustment and the method of adjustment.
- (3) Preferred shares to be issued by the Company may be participating or non-participating, and accumulating or non-accumulating by the resolution of the Board of Directors.
- (4) If a resolution not to distribute dividends on preferred shares is adopted, then the preferred shares shall be deemed to have voting rights from the next General Meeting of Shareholders immediately following the general meeting at which such resolution not to distribute dividends on preferred shares is adopted to the end of the general meeting of the shareholders at which a resolution to distribute dividends on such preferred shares is adopted.
- (5) In case the Company issues new shares by rights offering or bonus issue, then the new shares issued with respect to the preferred shares shall be (i) common shares in the case of rights offering and (ii) the shares of the same type in the case of bonus issue.
- (6) Whether or not to specify the term of the preferred shares shall be determined by a resolution of the Board of Directors. If the Company intends to specify the term of the preferred shares, such term shall be determined by a resolution of the Board of Directors at the time of issuance thereof within the period of one (1) year or more but less than ten (10) years from the issuance date of the preferred shares, and the preferred shares shall be converted into the common shares upon the expiration of the above period; provided, however, that if the prescribed dividends on the preferred shares during the above period have not been paid, the above period shall be extended until such dividends on the preferred shares have been fully paid. <Amended on March 25, 2021>

#### Article 10 (Electronic Registration of Rights to be Indicated on Shares and Certificate of Warrants)

The Company shall effect the electronic registration of the rights to be indicated on shares and certificate of warrants in the electronic register of the electronic registry instead of issuing share certificates and certificate of warrants.

#### Article 11 (Convertible Stock)

- (1) The Company may issue stocks which can be converted into the common stock or preferred stock, by the resolution of the Board of Directors.
- (2) Issue price of new shares to be issued upon conversion shall be the issue price of share prior to such conversion, and the number of shares to be issued upon conversion shall be the same number as that of common shares or preferred shares prior to such conversion.
- (3) The conversion period shall be no less than 1 year and no more than 10 years from the date of issuance, and such conversion period shall be determined by the Board of Directors.
- (4) In case of issuing the shares that may be converted into common shares under Paragraph (1) above, the Company may issue such convertible shares with a condition attached that they shall be converted into common shares to be issued by the Company in cases of falling under any subparagraph of Article 23 (2), to the extent that the total sum of their aggregate issue price, and the issue price of convertible bonds under Article 20 (1), bonds with warrant under Article 21 (1) and convertible contingent capital securities under Article 23-2 (1) does not exceed KRW 2 trillion. In such case, Article 23-2 shall apply mutatis mutandis to the specific terms and conditions of the conversion and the allocation of shares. <Amended on March 25, 2021>
- (5) (Deleted) <Amended on March 25, 2021>

#### Article 12 (Redeemable Stock)

- (1) In case of issuance of preferred stock, the Company may, by the resolution of the Board of Directors, issue the redeemable one which can be redeemed with the profits at the discretion of the Company.
- (2) The redemption price of the redeemable shares shall be calculated by the sum of the issue price and the premium, and the premium amount shall be determined at the time of issuance by a resolution of the Board of Directors in consideration of the interest rate, market conditions and other circumstances related to such issuance.
- (3) The redemption period shall be determined by the Board of Directors as a period within the period from the date immediately following the end of the Ordinary General Meeting of Shareholders convened in respect of the fiscal year during which the shares are issued, to the end of one month following the end of the Ordinary General Meeting of Shareholders convened in respect of the fiscal year during which the 20<sup>th</sup> anniversary of the issue date falls; provided that, in respect of redeemable shares which must be redeemed by the Company at the end of the redemption period, the redemption period shall be extended in the event of any of the following until full resolution thereof:
  - 1. If the holders of the redeemable shares do not receive dividends entitled to them; or
  - 2. If the redemption is not made within the redemption period due to insufficient profits of the Company.
- (4) The Company may redeem all of its redeemable shares in lump sum or any portion thereof. Provided that, in case of partial redemption, the Company may determine the shares to be redeemed, by means of lottery or proportional allotment. Any fractional shares resulting from the proportional allotment shall not be redeemed.
- (5) If the Company intends to redeem redeemable shares, the Company shall give notice to the shareholders and pledgees recorded in the shareholders' registry of such intention, the subject shares and the fact that the subject stock certificates must be submitted to the Company during the specified period, which shall be determined by the company to the extent not less than two weeks, and upon the expiry of such period, the subject shares shall be redeemed compulsorily ; provided that such notice may be substituted with a public notice.
- (6) The redeemable shares may, by the determination of the Board of Directors at the time of issuance, be issued as the convertible shares as set forth in Article 11.

#### **Article 13 (Pre-emptive Rights)**

- (1) The shareholders of the Company shall have pre-emptive rights to subscribe for new shares to be issued by the Company in proportion to their respective shareholdings.
- (2) Notwithstanding the provision of Paragraph (1) above, the Company may allocate new shares to persons other than existing shareholders of the Company, in the event of any of the following:
  - 1. If the Company issues new shares by way of general public offering, to the extent not exceeding 50/100 of the total number of issued and outstanding shares of the Company;
  - 2. If the Company preferentially allocates new shares to members of the Employee Stock Ownership Association in accordance with Article 165-7 of the Financial Investment Services and Capital Market Act.
  - 3. If the Company issues new shares for the issuance of depositary receipts ("DR"s), to the extent not exceeding 50/100 of the total number of issued and outstanding shares of the Company;
  - 4. If the Company issues new shares upon the exercise of stock options in accordance with Article 340-2 and Article 542-3 of the Commercial Law;
  - 5. If the Company issues new shares to investment companies, private equity funds, special purpose companies pursuant to the Financial Investment Services and Capital Market Act; or
  - 6. If the Company issues new shares to foreign investors, foreign or domestic financial institutions, allied companies, etc. for the necessity of management, such as introduction of advanced technology, improvement of financial structure of or financial support to the Company or its subsidiary, strategic business alliance, etc., to the extent not exceeding 50/100 of the total number of issued and outstanding shares of the Company.
- (3) When allotting newly-issued shares to those who are not shareholders in accordance with Paragraph (2), the matters set forth in Paragraphs (1), (2), (2) 2, (3) and (4) of Article 416 of the Commercial Act shall be publicly announced or notified to the shareholders no later than by 2 weeks prior to the payment deadline.
- (4) In the case in which new shares are issued pursuant to Paragraph (2), the type, number, issue price, etc. of shares to be issued shall be determined by the resolution of the Board of Directors.
- (5) In the case of abandonment or loss of the pre-emptive right to subscribe for new shares by any shareholder, the forfeited shares resulting from such abandonment or loss of the pre-emptive right shall be disposed by the resolution of the Board of Directors. If fractional shares result from the allocation of new shares, such shares shall also be disposed of by the resolution of the Board of Directors.

## **Article 14 (Stock Options)**

- (1) The Company may grant stock options to its officers and employees pursuant to the provisions of the Commercial Code, by a special resolution of the General Meeting of Shareholders, to the extent not exceeding 20/100 of the total number of issued and outstanding shares of the Company. Notwithstanding the foregoing, the Company may, by the resolution of the Board of Directors, grant stock options in numbers equal to or less than 1/100 of the total number of outstanding shares, provided that such action shall be approved at the first Ordinary Shareholders Meeting to be held after the date of such grant.
- (2) The Company may impose conditions of specific goals and achievement for the exercise of stock options, and may postpone or cancel the exercise of stock options if such conditions are not satisfied.
- (3) The persons who are entitled to receive such stock options shall be officers and employees of the Company or its subsidiaries or sub-subsidiaries as prescribed in the relevant laws and ordinances including the Commercial Code, etc. who have contributed, or are capable of contributing, to the establishment,

management or technical innovation of the Company, except for officers or employees in any of the following cases:

- 1. The largest shareholder of the Company and Specially Related Persons thereof (as defined in the Commercial Code and the Enforcement Decree of the Commercial Code; hereinafter the same shall apply), except for such persons who have been regarded as Specially Related Persons by becoming officers of the Company (including an officer who is the non-executive officer of the affiliate);
- Major Shareholders of the Company (as defined in the Commercial Code; hereinafter the same shall apply), and Specially Related Persons thereof, except for such persons who have been regarded as Specially Related Persons by becoming officers of the Company (including an officer who is the non-executive officer of the affiliate); and
- 3. The persons who become the Major Shareholders of the Company by the exercise of stock option.
- (4) The shares to be issued upon the exercise of stock options (in case the Company pays the difference between the exercise price of stock options and the market price of such shares in cash or treasury shares, the shares which shall be the basis of the calculation of such differences) shall be common shares in registered form.
- (5) The total number of shares to be given to one (1) officer or employee pursuant to the stock option shall not exceed 1/100 of the total number of shares issued and outstanding.
- (6) The exercise price per share for the stock option shall be determined in accordance with the relevant laws, such as the Commercial Code, etc.
- (7) Stock options may be exercised within seven (7) years commencing from two (2) years after the date specified in Paragraph (1) above at which a resolution to grant such stock options was adopted.
- (8) Stock option is exercisable by a person who has served for the Company two (2) years or more from the date specified in Paragraph (1) above at which a resolution to grant such stock option was adopted. If the grantee's continuous service terminates by reason of the grantee's death, attainment of mandatory retirement age, or for reasons other than by the fault of the grantee within two (2) years from the said date of resolution, the option may be exercisable within the exercise period.
- (9) (Deleted) <Amended on March 25, 2021>
- (10) In the following instances, the Company may, by a resolution of the Board of Directors, cancel the stock options granted to an officer or an employee:
  - 1. When the relevant officer or employee voluntarily resigns or is removed from his or her position at the Company after receiving the stock option;
  - 2. When the relevant officer or employee inflicts material damages or losses on the Company due to the willful conduct or negligence of such person;
  - 3. When the Company cannot respond to the exercise of stock options due to its bankruptcy, dissolution, etc.; or
  - 4. When there occurs any other event for cancellation of the stock option pursuant to the stock option agreement.

## **Article 15 (Equal Dividends)**

The Company shall equally pay the dividends with respect to the same classes of shares issued (including the case where such shares are converted) as of the record date for the payment of dividends, irrespective of the issuance date thereof. <Amended on March 25, 2021>

### Article 16 (Transfer Agent)

(1) The Company may designate a transfer agent for its shares.

- (2) The transfer agent, its office and its duties shall be determined by a resolution of the Board of Directors of the Company and shall be notified to the public.
- (3) The Company's registry of shareholders or a copy of it shall be kept at the office of the transfer agent. The transfer agent shall handle the electronic registration of shares, management of the registry of shareholders and other activities relating to shares.
- (4) The procedures for handling the business referred to in Paragraph 3 above shall comply with the relevant business regulations determined by the Transfer Agent. <Amended on March 25, 2021>

#### Article 17 (Preparation and Maintenance of Register of Shareholders)

If necessary, including the case where there is any change in the current status of the shareholders who own 5% or more equities in the Company (including the related parties), the Company may request the electronic registration institution to prepare the particulars of such shareholders. <Amended on March 25, 2021>

#### Article 18 (Record Date)

- (1) (Deleted) < Amended on March 25, 2021>
- (2) The shareholders registered in the shareholders' registry as of December 31 of each fiscal year shall be entitled to exercise the rights as shareholders at the Ordinary General Meeting of Shareholders convened for such fiscal year.
- (3) For the purpose of convening an Extraordinary General Meeting of Shareholders or if deemed otherwise necessary, the Company may, by a resolution of the Board of Directors, designate the shareholders whose names appear in the register of shareholders on a certain date set by a resolution of the Board of Directors as the shareholders who can exercise the rights as shareholders. In such case, the Company shall give at least two (2) weeks prior notice to the public thereof. <Amended on March 25, 2021>
- (4) Notwithstanding the provision of Paragraph (3), if otherwise set forth in the FHCA or other relevant laws, the Company may follow such different provisions.

## CHAPTER III BONDS

#### Article 19 (Issuance of Corporate Bonds)

- (1) The Company may issue corporate bonds upon the approval of the Board of Directors.
- (2) The Board of Directors may delegate to the Representative Director its authority to determine the bond type, amount and timing of the issuance, which shall occur within 1 year from the approval of such delegation.
- (3) Articles 16 shall apply to the issuance of corporate bonds.
- (4) (Deleted)

#### Article 19-2 (Electronic Registration of Rights to be Indicated on Bonds, etc.)

In lieu of issuing the bond certificate and the warrant certificates set forth in Chapter III, the Company shall electronically register the rights to be indicated on the bond certificates and the warrant certificates with the electronic register of an electronic registration institution; provided, however, that in case of the bonds, the Company may not electronically register the bonds other than the listed bonds, etc. which should be electronically registered in accordance with the applicable laws and regulations. <Amended on March 25, 2021>

#### Article 20 (Issuance of Convertible Bonds)

- (1) In any of the following cases, the Company may issue the convertible bonds to any person other than its shareholders by a resolution of the Board of Directors to the extent that the total sum of their issue price, and the issue price of convertible shares under Article 11 (4), bonds with warrant under Article 21 (1) and convertible contingent capital securities under Article 23-2 (1) does not exceed KRW 2 trillion. <Amended on March 25, 2021>
  - 1. If the convertible bonds are issued through general public offering;
  - 2. If the Company issues convertible bonds to the securities investment company that runs exclusively the banking business, as set forth in the FHCA;
  - 3. If the Company issues convertible bonds to foreign investors, foreign or domestic financial institutions, allied companies, etc. for the necessity of management, such as introduction of advanced technology, improvement of financial structure of or financial support to the Company or its subsidiary, strategic business alliance, etc.; or
  - 4. If the Company issues convertible bonds in a foreign country.
- (2) The Board of Directors may determine that the convertible bonds referred to in Paragraph (1) may be issued on the condition that conversion rights will be attached to only a portion of the convertible bonds.
- (3) The shares to be issued upon conversion shall be common shares. The conversion price, which shall be equal to or more than the face value of the shares, shall be determined by the Board of Directors at the time of issuance of convertible bonds.
- (4) The conversion period shall commence on the date following three (3) months from the issue date of the convertible bonds and end on the date immediately preceding the redemption date thereof. However, the conversion period may be adjusted within the above period by a resolution of the Board of Directors.
- (5) (Deleted) <Amended on March 25, 2021>

#### Article 21 (Issuance of Bonds with Warrant)

- (1) In any of the following cases, the Company may issue the bonds with warrant to any person other than its shareholders by a resolution of the Board of Directors to the extent that the total sum of their issue price and the issue price of convertible shares under Article 11 (4), convertible bonds under Article 20 (1) and the convertible contingent capital securities under Article 23-2 (1) does not exceed KRW 2 trillion. <Amended on March 25, 2021>
  - 1. If the bonds with warrants are issued through general public offering;
  - 2. If the Company issues bonds with warrants to the securities investment company that runs exclusively the banking business, as set forth in the FHCA;
  - 3. If the Company issues bonds with warrants to foreign investors, foreign or domestic financial institutions, allied companies, etc. for the necessity of management, such as introduction of advanced technology, improvement of financial structure of or financial support to the Company or its subsidiary, strategic business alliance, etc.; or
  - 4. If the Company issues bonds with warrants in foreign country.
- (2) The amount of new shares which can be subscribed for by the holders of the bonds with warrants shall be determined by the Board of Directors to the extent that the maximum amount of such new shares shall not exceed the face value of the bonds with warrants.
- (3) The shares to be issued upon exercise of warrants shall be common shares. The issue price, which shall be equal to or more than the face value of the shares, shall be determined by the Board of Directors at the time of issuance of bonds with warrants.

- (4) The warrant exercise period shall commence on the date following three (3) months from the issue date of the relevant bonds and end on the date immediately preceding the redemption date thereof. However, the warrant period may be adjusted within the above period by a resolution of the Board of Directors.
- (5) (Deleted) <Amended on March 25, 2021>

#### Article 22 (Issuance of Participating Bonds)

- In any of the following cases, the Company may issue the participating bonds to any person other than its shareholders by a resolution of the Board of Directors to the extent that their aggregate issue price does not exceed KRW 1 trillion. <Amended on March 25, 2021>
  - 1. If the participating bonds are issued through general public offering;
  - If the Company issues participating bonds to foreign investors, foreign or domestic financial institutions, allied companies, etc. for the necessity of management, such as introduction of advanced technology, improvement of financial structure of or financial support to the Company or its subsidiary, strategic business alliance, etc.; or
  - 3. If the Company issues participating bonds in foreign country.
- (2) Matters regarding the dividend participation of bonds issued pursuant to Paragraph (1) shall be determined by the resolution of the Board of Directors at the time of issuance, based on the dividend on common stock.

#### Article 23 (Issuance of Write-down Contingent Capital Securities)

- (1) The Company may, by a resolution of the Board of Directors, issue the bonds with a condition attached that the obligation to repay the bonds and to pay the interests thereon shall be waived upon occurrence of any event determined in advance in accordance with objective and reasonable standards at the time of the issuance of such bonds (the "Write-down Contingent Capital Securities") to the extent that their aggregate issue price does not exceed KRW 10 trillion. <Amended on March 25, 2021>
- (2) The obligation to repay the principal and pay the interest on the Write-down Contingent Capital Securities shall be waived upon the occurrence of the event described in any of the following sub-paragraphs (such waiver hereinafter referred to as "Debt Modification"):
  - 1. The Company is designated as an insolvent financial institution pursuant to the Act on Structural Improvement of Financial Industry ; or
  - 2. The Company receives a directive in the form of 'management improvement order' from the Financial Services Commission pursuant to the Supervisory Regulations on Financial Holding Companies.
- (3) The Board of Directors of the Company may, to the extent permitted by applicable law and at the time of the issuance, determine the scope of changes to be made to the terms and conditions of the Write-down Contingent Capital Securities as a result of the Debt Modification.

#### Article 23-2 (Issuance of Convertible Contingent Capital Securities)

- (1) The Company may, by a resolution of the Board of Directors, issue the bonds with a condition attached that they shall be converted into common shares of the Company upon occurrence of any event determined in advance in accordance with objective and reasonable standards at the time of the issuance of such bonds (the "Convertible Contingent Capital Securities") to the extent that the total sum of their issue price and the issue price of convertible shares under Article 11 (4), convertible bonds under Article 20 (1) and bonds with warrant under Article 21 (1) does not exceed KRW 2 trillion. <Amended on March 25, 2021>
- (2) The Contingent Convertible Capital Securities shall be converted into registered common stock issued by the Company upon the occurrence of the event described in any of the sub-paragraphs of Article 23 (2) and the detailed matters shall be determined by resolution of the Board of Directors.

- (3) The terms and conditions for conversion not set forth in this Article such as the conversion price, etc. shall be as provided in the relevant laws, but the detailed matters with respect thereto shall be determined by resolution of the Board of Directors at the time of issuance of the Contingent Convertible Capital Securities.
- (4) The Company may grant pre-emptive rights in proportion to the number of shares owned by the shareholders to the extent not exceeding the aggregate face value under Paragraph (1) and in the case of abandonment or loss of the pre-emptive right by any shareholder or fractional shares resulting from the allocation, the method for disposal thereof shall be determined by the resolution of the Board of Directors as set forth in the relevant laws.
- (5) If the Company issues the Contingent Convertible Capital Securities to foreign investors, foreign or domestic financial institutions, institutional investors or partner companies, etc. for business reasons, such as introduction of advanced technology, improvement of financial structure or to provide financial support to the Company or its subsidiary, or strategic business alliance, etc., it may issue such securities to any person other than the shareholders of the Company to the extent not exceeding the aggregate face value under Paragraph (1).
- (6) (Deleted) < Amended on March 25, 2021>

## CHAPTER IV GENERAL MEETINGS OF SHAREHOLDERS

#### Article 24 (Convening of General Meetings of Shareholders)

- (1) General Meetings of Shareholders of the Company shall be of two types: (i) Ordinary and (ii) Extraordinary.
- (2) The Ordinary General Meeting of Shareholders shall be held within three (3) months after the end of each fiscal year and the Extraordinary General Meeting of Shareholders may be convened whenever deemed to be necessary.

## Article 25 (Authority to Convene)

- The Representative Director-Chairman of the Company shall convene the General Meeting of Shareholders in accordance with a resolution of the Board of Directors, unless otherwise prescribed by other laws and ordinances.
- (2) If the Representative Director-Chairman is unable to perform his/her duties, the General Meeting of Shareholders shall be convened by a person designated by the Board of Directors.

#### Article 26 (Personal or Public Notices for Convening)

- (1) Written notice of the General Meeting of Shareholders of the Company shall state the date, time, place of the Meeting, the purposes for which the Meeting has been called, and other matters set forth in the relevant laws. The written notice shall be sent to all shareholders two (2) weeks prior to the date set for the Meeting.
- (2) The written notice of a General Meeting of Shareholders to be given to shareholders holding one-hundredth (1/100) or less of the total issued and outstanding voting shares may be substituted by giving public notice of the convening of the General Meeting of Shareholders in *Hankuk Kyongje Shinmun* and *Maeil Kyongje Shinmun* which are published in the city of Seoul, at least two (2) notices are made in the said publications or by using an electronic method defined by the Commercial Law and related regulations two (2) weeks prior to the date set for such Meeting.
- (3) Notwithstanding the provisions of Paragraphs (1) and (2), if otherwise set forth in the FHCA or other relevant laws, the Company may follow such different provisions.

### Article 27 (Place of Meeting)

The General Meeting of Shareholders shall be held in the city where the head office is located, or any other places adjacent thereto as required.

#### Article 28 (Chairman of the General Meeting of Shareholders)

The Chairman of the General Meetings of Shareholders shall be the person entitled to convene the Meeting pursuant to Article 25.

#### Article 29 (Chairman's Authority to Maintain Order)

- (1) The Chairman may order persons who purposely speak or act in a manner to prevent or disrupt the deliberations of the General Meeting of Shareholders or disturb the public order of the General Meeting of Shareholders to stop or retract his/her remarks or to leave the place of meeting.
- (2) The Chairman may restrict the length and frequency of the speech of shareholders if it is necessary for the smooth deliberations of the General Meeting of Shareholders.

#### Article 30 (Voting Rights)

Each shareholder shall have one (1) vote for each share he/she owns.

#### Article 31 (Split Voting)

- (1) If any shareholder who holds two (2) or more votes wishes to split his/her votes, he/she shall notify the Company in written form of such intent and the reasons therefor no later than three (3) days before the date set for the General Meeting of Shareholders.
- (2) The Company may refuse to allow the shareholder to split his/her votes unless the shareholder acquired the shares in trust or otherwise holds the shares for and on behalf of some other person.

## Article 32 (Voting by Proxy)

- (1) A shareholder may exercise his/her vote through a proxy.
- (2) In the case of Paragraph (1) above, the proxy holder shall file with the Company the documents evidencing the authority to act as a proxy before the General Meeting of Shareholders.

#### Article 33 (Method of Resolution)

Except as otherwise provided in the applicable laws and regulations or these Articles of Incorporation, all resolutions of the General Meeting of Shareholders shall be adopted by the affirmative vote of a majority of the shareholders present; provided that such votes shall, in any event, represent not less than one-fourth (1/4) of the total number of issued and outstanding shares.

#### Article 34 (Exercise of Voting Rights in Writing)

- If the method of resolution in writing at the General Meeting of Shareholders is adopted by the resolution of the Board of Directors, the shareholders may exercise their voting rights without participating in the meeting.
- (2) In the case of Paragraph (1), the Company shall attach the documents and references necessary for exercise of voting rights to the convening notice.

(3) If a shareholder intends to exercise his/her voting rights in writing, the shareholder shall fill in and submit to the Company the documents referred to in Paragraph (2) by the date preceding the date set for the General Meeting of Shareholders.

#### Article 35 (Minutes of the General Meetings of Shareholders)

The substance of the course of the proceedings of the General Meeting of Shareholders and the results thereof shall be recorded in the minutes and shall be preserved at the head office and branches of the Company, after being affixed with the names and seal impressions or signatures of the Chairman and the Directors present.

## CHAPTER V OFFICERS AND BOARD OF DIRECTORS

## Article 36 (Officers)

- (1) The Company shall have not less than three (3) but not more than fifteen (15) Directors, of which the number of Outside Directors shall not be less than 3 persons and 50/100 of the total number of Directors.
- (2) In cases where the number of Outside Directors does not meet the quorum required for the establishment of the Board of Directors under paragraph (1) due to a cause such as resignation or death of any Outside Director, the Company shall appoint Outside Directors at the first General Meeting of Shareholders convened after the occurrence of such cause, to satisfy the requirements prescribed therein. (Newly established)

#### **Article 37 (Election of Director)**

(1) Directors shall be elected at the General Meeting of Shareholders.

## Article 38 (Term of Director)

- (1) The term of office of the Director shall be determined at the General Meeting of Shareholders to the extent not exceeding three years, and the Director may be re-appointed. Provided that, the term of office of the Outside Director shall be no more than two years (or, in the case of reappointment, no more than one year), and the Outside Director may not serve as an outside director of the Company for a total of more than six years, or as an outside director of the Company or any of its subsidiaries for a total of more than nine years.
- (2) The term of office under Paragraph (1) above shall be until the closure of the ordinary General Meeting of Shareholders convened in respect of such fiscal year.

#### Article 39 (Eligibility of Outside Director)

- (1) The Company shall appoint a person with expertise and general knowledge as an outside director considering the qualifications set forth in each of the following subparagraphs.
  - 1. Whether such person possesses sufficient work experience or expert knowledge in relevant areas of financial businesses of financial institutions, such as finance, economy, business administration, accounting, legal affairs, consumer protection or information technology, to the extent necessary to perform duties as an Outside Director;
  - 2. Whether as an Outside Director such person is not bound to any special interests and is able to perform the relevant duties fairly in the interest of the entire shareholders' group and consumers of financial services;

- 3. Whether such person has a sense of ethics and responsibility that is appropriate to perform duties as an Outside Director; and
- 4. Whether such person is able to dedicate sufficient time and efforts in order to faithfully perform duties as an Outside Director.
- (2) An Outside Director may not be appointed as an outside director for other companies during his/her term as an Outside Director, except where such Outside Director concurrently serves as an outside director of a subsidiary, etc. of the Company.

## Article 40 (By-election of Directors)

- (1) In the event of any interim vacancy in the office of the Director, a substitute Director shall be elected at the General Meeting of Shareholders; provided, however, that the foregoing shall not apply if the number of remaining Directors satisfies the requirement of Article 36 hereof and such vacancy does not cause any difficulties in the business operation of the Company.
- (2) If the number of Outside Directors does not satisfy the requirement referred to in Article 36 due to the death or resignation of Outside Directors or any other reason, the Outside Directors shall be elected to fill the vacancy at the first Ordinary General Meeting of Shareholders after such cause to satisfy the required number of Outside Directors.
- (3) The term of office of the Director appointed pursuant to Paragraphs (1) and (2) shall commence from the date of taking office.

#### **Article 41 (Appointment of Representative Director)**

The Company may, by resolution of the Board of Directors, appoint one Director as a Representative Director-Chairman.

#### **Article 42 (Duties of Directors)**

- (1) The Representative Director-Chairman shall represent the Company, perform the matters resolved by the Board of Directors and oversee the business operations of the Company as determined by the Board of Directors.
- (2) Directors shall assist the Representative Director, and divide and perform business operations as delegated to them by the Board of Directors.

### Article 43 (Director's Obligations)

- (1) The Directors shall perform their respective duties faithfully for the benefits of the Company, in accordance with the laws and these Articles of Incorporation.
- (2) If any Director finds any facts which may cause substantial losses to the Company, such Director shall promptly report to the Audit Committee thereof.

#### Article 44 (Composition and Convening of the Meeting of Board of Directors)

- (1) The Board of Directors shall consist of Directors, and shall resolve important matters regarding the business affairs of the Company.
- (2) The Meeting of the Board of Directors shall be of two types: (i) Ordinary and (ii) Extraordinary. The Ordinary Meeting of the Board of Directors shall be held at least once per fiscal quarter and the Extraordinary Meeting of the Board of Directors may be convened whenever deemed to be necessary.

(3) The Meeting of the Board of Directors shall be convened by the Chairman of the Board of Director by giving notice to each Director at least seven (7) days prior to the scheduled date of such Meeting. However, such period may be reduced upon occurrence of urgent events, and the said procedures may be omitted with the consent thereon of all Directors.

## Article 45 (Chair of the Meeting of the Board of Directors)

- (1) The Chair of the Board of Directors shall be elected every year among the Outside Directors by a resolution of the Board of Directors.
- (2) Notwithstanding Paragraph (1), the Board of Directors may appoint a person who is not an Outside Director as the Chair of the Board of Directors, in which case, in addition to the Chair of the Board of Directors, a Senior Outside Director representing the Outside Directors shall be appointed by a resolution of the Board of Directors.

#### Article 46 (Resolutions of the Board of Directors)

- (1) The quorum for the Board of Directors shall be the presence of at least more than one half (1/2) of the Directors, and all resolutions of the Board of Directors shall require the affirmative votes of a majority of the Directors present at the meeting of the Board of Directors.
- (2) The Board meetings may be held by means of a telephone conference or other similar arrangement whereby all or part of the Directors may participate in the meeting and vote on matters at the same time. In such case, a Director participating in the meeting by such arrangement shall be considered present at the meeting.
- (3) Any Director who has a related interest in the matters to be resolved at the Meeting of the Board of Directors shall be abstained from voting at such Meeting.
- (4) The Board of Directors shall deliberate and decide on the following matters.
  - 1. Matters concerning the management objectives and evaluation of performance;
  - 2. Matters concerning the amendment of the Articles of Incorporation;
  - 3. Matters concerning the budget and settlement of accounts;
  - 4. Matters concerning important changes to the organization of the Company such as dissolution, business transfer, merger, etc;
  - 5. Matters concerning the enactment, amendment and abolition of the risk management standards and internal control standards;
  - 6. Matters concerning the establishment of governance policies such as a plan for succession of CEO, etc;
  - 7. Matters concerning the supervision of conflicts of interest between the Company and major shareholders or executive officers; and
  - 8. Other matters determined by the Board of Directors

#### Article 47 (Minutes of the Meeting of Board of Directors)

- (1) The proceedings of a Board meeting shall be recorded in the minutes.
- (2) The minutes for a Board meeting should record the agenda, proceedings, resolutions, the identity of dissenting directors (if any) and the reasons for such dissent and must be signed or affixed a seal by the Directors present at the meeting.

## Article 48 (Committees)

- (1) The Company shall operate the following committee within the Board of Directors at all times:
  - 1. Committee for recommending candidates for CEO <Amended on March 25, 2021>

- 2. (Deleted) <Amended on March 25, 2021>
- 3. Audit Committee;
- 4. Committee for recommending candidates for outside directors and members of audit committee; <Amended on March 25, 2021>
- 5. Risk Management Committee;
- 6. Remuneration Committee;
- 7. (Deleted) <Amended on March 25, 2021>
- 8. Environmental, social and governance (ESG) strategy committee; <Amended on March 25, 2021>
- Committee for recommending candidates for the subsidiary's CEO; and <Amended on March 25, 2021>
- 10. Other committees deemed necessary by the Board of Directors.
- (2) Details regarding composition, authority, operation, etc. of each Committee under the Board of Directors shall be determined by the resolution of the Board of Directors.
- (3) Articles 44, 46 and 47 shall apply *mutatis mutandis* with respect to the committees.

#### Article 49 (Remuneration for Directors)

The maximum remuneration for the Directors shall be determined by a resolution of the General Meeting of Shareholders, and the specific payment method of the remuneration for the Directors shall be determined at the Board of Directors. <Amended on March 25, 2021>

#### Article 50 (Consultants)

By a resolution of the Board of Directors, the Company may retain several consultants, honorary directors and advisors.

## CHAPTER VI AUDIT COMMITTEE

### Article 51 (Constitution of Audit Committee)

- (1) The Company shall have the Audit Committee, as prescribed by article 41 paragraph 1 of the Act on Corporate Governance of Financial Companies.
- (2) Candidates for the Audit Committee shall be recommended by the Committee for Recommending Candidates for Outside Directors and Members of Audit Committee comprised entirely of Outside directors. The Committee for Recommending Candidates for Outside Directors and Members of Audit Committee shall make resolution by an affirmative vote of at least two-thirds (2/3) of the members.
- (3) The Audit Committee shall consist of not less than three (3) but no more than five (5) directors, of whom at least two-thirds shall be Outside Directors.
- (4) At least one member shall be an expert in the area of accounting or finance, as defined by relevant laws and regulations.
- (5) The Audit Committee shall by its resolution elect one of its Outside Director members as its Chair.
- (6) In cases where the number of the Audit Committee members does not meet the quorum required for the establishment of the Audit Committee under this Article due to a cause such as resignation or death of any member, the Company shall take actions at the first General Meeting of Shareholders convened after the occurrence of such cause, to satisfy the requirements.

### **Article 52 (Duties of Audit Committee)**

- (1) The Audit Committee shall examine the operation and accounting of the Company.
- (2) The Audit Committee may request the Board of Directors to convene the Extraordinary General Meeting of Shareholders by submitting documents stating the agenda and reasons for convening such meeting.
- (3) If determined necessary, the Audit Committee may request convocation of a meeting of the Board of Directors by submitting the purpose and agenda of such meeting in writing to the person with the authority to convene such meeting.
- (4) If the request was submitted as set forth above in Paragraph (3), but the person with the authority to convene the meeting fails to do so, the Audit Committee may convene the meeting itself.
- (5) The Audit Committee may request business reports from any subsidiary of the Company when it is necessary to perform its duties. In this case, if such subsidiary does not report to the Audit Committee immediately or the Audit Committee needs to verify the contents of the reports, it may investigate the status of business and the financial condition of the subsidiary.
- (6) The Audit Committee shall select the external auditor of the Company.
- (7) In addition to the matters referred to in Paragraphs (1) through (4), the Audit Committee shall dispose of the matters delegated by the Board of Directors.

### Article 53 (Audit Committee's Record)

The Audit Committee shall record the substance and results of its audit in the Audit Committee's record, on which the name and seal of the Audit Committee member who has performed such audit shall be affixed or shall be signed by such Audit Committee member.

## CHAPTER VII ACCOUNTING

## Article 54 (Fiscal Year)

The fiscal year of the Company shall begin on January 1 and end on December 31 of each year.

#### Article 55 (Preparation and Display of Financial Statements and Business Report)

- (1) The Representative Director-Chairman of the Company shall prepare the following documents to be submitted to the Ordinary General Meeting of Shareholders, together with supplementary data and business reports, and have such documents audited by the Audit Committee no later than six (6) weeks before the date of the Ordinary General Meeting of Shareholders:
  - 1. balance sheet;
  - 2. statements of profit and loss; and
  - 3. other documents that reflect the Company's financial position and management performance according to the Enforcement Decree to the Commercial Act
- (2) If the Company is required to prepare consolidated financial statements under the Enforcement Decree to the Commercial Act, the documents set forth in each Subparagraph of Paragraph (1) shall include consolidated financial statements.
- (3) The Audit Committee shall submit an audit report to the Representative Director-President no later than one (1) week before the date of the Ordinary General Meeting of Shareholders.

- (4) The Representative Director-Chairman shall keep file copies of the documents described in Paragraph (1) and Audit Committee's audit report thereon, at the head office of the Company for five (5) years and certified copies of all such documents at the branches of the Company for three (3) years, beginning from one (1) week before the date of the Ordinary General Meeting of Shareholders.
- (5) Immediately upon obtaining approval for the documents mentioned in Paragraph (1) above from the General Meeting of Shareholders, the Representative Director- Chairman shall make a public notice of the balance sheet, income statement, consolidated balance sheet and income statement, and the opinion of an external auditor.

### Article 56 (Appointment of External Auditor)

The Company shall appoint the external auditor selected by the Audit Committee and either report such fact to the Ordinary General Meeting of Shareholders to be held first after such appointment or notify the shareholders or make a public announcement thereof as prescribed in the Enforcement Decree of the Act on External Audit of Stock Companies, Etc.

#### Article 57 (Disposal of Profits)

The Company shall dispose of the unappropriated retained earnings as of the end of each fiscal year as follows:

- 1. earned surplus reserves;
- 2. other statutory reserves;
- 3. dividends;
- 4. temporary reserves; and
- 5. other appropriation of earned surplus.

#### Article 58 (Deleted)

## Article 59 (Dividends)

- (1) Dividends may be distributed in cash or stock.
- (2) In the case where the dividends are to be distributed in stock and the Company has several classes of shares, the stock dividend distribution may be made in shares of different classes by a resolution of the General Meeting of Shareholders.
- (3) The Company may set a record date for determining the shareholders entitled to receive dividends under Paragraph (1) by a resolution of the Board of Directors; provided that the Company shall give at least two (2) weeks prior notice of such record date to the public.

#### Article 59-2 (Quarterly Dividends) < Amended on March 25, 2021>

- (1) The Company may pay quarterly dividends under Article 165-12 of the Financial Investment Services and Capital Markets Act to its shareholders, who are registered in the Company's final register of shareholders as of the end of March, June and September of each year. Quarterly dividends shall be paid in cash.
- (2) Quarterly dividends referred to in Paragraph (1) above shall be paid by a resolution of the Board of Directors; provided, however, that such resolution shall be made within 45 days from each record date referred to in Paragraph (1) above.
- (3) The maximum amount to be paid as quarterly dividends shall be calculated by deducting the following amounts from the net assets recorded in the year-end balance sheet of the immediately preceding fiscal year:
  - 1. Paid-in capital of the Company as of the end of the immediately preceding fiscal year;

- 2. The aggregate amount of the capital reserves and earned surplus reserves, which have been accumulated as of the end of the immediately preceding fiscal year;
- 3. Unrealized profits as prescribed under the Enforcement Decree of the Commercial Code;
- 4. The amount resolved to be distributed as dividends at the Ordinary General Meeting of Shareholders held in respect of the immediately preceding fiscal year;
- 5. Voluntary reserves which have been accumulated for specific purposes in accordance with the relevant provisions of these AOI or by a resolution of the General Meetings of Shareholders as of the end of the immediately preceding fiscal year;
- 6. Earned surplus reserves to be accumulated for the fiscal year concerned, pursuant to the distribution of the contemplated quarterly dividends; and
- 7. The aggregate amount of quarterly dividends paid during the current fiscal year, if any.
- (4) (Deleted)
- (5) In the event of payment of quarterly dividends, the dividend rate for the preferred shares shall be the same as that for the common shares, unless otherwise determined by the Board of Directors at the time of the issuance of the preferred shares.

### Article 60 (Expiration of Right to Payment of Dividends)

- The right to demand payment of dividends shall extinguish by prescription if not exercised within five (5) years.
- (2) The dividends, of which the right has been extinguished under Paragraph (1) above, shall be kept by the Company.

## **Article 61 (Supplementary Provision)**

Matters not specified in these Articles of Incorporation shall be determined by the resolution of the Board of Directors or the General Meeting of Shareholders, or in accordance with the Commercial Code or other laws.

#### ADDENDA

### **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective from the date of registration of incorporation.

## Article 2 (Initial Fiscal Year after Incorporation)

Notwithstanding the provisions of Article 52, the initial fiscal year of the Company after incorporation shall be from the date of incorporation to December 31, 2001.

### Article 3 (Initial Transfer Agent after Incorporation)

Notwithstanding the provisions of Article 16, Paragraph (2), the initial transfer agent of the Company after incorporation shall be Korea Securities Depository.

#### Article 4 (Appointment of Initial Representative Director, et al. after Incorporation)

Notwithstanding the provisions of Article 39, the initial Representative Director-Chairman and the initial Representative Director-Chairman of the Company after incorporation shall be one person appointed at the General Meetings of Shareholders of the Share Transferring Companies, at which the resolution to approve the share transfer is adopted.

#### Article 5 (Appointment of Initial Outside Director after Incorporation)

Notwithstanding the provisions of Article 36, Paragraph (2), the initial Outside Director of the Company after incorporation shall be appointed at the General Meetings of Shareholders of the Share Transferring Companies, at which the resolution to approve the share transfer is adopted, without recommendation of the Operation Committee.

### Article 6 (Appointment of Initial Members of Audit Committee after Incorporation)

The initial members of Audit Committee shall be appointed at the General Meetings of Shareholders of the Share Transferring Companies, at which the resolution to approve the share transfer is adopted.

#### Article 7 (Remuneration of Directors in Initial Fiscal Year after Incorporation)

Notwithstanding the provisions of Article 47, the remuneration of Directors in initial fiscal year after incorporation shall be determined at the first meeting of the Board of Directors after incorporation, to the extent not exceeding 1 billion Won.

#### Article 8 (Share Transferring Companies)

In order to incorporate the Company, the following share transferring companies prepare these Articles of Incorporation and affix their respective names and seals hereon on August 10, 2001.

Shinhan Bank 120, Taepyongro 2ga, Jung-gu, Seoul Representative Director, President In Ho Lee

Shinhan Securities Co., Ltd. 24-4, Yoido-dong, Youngdeungpo-gu, Seoul Representative Director, President Yang Sang Yoo

Shinhan Capital Co., Ltd. 526-3, Kojan-dong, Ansan, Kyonggido Representative Director, President Shin Jung Kang

Shinhan Investment Trust Management Co., Ltd. 24-4, Yoido-dong, Youngdeungpo-gu, Seoul Representative Director, President Bo Gil Baek

## **ADDENDUM** (1)

### **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective as of March 20, 2002.

## ADDENDUM (2)

## **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective as of March 31, 2003.

#### **ADDENDUM (3)**

### **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective as of March 25, 2004.

## **ADDENDUM (4)**

## **Article 1 (Effective Date)**

These Articles of Incorporation shall take effect as of March 21, 2006.

## Article 2 (Application to Preferred Shares)

Articles 9-2, 12-2 and 12-3 shall take effect only with respect to the preferred shares issued after the effective date of this amendment.

## **ADDENDUM (5)**

#### **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective as of March 19, 2008.

## **ADDENDUM (6)**

### **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective as of March 17, 2009.

### **ADDENDUM (7)**

## **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective as of March 24, 2010.

### **ADDENDUM (8)**

## **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective as of March 23, 2011.

### **ADDENDUM (9)**

### **Article 1 (Effective Date)**

These Articles shall take effect on April 15, 2012, except for Article 36, Article 47 Paragraph(1) Subparagraph 1 and Article 55 which shall take effect on March 29, 2012.

#### **ADDENDUM (10)**

## **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective as of March 25, 2015.

## **ADDENDUM (11)**

### **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective as of August 1, 2016.

#### **ADDENDUM (12)**

#### **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective as of March 23, 2017.

#### ADDENDUM (13)

#### **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective as of the date of the 18<sup>th</sup> Ordinary General Meeting of Shareholders. Provided, however, that the amendments to Articles 10, 16, 17, 19 and 19-2 shall become effective as of September 16, 2019, the date of enforcement of the Enforcement Decree of the Act on Electronic Registration of Stocks, Bonds, Etc.

#### **ADDENDUM (14)**

#### **Article 1 (Effective Date)**

These Articles of Incorporation shall become effective as the date of the 19<sup>th</sup> Annual General Meeting of Shareholders.

#### **ADDENDUM (15)**

#### **Article 1 (Effective Date)**

These AOI shall be effective from the date on which the Ordinary General Meeting of Shareholders for the 20th fiscal year is held. <Amended on March 25, 2021>

Shinhan Bank Co., Ltd Shinhan Card Co., Ltd Shinhan Securities Co., Ltd. Shinhan Life Insurance Co., Ltd. Shinhan Capital Co., Ltd. Shinhan Asset Management Co., Ltd. Jeiu Bank Shinhan Savings Bank Shinhan Asset Trust Co., Ltd. Shinhan DS Shinhan AITAS Co., Ltd. Shinhan REITs Asset Management Co., Ltd. Shinhan AI. Co., Ltd. Shinhan Venture Investment Co., Ltd. Shinhan EZ General Insurance, Ltd. SHC Management Co., Ltd. Shinhan Credit Information Co., Ltd. Shinhan Bank America (incorporated in United States) Shinhan Bank Canada (incorporated in Canada) Shinhan Bank (China) Limited (incorporated in People's Republic China) Shinhan Bank Europe GmbH (incorporated in Germany) Shinhan Bank Japan (incorporated in Japan) Shinhan Bank Vietnam Ltd. (incorporated in Vietnam) Shinhan Bank Kazakhstan Limited (incorporated in Kazakhstan) Shinhan Bank (Cambodia) PLC. (incorporated in Cambodia) PT Bank Shinhan Indonesia (incorporated in Indonesia) Banco Shinhan de Mexico (incorporated in Mexico) SBJ DNX, Inc. (incorporated in Japan) LLP MFO Shinhan Finance (incorporated in Kazakhstan) PT Shinhan Indo Finance (incorporated in Indonesia) Shinhan Microfinance Co., Ltd. (incorporated in Myanmar) Shinhan Vietnam Finance Company Ltd. (incorporated in Vietnam) Shinhan Investment Asia Ltd. (incorporated in Hong Kong) Shinhan Investment America Inc. (incorporated in United States) Shinhan Securities Vietnam (incorporated in Vietnam) PT Shinhan Securities Indonesia (incorporated in Indonesia) PT Shinhan Asset Management Indonesia (incorporated in Indonesia) Shinhan Asset Management (Hong Kong) Limited (incorporated in Hong Kong) Shinhan Financial Plus Shinhan CubeOn Co., Ltd. Shinhan Life Insurance Vietnam Co., Ltd. (incorporated in Vietnam) Shinhan DS Vietnam Co., Ltd. (incorporated in Vietnam) KOFC Shinhan Frontier Champ 2010-4 PEF Shinhan Praxis K-Growth Global Private Equity Fund Shinhan Smile Gate Global 1st PEF Shinhan SKS PEF Neoplux 3rd PEF KT CNP Growth Champ 2011-2 PEF Shinhan Private Equity Fund 2nd JS Shinhan PEF Shinhan Nautic 1st PEF

Other than as otherwise noted herein, all of our subsidiaries are incorporated in Korea.

## EXHIBIT 12.1

## CERTIFICATIONS

I, Jin Okdong, certify that:

- 1. I have reviewed this annual report on Form 20-F of Shinhan Financial Group (the "Company");
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
- 4. The Company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.
- 5. The Company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: April 20, 2023

By: /s/ Jin Okdong

Name: Jin Okdong Title: Chief Executive Officer

## **EXHIBIT 12.2**

## CERTIFICATIONS

I, Lee Taekyung, certify that:

- 1. I have reviewed this annual report on Form 20-F of Shinhan Financial Group (the "Company");
- 2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
- 3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
- 4. The Company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by this report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.
- 5. The Company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: April 20, 2023

By: /s/ Lee Taekyung

Name: Lee Taekyung Title: Chief Financial Officer

## CHIEF EXECUTIVE OFFICER CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350

In connection with the Annual Report of Shinhan Financial Group (the "Company") on Form 20-F for the fiscal year ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jin Okdong, Chief Executive Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge, that:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 20, 2023

By: /s/ Jin Okdong

Name: Jin Okdong Title: Chief Executive Officer

## **CHIEF FINANCIAL OFFICER CERTIFICATION** PURSUANT TO 18 U.S.C. SECTION 1350

In connection with the Annual Report of Shinhan Financial Group (the "Company") on Form 20-F for the fiscal year ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Lee Taekyung, Chief Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to the best of my knowledge, that:

- 1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- 2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 20, 2023

By: /s/ Lee Taekyung

Name: Lee Taekyung Title: Chief Financial Officer

## EXHIBIT 15.1

April 20, 2023

Securities and Exchange Commission 100 F Street, N.E. Washington, DC 20549

Commissioners:

We have read the statements made by Shinhan Financial Group Co., Ltd. (copy attached), which we understand will be filed with the Securities and Exchange Commission, pursuant to Item 16F of Form 20-F of Shinhan Financial Group Co., Ltd. dated April 20, 2023. We agree with the statements concerning our Firm contained therein.

Very truly yours,

/s/ Samil PricewaterhouseCoopers

Attachment

#### Attachment

## ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Our independent accountant has recently changed from Samil PricewaterhouseCoopers ("PwC") to KPMG Samjong Accounting Corp. ("KPMG Samjong"). Our Audit Committee evaluated the suitability and independence of KPMG Samjong, concluding to appoint KPMG Samjong as our independent auditor for the audit of our financial statements in Korea prepared in conformity with IFRS as adopted by Korea for the fiscal years ended December 31, 2023, 2024 and 2025. Our Audit Committee also approved the appointment of KPMG Samjong as our independent registered public accounting firm for the audit of our financial statements in conformity with IFRS as issued by the IASB for the fiscal year ended December 31, 2023. KPMG Samjong's appointment is effective from February 23, 2023. PwC's engagement as our independent auditor and independent registered public accounting firm expired upon the completion of the audit of our consolidated financial statements as of and for the year ended December 31, 2022, and no separate dismissal process was required for PwC. However, resolutions by the audit committee are required for each of our subsidiaries, which our subsidiaries have obtained as necessary.

PwC's reports on our consolidated financial statements for each of the fiscal years ended December 31, 2022 and 2021 did not contain an adverse opinion or a disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles. During the two most recent fiscal years ended December 31, 2022 and 2021 and in the subsequent interim period preceding PwC's dismissal, or the Pre-Engagement Period, there were: (i) no disagreements between us and PwC on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of PwC, would have caused PwC to make reference to the subject matter of the disagreements in its reports on the consolidated financial statements of Shinhan Financial Group; and (ii) no "reportable events" as defined in Item 16F(a)(1)(v) of Form 20-F.

During the Pre-Engagement Period, neither we nor anyone acting on our behalf consulted with KPMG Samjong regarding any matter that was either the subject of a disagreement, as that term is defined in Item 16F(a)(1)(iv) of Form 20-F (and the related instructions thereto), or a reportable event as described in Item 16F(a)(1)(v) of Form 20-F.

We provided a copy of the disclosure in this Item to KPMG Samjong and provided KPMG Samjong the opportunity to furnish us with a letter addressed to the Commission containing any new information, clarification of our expression of its views, or the respects in which it does not agree. KPMG Samjong has not furnished us with such letter. We also provided a copy of the disclosure in this Item to PwC and requested that PwC furnish us with a letter addressed to the Commission stating whether it agrees with such disclosure, and if it does not agree, stating the respects in which it does not agree. A copy of PwC's letter dated April 20, 2023 is filed as Exhibit 15.1 to this Form 20-F.