IMPORTANT NOTICE

THE ATTACHED DOCUMENT IS AVAILABLE ONLY TO INVESTORS WHO ARE EITHER (1) QIBs (AS DEFINED BELOW) UNDER RULE 144A OF THE SECURITIES ACT (AS DEFINED BELOW) OR (2) NON-U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT) OUTSIDE THE UNITED STATES.

IMPORTANT: You must read the following before continuing. The following applies to the preliminary pricing supplement and the offering circular following this page (collectively, "**Preliminary Offering Circular**"), and you are therefore advised to read this carefully before reading, accessing or making any other use of the Preliminary Offering Circular. In accessing the Preliminary Offering Circular, you agree to be bound by the following terms and conditions, including any modifications to them any time you receive any information as a result of such access.

NOTHING IN THIS ELECTRONIC TRANSMISSION CONSTITUTES AN OFFER OF SECURITIES FOR SALE IN ANY JURISDICTION WHERE IT IS UNLAWFUL TO DO SO.

THE SECURITIES DESCRIBED HEREIN HAVE NOT BEEN, AND WILL NOT BE, REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR OTHER JURISDICTION, AND THE SECURITIES DESCRIBED HEREIN MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES, OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT), EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE OR LOCAL SECURITIES LAWS.

THE FOLLOWING PRELIMINARY OFFERING CIRCULAR MAY NOT BE FORWARDED OR DISTRIBUTED TO ANY OTHER PERSON, IN WHOLE OR IN PART, ELECTRONICALLY OR OTHERWISE AND MAY NOT BE REPRODUCED IN ANY MANNER WHATSOEVER. ANY FORWARDING, DISTRIBUTION OR REPRODUCTION OF THIS DOCUMENT IN WHOLE OR IN PART IS UNAUTHORISED. FAILURE TO COMPLY WITH THIS DIRECTIVE MAY RESULT IN A VIOLATION OF THE SECURITIES ACT OR THE APPLICABLE LAWS OF OTHER JURISDICTIONS.

IF YOU HAVE GAINED ACCESS TO THIS TRANSMISSION CONTRARY TO ANY OF THE FOREGOING RESTRICTIONS, YOU ARE NOT AUTHORISED AND WILL NOT BE ABLE TO PURCHASE THE SECURITIES DESCRIBED THEREIN.

Confirmation of Your Representation: In order to be eligible to view the Preliminary Offering Circular or make an investment decision with respect to the securities described herein, investors must be either (1) qualified institutional buyers ("**QIBs**") (within the meaning of Rule 144A under the Securities Act) or (2) a non-U.S. person (within the meaning of Regulation S under the Securities Act). The Preliminary Offering Circular is being sent at your request and by accepting the e-mail and accessing the Preliminary Offering Circular, you shall be deemed to have represented to each of BNP Paribas, Crédit Agricole Corporate and Investment Bank, Merrill Lynch International, MUFG Securities EMEA plc, Standard Chartered Bank and Wells Fargo Securities, LLC (collectively, the "**Managers**") being the sender of the attached, that (1) you and any customers you represent are either (a) QIBs or (b) non-U.S. persons (as defined in Regulation S under the Securities Act) and that the electronic mail address that you gave us and to which this e-mail has been delivered is not located in the United States, its territories or possessions and (2) you consent to delivery of such Preliminary Offering Circular by electronic transmission.

You are reminded that the Preliminary Offering Circular has been delivered to you on the basis that you are a person into whose possession the Preliminary Offering Circular may be lawfully delivered in accordance with the laws of the jurisdiction in which you are located and you may not, nor are you authorised to, deliver or disclose the contents of the Preliminary Offering Circular to any other person. If this is not the case, you must return the Preliminary Offering Circular to us immediately.

The materials relating to the issue of the securities described herein do not constitute, and may not be used in connection with, an offer or solicitation in any place where offers or solicitations are not permitted by law. If a jurisdiction requires that the issue of the securities described herein be made by a licenced broker or dealer and any Manager or any affiliate of such Manager is a licenced broker or dealer in that jurisdiction, the issue of the securities described herein shall be deemed to be made by such Manager or such affiliate on behalf of KEB Hana Bank ("the Issuer" or the "Bank") in such jurisdiction.

The Preliminary Offering Circular is for distribution only to persons who (i) are outside the United Kingdom; (ii) have professional experience in matters relating to investments and who qualify as investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "Financial Promotion Order")); (iii) fall within Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the Financial Promotion Order; or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) in connection with the issue or sale of any Notes may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "Relevant Persons"). The Preliminary Offering Circular is directed only at Relevant Persons and must not be acted or relied upon by persons who are not Relevant Persons. Any investment or investment activity to which the Preliminary Offering Circular relates is available only to Relevant Persons and will be engaged in only with Relevant Persons.

The Preliminary Offering Circular has been sent to you in an electronic form. You are reminded that documents transmitted via this medium may be altered or changed during the process of electronic transmission and consequently none of the Managers, the Issuer nor any person who controls any of them nor any of their respective directors, officers, employees, agents or affiliates accepts any liability or responsibility whatsoever in respect of any difference between the Preliminary Offering Circular distributed to you in electronic format and the hard copy version available to you on request from the Managers.

You should not reply by e-mail to this distribution, and you may not purchase any securities by doing so. Any reply e-mail communications, including those you generate by using the "Reply" function on your e-mail software, will be ignored or rejected. You are responsible for protecting against viruses and other destructive items. Your use of this e-mail is at your own risk and it is your responsibility to take precautions to ensure that it is free from viruses and other items of a destructive nature.

Important Notice to Prospective Investors: Prospective investors should be aware that certain intermediaries in the context of this offering of the Notes, including certain Managers, are "capital market intermediaries" ("CMIs") subject to Paragraph 21 of the Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission (the "SFC Code"). This notice to prospective investors is a summary of certain obligations the SFC Code imposes on such CMIs, which require the attention and cooperation of prospective investors. Certain CMIs may also be acting as "overall coordinators" ("OCs") for the offering and are subject to additional requirements under the SFC Code.

Prospective investors who are the directors, employees or major shareholders of the Issuer, a CMI or its group companies would be considered under the SFC Code as having an association ("Association") with the Issuer, the CMI or the relevant group company. Prospective investors associated with the Issuer or any CMI (including its group companies) should specifically disclose this when placing an order for the Notes and should disclose, at the same time, if such orders may negatively impact the price discovery process in relation to this offering. Prospective investors who do not disclose their Associations are hereby deemed not to be so associated. Where prospective investors disclose their Associations but do not disclose that such order may negatively impact the price discovery process in relation to this offering, such order is hereby deemed not to negatively impact the price discovery process in relation to this offering.

Prospective investors should ensure, and by placing an order prospective investors are deemed to confirm, that orders placed are bona fide, are not inflated and do not constitute duplicated orders (i.e. two or more corresponding or identical orders placed via two or more CMIs). If a prospective investor is an asset management arm affiliated with any Manager, such prospective investor should indicate when placing an order if it is for a fund or portfolio where the Manager or its group company has more than 50% interest, in which case it will be classified as a "proprietary order" and subject to appropriate handling by CMIs in accordance with the SFC Code and should disclose, at the same time, if such "proprietary order" may negatively impact the price discovery process in relation to this offering. Prospective investors who do not indicate this information when placing an order are hereby deemed to confirm that their order is not a "proprietary order". If a prospective investor is otherwise affiliated with any Manager, such that its order may be considered to be a "proprietary order" (pursuant to the SFC Code), such prospective investor should indicate to the relevant Manager when placing such order. Prospective investors who do not indicate this information when placing an order are hereby deemed to confirm that their order is not a "proprietary order". Where prospective investors disclose such information but do not disclose that such "proprietary order" may negatively impact the price discovery process in relation to this offering, such "proprietary order" is hereby deemed not to negatively impact the price discovery process in relation to this offering.

Prospective investors should be aware that certain information may be disclosed by CMIs (including private banks) which is personal and/or confidential in nature to the prospective investor. By placing an order, prospective investors are deemed to have understood and consented to the collection, disclosure, use and transfer of such information by the Managers and/or any other third parties as may be required by the SFC Code, including to the Issuer, any OCs, relevant regulators and/or any other third parties as may be required by the SFC Code, it being understood and agreed that such information shall only be used for the purpose of complying with the SFC Code, during the bookbuilding process for this offering. Failure to provide such information may result in that order being rejected.

The distribution of the Preliminary Offering Circular in certain jurisdictions may be restricted by law. Persons into whose possession the Preliminary Offering Circular comes are required by the Managers and the Issuer to inform themselves about, and to observe, any such restrictions.

The information in this preliminary pricing supplement is not complete and may be changed. This preliminary pricing supplement is not an offer to sell securities and they is not a solicitation of an offer to buy securities in any jurisdiction where the offer or sale is not permitted.

PRELIMINARY PRICING SUPPLEMENT DATED 9 APRIL 2024

PRICING SUPPLEMENT

Hana Bank

(incorporated with limited liability under the laws of the Republic of Korea)

Issue of U.S.$ per cent. Senior Unsecured Sustainability Notes due 2029
under the U.S.$10,000,000,000 Global Medium Term Note Programme

THE NOTES TO WHICH THIS PRICING SUPPLEMENT RELATES (THE "NOTES") HAVE NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR WITH ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR OTHER JURISDICTION OF THE UNITED STATES AND, UNLESS SO REGISTERED, MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS (AS DEFINED IN REGULATION S UNDER THE SECURITIES ACT), EXCEPT PURSUANT TO AN EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS. ACCORDINGLY, THE NOTES WILL BE OFFERED AND SOLD ONLY (I) OUTSIDE THE UNITED STATES TO NON-U.S. PERSONS IN RELIANCE ON REGULATION S AND (II) WITHIN THE UNITED STATES IN RELIANCE ON RULE 144A UNDER THE SECURITIES ACT ("RULE 144A") TO QUALIFIED INSTITUTIONAL BUYERS (AS DEFINED UNDER RULE 144A).

IN CONNECTION WITH THIS ISSUE, THE STABILISATION MANAGER (OR ANY PERSON ACTING ON BEHALF OF THE STABILISATION MANAGER) MAY OVER-ALLOT OR EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE NOTES AT A LEVEL HIGHER THAN THAT WHICH MIGHT OTHERWISE PREVAIL FOR A LIMITED PERIOD AFTER THE ISSUE DATE. HOWEVER, THERE MAY BE NO OBLIGATION ON THE STABILISATION MANAGER (OR ANY PERSON ACTING ON BEHALF OF THE STABILISATION MANAGER) TO UNDERTAKE STABILISATION ACTION. ANY STABILISATION ACTION MAY BEGIN ON OR AFTER THE DATE ON WHICH ADEQUATE PUBLIC DISCLOSURE OF THE TERMS OF THE OFFER OF THE NOTES IS MADE, AND IF BEGUN, MAY BE ENDED AT ANY TIME, BUT IT MUST END NO LATER THAN THE EARLIER OF 30 DAYS AFTER THE ISSUE DATE OF THE NOTES AND 60 DAYS AFTER THE DATE OF THE ALLOTMENT OF THE NOTES. ANY STABILISATION ACTION OR OVER-ALLOTMENT MUST BE CONDUCTED BY THE RELEVANT STABILISATION MANAGER (OR ANY PERSON ACTING ON BEHALF OF THE STABILISATION MANAGER) IN ACCORDANCE WITH ALL APPLICABLE LAWS AND RULES.

Joint Bookrunners and Joint Lead Managers

BNP PARIBAS	**BofA Securities**	**Crédit Agricole CIB**
MUFG	**Standard Chartered Bank**	**Wells Fargo Securities**

The date of this pricing supplement is April 2024.

KEB HANA BANK
(acting through its principal office in Korea)

Issue of U.S.$ per cent. Senior Unsecured Sustainability Notes due 2029 under the U.S.$10,000,000,000 Global Medium Term Note Programme

This document constitutes the pricing supplement (this "**Pricing Supplement**") relating to the issue of Notes described herein. Terms used herein shall be deemed to be defined as such for the purposes of the Terms and Conditions of the Notes set forth in the Offering Circular dated 5 April 2024 as amended or supplemented from time to time (the "**Offering Circular**"). This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with the Offering Circular. Full information on the Issuer and the offer of the Notes is only available on the basis of this Pricing Supplement and the Offering Circular.

The Notes have not been and will not be registered with the Financial Services Commission of Korea under the Financial Investment Services and Capital Markets Act of Korea. Accordingly, the Notes may not be offered, delivered, or sold, directly or indirectly, in the Republic of Korea ("**Korea**") or to, or for the account or benefit of, any resident of Korea (as defined in the Foreign Exchange Transaction Act of Korea and the rules and regulations promulgated thereunder) or to others for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except as otherwise permitted under applicable Korean laws and regulations. In addition, during the first year after the issuance of the Notes, the Notes may not be transferred to any resident of Korea other than a "qualified institutional buyer" (a "**Korean QIB**" as defined under the Securities Issuance and Disclosure Regulations) who is registered with the Korea Financial Investment Association as a Korean QIB, provided that the amount of the Notes acquired by the Korean QIBs in the primary market is limited to not more than 20% of the aggregate principal amount of the Notes.

PROHIBITION OF SALES TO EEA RETAIL INVESTORS – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); (ii) a customer within the meaning of Directive (EU) 2016/97 (the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (the "Prospectus Regulation"). Consequently no key information document required by Regulation (EU) 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the securities or otherwise making them available to retail investors in the EEA has been prepared and therefore, offering or selling the securities or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

PROHIBITION OF SALES TO UK RETAIL INVESTORS – The Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the United Kingdom ("UK"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (the "EUWA"); (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (the "FSMA") and any rules or regulations made under the FSMA to implement the Insurance Distribution Directive, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of the Prospectus Regulation as it forms part of domestic law by virtue of the EUWA (the "UK Prospectus Regulation"). Consequently no key information document required by the Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the "UK PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

Any person making or intending to make an offer of the Notes may only do so in circumstances in which no obligation arises for the Issuer or any Manager to publish a prospectus pursuant to either of Article 3 of the Prospectus Regulation or section 85 of the FSMA or supplement a prospectus pursuant to either of Article 23 of the Prospectus Regulation or Article 23 of the UK Prospectus Regulation, in each case, in relation to such offer.

Notification under Section 309B(1)(c) of the Securities and Futures Act 2001 of Singapore (the "SFA") — The Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes are prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

1.	Issuer:		KEB Hana Bank, acting through its principal office in Korea (Legal Entity Identifier: 6RPK2YDJN6L35AS0M510)
2.	(i)	Series Number:	128
	(ii)	Tranche Number:	1
	(iii)	Re-opening:	No
3.	Specified Currency or Currencies:		United States Dollars ("**U.S.$**")
4.	Aggregate Nominal Amount:		
	(i)	Tranche:	U.S.$
	(ii)	Series:	U.S.$
5.	(i)	Issue Price of Tranche:	per cent. of the Aggregate Nominal Amount
	(ii)	Net Proceeds (after deducting a combined management and underwriting commission but not estimated expenses):	U.S.$
	(iii)	Use of Proceeds:	The Issuer will apply an amount equal to the Net Proceeds to finance and/or refinance new and/or existing projects from a combination of eligible green categories and eligible social categories in accordance with KEB Hana Bank Sustainability Financing Framework dated March 2023.
6.	(i)	Specified Denominations:	U.S.$200,000 and integral multiples of U.S.$1,000 in excess thereof
	(ii)	Calculation Amount:	U.S.$1,000
7.	(i)	Issue Date:	April 2024
	(ii)	Interest Commencement Date:	April 2024
8.	Maturity Date:		April 2029
9.	Interest Basis:		per cent. Fixed Rate (further particulars specified below)
10.	Redemption/Payment Basis:		Redemption at par
11.	Change of Interest Basis or Redemption/Payment Basis:		Not Applicable
12.	Put/Call Options:		Not Applicable
13.	(i)	Status of the Notes:	Senior

	(ii)	Date of Board approval for issuance of Notes obtained:	22 November 2023
	(iii)	Date of regulatory approval/consent for issuance of Notes obtained:	28 March 2024
14.	Listing:		Singapore Stock Exchange
15.	Method of distribution:		Syndicated

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

16.	Fixed Rate Note Provisions:		Applicable
	(i)	Rate of Interest:	per cent. per annum payable semi-annually in arrear
	(ii)	Interest Payment Date(s):	April and October in each year up to and including the Maturity Date (with the first Interest Payment Date being October 2024) adjusted in accordance with Following Business Day Convention
	(iii)	Fixed Coupon Amount(s):	U.S.$ per Calculation Amount
	(iv)	Broken Amount(s):	Not Applicable
	(v)	Day Count Fraction:	30/360
	(vi)	Determination Date(s):	Not Applicable
	(vii)	Business Day Convention:	Following Business Day Convention
	(viii)	Other terms relating to the method of calculating interest for Fixed Rate Notes:	Condition 5(a)(I) applies
17.	Floating Rate Note Provisions:		Not Applicable
18.	Zero Coupon Note Provisions:		Not Applicable
19.	Index Linked Interest Note Provisions:		Not Applicable
20.	Dual Currency Note Provisions:		Not Applicable
21.	Interest Rate Reset:		Not Applicable

PROVISIONS RELATING TO REDEMPTION

22.	Issuer Call:	Not Applicable
23.	Investor Put:	Not Applicable
24.	Final Redemption Amount of each Note:	U.S.$1,000 per Calculation Amount
25.	Early Redemption Amount of each Note payable on redemption for taxation reasons or on event of default and/or the method of calculating the same (if required or	U.S.$1,000 per Calculation Amount

	if different from that set out in Condition 7(e)):	

GENERAL PROVISIONS APPLICABLE TO THE NOTES

26.	Form of Notes:	Registered Notes: Regulation S Global Note registered in the name of a nominee for DTC Rule 144A Global Note registered in the name of a nominee for DTC
27.	Additional Financial Centre(s) or other special provisions relating to Payment Dates:	New York City, London and Seoul
28.	Talons for future Coupons or Receipts to be attached to Definitive Bearer Notes (and dates on which such Talons mature):	No
29.	Details relating to Partly Paid Notes: amount of each payment comprising the Issue Price and date on which each payment is to be made and consequences of failure to pay, including any right of the Issuer to forfeit the Notes and interest due on late payment:	Not Applicable
30.	Details relating to Instalment Notes:	Not Applicable
31.	Redenomination applicable:	Redenomination not applicable
32.	Other terms or special conditions:	Not Applicable
33.	Additional U.S. federal income tax considerations:	Not Applicable

DISTRIBUTION

34.	(i)	If syndicated, names of Managers:	BNP Paribas Crédit Agricole Corporate and Investment Bank Merrill Lynch International MUFG Securities EMEA plc Standard Chartered Bank Wells Fargo Securities, LLC *as Joint Bookrunners and Joint Lead Managers*
	(ii)	Stabilisation Manager (if any):	Any one of the Joint Lead Managers or any of its affiliates appointed and acting in such capacity as the Stabilisation Manager
35.	If non-syndicated, name of relevant Dealer:		Not Applicable
36.	Whether TEFRA D or TEFRA C rules applicable or TEFRA rules not applicable:		TEFRA rules not applicable

37.	U.S. Selling Restrictions:	Rule 144A/ Regulations S, Category 2
38.	Prohibition of Sales to EEA Retail Investors:	Applicable
39.	Prohibition of Sales to UK Retail Investors:	Applicable
40.	Additional selling restrictions:	Not Applicable

PROVISIONS RELATING TO GREEN BONDS, SOCIAL BONDS OR SUSTAINABILITY BONDS

41.	(i)	Green Bonds:	No
	(ii)	Social Bonds:	No
	(iii)	Sustainability Bonds:	Yes
	(iv)	Reviewer:	DNV

OPERATIONAL INFORMATION

42.	Any clearing system(s) other than Euroclear and Clearstream, Luxembourg and the relevant identification number(s):	DTC
43.	Delivery:	Delivery against payment
44.	In the case of Registered Notes, specify the location of the office of the Registrar if other than New York:	Not Applicable
45.	Additional Paying Agent(s) (if any):	Not Applicable

HONG KONG SFC CODE OF CONDUCT

46.	Rebates:	Not Applicable
47.	Contact email addresses of the Overall Coordinators where the underlying investor information in relation to omnibus orders should be sent:	dl.asia.syndicate@asia.bnpparibas.com bofa_dcm_syndicate_pb_orders@bofa.com HKG-Syndicate@ca-cib.com Asia-Syndicate@hk.sc.mufg.jp synhk@sc.com
48.	Marketing and Investor Targeting Strategy:	Same as in the programme OC

ISIN:	Rule 144A Notes:
	Regulation S Notes:
CUSIP:	Rule 144A Notes:
	Regulation S Notes:
Common Code:	Rule 144A Notes:

Regulation S Notes:

LISTING APPLICATION

This Pricing Supplement comprises the final terms required to list the issue of Notes described herein pursuant to the U.S.$10,000,000,000 Global Medium Term Note Programme of KEB Hana Bank.

The Singapore Exchange Securities Trading Limited (the "Singapore Stock Exchange") assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained in this Pricing Supplement. Approval in-principle from, admission to the Official List of, and listing and quotation of the Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Programme or the Notes.

RESPONSIBILITY

The Issuer accepts responsibility for the information contained in this Pricing Supplement.

Signed on behalf of the Issuer:

By: ________________________

Duly authorised

In Kwi Yum

General Manager, Treasury Department

KEB Hana Bank

OFFERING CIRCULAR

KEB Hana Bank

(incorporated with limited liability under the laws of the Republic of Korea)

U.S.$10,000,000,000
Global Medium Term Note Programme

On 17 May 1995, KEB Hana Bank (formerly Korea Exchange Bank; the "**Issuer**," the "**Bank**" or "**Hana Bank**") established a programme for the issuance of debt instruments up to U.S.$4,000,000,000 (as amended, supplemented or restated, the "**Programme**") and issued an offering circular on that date describing the Programme. On 8 January 2016, the Issuer increased the aggregate nominal amount of the Programme from U.S.$4,000,000,000 to U.S.$10,000,000,000. This offering circular (this "**Offering Circular**") updates the Programme and supersedes all previous offering circulars and any supplements or amendments thereto, including the immediately preceding offering circular dated 7 April 2023. Any Notes (as defined below) issued under the Programme on or after the date of this Offering Circular are issued subject to the provisions described herein. This update does not affect any Notes issued before the date of this Offering Circular.

Under the Programme, the Issuer may from time to time issue notes in bearer and/or registered form (respectively, "**Bearer Notes**" and "**Registered Notes**", and together, the "**Notes**", which expression includes Senior Notes and Subordinated Notes (as defined herein)) denominated in any currency agreed between the Issuer and the relevant Dealer (as defined below).

The maximum aggregate nominal amount of all Notes from time to time outstanding under the Programme will not exceed U.S.$10,000,000,000 (or its equivalent in other currencies calculated as described herein).

In relation to any Tranche (as defined under "*Terms and Conditions of the Notes*") of Notes, the Issuer may act through its principal office in Korea or through any of its branches, in each case as indicated in the applicable Pricing Supplement (as defined below).

The Notes may be issued on a continuing basis to one or more of the Dealers specified under "*Summary of the Programme*" and any additional Dealer appointed under the Programme from time to time, which appointment may be for a specific issue or on an ongoing basis (each a "**Dealer**", and together, the "**Dealers**"). References in this Offering Circular to the "**relevant Dealer**" shall, in the case of an issue of Notes being (or intended to be) subscribed by more than one Dealer, be to all Dealers agreeing to subscribe for such Notes.

Approval in-principle has been received from the Singapore Exchange Securities Trading Limited (the "**Singapore Stock Exchange**") in connection with the Programme and application will be made for the listing and quotation of Notes that may be issued pursuant to the Programme and which are agreed, at or prior to the time of issue thereof, to be so listed on the Singapore Stock Exchange. Such permission will be granted when such Notes have been admitted for listing and quotation on the Singapore Stock Exchange. The Singapore Stock Exchange assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained herein. Approval in-principle from, admission to the Official List of, and listing and quotation of any Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Programme or the Notes. Notice of the aggregate nominal amount of Notes, interest (if any) payable in respect of Notes, the issue price of Notes and any other terms and conditions not contained herein which are applicable to each Tranche of Notes will be set out in a pricing supplement (the "**Pricing Supplement**") a copy of which, with respect to Notes to be listed on the Singapore Stock Exchange, will be submitted to the Singapore Stock Exchange before the date of listing of the Notes of such Tranche.

The Programme provides that Notes may be listed on such other or further stock exchange(s) as may be agreed between the Issuer and the relevant Dealer. The Issuer may also issue unlisted Notes.

See "*Investment Considerations*" for a discussion of certain factors to be considered in connection with an investment in the Notes.

The Notes have not been and will not be registered under the U.S. Securities Act of 1933, as amended (the "**Securities Act**") and may not be offered or sold in the United States or to, or for the benefit of, U.S. persons (as defined in Regulation S under the Securities Act) unless the Notes are registered under the Securities Act or an exemption from the registration requirements of the Securities Act is available. See "*Form of the Notes*" for a description of the manner in which Notes will be issued. Registered Notes are subject to certain restrictions on transfer, see "*Subscription and Sale and Transfer and Selling Restrictions*".

Notification under Section 309B(1)(c) of the Securities and Futures Act 2001 of Singapore (the "SFA") – Unless otherwise stated in the Pricing Supplement in respect of any Notes, the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes to be issued under the Programme shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

The Issuer may agree with any Dealer that Notes may be issued in a form not contemplated by the Terms and Conditions of the Notes herein, in which event a supplementary Offering Circular, if appropriate, will be published which will describe the effect of the agreement reached in relation to such Notes.

Arranger

BNP PARIBAS

Dealers
(in alphabetical order)

BNP PARIBAS
BofA Securities
Citigroup
Crédit Agricole CIB
Daiwa Capital Markets
Hana Securities
HSBC
ING
J.P. Morgan
KEB Hana Global Finance
Mizuho
MUFG
Société Générale Corporate & Investment Banking
Standard Chartered Bank
UBS
Wells Fargo Securities

The date of this Offering Circular is 5 April 2024.

The Issuer, having made all reasonable enquiries, accepts responsibility for this Offering Circular, and confirms that this Offering Circular contains all information which is material in the context of the Programme, that the information contained in this Offering Circular is true and accurate in all material respects and is not misleading, that the opinions and intentions expressed in this Offering Circular are honestly held and that there are no other facts the omission of which would make any of such information or the expression of any such opinions or intentions misleading.

This Offering Circular is to be read in conjunction with all documents which are deemed to be incorporated herein by reference (see "*Documents Incorporated by Reference*" below). This Offering Circular shall be read and construed on the basis that such documents are incorporated and form part of this Offering Circular.

No representation, warranty or undertaking, express or implied, is made and no responsibility or liability is accepted by the Dealers as to the authenticity, origin, validity, accuracy or completeness of the information contained or incorporated by reference in this Offering Circular or any supplement hereto or any other information provided by or purported to be provided by the Arranger, the Dealers or the Issuer in connection with the Programme, the Issuer or issue and offering of the Notes. No Dealer accepts any liability in relation to the information contained or incorporated by reference in this Offering Circular or any other information provided by the Arranger, the Dealers or the Issuer in connection with the Programme, the Issuer or issue and offering of the Notes. Each Dealer and its affiliates accordingly disclaim all and any liability whether arising in tort or contract or otherwise which it might otherwise have in respect of this Offering Circular or any such information.

No person is or has been authorised by the Issuer to give any information or to make any representation not contained in or not consistent with this Offering Circular or any other information supplied in connection with the Programme or the Notes and, if given or made, such information or representation must not be relied upon as having been authorised by the Issuer or any of the Dealers.

Neither this Offering Circular nor any other information supplied in connection with the Programme or any Notes (i) is intended to provide the basis of any credit or other evaluation or (ii) should be considered as a recommendation or constituting an invitation or offer by the Issuer or any of the Dealers that any recipient of this Offering Circular or any other information supplied in connection with the Programme or any Notes should purchase any Notes. Each investor contemplating purchasing any Notes should make its own independent investigation of the financial condition and affairs, and its own appraisal of the creditworthiness, of the Issuer. Neither this Offering Circular nor any other information supplied in connection with the Programme or any Notes constitutes an offer or invitation by or on behalf of the Issuer or any of the Dealers to any person to subscribe for or to purchase any Notes.

Neither the delivery of this Offering Circular nor the offering, sale or delivery of any Notes shall in any circumstances imply that the information contained herein concerning the Issuer is correct at any time subsequent to the date hereof or that any other information supplied in connection with the Programme is correct as of any time subsequent to the date indicated in the document containing the same. The Dealers expressly do not undertake to review the financial condition or affairs of the Issuer during the life of the Programme or to advise any investor in the Notes of any information coming to their attention. Investors should review, *inter alia*, the most recently published financial statements of the Issuer when deciding whether or not to purchase any Notes.

The Notes in bearer form are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to U.S. persons, except in certain transactions permitted by U.S. tax regulations. Terms used in this paragraph have the meanings given to them by the U.S. Internal Revenue Code of 1986, as amended (the "**Code**"), and the regulations promulgated thereunder.

This Offering Circular does not constitute an offer to sell or the solicitation of an offer to buy any Notes in any jurisdiction to any person to whom it is unlawful to make the offer or solicitation in such jurisdiction. The distribution of this Offering Circular and the offer or sale of Notes may be restricted by law in certain jurisdictions. The Issuer and the Dealers do not represent that this document may be lawfully distributed, or that any Notes may be lawfully offered, in compliance with any applicable registration or other requirements in any such jurisdiction, or pursuant to an exemption available thereunder, or assume any responsibility for facilitating any such distribution or offering. In particular, no action has been taken by the Issuer or the Dealers which would permit a public offering of any Notes or distribution of this document in any jurisdiction where action for that purpose is required. Accordingly, no Notes may be offered or sold, directly or indirectly, and neither this Offering Circular nor any advertisement or other offering material may be distributed or published in any jurisdiction, except under circumstances that will result in compliance with any applicable laws and regulations and the Dealers have represented that all offers and sales by them will be made on the same terms. Persons into whose possession this Offering Circular or any Notes come must inform themselves about, and observe, any such restrictions on the distribution of this Offering Circular and the offering and sale of Notes. In particular, there are restrictions on the distribution of this Offering Circular and the offer or sale of Notes in the United States, the European Economic Area, the United Kingdom, Japan, Hong Kong, Singapore, Canada, United Arab Emirates (including the Dubai International Finance Centre), Switzerland and Korea. For a description of these and certain further restrictions on offers and sales of the Notes and distribution of this Offering Circular, see "*Subscription and Sale and Transfer and Selling Restrictions*" below.

In making an investment decision, investors must rely on their own examination of the Issuer and the terms of the Notes being offered, including the merits and risks involved. The Notes have not been approved or disapproved by the U.S. Securities and Exchange Commission or any other securities commission or other regulatory authority in the United States, nor have the foregoing authorities approved this Offering Circular or confirmed the accuracy or determined the adequacy of the information contained in this Offering Circular. Any representation to the contrary is unlawful.

None of the Dealers or the Issuer makes any representation to any investor in the Notes regarding the legality of its investment under any applicable laws. Any investor in the Notes should be able to bear the economic risk of an investment in the Notes for an indefinite period of time.

U.S. INFORMATION

The Notes have not been and will not be registered under the Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in certain transactions exempt from the registration requirements of the Securities Act. See "*Subscription and Sale and Transfer and Selling Restrictions*" below.

This Offering Circular may be submitted on a confidential basis in the United States to a limited number of QIBs or Institutional Accredited Investors (each as defined under "*Form of the Notes*") for informational use solely in connection with the consideration of the purchase of the Notes being offered hereby. Its use for any other purpose in the United States is not authorised. It may not be copied or reproduced in whole or in part nor may it be distributed or any of its contents disclosed to anyone other than the prospective investors to whom it is originally submitted.

Registered Notes may be offered or sold within the United States only to QIBs or to Institutional Accredited Investors, in either case in transactions exempt from registration under the Securities Act. Each U.S. purchaser of Registered Notes is hereby notified that the offer and sale of any Registered Notes to it may be being made in reliance upon the exemption from the registration requirements of the Securities Act provided by Rule 144A under the Securities Act ("**Rule 144A**").

Purchasers of Definitive IAI Registered Notes will be required to execute and deliver an IAI Investment Letter (as defined under "*Terms and Conditions of the Notes*"). Each purchaser or holder of Definitive IAI Registered Notes, Notes represented by a Restricted Global Note (as defined under "*Form of the Notes*") or any Notes issued in registered form in exchange or substitution therefor (together, "**Legended Notes**") will be deemed, by its acceptance or purchase of any such Legended Notes, to have made certain representations and agreements intended to restrict the resale or other transfer of such Notes as set out in "*Subscription and Sale and Transfer and Selling Restrictions*". Unless otherwise stated, terms used in this paragraph have the meanings given to them in "*Form of the Notes*".

MIFID II PRODUCT GOVERNANCE / TARGET MARKET

The applicable Pricing Supplement in respect of any Notes may include a legend entitled "EU MiFID II Product Governance" which will outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the target market assessment; however, a distributor subject to Directive 2014/65/EU (as amended, "**EU MiFID II**") is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

A determination will be made in relation to each issue about whether, for the purpose of the MiFID Product Governance rules under EU Delegated Directive 2017/593 (the "**EU MiFID Product Governance Rules**"), any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise neither the Arranger nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the MiFID Product Governance Rules.

UK MIFIR PRODUCT GOVERNANCE / TARGET MARKET

The applicable Pricing Supplement in respect of any Notes may include a legend entitled "UK MiFIR Product Governance" which will outline the target market assessment in respect of the Notes and which channels for distribution of the Notes are appropriate. Any person subsequently offering, selling or recommending the Notes (a "**distributor**") should take into consideration the target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook (the "**UK MiFIR Product Governance Rules**") is responsible for undertaking its own target market assessment in respect of the Notes (by either adopting or refining the target market assessment) and determining appropriate distribution channels.

A determination will be made in relation to each issue about whether, for the purpose of the UK MiFIR Product Governance Rules, any Dealer subscribing for any Notes is a manufacturer in respect of such Notes, but otherwise neither the Arranger nor the Dealers nor any of their respective affiliates will be a manufacturer for the purpose of the UK MiFIR Product Governance Rules.

NOTICE TO EEA RETAIL INVESTORS

If the applicable Pricing Supplement in respect of any Notes includes a legend entitled "Prohibition of Sales to EEA Retail Investors" or otherwise specifies "Prohibition of Sales to EEA Retail Investors" as "Applicable", such Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("**EEA**"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of EU MiFID II; or (ii) a customer within the meaning of Directive (EU) 2016/97 (as amended, "**Insurance Distribution Directive**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of EU MiFID II; or (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (as amended, the "**EU Prospectus Regulation**"). Consequently no key information document required by Regulation (EU) No. 1286/2014 (as amended, the "**EU PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the EU PRIIPs Regulation.

NOTICE TO UK RETAIL INVESTORS

If the applicable Pricing Supplement in respect of any Notes includes a legend entitled "Prohibition of Sales to UK Retail Investors" or otherwise specifies "Prohibition of Sales to UK Retail Investors" as "Applicable", such Notes are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the United Kingdom (the "**UK**"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No. 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 ("**EUWA**"); (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 ("**FSMA**") and any rules or regulations made under the FSMA to implement Directive (EU) 2016/97, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No. 600/2014 as it forms part of domestic law by virtue of the EUWA or (iii) not a "qualified investor" as defined in Article 2 of Regulation (EU) 2017/1129 as it forms part of the domestic law of the UK by virtue of the EUWA (the "**UK Prospectus Regulation**"). Consequently no key information document required by Regulation (EU) No. 1286/2014 as it forms part of domestic law by virtue of the EUWA (the "**UK PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

SINGAPORE INFORMATION

Notification under Section 309B(1)(c) of the Securities and Futures Act 2001 of Singapore (the "SFA") – Unless otherwise stated in the Pricing Supplement in respect of any Notes, the Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the SFA), that the Notes to be issued under the Programme shall be prescribed capital markets products (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

NOTICE TO PERSONS IN THE UNITED KINGDOM

This Offering Circular is for distribution only to persons who (i) are outside the United Kingdom; (ii) have professional experience in matters relating to investments and who qualify as investment professionals within the meaning of Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005, as amended (the "**Financial Promotion Order**")); (iii) fall within Article 49(2)(a) to (d) (high net worth companies, unincorporated associations, etc.) of the Financial Promotion Order; or (iv) are persons to whom an invitation or inducement to engage in investment activity (within the meaning of section 21 of the FSMA) in connection with the issue or sale of any Securities may otherwise lawfully be communicated or caused to be communicated (all such persons together being referred to as "**Relevant Persons**"). This Offering Circular is directed only at Relevant Persons and must not be acted or relied upon by persons who are not Relevant Persons. Any investment or investment activity to which this Offering Circular relates is available only to Relevant Persons and will be engaged in only with Relevant Persons.

AVAILABLE INFORMATION

To permit compliance with Rule 144A in connection with any resales or other transfers of Notes that are "restricted securities" within the meaning of the Securities Act, the Issuer has undertaken in a deed poll dated 8 January 2016 (the "**Deed Poll**") to furnish, upon the request of a holder of such Notes or any beneficial interest therein, to such holder or to a prospective purchaser designated by him, the information required to be delivered under Rule 144A(d)(4) under the Securities Act if, at the time of the request, the Issuer is neither a reporting company under Section 13 or 15(d) of the U.S. Securities Exchange Act of 1934, as amended, (the "**Exchange Act**") nor exempt from reporting pursuant to Rule 12g3-2(b) thereunder.

KOREAN SELLING RESTRICTIONS

The Notes have not been and will not be registered with the Financial Services Commission of Korea under the Financial Investment Services and Capital Markets Act of Korea. Accordingly, the Notes may not be offered, sold or delivered, directly or indirectly, in Korea or to, or for the account or benefit of, any resident of Korea (as such term is defined under the Foreign Exchange Transaction Act of Korea and the regulations thereunder) or to others for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea, except as otherwise permitted under applicable Korean laws and regulations. In addition, during the first year after the issuance of the Notes, the Notes may not be transferred to any resident of Korea (i) (in the case where the Notes are issued as straight bonds other than equity-linked bonds, such as convertible bonds, bonds with warrants and exchangeable bonds in reliance on the exemption as set out in Article 2-2-2, Paragraph 2, Item 3 of the Regulation on Issuance of Securities and Public Disclosure of Korea) other than a Korean qualified institutional buyer (a "Korean QIB", as defined in the above regulation) who is registered with the Korea Financial Investment Association as a Korean QIB, provided that (1) the Notes are denominated, and the principal and interest payments thereunder are made, in a currency other than Korean won, (2) the amount of the Notes acquired by the Korean QIBs in the primary market is limited to not more than 20% of the aggregate principal amount of the Notes, (3) the Notes are listed on one of the major overseas securities markets designated by the Financial Supervisory Service of Korea, or certain procedures, such as registration or report with a foreign financial investment regulator of the country in which any major overseas securities market is established, have been completed for offering of the Notes, (4) the one-year restriction on transfer of the Notes to any resident of Korea other than the Korean QIBs is expressly stated in the Notes, the relevant purchase agreement and offering circular and (5) the Issuer and the Dealers shall individually or collectively keep the evidence of fulfilment of conditions (1) through (4) above after having taken necessary actions therefor or (ii) except as otherwise permitted under applicable Korean laws and regulations.

NOTICE TO CAPITAL MARKET INTERMEDIARIES AND PROSPECTIVE INVESTORS PURSUANT TO PARAGRAPH 21 OF THE HONG KONG SFC CODE OF CONDUCT

Prospective investors should be aware that certain intermediaries in the context of certain offerings of the Notes, including certain Dealers, may be "capital market intermediaries" ("**CMIs**") subject to Paragraph 21 of the Code of Conduct for Persons Licensed by or Registered with the Hong Kong Securities and Futures Commission (the "**SFC Code**"). This notice to prospective investors is a summary of certain obligations the SFC Code imposes on such CMIs, which require the attention and cooperation of prospective investors. Certain CMIs may also be acting as "overall coordinators" (together, the "**OCs**") for such offering and are subject to additional requirements under the SFC Code. The application of these obligations will depend on the role(s) undertaken by the relevant Dealers in respect of each offering of Notes under the Programme.

Prospective investors who are the directors, employees or major shareholders of the Issuer, a CMI or its group companies would be considered under the SFC Code as having an association (an "**Association**") with the Issuer, the CMI or the relevant group company. Prospective investors associated with the Issuer, or any CMI (including its group companies) should specifically disclose this when placing an order for the relevant Notes and should disclose, at the same time, if such orders may negatively impact the price discovery process in relation to such offering. Prospective investors who do not disclose their Associations are hereby deemed not to be so associated. Where prospective investors disclose their Associations but do not disclose that such order may negatively impact the price discovery process in relation to such offering, such order is hereby deemed not to negatively impact the price discovery process in relation to such offering.

Prospective investors should ensure, and by placing an order prospective investors are deemed to confirm, that orders placed are bona fide, are not inflated and do not constitute duplicated orders (i.e. two or more corresponding or identical orders placed via two or more CMIs). A rebate may be offered by the Issuer to all private banks for orders they place (other than in relation to the Notes subscribed by such private banks as principal whereby it is deploying its own balance sheet for onward selling to investors), payable upon closing of the relevant offering based on the principal amount of the Notes distributed by such private banks to investors. Private banks are deemed to be placing an order on a principal basis unless they inform the CMIs otherwise. As a result, private banks placing an order on a principal basis (including those deemed as placing an order as principal) will not be entitled to, and will not be paid, the rebate. Details of any such rebate (where applicable) will be set out in the applicable Pricing Supplement or otherwise notified to prospective investors on or prior to the launch of an offering of Notes under the Programme. If a prospective investor is an asset management arm affiliated with any relevant Dealer, such prospective investor should indicate when placing an order if it is for a fund or portfolio where the relevant Dealer or its group company has more than 50% interest, in which case it will be classified as a "proprietary order" and subject to appropriate handling by CMIs in accordance with the SFC Code and should disclose, at the same time, if such "proprietary order" may negatively impact the price discovery process in relation to such offering. Prospective investors who do not indicate this information when placing an order are hereby deemed to confirm that their order is not such a "proprietary order". If a prospective investor is otherwise affiliated with any relevant Dealer, such that its order may be considered to be a "proprietary order" (pursuant to the SFC Code), such prospective investor should indicate to the relevant Dealer when placing such order. Prospective investors who do not indicate this information when placing an order are hereby deemed to confirm that their order is not such a "proprietary order". Where prospective investors disclose such information but do not disclose that such "proprietary order" may negatively impact the price discovery process in relation to such offering, such "proprietary order" is hereby deemed not to negatively impact the price discovery process in relation to such offering.

Prospective investors should be aware that certain information may be disclosed by CMIs (including private banks) which is personal and/or confidential in nature to the prospective investor. By placing an order, prospective investors are deemed to have understood and consented to the collection, disclosure, use and transfer of such information by the relevant Dealers and/or any other third parties as may be required by the SFC Code, including to the Issuer, any OCs, relevant regulators and/or any other third parties as may be required by the SFC Code, it being understood and agreed that such information shall only be used for the purpose of complying with the SFC Code, during the bookbuilding process for such offering. Failure to provide such information may result in that order being rejected.

SERVICE OF PROCESS AND ENFORCEMENT OF CIVIL LIABILITIES

The Issuer is a corporation organised under the laws of Korea. All of the officers and directors named herein reside outside the United States and all or a substantial portion of the assets of the Issuer and of such officers and directors are located outside the United States. As a result, it may not be possible for investors to effect service of process within the U.S. upon the Issuer or such persons, or to enforce judgements against them obtained in courts in the U.S. predicated upon civil liabilities of the Issuer or such directors and officers under laws other than Korean law, including any judgement predicated upon U.S. federal securities laws. There is doubt as to the enforceability in Korea in original actions or in actions for enforcement of judgements of U.S. courts of civil liabilities predicated solely upon the federal securities laws of the United States.

FORWARD-LOOKING STATEMENTS

Certain statements in this Offering Circular constitute "forward-looking statements", including statements regarding the Issuer's expectations and projections for future operating performance and business prospects. The words "believe", "expect", "anticipate", "estimate", "project", "will", "aim", "will likely result", "will continue", "intend", "plan", "contemplate", "seek to", "future", "objective", "goal", "should", "will pursue" and similar expressions or variations of these expressions identify forward-looking statements. In addition, all statements other than statements of historical facts included in this Offering Circular, including, without limitation, those regarding the Issuer's financial position and results, business strategy, plans and objectives of management for future operations, including development plans and objectives relating to the Issuer's products and services, are forward-looking statements. Such forward-looking statements and any other projections contained in this Offering Circular (whether made by the Issuer or any third party) involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from the future results, performance or achievements expressed or implied by forward-looking statements. Such forward-looking statements are based on current beliefs, assumptions, expectations, estimates and projections regarding the Issuer's present and future business strategies and the environment in which the Issuer will operate in the future. Important factors that could cause some or all of those assumptions not to occur or cause the Issuer's actual results, performance or achievements to differ materially from those in the forward-looking statements include, among other things:

- the condition of and changes in the Korean, Asian or global economies, including changes in consumer confidence and spending;
- changes in interest rates;
- future levels of non-performing loans;
- changes in government regulations affecting the Issuer's businesses in Korea and in other jurisdictions where the Issuer operates;
- the Issuer's ability to successfully implement its business strategy; and
- competition in the financial services industry.

Additional factors that could cause the Issuer's actual results, performance or achievements to differ materially include, but are not limited to, those discussed under "*Investment Considerations*". Any forward-looking statements contained in this Offering Circular speak only as of the date of this Offering Circular. Each of the Issuer and the Dealers expressly disclaims any obligation or undertaking to release, publicly or otherwise, any updates or revisions to any forward-looking statement contained herein to reflect any change in the Issuer's expectations with regard thereto or any change in events, conditions, assumptions or circumstances on which any such statement was based.

CERTAIN DEFINED TERMS AND CONVENTIONS

The Issuer is the surviving entity resulting from a merger between Original Hana Bank (as defined below) and Korea Exchange Bank, which was completed in 2015. Upon completion of the merger, the Issuer changed its name to KEB Hana Bank. In February 2020, the Issuer changed its brand name to "Hana Bank" while maintaining "KEB Hana Bank" as its English legal name. See "*Hana Bank — History*." Accordingly, unless otherwise specified or the context otherwise requires, in this Offering Circular:

- References to "**we**," "**us**," "**our**," the "**Issuer**," the "**Bank**" and "**Hana Bank**" are to KEB Hana Bank.
- References to the "**Merger**" are to the merger between Original Hana Bank and Korea Exchange Bank on 1 September 2015.

- References to "**Original Hana Bank**" are to Hana Bank, the Issuer's predecessor which merged with and into Korea Exchange Bank through the Merger.
- References to "**Hana Financial Group**" are to Hana Financial Group, Inc., the Bank's holding company.

References to "**Korea**" are to the Republic of Korea. References to "**U.S.**" or the "**United States**" are to the United States of America. References to "**PRC**" or "**China**" are to the People's Republic of China. References to the "**Government**" are to the government of Korea. The "**Financial Services Commission**" or the "**FSC**" shall mean the Financial Services Commission of Korea, and the "**Financial Supervisory Service**" or the "**FSS**" shall mean the Financial Supervisory Service of Korea, the executive body of the FSC.

All references in this Offering Circular to "**Won**" and "**₩**" refer to the currency of Korea, those to "**U.S. dollars**," "**US$**" and "**U.S.$**" are to United States dollars, those to "**Japanese Yen**" are to the currency of Japan, those to "**S$**" are to the currency of Singapore, those to "**Sterling**" and "**£**" are to the currency of the United Kingdom, those to "**Chinese Renminbi**," "**Renminbi**" and "**RMB**" are to the currency of China and those to "**Euro**," "**euro**" and "**€**" are to the currency introduced at the start of the third stage of the European economic and monetary union pursuant to the Treaty establishing the European Community, as amended.

PRESENTATION OF FINANCIAL AND OTHER INFORMATION

The Issuer maintains its financial books and records and prepares its financial statements in Won in accordance with the Korean equivalent of International Financial Reporting Standards ("**K-IFRS**"), which differ in certain significant respects from generally accepted accounting principles in other countries, including generally accepted accounting principles in the United States ("**U.S. GAAP**"). The Issuer has made no attempt to identify or quantify the impact of differences between K-IFRS and U.S. GAAP.

Unless otherwise stated, all financial information contained in this Offering Circular is presented on a consolidated basis in accordance with K-IFRS together with, where applicable, accounting and reporting guidelines under Korean accounting standards applicable to the banking industry. Financial and other information contained in this Offering Circular regarding individual borrowers, groups or categories of borrowers or classifications by industry, geography, size or other factors, including information as to loans, credits, total exposures, allowances, collateral values, nonperforming loans and other items, has been derived solely from the Issuer's internal management information systems.

Unless otherwise stated, the financial data of the Issuer as of and for the years ended 31 December 2021, 2022 and 2023 contained in this Offering Circular have been derived from the audited consolidated financial statements of the Issuer included herein, which have been prepared in accordance with K-IFRS.

All references in this document to "**balance sheet**" are to the statement of financial position.

Under the Korean Banking Act (the "**Bank Act**"), assets accepted in trust by a bank in Korea must be segregated from its other assets in the accounts of that bank. Accordingly, banks, including the Issuer, engaged in the banking and trust businesses must maintain two separate accounts, the bank account and the trust account, and two separate sets of records, which provide details of their respective banking and trust businesses. All financial information contained in this Offering Circular relating to the Issuer is presented with respect to the Issuer's bank account only, unless stated otherwise.

Unless otherwise specified, all conversions of Won into U.S. dollars were made at the base rate under the market average exchange system, provided by Seoul Money Brokerage Services, Ltd. in Seoul for U.S. dollars against Won (the "**Market Average Exchange Rate**"). No representation is made that the Won or the U.S. dollar amounts referred to in this Offering Circular 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.

Any discrepancies in any table between totals and the sums of the amounts listed are due to rounding. References to billions are to thousands of millions.

In connection with the issue of any Tranche of Notes, the Dealer or Dealers (if any) named as the Stabilisation Manager(s) (or persons acting on behalf of any Stabilisation Manager(s)) in the applicable

Pricing Supplement may over-allot Notes or effect transactions with a view to supporting the market price of the Notes at a level higher than that which might otherwise prevail. However, there is no assurance that the Stabilisation Manager(s) (or persons acting on behalf of a Stabilisation Manager) will undertake stabilisation action. Any stabilisation action may begin on or after the date on which adequate public disclosure of the terms of the offer of the relevant Tranche of Notes is made and, if begun, may be ended at any time, but it must end no later than the earlier of 30 days after the issue date of the relevant Tranche of Notes and 60 days after the date of the allotment of the relevant Tranche of Notes. Any stabilisation action or over-allotment must be conducted by the relevant Stabilisation Manager(s) (or person(s) acting on behalf of Stabilisation Manager(s)) in accordance with all applicable laws and rules.

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DOCUMENTS INCORPORATED BY REFERENCE

The following documents shall be deemed to be incorporated in, and to form part of, this Offering Circular:

(a) the publicly available audited consolidated and audited separate financial statements and the publicly available unaudited consolidated and unaudited separate interim financial statements of the Issuer for the most recent financial period;

(b) each relevant Pricing Supplement; and

(c) all supplements or amendments to this Offering Circular circulated by the Issuer from time to time,

save that any statement contained herein or in a document which is deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purpose of this Offering Circular to the extent that a statement contained in any such subsequent document which is deemed to be incorporated by reference herein modifies or supersedes such earlier statement (whether expressly, by implication or otherwise).

The Issuer will provide, without charge, to each person to whom a copy of this Offering Circular has been delivered, upon the written request of such person, a copy of any or all of the documents deemed to be incorporated herein by reference unless such documents have been modified or superseded as specified above. Written requests for such documents should be directed to the Issuer at its registered office set out at the end of this Offering Circular. In addition, such documents will be available for inspection, free of charge at the specified office of Citibank, N.A., London Branch (the "**Principal Paying Agent**").

The Issuer will, in connection with the listing of the Notes on the Singapore Stock Exchange, so long as the rules of the Singapore Stock Exchange so require, in the event of any material change which is not reflected in this Offering Circular, prepare a supplement to this Offering Circular or publish a new Offering Circular for use in connection with any subsequent issue of the Notes to be listed on the Singapore Stock Exchange.

If the terms of the Programme are modified or amended in a manner which would make this Offering Circular, as supplemented, materially inaccurate or misleading, a new Offering Circular will be prepared.

GENERAL DESCRIPTION OF THE PROGRAMME

Under the Programme, the Issuer may from time to time issue Notes denominated in any currency and with any maturity, subject as set out herein. A summary of the terms and conditions of the Programme and the Notes appears below. The applicable terms of any Notes will be agreed between the Issuer and the relevant Dealer prior to the issue of the Notes and will be set out in the Terms and Conditions of the Notes endorsed on, or incorporated by reference into, the Notes, as modified and supplemented by the applicable Pricing Supplement attached to, or endorsed on, such Notes, as more fully described under "*Form of the Notes*" below.

This Offering Circular and any supplement will only be valid for the offering of Notes in an aggregate nominal amount of Notes which, when added to the aggregate nominal amount then outstanding of all Notes previously or simultaneously issued under the Programme, does not exceed U.S.$10,000,000,000 or its equivalent in other currencies. For the purpose of calculating the U.S. dollar equivalent of the aggregate nominal amount of Notes issued under the Programme from time to time:

(a) the U.S. dollar equivalent of Notes denominated in another Specified Currency (as specified in the applicable Pricing Supplement in relation to the Notes, described under "*Form of the Notes*" below) shall be determined, at the discretion of the Issuer, either as of the date on which agreement is reached for the issue of Notes or on the preceding day on which commercial banks and foreign exchange markets are open for business in London, in each case on the basis of the spot rate for the sale of the U.S. dollar against the purchase of such Specified Currency in the London foreign exchange market quoted by any leading international bank selected by the Issuer on the relevant day of calculation;

(b) the U.S. dollar equivalent of Dual Currency Notes, Index Linked Notes and Partly Paid Notes (each as specified in the applicable Pricing Supplement in relation to the Notes, described under "*Form of the Notes*" below) shall be calculated in the manner specified above by reference to the original nominal amount on issue of such Notes (in the case of Partly Paid Notes regardless of the subscription price paid); and

(c) the U.S. dollar equivalent of Zero Coupon Notes (as specified in the applicable Pricing Supplement in relation to the Notes, described under "*Form of the Notes*" below) and other Notes issued at a discount or premium shall be calculated in the manner specified above by reference to the net proceeds received by the Issuer for the relevant issue.

SUMMARY OF THE PROGRAMME

The following summary does not purport to be complete and is taken from, and is qualified in its entirety by, the remainder of this Offering Circular and, in relation to the terms and conditions of any particular Tranche of Notes, the applicable Pricing Supplement. Words and expressions defined in "*Form of the Notes*" and "*Terms and Conditions of the Notes*" below shall have the same meanings in this summary.

Issuer:	KEB Hana Bank (in relation to each Tranche of Notes, the applicable Pricing Supplement will indicate whether the Issuer is acting through its principal office in Korea or through any of its branches)
Legal Entity Identifier:	6RPK2YDJN6L35AS0M510
Description:	Global Medium Term Note Programme
Arranger:	BNP Paribas
Dealers:	BNP Paribas, Citigroup Global Markets Inc., Crédit Agricole Corporate and Investment Bank, Daiwa Capital Markets Singapore Limited, Hana Securities Co., Ltd., The Hongkong and Shanghai Banking Corporation Limited, ING Bank N.V., Singapore Branch, J.P. Morgan Securities plc, KEB Hana Global Finance Limited, Merrill Lynch International, Mizuho Securities Asia Limited, MUFG Securities EMEA plc, Société Générale, Standard Chartered Bank, UBS AG Hong Kong Branch, Wells Fargo Securities International Limited and Wells Fargo Securities, LLC. and any other Dealers appointed in accordance with the Programme Agreement (as defined under "*Subscription and Sale and Transfer and Selling Restrictions*").
Certain Restrictions:	Each issue of Notes denominated in a currency in respect of which particular laws, guidelines, regulations, restrictions or reporting requirements apply will only be issued in circumstances which comply with such laws, guidelines, regulations, restrictions or reporting requirements from time to time (see "*Subscription and Sale and Transfer and Selling Restrictions*").
Principal Paying Agent, Transfer Agent, Exchange Agent and Calculation Agent:	Citibank, N.A., London Branch
Registrar, CMU Lodging and Paying Agent, CMU Transfer Agent and CMU Registrar:	Citicorp International Limited
Programme Size:	Up to U.S.$10,000,000,000 (or its equivalent in other currencies calculated as described under "*General Description of the Programme*") outstanding at any time. The Issuer may increase the amount of the Programme in accordance with the terms of the Programme Agreement.
Distribution:	Notes may be distributed by way of private or public placement and in each case on a syndicated or non-syndicated basis.
Currencies:	Subject to any applicable legal or regulatory restrictions, any currency agreed between the Issuer and the relevant Dealer.
Maturities:	Such maturities as may be agreed between the Issuer and the relevant Dealer and as indicated in the applicable Pricing Supplement, subject to such minimum or maximum maturities as may be allowed or required from time to time by the relevant central bank (or equivalent

	body) or any laws or regulations applicable to the Issuer or the relevant Specified Currency; **provided that** Tier II Subordinated Notes shall have a minimum maturity of five years and Tier I Subordinated Notes shall be undated perpetual securities with no fixed maturity.
Issue Price:	Notes may be issued on a fully-paid or a partly-paid basis and at an issue price which is at par or at a discount to, or premium over, par.
Form of Notes:	The Notes will be issued in bearer or registered form as described in "*Form of the Notes*". Registered Notes will not be exchangeable for Bearer Notes and *vice versa*.
Fixed Rate Notes:	Fixed interest will be payable on such date or dates as may be agreed between the Issuer and the relevant Dealer (as indicated in the applicable Pricing Supplement) and on redemption and will be calculated on the basis of such Day Count Fraction as may be agreed between the Issuer and the relevant Dealer.
Floating Rate Notes:	Floating Rate Notes will bear interest at a rate determined either: (i) on the same basis as the floating rate under a notional interest-rate swap transaction in the relevant Specified Currency governed by an agreement incorporating the 2006 ISDA Definitions (as published by the International Swaps and Derivatives Association, Inc., and as amended and updated as at the Issue Date of the first Tranche of the Notes of the relevant Series); or (ii) on the basis of a reference rate appearing on the agreed screen page of a commercial quotation service; or (iii) on such other basis as may be agreed between the Issuer and the relevant Dealer, as indicated in the applicable Pricing Supplement. The Margin (if any) relating to such floating rate will be agreed between the Issuer and the relevant Dealer for each series of Floating Rate Notes.
Index Linked Notes:	Payments of interest in respect of Index Linked Interest Notes will be calculated by reference to such index and/or formula, to the extent permitted by applicable law, as the Issuer and the relevant Dealer may agree (as indicated in the applicable Pricing Supplement).
Other provisions in relation to Floating Rate Notes and Index Linked Interest Notes:	Floating Rate Notes and Index Linked Interest Notes may also have a maximum interest rate, a minimum interest rate or both. Interest on Floating Rate Notes and Index Linked Interest Notes in respect of each Interest Period, as selected prior to issue by the Issuer and the relevant Dealer, will be payable on such Interest Payment Dates specified in, or determined pursuant to, the applicable Pricing Supplement and will be calculated on the basis of the relevant Day Count Fraction, as may be agreed between the Issuer and the relevant Dealer.
Dual Currency Notes:	Payments (whether in respect of principal or interest and whether at maturity or otherwise) in respect of Dual Currency Notes will be made in such currencies and based on such rates of exchange, as the Issuer and the relevant Dealer may agree (as indicated in the applicable Pricing Supplement).

Zero Coupon Notes:	Zero Coupon Notes will be offered and sold at a discount to their nominal amount and will not bear interest other than in the case of late payment.
Redemption:	The applicable Pricing Supplement will indicate either that the relevant Notes cannot be redeemed prior to their stated maturity (other than in specified instalments (see below), if applicable, or for taxation reasons (in the case of Subordinated Notes, only with the prior approval of the FSS or of such other relevant regulatory authorities in Korea, if necessary) or, in the case of Senior Notes, following an Event of Default or, in the case of Subordinated Notes, following a Bankruptcy Event or Liquidation Event of the Bank) or that such Notes will be redeemable at the option of the Issuer (in the case of Subordinated Notes, only with the prior approval of the FSS or of such other relevant regulatory authorities in Korea, if necessary, and only after 5 years from the issuance date of Subordinated Notes) upon giving not less than 15 nor more than 30 days' irrevocable notice (or such other notice period (if any) as is indicated in the applicable Pricing Supplement) to the Noteholders, and/or (except in the case of Subordinated Notes) at the option of the Noteholders, upon giving not less than 15 nor more than 30 days' irrevocable notice (or such other notice period (if any) as is indicated in the applicable Pricing Supplement) to the Issuer, on a date or dates specified prior to such stated maturity and at a price or prices and on such terms as are indicated in the applicable Pricing Supplement. The applicable Pricing Supplement may provide that Notes may be repayable in two or more instalments of such amounts and on such dates as are indicated in the applicable Pricing Supplement.
Denomination of Notes:	Notes will be issued in such denominations as may be agreed between the Issuer and the relevant Dealer and as indicated in the applicable Pricing Supplement save that the minimum denomination of each Note will be such as may be allowed or required from time to time by the relevant central bank (or equivalent body) or any laws or regulations applicable to the relevant Specified Currency. Definitive IAI Registered Notes sold in the United States to Institutional Accredited Investors pursuant to Section 4(a)(2) of the Securities Act or in a transaction otherwise exempt from registration under the Securities Act shall be issued in minimum denominations of U.S.$500,000 (or its equivalent in any other currency) and higher integral multiples of U.S.$1,000 (or its equivalent as aforesaid).
Taxation:	All payments in respect of the Notes will be made without deduction for or on account of withholding taxes imposed within Korea or any Specified Country, subject as provided in Condition 9. In the event that any such deduction is made, the Issuer will, save in certain limited circumstances provided in Condition 9, be required to pay additional amounts to cover the amounts so deducted.
Negative Pledge:	The terms of the Senior Notes will contain a negative pledge provision as further described in Condition 4.
Cross-Acceleration:	The terms of the Senior Notes will contain a cross-acceleration provision as further described in Condition 11.

Status of the Senior Notes:	The Senior Notes and any relative Receipts and Coupons will constitute direct, unconditional, unsubordinated and (subject to Condition 4) unsecured obligations of the Issuer which will rank *pari passu* among themselves and will rank at least *pari passu* with all other present and future unsecured (subject to Condition 4) and unsubordinated obligations of the Issuer, save for such as may be preferred by mandatory provisions of applicable law.
Status of the Subordinated Notes:	The Subordinated Notes and any relative Receipts and Coupons will constitute direct, general, subordinated and unsecured obligations of the Issuer. The rights of holders of Subordinated Notes will be subordinated in right of payment in the manner provided in Conditions 3(b) and 3(c).
Write-off of the Subordinated Notes upon a Trigger Event	The Subordinated Notes will be subject to Write-off upon the occurrence of a Trigger Event, as provided in Condition 8. See "*Investment Considerations — Risks relating to the Notes — The Notes that are Subordinated Notes may be fully written off upon the occurrence of certain trigger events, in which case holders of the Subordinated Notes will lose all of their investment*".
Listing:	Approval in-principle has been received from the Singapore Stock Exchange in connection with the Programme and application will be made for the listing and quotation of Notes that may be issued pursuant to the Programme and which are agreed at or prior to the time of issue thereof, to be so listed on the Singapore Stock Exchange. Such permission will be granted when such Notes have been admitted for listing and quotation on the Singapore Stock Exchange. The Singapore Stock Exchange assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained herein. Approval in-principle from, admission to the Official List of, and listing and quotation of any Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Programme or the Notes. For so long as any Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, such Notes, if traded on the Singapore Stock Exchange, will be traded in a minimum board lot size of S$200,000 or its equivalent in foreign currencies. Notes may also be listed on such other or further stock exchange(s) as may be agreed between the Issuer and the relevant Dealer in relation to each Series. The Pricing Supplement relating to each Tranche of Notes will state whether or not and, if so, on which stock exchange(s) the Notes are to be listed. Notes not listed on a stock exchange may also be issued.
Governing Law:	The Notes and all non-contractual obligations arising out of or in connection with the Notes will be governed by, and construed in accordance with, English law, except for Conditions 3(b) (*Status of the Subordinated Notes*) and 3(c) (*Subordination*), which will be governed by, and construed in accordance with, Korean law.
Notes Issued as Green Bonds, Social Bonds or Sustainability Bonds:	The Issuer may agree at the relevant issue date of any Notes designated as Green Bonds, Social Bonds or Sustainability Bonds (as described in "*Use of Proceeds*") to allocate the amount equivalent to the net proceeds towards the financing and/or refinancing of Green Eligible Categories, Social Eligible Categories (each as defined in "*Use of Proceeds*") or a combination of the two categories (in the case of Sustainability Bonds) in accordance with certain prescribed

	eligibility criteria as described under the Issuer's Sustainable Financing Framework. See "*Sustainable Financing Framework*". However, it would not be an event of default under the Green Bonds, Social Bonds or Sustainability Bonds if (i) the Issuer were to fail to comply with such undertaking or were to fail to allocate the amount equivalent to the net proceeds in the manner specified in the applicable Pricing Supplement and/or (ii) any Second Party Opinion issued in connection with such Green Bonds, Social Bonds or Sustainability Bonds were to be withdrawn. Any failure to allocate the amount equivalent to the net proceeds of any Series of Green Bonds, Social Bonds or Sustainability Bonds in connection with green projects, social projects or sustainability projects and/or any failure to meet, or to continue to meet, the investment requirements of certain environmentally or socially focused investors with respect to such Green Bonds, Social Bonds or Sustainability Bonds may affect the value and/or trading price of the Green Bonds, Social Bonds or Sustainability Bonds, and/or may have consequences for certain investors with portfolio mandates to invest in green assets, social assets or sustainability assets.
Selling Restrictions:	There are selling restrictions in relation to the United States, the European Economic Area, the United Kingdom, Japan, Hong Kong, Singapore, Canada, United Arab Emirates (including the Dubai International Finance Centre), Switzerland, Korea and such other restrictions as may be required in connection with the offering and sale of a particular Tranche of Notes. See "*Subscription and Sale and Transfer and Selling Restrictions*".
ISDA Determination / ISDA Definitions	Notwithstanding anything included in the ISDA Definitions and/or ISDA Determinations to the contrary, the Issuer agrees that the Citibank, N.A., London Branch in its capacity as Calculation Agent or Principal Paying Agent will have no obligation to exercise any discretion (including, but not limited to, determinations of alternative or substitute benchmarks, successor reference rates, screen pages, interest adjustment factors/fractions or spreads, market disruptions, benchmark amendment conforming changes or selection and polling of reference banks), and to the extent the ISDA Definitions and/or ISDA Determinations require, for a particular Series of Notes, the Calculation Agent and/ or Principal Paying Agent to exercise any such discretions and/or make such determinations and/or take such actions, such references shall be construed as the Issuer (or its financial adviser or alternate agent appointed by the Issuer) exercising such discretions and/or determinations and/or taking such actions and not the Calculation Agent and/ or Principal Paying Agent.

FORM OF THE NOTES

The Notes of each Series will be in either bearer form, with or without interest coupons attached, or registered form, without interest coupons attached. Bearer Notes will be issued outside the United States in reliance on Regulation S under the Securities Act ("**Regulation S**") and Registered Notes will be issued both outside the United States in reliance on the exemption from registration provided by Regulation S and within the United States in reliance on Rule 144A or Regulation D under the Securities Act.

Bearer Notes

Each Tranche of Bearer Notes will be initially issued in the form of either a temporary global note (a "**Temporary Global Note**") or a permanent global note (a "**Permanent Global Note**") as indicated in the applicable Pricing Supplement, which, in either case, will be delivered on or prior to the original issue date of the Tranche to either (i) a common depositary (the "**Common Depositary**") for Euroclear Bank S.A./N.V. ("**Euroclear**") and Clearstream Banking S.A. ("**Clearstream, Luxembourg**") or (ii) a sub-custodian for the Hong Kong Monetary Authority ("**HKMA**") as operator of the Central Moneymarkets Unit Service (the "**CMU Service**"). Whilst any Bearer Note is represented by a Temporary Global Note, payments of principal, interest (if any) and any other amount payable in respect of the Notes due prior to the Exchange Date (as defined below) will be made against presentation of the Temporary Global Note only to the extent that certification (in a form to be provided) to the effect that the beneficial owners of interests in such Bearer Note are not U.S. persons or persons who have purchased for resale to any U.S. person, as required by U.S. Treasury regulations, has been received by Euroclear and/or Clearstream, Luxembourg and/or Citicorp International Limited (the "**CMU Lodging Agent**") and (in the case of a Temporary Global Note delivered to the Common Depositary for Euroclear and Clearstream, Luxembourg) Euroclear and/or Clearstream, Luxembourg, as applicable, has given a like certification (based on the certifications it has received) to the Principal Paying Agent.

On and after the date (the "**Exchange Date**") which is 40 days after a Temporary Global Note is issued, interests in such Temporary Global Note will be exchangeable (free of charge) upon a request as described therein either for (i) interests in a Permanent Global Note of the same Series or (ii) for definitive Bearer Notes of the same Series with, where applicable, receipts, interest coupons and talons attached (as indicated in the applicable Pricing Supplement and subject, in the case of definitive Bearer Notes, to such notice period as is specified in the applicable Pricing Supplement), in each case against certification of beneficial ownership as described above unless such certification has already been given, **provided that** purchasers in the United States and certain U.S. persons will not be able to receive definitive Bearer Notes. The CMU Service may require that any such exchange for a Permanent Global Note is made in whole and not in part and in such event, no such exchange will be effected until all relevant account holders (as set out in a CMU Instrument Position Report (as defined in the rules of the CMU Service) or any other relevant notification supplied to the CMU Lodging Agent by the CMU Service) have so certified. The holder of a Temporary Global Note will not be entitled to collect any payment of interest, principal or other amount due on or after the Exchange Date unless, upon due certification, exchange of the Temporary Global Note for an interest in a Permanent Global Note or for definitive Bearer Notes is improperly withheld or refused.

Payments of principal, interest (if any) or any other amounts on a Permanent Global Note (if not held through the CMU Service) will be made through Euroclear and/or Clearstream, Luxembourg against presentation or surrender (as the case may be) of the Permanent Global Note without any requirement for certification.

In respect of a Bearer Global Note held through the CMU Service, any payments of principal, interest (if any) or any other amounts shall be made to the person(s) for whose account(s) interests in the relevant Bearer Global Note are credited (as set out in a CMU Instrument Position Report or any other relevant notification supplied to the CMU Lodging Agent by the CMU Service) and save in the case of final payment, no presentation of the relevant Bearer Global Note shall be required for such purpose.

The applicable Pricing Supplement will specify that a Permanent Global Note will be exchangeable (free of charge), in whole but not in part, for definitive Notes with, where applicable, receipts, interest coupons and talons attached upon the occurrence of an Exchange Event. For these purposes, "**Exchange Event**" means that (i) an Event of Default (as defined in Condition 11) has occurred and is continuing, (ii) the Issuer has been notified that Euroclear and/or Clearstream, Luxembourg have been or, in the case of Notes held through the CMU Service, the CMU Service has been, closed for business for a continuous period of 14 days (other than by reason of holiday, statutory or otherwise) or have announced an intention permanently to cease business or have in fact done so and no alternative clearing system is available or (iii) the Issuer has or will become obliged to pay additional amounts as provided for or referred to in Condition 9 which would not be required were the Notes represented by the Permanent Global Note in definitive form (**provided that**, in certain circumstances where the Notes are held through Euroclear and/or Clearstream, Luxembourg, and/or the CMU Service, such adverse tax consequences are as a result of a change in, or amendment to, the laws or regulation (taxation or otherwise) in, or of, Korea). The Issuer will promptly give notice to Noteholders and the relevant agents in accordance with Condition 15 if an Exchange Event occurs. In the event of the occurrence of an Exchange Event, in the case of Notes held by a Common Depositary for Euroclear and/or Clearstream, Luxembourg, Euroclear and/or Clearstream, Luxembourg (acting on the instructions of any holder of an interest in such Permanent Global Note) and/or, in the case of Notes held through the CMU Service, the relevant account holders therein, may give notice to the Principal Paying Agent or, as the case may be, the CMU Lodging Agent, requesting exchange and, in the event of the occurrence of an Exchange Event as described in (iii) above, the Issuer may also give notice to the Principal Paying Agent or, as the case may be, the CMU Lodging Agent, requesting exchange. Any such exchange shall occur not later than 45 days after the date of receipt of the first relevant notice by the Principal Paying Agent or, as the case may be, the CMU Lodging Agent.

The following legend will appear on all Bearer Notes which have an original maturity of more than 365 days and on all receipts and interest coupons relating to such Notes:

"ANY U.S. PERSON WHO HOLDS THIS OBLIGATION WILL BE SUBJECT TO LIMITATIONS UNDER THE UNITED STATES INCOME TAX LAWS, INCLUDING THE LIMITATIONS PROVIDED IN SECTIONS 165(j) AND 1287(a) OF THE U.S. INTERNAL REVENUE CODE OF 1986, AS AMENDED."

The sections referred to provide that U.S. holders, with certain exceptions, will not be entitled to deduct any loss on Bearer Notes, receipts or interest coupons and will not be entitled to capital gains treatment of any gain on any sale, disposition, redemption or payment of principal in respect of such Notes, receipts or interest coupons.

Notes which are represented by a Bearer Global Note will only be transferable in accordance with the rules and procedures for the time being of Euroclear or Clearstream, Luxembourg, or the CMU Service, as the case may be.

Registered Notes

The Registered Notes of each Tranche offered and sold in reliance on Regulation S, which will be sold to non-U.S. persons outside the United States, will initially be represented by a global note in registered form (a "**Regulation S Global Note**"). To the extent Category 2 is applicable at the time of the offering pursuant to Rule 903 under Regulation S, prior to expiry of the distribution compliance period (as defined in Regulation S) applicable to each Tranche of Notes, beneficial interests in a Regulation S Global Note may not be offered or sold to, or for the account or benefit of, a U.S. person save as otherwise provided in Condition 2 and may not be held otherwise than through Euroclear or Clearstream, Luxembourg or the CMU Service and such Regulation S Global Note will bear a legend regarding such restrictions on transfer.

The Registered Notes of each Tranche may only be offered and sold in the United States or to U.S. persons in private transactions (i) to "qualified institutional buyers" within the meaning of Rule 144A under the Securities Act ("**QIB**") or (ii) to "accredited investors" (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act) that are institutions ("**Institutional Accredited Investors**") who agree to purchase the Notes for their own account and not with a view to the distribution thereof. The Registered Notes of each Tranche sold to QIBs will be represented by a restricted permanent global note in registered form (a "**Restricted Global Note**" and, together with a Regulation S Global Note, the "**Registered Global Notes**").

Registered Global Notes will be deposited with either (i) a custodian for, and registered in the name of a nominee of, the Depositary Trust Company ("**DTC**") for the accounts of Euroclear and Clearstream, Luxembourg, (ii) a common depositary for, and registered in the name of a common nominee of, Euroclear and Clearstream, Luxembourg or (iii) a sub-custodian for the HKMA as operator of the CMU Service, in each case, as specified in the applicable Pricing Supplement. Persons holding beneficial interests in Registered Global Notes will be entitled or required, as the case may be, under the circumstances described below, to receive physical delivery of definitive Notes in fully registered form.

The Registered Notes of each Tranche sold to Institutional Accredited Investors will be in definitive form, registered in the name of the holder thereof ("**Definitive IAI Registered Notes**"). Unless otherwise set forth in the applicable Pricing Supplement, Definitive IAI Registered Notes will be issued only in minimum denominations of U.S.$500,000 and integral multiples of U.S.$1,000 in excess thereof (or the approximate equivalents in the applicable Specified Currency). Definitive IAI Registered Notes will be subject to the restrictions on transfer set forth therein and will bear the restrictive legend described under "*Subscription and Sale and Transfer and Selling Restrictions*". Institutional Accredited Investors that hold Definitive IAI Registered Notes may not hold such Notes through DTC, Euroclear, Clearstream, Luxembourg or the CMU Service, but transferees acquiring the Notes in transactions exempt from Securities Act registration pursuant to Regulation S or Rule 144 under the Securities Act (if available) may elect to do so upon satisfaction of the requirements applicable to such transfer as described under "*Subscription and Sale and Transfer and Selling Restrictions*". The Restricted Global Note and the Definitive IAI Registered Notes will be subject to certain restrictions on transfer set forth therein and will bear a legend regarding such restrictions.

Payments of principal, interest and any other amount in respect of the Registered Global Notes will, in the absence of provision to the contrary, be made to the person shown on the Register (as defined in Condition 1) as the registered holder of the Registered Global Notes. None of the Issuer, any Paying Agent or the Registrar will have any responsibility or liability for any aspect of the records relating to or payments or deliveries made on account of beneficial ownership interests in the Registered Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Payments of principal, interest or any other amount in respect of the Registered Notes in definitive form will, in the absence of provision to the contrary, be made to the persons shown on the Register on the relevant Record Date (as defined in Condition 6(b)) immediately preceding the due date for payment in the manner provided in that Condition.

Interests in a Registered Global Note will be exchangeable (free of charge), in whole but not in part, for definitive Registered Notes without receipts, interest coupons or talons attached only upon the occurrence of an Exchange Event. For these purposes, "**Exchange Event**" means that (i) an Event of Default has occurred and is continuing, (ii) in the case of Notes registered in the name of a nominee for DTC, either DTC has notified the Issuer that it is unwilling or unable to continue to act as depository for the Notes and no alternative clearing system is available or DTC has ceased to constitute a clearing agency registered under the Exchange Act, (iii) in the case of Notes registered in the name of a nominee for a common depositary for Euroclear and Clearstream, Luxembourg, the Issuer has been notified that both Euroclear and Clearstream, Luxembourg have and, in the case of Notes held through the CMU Service, the Issuer has been notified that the CMU Service has, been closed for business for a continuous period of 14 days (other than by reason of holiday, statutory or otherwise) or have announced an intention permanently to cease business or have in fact done so and, in any such case, no successor clearing system is available or (iv) the Issuer has or will become subject to adverse tax consequences which would not be suffered were the Notes represented by the Registered Global Note in definitive form. The Issuer will promptly give notice to Noteholders and the relevant agents in accordance with Condition 15 if an Exchange Event occurs. In the event of the occurrence of an Exchange Event, (i) in the case of Notes registered in the name of a nominee for DTC or a nominee for a Common Depositary for Euroclear and/or Clearstream, Luxembourg, DTC, Euroclear and/or Clearstream, Luxembourg (acting on the instructions of any holder of an interest in such Registered Global Note) and/or (ii) in the case of Notes held through the CMU Service, the relevant account holders therein, may give notice to the Registrar, or as the case may be, the CMU Lodging Agent requesting exchange and, in the event of the occurrence of an Exchange Event as described in (iv) above, the Issuer may also give notice to the Registrar or, as the case may be, the CMU Lodging Agent requesting exchange. Any such exchange shall occur not later than 10 days after the date of receipt of the first relevant notice by the Registrar or, as the case may be, the CMU Lodging Agent.

Transfer of Interests

Interests in a Registered Global Note may, subject to compliance with all applicable restrictions, be transferred to a person who wishes to hold such interest in another Registered Global Note or in the form of a Definitive IAI Registered Note and Definitive IAI Registered Notes may, subject to compliance with all applicable restrictions, be transferred to a person who wishes to hold such Notes in the form of an interest in a Registered Global Note. No beneficial owner of an interest in a Registered Global Note will be able to transfer such interest, except in accordance with the applicable procedures of DTC, Euroclear and Clearstream, Luxembourg and the CMU Service, in each case to the extent applicable. Registered Notes are also subject to the restrictions on transfer set forth therein and will bear a legend regarding such restrictions, see "*Subscription and Sale and Transfer and Selling Restrictions*".

CMU Notes

Unless otherwise specified in the applicable Pricing Supplement, CMU Notes will initially be issued in registered form and represented by a global certificate registered in the name of HKMA, in its capacity as operator of the CMU Service. Certain special provisions apply to such CMU Notes. See "*Book-Entry Clearance Systems — CMU Notes*".

General

Pursuant to the Agency Agreement (as defined under "*Terms and Conditions of the Notes*"), the Principal Paying Agent or the CMU Lodging Agent, as the case may be, shall arrange that, where a further Tranche of Notes is issued which is intended to form a single Series with an existing Tranche of Notes, the Notes of such further Tranche shall be assigned a common code and ISIN and, where applicable, a CUSIP and CINS number and/or CMU instrument number which are different from the common code, ISIN, CUSIP, CINS and CMU instrument number assigned to Notes of any other Tranche of the same Series until at least the expiry of the distribution compliance period applicable to the Notes of such Tranche.

For so long as any of the Notes is represented by a Global Note held on behalf of Euroclear, Clearstream, Luxembourg and/or the CMU Service, each person (other than Euroclear, Clearstream, Luxembourg or the CMU Service) who is for the time being shown in the records of Euroclear, Clearstream, Luxembourg or the CMU Service as the holder of a particular nominal amount of such Notes (in which regard any certificate or other document issued by Euroclear, Clearstream, Luxembourg and/or the CMU Service as to the nominal amount of such Notes standing to the account of any person shall be conclusive and binding for all purposes save in the case of manifest error) shall be treated by the Issuer and its agents as the holder of such nominal amount of such Notes for all purposes other than with respect to the payment of principal or interest on such nominal amount of such Notes, for which purpose the bearer of the relevant Bearer Global Note or the registered holder of the relevant Registered Global Note shall be treated by the Issuer and its agents as the holder of such nominal amount of such Notes in accordance with and subject to the terms of the relevant Global Note and the expressions "**Noteholder**" and "**holder of Notes**" and related expressions shall be construed accordingly. Notwithstanding the above, if a Note is held through the CMU Service, any payment that is made in respect of such Note shall be made at the direction of the bearer or the registered holder to the person(s) for whose account(s) interests in such Note are credited as being held through the CMU Service in accordance with the CMU Rules at the relevant time as notified to the CMU Lodging Agent by the CMU Service in a relevant CMU Instrument Position Report or any other relevant notification by the CMU Service (which notification, in either case, shall be conclusive evidence of the records of the CMU Service as to the identity of any accountholder and the principal amount of any Note credited to its account, save in the case of manifest error) and such payments shall discharge the obligation of the Issuer in respect of that payment under such Note.

So long as DTC or its nominee is the registered owner or holder of a Registered Global Note, DTC or such nominee, as the case may be, will be considered the sole owner or holder of the Notes represented by such Registered Global Note for all purposes under the Agency Agreement and such Notes except to the extent that in accordance with DTC's published rules and procedures any ownership rights may be exercised by its participants or beneficial owners through participants.

Any reference herein to Euroclear and/or Clearstream, Luxembourg and/or DTC and/or the CMU Service shall, whenever the context so permits, be deemed to include a reference to any additional or alternative clearing system specified in the applicable Pricing Supplement.

A Note may be accelerated by the holder thereof in certain circumstances described in Condition 11. In such circumstances, where any Note is still represented by a Global Note and the Global Note (or any part thereof) has become due and repayable in accordance with the Terms and Conditions of such Notes and payment in full of the amount due has not been made in accordance with the provisions of the Global Note then holders of interests in such Global Note credited to their accounts with Euroclear and/or Clearstream, Luxembourg and/or DTC and/or the CMU Service, as the case may be, will become entitled to proceed directly against the Issuer on the basis of statements of account provided by Euroclear, Clearstream, Luxembourg, DTC and the CMU Service on and subject to the terms of a deed of covenant (the "**Deed of Covenant**") dated 8 January 2016 and executed by the Issuer. In addition, holders of interests in such Global Note credited to their accounts with DTC may require DTC to deliver Definitive Notes in registered form in exchange for their interest in such Global Note in accordance with DTC's standard operating procedures.

For so long as any Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, in the event that the Global Note representing such Notes is exchanged for definitive Notes, the Issuer shall appoint and maintain a Paying Agent in Singapore, where such definitive Notes may be presented or surrendered for payment or redemption. In addition, in the event the Global Note representing such Notes is exchanged for definitive Notes, an announcement of such exchange will be made by or on behalf of the Issuer through the Singapore Stock Exchange. Such announcement will include all material information with respect to the delivery of the definitive Notes, including details of the Paying Agent in Singapore.

Form of Pricing Supplement

Set out below is the form of Pricing Supplement which will be completed for each Tranche of Notes issued under the Programme.

[MIFID II PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET — Solely for the purposes of [the/each] manufacturer's product approval process, the target market assessment in respect of the securities has led to the conclusion that: (i) the target market for the securities is eligible counterparties and professional clients only, each as defined in Directive 2014/65/EU (as amended, "MiFID II"); and (ii) all channels for distribution of the securities to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the securities (a "distributor") should take into consideration the manufacturer's target market assessment; however, a distributor subject to MiFID II is responsible for undertaking its own target market assessment in respect of the securities (by either adopting or refining the manufacturer's target market assessment) and determining the appropriate distribution channels.]

[UK MIFIR PRODUCT GOVERNANCE / PROFESSIONAL INVESTORS AND ECPS ONLY TARGET MARKET — Solely for the purposes of [the/each] manufacturer's product approval process, the target market assessment in respect of the securities has led to the conclusion that: (i) the target market for the securities is only eligible counterparties, as defined in the FCA Handbook Conduct of Business Sourcebook, and professional clients, as defined in Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 ("UK MiFIR"); and (ii) all channels for distribution of the Notes to eligible counterparties and professional clients are appropriate. Any person subsequently offering, selling or recommending the securities (a "distributor") should take into consideration the manufacturer's target market assessment; however, a distributor subject to the FCA Handbook Product Intervention and Product Governance Sourcebook is responsible for undertaking its own target market assessment in respect of the securities (by either adopting or refining the manufacturer's target market assessment) and determining the appropriate distribution channels.]

[PROHIBITION OF SALES TO EEA RETAIL INVESTORS — The securities are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the European Economic Area ("EEA"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); (ii) a customer within the meaning of Directive (EU) 2016/97 (the "Insurance Distribution Directive"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (iii) not a qualified investor as defined in Regulation (EU) 2017/1129 (the "Prospectus Regulation"). Consequently no key information document required by Regulation (EU) 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the securities or otherwise making them available to retail investors in the EEA has been prepared and therefore, offering or selling the securities or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.]

[PROHIBITION OF SALES TO UK RETAIL INVESTORS — The securities are not intended to be offered, sold or otherwise made available to and should not be offered, sold or otherwise made available to any retail investor in the United Kingdom ("UK"). For these purposes, a retail investor means a person who is one (or more) of: (i) a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (the "EUWA"); (ii) a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (the "FSMA") and any rules or regulations made under the FSMA to implement the Insurance Distribution Directive, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or (iii) not a qualified investor as defined in Article 2 of the Prospectus Regulation as it forms part of domestic law by virtue of the EUWA (the "UK Prospectus Regulation"). Consequently no key information document required by the Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the "UK PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.]

[Notification under Section 309B(1)(c) of the Securities and Futures Act 2001 of Singapore (the "SFA") — The Issuer has determined, and hereby notifies all relevant persons (as defined in Section 309A(1) of the

SFA), that the Notes are [prescribed capital markets products [OR] capital markets products other than prescribed capital markets products]* (as defined in the Securities and Futures (Capital Markets Products) Regulations 2018 of Singapore) and [Excluded Investment Products [OR] Specified Investment Products]* (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).]

**** To delete accordingly.***

[Date]

KEB HANA BANK

[(acting through its [●] branch)]

Issue of [Aggregate Nominal Amount of Tranche] [Title of Notes]

Issued Pursuant to the U.S.$10,000,000,000 Global Medium Term Note Programme

This document constitutes the Pricing Supplement relating to the issue of Notes described herein. Terms used herein shall be deemed to be defined as such for the purposes of the Terms and Conditions of the Notes set forth in the Offering Circular dated [date] as amended or supplemented from time to time (the "Offering Circular"). This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with the Offering Circular. Full information on the Issuer and the offer of the Notes is only available on the basis of this Pricing Supplement and the Offering Circular.

[The following language applies if the Notes rely on the exemption as set out in Article 2-2-2, Paragraph 2, Item 3 of the Securities Issuance and Disclosure Regulations promulgated by the Financial Services Commission of Korea.]

The Notes have not been and will not be registered with the Financial Services Commission of Korea under the Financial Investment Services and Capital Markets Act of Korea. Accordingly, the Notes may not be offered, delivered, or sold, directly or indirectly, in the Republic of Korea ("Korea") or to, or for the account or benefit of, any resident of Korea (as defined in the Foreign Exchange Transaction Act of Korea and the rules and regulations promulgated thereunder) or to others for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except as otherwise permitted under applicable Korean laws and regulations. In addition, during the first year after the issuance of the Notes, the Notes may not be transferred to any resident of Korea other than a "qualified institutional buyer" (a "Korean QIB" as defined under the Securities Issuance and Disclosure Regulations) who is registered with the Korea Financial Investment Association as a Korean QIB, provided that the amount of the Notes acquired by the Korean QIBs in the primary market is limited to not more than 20% of the aggregate principal amount of the Notes.

[The following language applies if the Notes rely on the exemption as set out in Article 2-2-2, Paragraph 2 (other than Item 3) of the Securities Issuance and Disclosure Regulations promulgated by the Financial Services Commission of Korea.]

The Notes have not been and will not be registered with the Financial Services Commission of Korea under the Financial Investment Services and Capital Markets Act of Korea. Accordingly, the Notes may not be offered, delivered, or sold, directly or indirectly, in the Republic of Korea ("Korea") or to, or for the account or benefit of, any resident of Korea (as defined in the Foreign Exchange Transaction Act of Korea and the rules and regulations promulgated thereunder) or to others for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except as otherwise permitted under applicable Korean laws and regulations. In addition, during the first year after the issuance of the Notes, the Notes may not be transferred to any resident of Korea except as otherwise permitted under applicable Korean laws and regulations.

Any person making or intending to make an offer of the Notes may only do so in circumstances in which no obligation arises for the Issuer or any Dealer to publish a prospectus pursuant to either of Article 3 of the Prospectus Regulation or section 85 of the FSMA or supplement a prospectus pursuant to either of Article 23 of the Prospectus Regulation or Article 23 of the UK Prospectus Regulation, in each case, in relation to such offer.

[The following alternative language applies if the first tranche of an issue which is being increased was issued under an Offering Circular with an earlier date.

Terms used herein shall be deemed to be defined as such for the purposes of the Terms and Conditions of the Notes (the "**Conditions**") set forth in the Offering Circular dated [*original date*]. This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with the Offering Circular dated [*date*], save in respect of the Conditions which are extracted from the Offering Circular dated [*original date*] and are attached hereto. Full information on the Issuer and the offer of the Notes is only available on the basis of this Pricing Supplement and such Offering Circulars.]

[Include whichever of the following apply or specify items as "not applicable" (N/A). Note that the numbering should remain as set out below, even if "Not Applicable" is indicated for individual paragraphs or sub-paragraphs. Italics denote directions for completing the Pricing Supplement.]

[If the Notes have a maturity of less than one year from the date of their issue, the minimum denomination may need to be £100,000 or its equivalent in any other currency.]

1.	Issuer (acting [through its principal office in Korea]/[through its branch]):		KEB Hana Bank, [acting through its [principal office in Korea]/[name of relevant issuing branch]] (Legal Entity Identifier: 6RPK2YDJN6L35AS0M510)
2.	(i)	Series Number:	[●]
	(ii)	Tranche Number:	[●] (*If re-opening fungible with an existing Series, details of that Series, including the date on which the Notes become fungible*)
	(iii)	Re-opening:	[Yes/No] (*Specify terms of initial or eventual fungibility*)
3.	Specified Currency or Currencies:		[●]*
4.	Aggregate Nominal Amount:		
	(i)	Tranche:	[●]
	(ii)	Series:	[●]
5.	[(i)]	Issue Price of Tranche:	[●]% of the Aggregate Nominal Amount [plus accrued interest from [*insert* date] (in *the case of fungible re-opening issues only, if applicable*).
	[(ii)	Net Proceeds:	[●]
	(*Required only for listed issues*)]		
	[(iii)]	Use of Proceeds:	[●]
6.	(i)	Specified Denominations:	[●] (*N.B. In the case of Registered Notes, this means the minimum integral amount in which transfers can be made. For Registered Global Notes, consider including language substantially to the following effect (however, appropriate amendments should be made for different currencies*): ("[US$200,000] / [€100,000] and integral multiples of [US$1,000] / [€1,000] in excess thereof") (*Notes (including Notes denominated in Sterling) in respect of which the issue proceeds are to be accepted by the issuer in the United Kingdom or whose issue otherwise constitutes a contravention of Section 19 FSMA and which have a maturity of less than one year must have a minimum redemption value of £100,000 (or its equivalent in other currencies).*)

* *Ensure that this is consistent with the wording in the "Form of the Notes" section in the Offering Circular and the Notes themselves. N.B. The exchange upon notice/at any time options should not be expressed to be applicable if the Specified Denomination of the Notes in paragraph 6(i) includes language substantially to the following effect: "U.S.$200,000 and integral multiples of U.S.$1,000 in excess thereof up to and including U.S.$399,000." Furthermore, such Specified Denomination construction is not permitted in relation to any issue of Notes which is to be represented on issue by a Temporary Global Note exchangeable for Definitive Bearer Notes.*

			(*N.B. For Bearer Notes with a Specified Denomination and higher integral multiples above the minimum denomination, consider including language substantially to the following effect (however, appropriate amendments should be made for different currencies*):
			("[US$200,000] / [€100,000] and integral multiples of [US$1,000] / [€1,000] in excess thereof, up to and including [US$399,000] / [€199,000] and, for so long as the Notes are represented by a Global Note (as defined below) and Euroclear and Clearstream so permit, the Notes shall be tradable only in the minimum authorised denomination of [US$200,000] / [€100,000] and higher integral multiples of [US$1,000] [€1,000], notwithstanding that no definitive notes will be issued with a denomination above [US$399,000] / [€199,000].")
	(ii)	Calculation Amount:	[●]
			(*If there is only one Specified Denomination, insert the Specified Denomination. If there is more than one Specified Denomination, insert the highest common factor. Note: There must be a common factor in the case of two or more Specified Denominations.*)
7.	(i)	Issue Date:	[●]
	(ii)	Interest Commencement Date:	[*specify*/Issue Date/Not Applicable] (*N.B. An Interest Commencement Date will not be relevant for certain Notes, for example Zero Coupon Notes.*)
8.	Maturity Date:		[Fixed rate — *specify date*] [Floating rate — *Interest Payment Date falling in or nearest to [specify month and year]*]
			(N.B. Tier II Subordinated Notes shall have a minimum maturity of five years and Tier I Subordinated Notes shall be undated perpetual securities with no fixed maturity.)
9.	Interest Basis:		[[●]% Fixed Rate]
			[[*specify reference rate*[1]] +/- [●]% Floating Rate]
			[Zero Coupon]
			[Index-Linked Interest]
			[Dual Currency Interest]
			[*specify other*]
			(further particulars specified below)
10.	Redemption/Payment Basis:		[Redemption at par]
			[Dual Currency Redemption]
			[Partly Paid]
			[Instalment]
			[*specify other*]

[1] *Parties to consider the various IBOR cessation dates and the maturity date of the Notes in selecting a Reference Rate.*

11.	Change of Interest Basis or Redemption/Payment Basis:	[*Specify details of any provision for change of Notes into another Interest Basis or Redemption/Payment Basis*]
12.	Put/Call Options:	[Investor Put] [Issuer Call] [(further particulars specified below)] [*N.B. Investor Put not possible for Subordinated Notes; Issuer Call for Subordinated Notes may not be made within five years of their issuance date and will be subject to satisfaction of regulatory conditions.*]
13.	(i) Status of the Notes:	[Senior/Tier I Subordinated/Tier II Subordinated]
	(ii) Date of [Board] approval for issuance of Notes obtained:	[●]/[None required] (*N.B. Only relevant where Board (or similar) authorisation is required for the particular tranche of Notes*)
	(iii) Date of regulatory approval/ consent for issuance of Notes obtained:	[●]/[None required] (*N.B. Only relevant where Board (or similar) authorisation is required for the particular tranche of Notes*)
14.	Listing:	[Singapore Stock Exchange/*specify other*/None]
15.	Method of distribution:	[Syndicated/Non-syndicated]

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

16.	Fixed Rate Note Provisions:	[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i) Rate[(s)] of Interest:	[●]% per annum [payable [annually/ semi-annually/quarterly/ monthly] in arrear] (*If payable other than annually, consider amending Condition 5*)
	(ii) Interest Payment Date(s):	[[●] in each year up to and including the Maturity Date [adjusted in accordance with [*specify Business Day Convention*]] / [not adjusted] / [*specify other*] (*N.B. This will need to be amended in the case of long or short coupons*)
	(iii) Fixed Coupon Amount(s): (*Applicable to Notes in definitive form*)	[[●] per Calculation Amount]/[As per Condition 5(a)(II)]
	(iv) Broken Amount(s): (*Applicable to Notes in definitive form*)	[[●] per Calculation Amount, payable on the Interest Payment Date falling [in/on] [●]]/[As per Condition 5(a)(II)]
	(v) Day Count Fraction:	[30/360 or Actual/Actual (ICMA) or *specify other*]/[Not applicable] (*Applicable if Condition 5(a)(I) is specified as being applicable in paragraph 16(viii)*)

	(vi)	Determination Date(s):	[●] in each year [*Insert regular interest payment dates, ignoring issue date or maturity date in the case of a long or short first or last coupon. N.B.: This will need to be amended in the case of regular interest payment dates which are not of equal duration. N.B. Only relevant where Day Count Fraction is Actual/Actual (ICMA)*]
	(vii)	Business Day Convention:	[Following Business Day Convention] [*specify other*]
	(viii)	Other terms relating to the method of calculating interest for Fixed Rate Notes:	[Condition 5(a)(I) applies/Condition 5(a)(II) applies. The Principal Paying Agent will act as the Calculation Agent / None / *give details*]
17.	Floating Rate Note Provisions:		[Applicable/Not Applicable] (*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i)	Specified Period(s)/Interest Payment Dates:	[●]
	(ii)	Business Day Convention:	[Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/ Preceding Business Day Convention/[*specify other*]]
	(iii)	Additional Business Centre(s):	[●] (Insert New York City for U.S. dollar denominated Notes to be held through DTC and for non-U.S. dollar denominated Notes where exchange into U.S. dollars is contemplated for DTC participants holding through Euroclear and Clearstream, Luxembourg)
	(iv)	Manner in which the Rate of Interest and Interest Amount is to be determined:	[Screen Rate Determination/ISDA Determination/*specify other*]
	(v)	Party responsible for calculating the Rate of Interest and Interest Amount (if not the Principal Paying Agent):	[●]
	(vi)	Screen Rate Determination:	
		Reference Rate:	[●] *(Either EURIBOR, SOFR or other, although additional information is required if other — including fallback provisions in the Agency Agreement)*
		Interest Determination Date(s):	[●] *(Second day on which the T2 is open prior to the start of each Interest Period if EURIBOR)*
		Relevant Screen Page:	[●] *(In the case of EURIBOR, if not Reuters Page EURIBOR 01 ensure it is a page which shows a composite rate or amend the fallback provisions appropriately)*

	SOFR Benchmark:	[*Not Applicable/Compounded Daily SOFR/SOFR Index*]
		(Only applicable where the Reference Rate is SOFR Benchmark)
	Compounded Daily SOFR:	[Not Applicable/SOFR Lag/SOFR Observation Shift]
		(Only applicable in the case of Compounded Daily SOFR)
	Lookback Days:	[Not Applicable/[●] U.S. Government Securities Business Day(s)]
		(*Only applicable in the case of SOFR Lag*)
	SOFR Observation Shift Days:	[Not Applicable/[●] U.S. Government Securities Business Day(s)]
		(*Only applicable in the case of SOFR Observation Shift or SOFR Index*)
	SOFR $Index_{Start}$:	[Not Applicable/[●] U.S. Government Securities Business Day(s)]
		(*Only applicable in the case of SOFR Index*)
	SOFR $Index_{End}$:	[Not Applicable/[●] U.S. Government Securities Business Day(s)]
		(*Only applicable in the case of SOFR Index*)
	Reference Rate:	[●]
		(Either EURIBOR, SOFR or other, although additional information is required if other — including fallback provisions in the Agency Agreement)
(vii)	ISDA Determination:	
	Floating Rate Option:	[●]
	Designated Maturity:	[●]
	Reset Date:	[●]
(viii)	Margin(s):	[+/-] [●]% per annum
(ix)	Minimum Rate of Interest:	[●]% per annum
(x)	Maximum Rate of Interest:	[●]% per annum
(xi)	Day Count Fraction:	[Actual/Actual (ISDA)
		Actual/365 (Fixed)
		Actual/365 (Sterling) Actual/360
		30/360
		30E/360
		30E/360 (ISDA)]
		(*See Condition 5 for alternatives*)

	(xii)	Fall back provisions, rounding provisions and any other terms relating to the method of calculating interest on Floating Rate Notes, if different from those set out in the Conditions:	[●]
18.	Zero Coupon Note Provisions:		[Applicable/Not Applicable] *(If not applicable, delete the remaining sub-paragraphs of this paragraph)*
	(i)	Accrual Yield:	[●]% per annum
	(ii)	Reference Price:	[●]
	(iii)	Any other formula/basis of determining amount payable:	[●]
	(iv)	Day Count Fraction in relation to Early Redemption Amounts and late payment:	[Conditions 7(e)(iii) and 7(j) apply/*specify other*] (*Consider applicable day count fraction if not U.S. dollar denominated*)
19.	Index Linked Interest Note Provisions:		[Applicable/Not Applicable] *(If not applicable, delete the remaining sub-paragraphs of this paragraph)*
	(i)	Index/Formula:	[*give or annex details*]
	(ii)	Calculation Agent:	[●]
	(iii)	Party responsible for calculating the Rate of Interest (if not the Calculation Agent) and Interest Amount (if not the Principal Paying Agent):	[●]
	(iv)	Provisions for determining Coupon where calculation by reference to Index and/or Formula is impossible or impracticable:	[*need to include a description of market disruption or settlement disruption events and adjustment provisions*]
	(v)	Specified Period(s)/Specified Interest Payment Dates:	[●]
	(vi)	Business Day Convention:	[Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/ Preceding Business Day Convention/[*specify other*]]
	(vii)	Additional Business Centre(s):	[●]
	(viii)	Minimum Rate of Interest:	[●]% per annum
	(ix)	Maximum Rate of Interest:	[●]% per annum
	(x)	Day Count Fraction:	[●]

20.	Dual Currency Note Provisions:	[Applicable/Not Applicable]
		(*If not applicable, delete the remaining sub-paragraphs of this paragraph*)
	(i) Rate of Exchange/method of calculating Rate of Exchange:	[*give details*]
	(ii) Party, if any, responsible for calculating the principal and/or interest payable (if not the Principal Paying Agent):	[●]
	(iii) Provisions applicable where calculation by reference to Rate of Exchange impossible or impracticable:	[*need to include a description of market disruption or settlement disruption events and adjustment provisions*]
	(iv) Person at whose option Specified Currency(ies) is/are payable:	[●]
21.	Interest Rate Reset:	[Applicable/Not Applicable]
	Interest Reset Date:	[●] (*include if applicable*)

PROVISIONS RELATING TO REDEMPTION

22.	Issuer Call:	[Applicable/Not Applicable]
		(If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i) Optional Redemption Date(s):	[●] (*N.B. Subordinated Notes may not be redeemed within five years of their issuance date and will be subject to satisfaction of regulatory conditions*)
	(ii) Optional Redemption Amount of each Note and method, if any, of calculation of such amount(s):	[[●] per Calculation Amount/*specify other/see Appendix*]
	(iii) If redeemable in part:	
	(a) Minimum Redemption Amount:	[●]
	(b) Maximum Redemption Amount:	[●]
	(iv) Notice period (if other than as set out in the Conditions):	[●]
		(*N.B. If setting notice periods which are different to those provided in the Conditions, the Issuer is advised to consider the practicalities of distribution of information through intermediaries, for example, clearing systems and custodians, as well as any other notice requirements which may apply, for example, as between the Issuer and the Principal Paying Agent*)

23.	Investor Put:	[Applicable/Not Applicable]
		(If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i) Optional Redemption Date(s):	[●]
	(ii) Optional Redemption Amount of each Note and method, if any, of calculation of such amount(s):	[[●] per Calculation Amount/*specify other/see Appendix*]
	(iii) Notice period (if other than as set out in the Conditions):	[●]
		(*N.B. If setting notice periods which are different to those provided in the Conditions, the Issuer is advised to consider the practicalities of distribution of information through intermediaries, for example, clearing systems and custodians, as well as any other notice requirements which may apply, for example, as between the Issuer and the Principal Paying Agent*)
24.	Final Redemption Amount of each Note:	[[●] per Calculation Amount/*specify other/see Appendix*]
25.	Early Redemption Amount of each Note payable on redemption for taxation reasons or on event of default and/or the method of calculating the same (if required or if different from that set out in Condition 7(e)):	[[●] per Calculation Amount/*specify other/see Appendix*]

GENERAL PROVISIONS APPLICABLE TO THE NOTES

26.	Form of Notes:	[Bearer Notes:
		[Temporary Global Note exchangeable for a Permanent Global Note which is exchangeable for Definitive Bearer Notes only upon an Exchange Event]*
		[Temporary Global Note exchangeable for Definitive Bearer Notes on and after the Exchange Date]*
		[Permanent Global Note exchangeable for Definitive Bearer Notes only upon an Exchange Event]*
		[Registered Notes:
		Regulation S Global Note (U.S.$[●] nominal amount) registered in the name of a nominee for [DTC/a common depositary for Euroclear and Clearstream, Luxembourg/held through the CMU Service]/ Restricted Global Note (U.S.$[●] nominal amount) registered in the name of a nominee for [DTC/a common depositary for Euroclear and Clearstream, Luxembourg/held through the CMU Service]/Definitive IAI Registered Notes (*specify nominal amounts*)]

* *Ensure that this is consistent with the wording in the "Form of the Notes" section in the Offering Circular and the Notes themselves. N.B. The exchange upon notice/at any time options should not be expressed to be applicable if the Specified Denomination of the Notes in paragraph 6(i) includes language substantially to the following effect: "U.S.$200,000 and integral multiples of U.S.$1,000 in excess thereof up to and including U.S.$399,000." Furthermore, such Specified Denomination construction is not permitted in relation to any issue of Notes which is to be represented on issue by a Temporary Global Note exchangeable for Definitive Bearer Notes.*

		(*Ensure that this is consistent with the language in the "Form of the Notes" section in the Offering Circular and the Notes themselves*)
27.	Additional Financial Centre(s) or other special provisions relating to Payment Dates:	[Not Applicable/*give details*] (*Note that this item relates to the place of payment and not Interest Period end dates to which items 17(iii) and 19(vi) relate; insert New York City for U.S. dollar denominated Notes to be held through DTC*)
28.	Talons for future Coupons or Receipts to be attached to Definitive Bearer Notes (and dates on which such Talons mature):	[Yes/No. *If yes, give details*]
29.	Details relating to Partly Paid Notes: amount of each payment comprising the Issue Price and date on which each payment is to be made and consequences of failure to pay, including any right of the Issuer to forfeit the Notes and interest due on late payment:	[Not Applicable/*give details*] *(N.B. New forms of Global Note(s) may be required for Partly Paid issues.)*
30.	Details relating to Instalment Notes:	
	(i) Instalment Amount(s):	[Not Applicable/*give details*]
	(ii) Instalment Date(s):	[Not Applicable/*give details*]
31.	Redenomination applicable:	Redenomination [not] applicable (*If Redenomination is applicable, specify the applicable Day Count Fraction and any provisions necessary to deal with floating rate interest calculation (including alternative reference rates)*)
32.	Other terms or special conditions:	[Not Applicable/*give details*]
33.	Additional U.S. federal income tax considerations:	[Not Applicable/*give details*]

DISTRIBUTION

34.	(i) If syndicated, names of Managers:	[Not Applicable/*give names*]
	(ii) Stabilisation Manager (if any):	[Not Applicable/*give name*]
35.	If non-syndicated, name of relevant Dealer:	[●]
36.	Whether TEFRA D or TEFRA C rules applicable or TEFRA rules not applicable:	[TEFRA D/TEFRA C/TEFRA not applicable]
37.	U.S. Selling Restrictions:	[Rule 144A]/ Regulations S, Category 2

38.	Prohibition of Sales to EEA Retail Investors:	[Applicable/Not Applicable] *(If the Notes clearly do not constitute "packaged" products or the Notes do constitute "packaged" products and a key information document will be prepared in the EEA, "Not Applicable" should be specified. If the Notes may constitute "packaged" products and no key information document will be prepared in the EEA, "Applicable" should be specified.)*
39.	Prohibition of Sales to UK Retail Investors:	[Applicable/Not Applicable] *(If the Notes clearly do not constitute "packaged" products, or the Notes do constitute "packaged" products and a key information document will be prepared in the UK, "Not Applicable" should be specified. If the Notes may constitute "packaged" products and no key information document will be prepared in the UK, "Applicable" should be specified.)*
40.	Additional selling restrictions:	[Not Applicable/*give details*]

PROVISIONS RELATING TO GREEN BONDS, SOCIAL BONDS OR SUSTAINABILITY BONDS

41.	(i) Green Bonds	[Yes/No]
	(ii) Social Bonds	[Yes/No]
	(iii) Sustainability Bonds	[Yes/No]
	(iv) [Reviewer(s):]	*[Name of sustainability rating agency(ies) [and name of third party assurance agent] and [give details of compliance opinion(s) and availability]]*

OPERATIONAL INFORMATION

42.	Any clearing system(s) other than Euroclear and Clearstream, Luxembourg and the relevant identification number(s):	[CMU Service/Not Applicable/give *name(s) and number(s)*]
43.	Delivery:	Delivery [against/free of] payment
44.	[In the case of Registered Notes, specify the location of the office of the Registrar if other than New York:]	[Not Applicable/[Luxembourg]/Hong Kong]
45.	Additional Paying Agent(s) (if any):	[●]

[HONG KONG SFC CODE OF CONDUCT[2]

46.	Rebates:	[A rebate of [●] bps is being offered by the [Issuer] to all private banks for orders they place (other than in relation to [Bonds/Notes/Securities] subscribed by such private banks as principal whereby it is deploying its own balance sheet for onward selling to investors), payable upon closing of this

2 For an MTN drawdown involving in-scope managers, parties may decide to have a preliminary Pricing Supplement which can be distributed to other CMIs and investors containing the relevant Hong Kong SFC Code of Conduct information. If no preliminary Pricing Supplement is available for the MTN drawdown, or for EU/UK PR-compliant programs, in-scope managers may consider other ways in which to facilitate compliance with paragraph 21 requirements (e.g. BBG messages, bilateral communications with investors, attaching a standalone "Notice to Investors" page to the front of any marketing materials).

		offering based on the principal amount of the [Bonds/Notes/Securities] distributed by such private banks to investors. Private banks are deemed to be placing an order on a principal basis unless they inform the CMIs otherwise. As a result, private banks placing an order on a principal basis (including those deemed as placing an order as principal) will not be entitled to, and will not be paid, the rebate.] / [Not Applicable]
47.	Contact email addresses of the Overall Coordinators where the underlying investor information in relation to omnibus orders should be sent:	[*Include relevant contact email addresses of the Overall Coordinators where the underlying investor information should be sent — OCs to provide*] / [Not Applicable]
48.	Marketing and Investor Targeting Strategy:	[*If different from the programme OC*]]
ISIN:		[●]
Common Code:		[●]

(*insert here any other relevant codes such as CUSIP, CINS codes and a CMU instrument number*)

[LISTING APPLICATION

This Pricing Supplement comprises the final terms required to list the issue of Notes described herein pursuant to the U.S.$10,000,000,000 Global Medium Term Note Programme of KEB Hana Bank.

The Singapore Exchange Securities Trading Limited (the "**Singapore Stock Exchange**") assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained in this Pricing Supplement. Approval in-principle from, admission to the Official List of, and listing and quotation of the Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Programme or the Notes.][3]

[Application [has been] / [will be] made for the Notes to be recognised under the SGX Sustainable Fixed Income initiative on the Singapore Stock Exchange. There is no guarantee that such application for recognition under the SGX Sustainable Fixed Income initiative will be approved. Recognition under the SGX Sustainable Fixed Income initiative does not guarantee that the Notes will satisfy any investor's expectations or requirements on its sustainability-related performance or impact. If approved, the Singapore Stock Exchange may remove the recognition from the Notes at its discretion. The latest list of fixed income securities that have been granted recognition under the SGX Sustainable Fixed Income initiative is available at the Singapore Stock Exchange website.][4]

RESPONSIBILITY

The Issuer accepts responsibility for the information contained in this Pricing Supplement.

Signed on behalf of the Issuer:

By: ____________________________________

Duly authorised

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3 For Singapore Stock Exchange listing: For drawdowns based on the 5 April 2024 Offering Circular, please note that if the Issuer's audited financials for financial year 2024 have since become available, this should be appended in full to the pricing supplement.

4 For Singapore Stock Exchange listing: To include this paragraph if the Notes are green/social/sustainability Notes and the Issuer intends to apply for recognition under SGX's Sustainable Fixed Income initiative.

If the relevant Pricing Supplement relating to a Tranche of Notes specifies any modification to the Terms and Conditions of the Notes as described herein, it is envisaged that, to the extent that such modification relates only to Conditions 1, 2, 5, 6, 7 (except Condition 7(b)), 12, 13, 14, 15 (insofar as such Notes are not listed or admitted to trade on any stock exchange) or 17, they will not necessitate the preparation of a supplementary Offering Circular. If the Terms and Conditions of the Notes of any Series are to be modified in any other respect, a supplementary Offering Circular or a further Offering Circular describing the modification will be prepared, if appropriate.

TERMS AND CONDITIONS OF THE NOTES

The following are the Terms and Conditions of the Notes to be issued by the Issuer which will be incorporated by reference into each global Note and each definitive Note, in the latter case only if permitted by the relevant stock exchange (if any) and agreed by the Issuer and the relevant Dealer at the time of issue but if not so permitted and agreed, such definitive Note will have endorsed thereon or attached thereto such Terms and Conditions. The applicable Pricing Supplement in relation to any Tranche of Notes may specify other terms and conditions which shall to the extent so specified or to the extent inconsistent with the following Terms and Conditions, replace or modify the following Terms and Conditions for the purpose of such Notes. The applicable Pricing Supplement (or the relevant provisions thereof) will be endorsed upon, or attached to, each Temporary Global Note, Permanent Global Note, Regulation S Global Note, Restricted Global Note and definitive Note. Reference should be made to "Form of the Notes" above for a description of the content of Pricing Supplements which will specify which of such terms are to apply in relation to the relevant Notes.

This Note is one of a Series (as defined below) of Notes issued by KEB Hana Bank (the "**Issuer**"). The applicable Pricing Supplement (as defined below) will indicate whether the Issuer is acting in relation to the Notes through its principal office in the Republic of Korea ("**Korea**") or any of its branches.

References herein to the "**Notes**" shall be references to the Notes of this Series and shall mean;

(i) in relation to any Notes represented by a global Note (a "**Global Note**"), units of the lowest Specified Denomination in the Specified Currency;

(ii) definitive Notes in bearer form ("**Bearer Notes**") issued in exchange (or part exchange) for a Global Note;

(iii) any Global Note;

(iv) in relation to any Notes represented by definitive Notes in registered form ("**Definitive Registered Notes**"), units of the lowest Specified Denomination in the Specified Currency; and

(v) any Definitive Registered Notes.

The Notes, the Receipts (as defined below) and the Coupons (as defined below) have the benefit of the Agency Agreement dated 8 January 2016 as amended and supplemented by the First Supplement to the Agency Agreement dated 5 October 2016, the Second Supplement to the Agency Agreement dated 11 January 2019, the Third Supplement to the Agency Agreement dated 31 May 2021, the Fourth Supplement to the Agency Agreement dated 7 April 2023 and the Fifth Supplement to the Agency Agreement dated 5 April 2024 (as further amended, restated or supplemented from time to time, the "**Agency Agreement**") and made between, the Issuer, Citibank, N.A., London Branch, as principal paying agent and DTC paying agent (the "**Principal Paying Agent**", which expression shall include any successor principal paying agent), as calculation agent (the "**Calculation Agent**", which expression shall include any successor), as transfer agent with respect to Notes held through DTC, Euroclear and Clearstream, Luxembourg (the relevant "**Transfer Agents**", which expression shall include any successor or any additional transfer agents appointed in accordance with the Agency Agreement) and as exchange agent (the "**Exchange Agent**", which expression shall include any successor exchange agent) and Citicorp International Limited, as registrar with respect to Notes held through DTC, Euroclear and Clearstream, Luxembourg (the relevant "**Registrar**", which expression shall include any successor registrar), as registrar with respect to Notes held through CMU (the "**CMU Registrar**", which expression shall include any successor or any additional CMU registrar), as transfer agent with respect to Notes held through CMU (the "**CMU Transfer Agent**", which expression shall include any successor or any additional CMU transfer agents appointed in accordance with the Agency Agreement) and as CMU lodging and paying agent (the "**CMU Lodging Agent**", which expression shall include any successor or any additional CMU lodging and paying agents appointed from time to time) (together with the Principal Paying Agent, the "**Paying Agents**", which expression shall, unless the context otherwise requires, include any successor or any additional paying agents appointed in accordance with the Agency Agreement). For purposes of these Terms and Conditions, all references to the Principal Paying Agent and the Registrar shall, with respect to a Series of Notes to be held in the CMU Service (as defined below), be deemed to be a reference to the CMU Lodging Agent and all such references shall be construed accordingly.

Interest bearing definitive Bearer Notes (unless otherwise indicated in the applicable Pricing Supplement) have interest coupons ("**Coupons**") and, if indicated in the applicable Pricing Supplement, talons for further Coupons ("**Talons**") attached on issue. Any reference herein to Coupons or coupons shall, unless the context otherwise requires, be deemed to include a reference to Talons or talons. Definitive Bearer Notes repayable in instalments have receipts ("**Receipts**") for the payment of the instalments of principal (other than the final instalment) attached on issue. Definitive Registered Notes do not have Receipts or Coupons attached on issue.

The Pricing Supplement for this Note (or the relevant provisions thereof) is attached to or endorsed on this Note and supplements these Terms and Conditions and may specify other terms and conditions which shall, to the extent so specified or to the extent inconsistent with these Terms and Conditions, replace or modify these Terms and Conditions for the purposes of this Note. References to the "**applicable Pricing Supplement**" are to the Pricing Supplement (or the relevant provisions thereof) attached to or endorsed on this Note.

Any reference to "**Noteholders**" shall mean (in the case of Bearer Notes) the holders of the Notes and (in the case of Registered Notes) the persons in whose name the Notes are registered, and shall, in relation to any Notes represented by a Global Note, be construed as provided below. Any reference herein to "**Receiptholders**" shall mean the holders of the Receipts and any reference herein to "**Couponholders**" shall mean the holders of any Coupons, and shall, unless the context otherwise requires, include the holders of any Talons.

As used herein, "**Tranche**" means Notes which are identical in all respects (including as to listing) and "**Series**" means a Tranche of Notes together with any further Tranche or Tranches of Notes which are (i) expressed to be consolidated and form a single series and (ii) identical in all respects (including as to listing) except for their respective Issue Dates, Interest Commencement Dates and/or Issue Prices.

The Noteholders, the Receiptholders and the Couponholders are entitled to the benefit of the deed of covenant dated 8 January 2016 (the "**Deed of Covenant**") made by the Issuer. The original of the Deed of Covenant is held by a common depositary on behalf of Euroclear (as defined below) and Clearstream, Luxembourg (as defined below).

Copies of the Agency Agreement, the Pricing Supplement applicable to this Note, a deed poll (the "**Deed Poll**") dated 8 January 2016 and the Deed of Covenant are available for inspection during normal business hours at the specified office of the Paying Agents save that, if this Note is an unlisted Note of any Series, the applicable Pricing Supplement will only be available to a Noteholder holding one or more unlisted Notes of that Series and such Noteholder must produce evidence satisfactory to the relevant Paying Agent as to its holding of Notes and as to identity. The Noteholders, the Receiptholders and the Couponholders are deemed to have notice of, and are entitled to the benefit of, all the provisions of the Agency Agreement, the Deed Poll, the Deed of Covenant and the applicable Pricing Supplement which are applicable to them.

Words and expressions defined in the Agency Agreement or used in the applicable Pricing Supplement shall have the same meanings where used in these Terms and Conditions unless the context otherwise requires or unless otherwise stated and **provided that**, in the event of inconsistency between the Agency Agreement and the applicable Pricing Supplement or these Terms and Conditions and the applicable Pricing Supplement, the applicable Pricing Supplement will prevail.

1. Form, Denomination and Title

The Notes may be in bearer form or in registered form and, in the case of definitive Notes, will be serially numbered, in the Specified Currency and the Specified Denomination(s). Save as provided in Condition 2, Notes of one Specified Denomination may not be exchanged for Notes of another Specified Denomination and Bearer Notes may not be exchanged for Registered Notes and *vice versa*.

This Note is a Fixed Rate Note, a Floating Rate Note, a Zero Coupon Note, an Index Linked Interest Note, an Instalment Note, a Dual Currency Note or a Partly Paid Note or a combination of any of the foregoing, depending upon the Interest/ Payment Basis shown in the applicable Pricing Supplement.

Each Tranche of Bearer Notes will be initially represented by a temporary global Note without Receipts, Coupons or Talons attached (each, a "**Temporary Global Note**") which will be delivered to a common depositary for Euroclear Bank S.A./N.V. ("**Euroclear**") and Clearstream Banking S.A. ("**Clearstream, Luxembourg**") and/or a sub-custodian for the Central Moneymarkets Unit Service (the "**CMU Service**") operated by the Hong Kong Monetary Authority (the "**HKMA**"). On or after the date which is 40 days after the Issue Date beneficial interests in a Temporary Global Note will be exchangeable upon a request as described therein either for interests in a permanent global Note without Receipts, Coupons or Talons (each, a "**Permanent Global Note**") or for definitive Bearer Notes (as indicated in the applicable Pricing Supplement and subject, in the case of definitive Bearer Notes, to such notice period as is specified in the applicable Pricing Supplement), in each case against certification to the effect that the beneficial owner of interests in such Temporary Global Note is not a U.S. person or a person who has purchased for resale to any U.S. person, as required by U.S. Treasury regulations. The applicable Pricing Supplement will specify that a Permanent Global Note will be exchangeable (free of charge), in whole but not in part, for definitive Notes with, where applicable, receipts, interest coupons and talons attached upon the occurrence of an Exchange Event. For these purposes, "**Exchange Event**" means that (i) an Event of Default (as defined in Condition 11) has occurred and is continuing, (ii) the Issuer has been notified that Euroclear and/or Clearstream, Luxembourg have been or, in the case of Notes held through the CMU Service, the CMU Service has been, closed for business for a continuous period of 14 days (other than by reason of holiday, statutory or otherwise) or have announced an intention permanently to cease business or have in fact done so and no alternative clearing system is available or (iii) the Issuer has or will become obliged to pay additional amounts as provided for or referred to in Condition 9 which would not be required were the Notes represented by the Permanent Global Note in definitive form (**provided that**, in certain circumstances where the Notes are held through Euroclear and/or Clearstream, Luxembourg, and/or the CMU Service, such adverse tax consequences are as a result of a change in, or amendment to, the laws or regulation (taxation or otherwise) in, or of, Korea). The Issuer will promptly give notice to Noteholders in accordance with Condition 15 if an Exchange Event occurs. In the event of the occurrence of an Exchange Event, (x) in the case of Notes held by a Common Depositary for Euroclear and/or Clearstream, Luxembourg, Euroclear and/or Clearstream, Luxembourg (acting on the instructions of any holder of an interest in such Permanent Global Note) and/or (y) in the case of Notes held through the CMU Service, the relevant accountholders therein, may give notice to the Principal Paying Agent or, as the case may be, the CMU Lodging Agent, requesting exchange and, in the event of the occurrence of an Exchange Event as described in (iii) above, the Issuer will also give notice to the Principal Paying Agent or the CMU Lodging Agent, as the case may be, requesting exchange. Any such exchange following an Exchange Event shall occur not later than 45 days after the date of receipt of the first relevant notice by the Principal Paying Agent or the CMU Lodging Agent, as the case may be.

Bearer Notes in definitive form are issued with Coupons and (if applicable) Receipts and Talons attached, unless they are Zero Coupon Notes in which case references to Coupons and Couponholders in these Terms and Conditions are not applicable.

Unless otherwise provided with respect to a particular series of Registered Notes, Registered Notes of each Tranche sold outside the United States in reliance on Regulation S ("**Regulation S**") under the United States Securities Act of 1933, as amended, (the "**Securities Act**") will, unless otherwise specified in the applicable Pricing Supplement, be represented by a permanent global Registered Note, without Receipts, Coupons or Talons attached, (each, a "**Regulation S Global Note**"), deposited with (i) a custodian for, and registered in the name of a nominee of, The Depository Trust Company ("**DTC**") for the accounts of Euroclear and Clearstream, Luxembourg, (ii) a common depositary for, and registered in the name of a common nominee of, Euroclear and Clearstream, Luxembourg, or (iii) a sub-custodian for the HKMA as operator of the CMU Service, as specified in the applicable Pricing Supplement. Definitive Registered Notes issued in exchange for Regulation S Global Notes or otherwise sold or transferred in reliance on Regulation S under the Securities Act, together with the Regulation S Global Notes, are referred to herein as "**Regulation S Notes**". With respect to all offers or sales of an unsold allotment or subscription and in any case prior to expiry of the period that ends 40 days after the later of the relevant Issue Date and completion of the distribution of each Tranche of Notes, as certified by the relevant Dealer, in the case of a non-syndicated issue, or by the Lead Manager, in the case of a syndicated issue (the "**Distribution Compliance Period**"), beneficial interests in a Regulation S Global Note may not be offered or sold to, or for the account or benefit of, a U.S. person (save as otherwise provided in Condition 2). After expiry of such Distribution Compliance Period, beneficial interests in a Regulation S Note may be held through DTC directly by a participant in DTC or indirectly through a participant in DTC.

Registered Notes of each Tranche sold in private transactions in reliance upon Rule 144A under the Securities Act to qualified institutional buyers within the meaning of Rule 144A under the Securities Act ("**QIBs**") will, unless otherwise specified in the applicable Pricing Supplement, be represented by a permanent global Registered Note, without Receipts, Coupons or Talons (each, a "**Restricted Global Note**" and, together with any Regulation S Global Note, the "**Registered Global Notes**") deposited with a custodian for, and registered in the name of a nominee of, DTC. Notes in definitive form issued in exchange for Restricted Global Notes or otherwise sold or transferred in accordance with the requirements of Rule 144A under the Securities Act, together with the Restricted Global Notes, are referred to herein as "**Restricted Notes**".

Registered Notes of each Tranche sold to accredited investors (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act) ("**Institutional Accredited Investors**") pursuant to Section 4(a)(2) of the Securities Act or in a transaction otherwise exempt from registration under the Securities Act who agree to purchase the Notes for their own account and not with a view to the distribution thereof will be issued as Definitive Registered Notes only, registered in the name of the holder thereof and will not be represented by a global Note.

Definitive Registered Notes issued to Institutional Accredited Investors or in exchange for an interest in a Restricted Global Note and Restricted Global Notes shall bear a legend specifying certain restrictions on transfer (each, a "**Legend**"), such Notes being referred to herein as "**Legended Notes**". Upon the transfer, exchange or replacement of Legended Notes, or upon specific request for removal of a Legend, the Registrar shall (save as provided in Condition 2(d)) deliver only Legended Notes or refuse to remove such Legend, as the case may be, unless there is delivered to the Issuer such satisfactory evidence as may reasonably be required by the Issuer, which may include an opinion of counsel, that neither the Legend nor the restrictions on transfer set forth therein are required to ensure compliance with the provisions of the Securities Act and the Issuer shall notify the Registrar accordingly.

Subject as otherwise provided in Condition 2, Definitive Registered Notes may be exchanged or transferred in whole or in part in the Specified Denominations for one or more Definitive Registered Notes of like aggregate nominal amount.

Each Definitive Registered Note will be numbered serially with an identifying number which will be recorded in the register (the "**Register**") which the Issuer shall procure to be kept by the Registrar.

Notes are issued in the Specified Denomination(s) set out in the applicable Pricing Supplement which, in the case of Registered Notes sold other than pursuant to Regulation S, shall be the Authorised Denomination (as defined below) and, in the case of Notes having a maturity of 183 days or less, the Specified Denomination shall be at least U.S.$500,000 (or the equivalent in any other currency or currencies). Each Tranche of Notes is issued in a nominal amount that is a multiple of the applicable Specified Denominations.

"**Authorised Denomination**" means:

(i) in the case of a Restricted Note, U.S.$200,000 (or its equivalent in any other currency rounded upwards as specified in the relevant Pricing Supplement), unless otherwise specified in the applicable Pricing Supplement, and higher integral multiples of U.S.$1,000, or the higher denomination or denominations specified in the applicable Pricing Supplement; and

(ii) in the case of a Definitive Registered Note which is initially offered and sold to Institutional Accredited Investors pursuant to Section 4(a)(2) of the Securities Act, U.S.$500,000 (or its equivalent in any other currency rounded upwards as specified in the applicable Pricing Supplement) and higher integral multiples of U.S.$1,000 or the higher denomination or denominations specified in the applicable Pricing Supplement.

Any minimum Authorised Denomination required by any law or directive or regulatory authority in respect of the currency of issue of any Note shall be such as applied on or prior to the date of issue of such Note.

Subject as set out below, title to Bearer Notes, Receipts and Coupons will pass by delivery. Title to Registered Notes will pass upon registration of transfers in accordance with the provisions of the Agency Agreement. The Issuer, the Principal Paying Agent, any other Paying Agent, the Registrar, (if applicable) the CMU Lodging Agent (except as otherwise required by law) and any Transfer Agent may deem and treat the bearer of any Bearer Note, Receipt or Coupon and any person in whose name a Registered Note is registered as the absolute owner thereof (whether or not overdue and notwithstanding any notice of ownership or writing thereon or notice of any previous loss or theft thereof) for all purposes but, in the case of any Global Note, without prejudice to the provisions set out in the next paragraph.

For so long as any of the Bearer Notes is represented by a bearer Global Note held by a common depositary on behalf of Euroclear and/or Clearstream, Luxembourg and/or a sub-custodian for the CMU Service or for so long as DTC or its nominee is the registered holder of a Registered Global Note, each person (other than Euroclear, Clearstream, Luxembourg, the CMU Service or DTC as applicable) who is for the time being shown in the records of Euroclear, Clearstream, Luxembourg, the CMU Service or, as the case may be, DTC, as the holder of a particular nominal amount of such Notes (in which regard any certificate or other document issued by Euroclear, Clearstream, Luxembourg, the CMU Service or, as the case may be, DTC, as to the nominal amount of such Notes standing to the account of any person shall be conclusive and binding for all purposes save in the case of manifest error) shall be treated by the Issuer, any Paying Agent, the Registrar, the Exchange Agent and any Transfer Agent as the holder of such nominal amount of such Notes for all purposes other than with respect to the payment of principal or interest on the Notes, for which purpose the bearer of the relevant Global Note shall be treated by the Issuer, any Paying Agent, the Registrar, the Exchange Agent and any Transfer Agent as the holder of such Notes in accordance with and subject to the terms of the relevant Global Note (and the expressions "**Noteholder**" and "**holder of Notes**" and related expressions shall be construed accordingly). Notes which are represented by a Global Note will be transferable only in accordance with the rules and procedures for the time being of Euroclear, Clearstream, Luxembourg, the CMU Service and DTC, as the case may be. Notwithstanding the above, if a Note (whether in global or definitive form) is held through the CMU Service, any payment that is made in respect of such Note shall be made at the direction of the bearer or the registered holder to the person(s) for whose account(s) interests in such Note are credited as being held through the CMU Service in accordance with the CMU Rules at the relevant time as notified to the CMU Lodging Agent by the CMU Service in a relevant CMU Instrument Position Report or any other relevant notification by the CMU Service. Such notification shall be conclusive evidence of the records of the CMU Service as to the identity of any accountholder (the "**CMU Accountholders**") and the principal amount of any Note credited to its account, save in the case of manifest error, and such payments shall discharge the obligation of the Issuer in respect of that payment under such Note.

For so long as DTC or its nominee is the registered owner or holder of a Registered Global Note, DTC or such nominee, as the case may be, will be considered the sole owner or holder of the Notes represented by such Registered Global Note for all purposes under the Agency Agreement and the Notes except to the extent that in accordance with DTC's published rules and procedures any ownership rights may be exercised by its participants or beneficial owners through participants.

References to Euroclear, Clearstream, Luxembourg, the CMU Service and/or DTC shall, whenever the context so permits, be deemed to include a reference to any additional or alternative clearing system approved by the Issuer and the Principal Paying Agent and specified in the applicable Pricing Supplement.

2. **Exchange and Transfers of Registered Notes**

(a) ***Exchange of interests in Registered Global Notes for Definitive Registered Notes***

Interests in any Registered Global Note will be exchangeable for Definitive Registered Notes if (i) Euroclear and/or Clearstream, Luxembourg, the CMU Service or DTC, as the case may be, notifies the Issuer that it is unwilling or unable to continue as depositary for such Registered Global Note, (ii) if applicable, DTC ceases to be a "**Clearing Agency**" registered under the U.S. Securities Exchange Act of 1934, as amended (the "**Exchange Act**") or Euroclear, Clearstream, Luxembourg or the CMU Service, as the case may be, is closed for business for a continuous period of 14 days (other than by reason of holiday, statutory or otherwise) or announces its intention permanently to cease business, and a successor depositary or alternative clearing system satisfactory to the Issuer and the Registrar and, in the case of CMU Notes, the CMU Lodging Agent is not available or (iii) an Event of Default (as defined in Condition 11) has occurred and is continuing with respect to such Notes. Upon the occurrence of any of the events described in the preceding sentence, the Issuer will cause the appropriate Definitive Registered Notes to be delivered, **provided that**, notwithstanding the above, no Definitive Registered Notes will be issued until expiry of the applicable Distribution Compliance Period.

(b) ***Transfers of Registered Global Notes***

Transfers of a Registered Global Note registered in the name of a nominee or a sub-custodian for DTC, Euroclear, Clearstream, Luxembourg or the CMU Service, as the case may be, shall be limited to transfers of such Registered Global Note, in whole but not in part, to another nominee or sub-custodian of DTC, Euroclear, Clearstream, Luxembourg or the CMU Service, as the case may be, or to the nominee or sub-custodian of any successor thereto.

(c) ***Transfers of interests in Regulation S Notes***

Prior to expiry of the applicable Distribution Compliance Period, transfers by the holder of, or of a beneficial interest in, a Regulation S Note to a transferee in the United States will (unless otherwise specified in the applicable Pricing Supplement) only be made:

(i) upon receipt by the Registrar of a written certification substantially in the form set out in the Agency Agreement, amended as appropriate (a "**Transfer Certificate**"), copies of which are available from the specified office of the Registrar or any Transfer Agent, from the transferor of the Note or beneficial interest therein to the effect that such transfer is being made:

(A) to a person whom the transferor reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A; or

(B) to a person who is an Institutional Accredited Investor (as defined below), in which case the Transfer Certificate must be accompanied by a duly executed investment letter from the relevant transferee substantially in the form set out in the Agency Agreement (an "**IAI Investment Letter**"); or

(ii) otherwise pursuant to the Securities Act or an exemption therefrom, subject to receipt by the Issuer of such satisfactory evidence as the Issuer may reasonably require, which may include an opinion of U.S. counsel, that such transfer is in compliance with any applicable federal securities laws of the United States or any applicable securities laws of any state of the United States,

and, in each case, in accordance with any applicable federal securities laws of the United States or any applicable securities laws of any state of the United States or any other jurisdiction.

In the case of (i) above, such transferee may take delivery through a Legended Note in global or definitive form and, in the case of (ii) above, such transferee may take delivery only through a Legended Note in definitive form. After expiry of the applicable Distribution Compliance Period (a) beneficial interests in Regulation S Notes may be held through DTC directly by a participant in DTC or indirectly through a participant in DTC and (b) such certification requirements will no longer apply to such transfers.

(d) ***Transfers of interests in Legended Notes***

Transfers of Legended Notes or beneficial interests therein may be made:

(i) to a transferee who takes delivery of such interest through a Regulation S Note, upon receipt by the Registrar of a duly completed Transfer Certificate from the transferor to the effect that such transfer is being made in accordance with Regulation S and that, if such transfer is being made prior to expiry of the applicable Distribution Compliance Period, the interests in the Notes being transferred will be held immediately thereafter indirectly through Euroclear and/or Clearstream, Luxembourg; or

(ii) to a transferee who takes delivery of such interest through a Restricted Global Note if the transferee is a person whom the transferor reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A; or

(iii) to a transferee who takes delivery of such interest through a Legended Note:

(A) where the transferee is a person whom the transferor reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A, without certification; or

(B) where the transferee is an Institutional Accredited Investor, subject to delivery to the Registrar of a Transfer Certificate from the transferor to the effect that such transfer is being made to an Institutional Accredited Investor, together with a duly executed investment letter from the relevant transferee substantially in the form set out in the Agency Agreement (an "**IAI Investment Letter**"); or

(iv) otherwise pursuant to the Securities Act or an exemption therefrom, subject to receipt by the Issuer of such satisfactory evidence as the Issuer may reasonably require, which may include an opinion of U.S. counsel, that such transfer is in compliance with any applicable federal securities laws of the United States or any applicable securities laws of any state of the United States, and in each case, in accordance with any applicable federal securities laws of the United States or any applicable securities laws of any state of the United States or any other jurisdiction.

Notes transferred by Institutional Accredited Investors to QIBs pursuant to Rule 144A or outside the United States pursuant to Regulation S will be eligible to be held by such QIBs or non-U.S. investors through DTC, Euroclear, Clearstream, Luxembourg or the CMU Service, as appropriate, and the Registrar will arrange for any Notes which are the subject of such a transfer to be represented by the appropriate Registered Global Note, where applicable.

(e) ***Exchanges and transfers of Registered Notes generally***

Registered Notes may not be exchanged for Bearer Notes and vice versa.

Holders of Definitive Registered Notes, other than Institutional Accredited Investors, may exchange such Definitive Registered Notes for interests in a Registered Global Note of the same type at any time.

Transfers of beneficial interests in Registered Global Notes will be effected by DTC, Euroclear, Clearstream, Luxembourg or the CMU Service, as the case may be, and, in turn, by participants and, if appropriate, indirect participants in such clearing systems acting on behalf of beneficial transferors and transferees of such interests. A beneficial interest in a Registered Global Note will be transferable and exchangeable for Notes in definitive form or for a beneficial interest in another Registered Global Note only in accordance with the terms and conditions thereof and the rules and operating procedures for the time being of DTC, Euroclear, Clearstream, Luxembourg, or the CMU Service, as the case may be (the "**Applicable Procedures**") and as specified in the Pricing Supplement.

Upon the terms and subject to the conditions set forth in the Agency Agreement, a Definitive Registered Note may be transferred in whole or in part (in the Authorised Denominations set out in the applicable Pricing Supplement) by the holder or holders surrendering the Definitive Registered Note for registration of the transfer of the Definitive Registered Note (or the relevant part of the Definitive Registered Note) at the specified office of the Registrar or any Transfer Agent, with the form of transfer thereon duly executed by the holder or holders thereof or his or their attorney or attorneys duly authorised in writing and upon the Registrar or, as the case may be, the relevant Transfer Agent, after due and careful enquiry, being satisfied with the documents of title and the identity of the person making the request and subject to such reasonable regulations as the Issuer and the Registrar or, as the case may be, the relevant Transfer Agent may prescribe, including any restrictions imposed by the Issuer on transfers of Definitive Registered Notes originally sold to a U.S. person. Subject as provided above, the Registrar or, as the case may be, the relevant Transfer Agent will, within three business days (being for this purpose a day on which banks are open for business in the city where the specified office of the Registrar or, as the case may be, the relevant Transfer Agent is located) of the request (or such longer period as may be required to comply with any applicable fiscal or other laws or regulations) authenticate and deliver, or procure the authentication and delivery of, at its specified office to the transferee or (at the risk of the transferee) send by mail to such address as the transferee may request, a new Definitive Registered Note of a like aggregate nominal amount to the Definitive Registered Note (or the relevant part of the Definitive Registered Note) transferred. In the case of the transfer of part only of a Definitive Registered Note, a new Definitive Registered Note in respect of the balance of the Definitive Registered Note not transferred will be so authenticated and delivered or (at the risk of the transferor) sent to the transferor.

Exchanges or transfers by a holder of a Definitive Registered Note for an interest in, or to a person who takes delivery of such Note through, a Registered Global Note will be made no later than 30 days after the receipt by the Registrar or, as the case may be, the relevant Transfer Agent of the Definitive Registered Note to be so exchanged or transferred and, if applicable, upon receipt by the Registrar of a written certification from the transferor.

(f) ***Registration of transfer upon partial redemption***

In the event of a partial redemption of Notes under Condition 7(c), the Issuer shall not be required:

(a) to register the transfer of Registered Notes (or parts of Registered Notes) during the period beginning on the 15th day before the date of the partial redemption and ending on the date on which notice is given specifying the serial numbers of Notes called (in whole or in part) for redemption (both inclusive); or

(b) to register the transfer of any Registered Note, or part of a Registered Note, called for partial redemption.

(g) ***Closed Periods***

No Noteholder may require the transfer of a Registered Note to be registered during the period of 15 days ending on the due date for any payment of principal or interest or payment on that Note.

(h) ***Costs of exchange or registration***

Registration of transfers will be effected without charge by or on behalf of the Issuer, the Registrar or the relevant Transfer Agent, but upon payment (or the giving of such indemnity as the Registrar or the relevant Transfer Agent may reasonably require) in respect of any tax or other governmental charges which may be imposed in relation to it **provided that** the Issuer shall not be responsible for any documentary stamp tax payable on the transfer of Notes effected in Korea unless the Issuer is the counterparty directly liable for that documentary stamp tax.

3. **Status of the Notes**

(a) ***Status of the Senior Notes***

Notes whose status is specified in the applicable Pricing Supplement as Senior (the "**Senior Notes**") and any relative Receipts and Coupons constitute direct, unconditional, unsubordinated and (subject to Condition 4) unsecured obligations of the Issuer which rank *pari passu* among themselves and will rank at least *pari passu* with all other present and future unsecured (subject to Condition 4) and unsubordinated obligations of the Issuer, save for such as may be preferred by mandatory provisions of applicable law.

(b) ***Status of the Subordinated Notes***

(i) **Tier II Subordinated Notes**

*This Condition 3(b)(i) applies only to Notes whose status is specified in the applicable Pricing Supplement as "Tier II Subordinated Notes" (the "**Tier II Subordinated Notes**").*

Tier II Subordinated Notes and any relative Receipts and Coupons constitute direct, general, subordinated (as described in Condition 3(c)) and unsecured obligations of the Issuer which (subject to the provision of Condition 8) rank (x) junior to the Senior Indebtedness of the Issuer (as defined in Condition 3(c)), (y) *pari passu* among themselves and all other subordinated obligations of the Issuer which do not rank or are not expressed by their terms to rank junior to the Tier II Subordinated Notes (collectively, the "**Tier II Obligations**") and (z) in priority to claims of holders of the Tier I Obligations (as defined in Condition 3(b)(ii)) and all classes of equity (including holders of preference shares (if any)) of the Issuer (other than equity that constitutes Tier II capital of the Issuer under applicable Korean Law).

(ii) **Tier I Subordinated Notes**

This Condition 3(b)(ii) applies only to Notes whose status is specified in the applicable Pricing Supplement as "Tier I Subordinated Notes" (the "***Tier I Subordinated Notes***").

Tier I Subordinated Notes and any relative Receipts and Coupons constitute direct, general, subordinated (as described in Condition 3(c)) and unsecured obligations of the Issuer which (subject to the provisions of Conditions 5(c) and 8) rank (x) junior to the Senior Indebtedness of the Issuer (as defined in Condition 3(c)), (y) *pari passu* among themselves and all other subordinated obligations of the Issuer which either constitute additional Tier I capital of the Issuer under applicable Korean Law or otherwise rank or are expressed by their terms to rank *pari passu* with the Tier I Subordinated Notes (collectively, the "**Tier I Obligations**") and (z) in priority to claims of holders of all classes of equity (including holders of preference shares (if any)) of the Issuer (other than equity that constitutes Tier II capital of the Issuer under applicable Korean Law). In addition, in the case of a Bankruptcy Event (as defined in Condition 3(c)), the Tier I Subordinated Notes shall be deemed not to constitute liabilities for purposes of determining whether the Issuer's liabilities exceed its assets.

(c) ***Subordination***

*This Condition 3(c) applies only to Tier I Subordinated Notes and Tier II Subordinated Notes (together, the "**Subordinated Notes**").*

(i) If, on or prior to the Maturity Date or at any time while any amount is due and outstanding under any Subordinated Notes, a Bankruptcy Event (as defined below) occurs and so long as it continues, any amounts which become due then or thereafter under the Subordinated Notes (including overdue amounts) shall not be payable **unless** and until the total amount of any and all Senior Indebtedness of the Issuer which is listed on the distribution list (as amended, if such be the case) for final distribution submitted to the court in the bankruptcy proceedings is paid in full or provided to be paid in full in such bankruptcy proceedings.

(ii) If, on or prior to the Maturity Date or at any time while any amount is due and outstanding under any Subordinated Notes, a Rehabilitation Event (as defined below) occurs and so long as it continues, any amounts which become due then or thereafter under the Subordinated Notes (including overdue amounts) shall not be payable unless and until the total amount of any and all Senior Indebtedness of the Issuer which is listed on the rehabilitation plan of the Issuer at the time when the court's approval of such plan becomes final and conclusive shall have been paid in full in the rehabilitation proceedings to the extent of the original amount thereof (without regard to any adjustment of such amount in the approved rehabilitation plan).

(iii) If, on or prior to the Maturity Date or at any time while any amount is due and outstanding under any Subordinated Notes, a Liquidation Event (as defined below) occurs and so long as it continues, any amounts which become due then or thereafter under the Subordinated Notes (including overdue amounts) shall not be payable unless and until the total amount of any and all Senior Indebtedness of the Issuer which is reported during the claims reporting period or is required by the laws or regulations of Korea to be paid during the liquidation proceedings is paid in full or provided to be paid in full in such liquidation proceedings.

(iv) If, on or prior to the Maturity Date or at any time while any amount is due and outstanding under any Subordinated Notes, a Foreign Event (as defined below) occurs and so long as it continues, any amounts which become due then or thereafter under the Subordinated Notes (including overdue amounts) shall only become payable upon conditions equivalent to those enumerated in the above two paragraphs having been fulfilled; **provided that** notwithstanding any provision herein to the contrary if the imposition of any such conditions is not allowed under such proceedings, any amounts which become due under the Subordinated Notes shall become payable in accordance with the terms herein provided and not subject to such conditions.

(v) A holder of a Subordinated Note by its acceptance thereof or its interest therein, shall thereby agree that (i) if any payment in respect of such Note is made to such holder after the occurrence of a Subordination Event and the amount of such payment shall exceed the amount, if any, that should have been paid to such holder upon the proper application of these subordination provisions, the payment of such excess amount shall be deemed null and void and such holder (without the Registrar or any Paying Agent having any obligation or liability with respect thereto, save to the extent that the Registrar or such Paying Agent shall return to the Issuer any such excess amount which remains held by it at the time of the notice next referred to) shall be obliged to return the amount of the excess payment within 10 days of receiving notice from the Issuer of the excess payment and (ii) upon the occurrence of a Subordination Event and so long as such Subordination Event continues, such holder shall not exercise any right to set off any liabilities of the Issuer under such Note which become so payable on or after the date on which the Subordination Event occurs against any liabilities of such holder owed to the Issuer unless, until and only in such amount as the liabilities of the Issuer under such Note become payable pursuant to the proper application of these subordination provisions.

In addition, a holder of a Subordinated Note by its acceptance thereof or its interest therein shall be deemed to have waived, and agreed not to exercise, any right as a creditor to require the Issuer to redeem such Subordinated Note or provide collateral with respect thereto that may arise pursuant to Article 439, Paragraph 2, Article 527-5, Paragraph 3, Article 530-9, Paragraph 4, Article 530-11, Paragraph 2 and Article 232 of the Korean Commercial Code in connection with a capital reduction, merger and/or corporate split off of the Issuer.

In these Conditions:

a "**Bankruptcy Event**" shall mean a court of competent jurisdiction in Korea having adjudicated the Issuer to be bankrupt pursuant to the provisions of the Debtor Rehabilitation and Bankruptcy Act or any successor legislation thereto;

a "**Foreign Event**" shall mean in any jurisdiction other than Korea, the Issuer having become subject to bankruptcy, rehabilitation or other equivalent proceedings pursuant to any applicable law of any jurisdiction other than Korea;

a "**Liquidation Event**" shall mean that the liquidation proceedings of the Issuer have commenced by any reason other than a Bankruptcy Event or Rehabilitation Event pursuant to the Korean Commercial Code or other applicable laws of Korea;

a "**Rehabilitation Event**" shall mean a court of competent jurisdiction in Korea having adjudicated the Issuer to be subject to the rehabilitation proceedings pursuant to the provisions of the Debtor Rehabilitation and Bankruptcy Act or any successor legislation thereto;

"**Senior Indebtedness of the Issuer**" shall mean (i) in the case of Tier II Subordinated Notes, all deposits and other liabilities of the Issuer (other than the Tier II Obligations and the Tier I Obligations) and (ii) in the case of Tier I Subordinated Notes, all deposits and other liabilities of the Issuer (other than the Tier I Obligations) and all equity that constitutes Tier II capital of the Issuer under applicable Korean Law; and

a "**Subordination Event**" shall mean any Bankruptcy Event, Rehabilitation Event, Liquidation Event or Foreign Event.

4. **Negative Pledge**

(a) ***Negative Pledge***

So long as any Senior Note remains outstanding (as defined in the Agency Agreement), the Issuer will not create or permit to be outstanding any mortgage, charge, pledge or other security interest upon or over the whole or any part of its property, assets or revenues (whether present or future) to secure for the benefit of the holders of any International Investment Securities (as defined below):

(i) payment of any sum due in respect of any such International Investment Securities;

(ii) payment under any guarantee in respect of any such International Investment Securities; or

(iii) payment under any indemnity or other like obligations in respect of any such International Investment Securities,

without, in any such case and at the same time, according to the Senior Notes either the same security as is available for the benefit of the holders of such International Investment Securities or such other security as shall be approved for the purpose by an Extraordinary Resolution (as defined in the Agency Agreement) of the holders of Senior Notes.

For the avoidance of doubt, notwithstanding the foregoing, under the Act on Issuance of Covered Bonds, which was enacted on 14 January 2014 and became effective on 15 April 2014, in Korea, the issuance of Covered Bonds (as defined below) by the Issuer and any arrangement relating to the segregation or "ring-fencing" of any part of the Issuer's property, assets or revenues (whether present or future) for the purpose thereof shall be permitted, **provided that** such Covered Bonds are issued and such arrangement is entered into, respectively, in compliance with the Act on Issuance of Covered Bonds (or any amendment or supplemental legislation in connection thereof) and that such property, assets and revenues are intended to form part of the pool of the assets in respect of which a priority of claim in favour of the holders of the Covered Bonds may be given.

(b) ***Interpretation***

In these Conditions:

(i) "**International Investment Securities**" means notes, bonds, debentures, certificates of deposit or investment securities of any Person which (1) by their terms either are payable, or confer a right to receive payment, in any currency other than Won or are denominated in Won and more than 50% of the aggregate principal amount of which is initially distributed outside Korea by or with the authorisation of the Issuer; (2) are for the time being, or are intended to be, quoted, listed, ordinarily dealt in or traded on any stock exchange or over-the-counter or other securities market outside Korea; and (3) are not (A) securities issued in accordance with a securitisation plan pursuant to the Asset-Backed Securitisation Act of Korea (or other similar laws of Korea); or (B) securities or instruments serviced primarily by the cash flows of a discrete pool of receivables or other financial assets, either fixed or revolving, that by their terms convert into cash within a finite period and which are commonly regarded as asset-backed securities;

(ii) "**Covered Bonds**" means debt securities (including, without limitation, any notes, bonds, debentures, certificates of deposit or investment securities) backed by cash flows generated from an underlying investment pool consisting of mortgage loans, public sector assets, cash, cash equivalents and/or other financial assets or otherwise issued in compliance with the Act on Issuance of Covered Bonds; and

(iii) "**Person**" means any individual, company, corporation, firm, partnership, joint venture, association, organisation, state, agency of a state or other entity, whether or not having a separate legal personality.

5. **Interest**

(a) ***Interest on Fixed Rate Notes***

(I) *In the case of Fixed Rate Notes where Conditions 5(a)(I) is specified as being applicable in the applicable Pricing Supplement, the following provisions will apply instead of Condition 5(a)(II)*:

Each Fixed Rate Note bears interest on its nominal amount (or, if it is a Partly Paid Note, the amount paid up) from (and including) the Issue Date (or, if otherwise specified in the applicable Pricing Supplement, the Interest Commencement Date) at the rate(s) per annum equal to the Fixed Rate(s) of Interest payable in arrear on the Interest Payment Date(s) in each year and on the Maturity Date if that does not fall on an Interest Payment Date.

Except as provided in the applicable Pricing Supplement, the amount of interest payable on each Interest Payment Date in respect of the Fixed Interest Period ending on such date will amount to the Fixed Coupon Amount. Payments of interest on any Interest Payment Date will, if so specified in the applicable Pricing Supplement, amount to the Broken Amount so specified.

Where a Fixed Coupon Amount or Broken Amount is specified in the applicable Pricing Supplement, interest shall be calculated in respect of any period by applying the Rate of Interest to:

(A) in the case of Fixed Rate Notes which are represented by a Global Note, the aggregate outstanding nominal amount of the Fixed Rate Notes represented by such Global Note (or, if they are Partly Paid Notes, the aggregate amount paid up); or

(B) in the case of Fixed Rate Notes in definitive form, the Calculation Amount;

and, in each case, multiplying such sum by the applicable Day Count Fraction, and rounding the resultant figure to the nearest sub-unit of the relevant Specified Currency, half of any such sub-unit being rounded upwards or otherwise in accordance with applicable market convention.

In these Conditions:

"**Day Count Fraction**" means, in respect of the calculation of an amount of interest in accordance with this Condition 5(a):

(i) if "**Actual/Actual (ICMA)**" is specified in the applicable Pricing Supplement:

(a) in the case of Notes where the number of days in the relevant period from (and including) the most recent Interest Payment Date (or, if none, the Interest Commencement Date) to (but excluding) the relevant payment date (the "**Accrual Period**") is equal to or shorter than the Determination Period (as defined below) during which the Accrual Period ends, the number of days in such Accrual Period divided by the product of (1) the number of days in such Determination Period and (2) the number of Determination Dates (as specified in the applicable Pricing Supplement) that would occur in one calendar year; or

(b) in the case of Notes where the Accrual Period is longer than the Determination Period during which the Accrual Period ends, the sum of:

(1) the number of days in such Accrual Period falling in the Determination Period in which the Accrual Period begins divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates (as specified in the applicable Pricing Supplement) that would occur in one calendar year; and

(2) the number of days in such Accrual Period falling in the next Determination Period divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates that would occur in one calendar year.

(ii) if "**30/360**" is specified in the applicable Pricing Supplement, the number of days in the period from (and including) the most recent Interest Payment Date (or, if none, the Interest Commencement Date) to (but excluding) the relevant payment date (such number of days being calculated on the basis of a year of 360 days with twelve 30-day months) divided by 360.

(iii) if "**Actual/365 (Fixed)**" is specified in the applicable Pricing Supplement, the actual number of days in the period from (and including) the most recent Interest Payment Date (or, if none, the Interest Commencement Date) to (but excluding) the relevant payment date divided by 365.

(iv) if "**Actual/360 (Fixed)**" is specified in the applicable Pricing Supplement, the actual number of days in the period from (and including) the most recent Interest Payment Date (or, if none, the Interest Commencement Date) to (but excluding) the relevant payment date divided by 360.

In this Condition 5(a)(I):

"**Determination Period**" means each period from (and including) a Determination Date to but excluding the next Determination Date (including, where either the Interest Commencement Date or the final Interest Payment Date is not a Determination Date, the period commencing on the first Determination Date prior to, and ending on the first Determination Date falling after, such date);

"**Fixed Interest Period**" means the period from (and including) an Interest Payment Date (or the Interest Commencement Date) to (but excluding) the next (or first) Interest Payment Date; and

"**sub-unit**" means, with respect to any currency other than Euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, with respect to Euro, means one cent.

If a Business Day Convention is specified in the applicable Pricing Supplement and (x) if there is no numerically corresponding day on the calendar month in which an Interest Payment Date should occur or (y) if any Interest Payment Date would otherwise fall on a day which is not a Business Day, then, if the Business Day Convention specified is:

(i) the Following Business Day Convention, such Interest Payment Date shall be postponed to the next day which is a Business Day;

(ii) the Modified Following Business Day Convention, such Interest Payment Date shall be postponed to the next day which is a Business Day unless it would thereby fall into the next calendar month, in which event such Interest Payment Date shall be brought forward to the immediately preceding Business Day; or

(iii) the Preceding Business Day Convention, such Interest Payment Date shall be brought forward to the immediately preceding Business Day.

In these Conditions, unless the context otherwise requires, "**Business Day**" means a day which is either (1) in relation to any sum payable in a Specified Currency other than Euro, a day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in the principal financial centre of the country of the relevant Specified Currency (if other than the country of the Paying Agent's specified office) and in any Additional Business Center specified in the applicable Pricing Supplement and which if the Specified Currency is Australian dollars or New Zealand dollars shall be Melbourne or Wellington, respectively) or (2) in relation to any sum payable in Euro, a day (other than a Saturday or Sunday) on which the real time gross settlement system operated by the Eurosystem (T2), or any successor system (the "**T2**") is open.

(II) *In the case of Fixed Rate Notes where Conditions 5(a)(II) is specified as being applicable in the applicable Pricing Supplement, the following provisions will apply instead of Condition 5(a)(I):*

Each Fixed Rate Note bears interest on its outstanding nominal amount (or, if it is a Partly Paid Note, the amount paid up) from (and including) the Interest Commencement Date at the rate(s) per annum (expressed as a percentage) equal to the Rate(s) of Interest. If any Interest Payment Date would otherwise fall on a day which is not a business day (as defined below), it shall be postponed to the next day which is a business day unless it would thereby fall into the next calendar month in which event it shall be brought forward to the immediately preceding day. Interest will be payable in arrear on the Interest Payment Date(s) in each year up to (and including) the Maturity Date.

Except as provided in the applicable Pricing Supplement, the amount of interest payable on each Interest Payment Date in respect of the Fixed Interest Period ending on such date will amount to the Fixed Coupon Amount. Payments of interest on any Interest Payment Date will, if so specified in the applicable Pricing Supplement, amount to the Broken Amount so specified.

Where an applicable Fixed Coupon Amount or Broken Amount is specified in the applicable Pricing Supplement, interest shall be calculated in respect of any period by applying the Rate of Interest to:

(A) in the case of Fixed Rate Notes which are represented by a Global Note, the aggregate outstanding nominal amount of the Fixed Rate Notes represented by such Global Note (or, if they are Partly Paid Notes, the aggregate amount paid up); or

(B) in the case of Fixed Rate Notes in definitive form, the Calculation Amount;

and, in each case, multiplying such sum by the actual number of days in the Fixed Interest Period concerned divided by 365, and rounding the resultant figure to the nearest sub-unit of the relevant

Specified Currency, half of any such sub-unit being rounded upwards or otherwise in accordance with applicable market convention. Where the Specified Denomination of a Fixed Rate Note in definitive form is a multiple of the Calculation Amount, the amount of interest payable in respect of such Fixed Rate Note shall be the product of the amount (determined in the manner provided above) for the Calculation Amount and the amount by which the Calculation Amount is multiplied to reach the Specified Denomination, without any further rounding.

In this Condition 5(a)(II):

"**business day**" means a day (other than a Saturday, Sunday or public holiday) upon which commercial banks and foreign exchange markets are generally open for business and settlement of Renminbi payments in Hong Kong and are not authorised or obligated by law or executive order to be closed; and

"**Fixed Interest Period**" means the period from (and including) an Interest Payment Date (or the Interest Commencement Date) to (but excluding) the next (or first) Interest Payment Date; and

"**sub-unit**" means, with respect to Renminbi, the lowest amount of such currency that is available as legal tender in the People's Republic of China.

(b) ***Interest on Floating Rate Notes and Index Linked Interest Notes***

(i) *Interest Payment Dates*

Each Floating Rate Note and Index Linked Interest Note bears interest on its nominal amount (or, if it is a Partly Paid Note, the amount paid up) from (and including) the Interest Commencement Date and such interest will be payable in arrear on either:

(A) the Interest Payment Date(s) (each an "**Interest Payment Date**") in each year specified in the applicable Pricing Supplement; or

(B) if no express Interest Payment Date(s) is/are specified in the applicable Pricing Supplement, each date (each an "**Interest Payment Date**") which falls the number of months or other period specified as the Specified Period in the applicable Pricing Supplement after the preceding Interest Payment Date or, in the case of the first Interest Payment Date, after the Interest Commencement Date.

Such interest will be payable in respect of each Interest Period (which expression shall in these Terms and Conditions, mean the period from (and including) an Interest Payment Date (or the Interest Commencement Date) to (but excluding) the next (or first) Interest Payment Date, each an "**Interest Period**").

If a business day convention is specified in the applicable Pricing Supplement and (x) if there is no numerically corresponding day in the calendar month in which an Interest Payment Date should occur or (y) if any Interest Payment Date would otherwise fall on a day which is not a Business Day, then, if the business day convention specified is:

(1) in any case where Specified Periods are specified in accordance with Condition 5(b)(i)(B) above, the Floating Rate Convention, such Interest Payment Date (i) in the case of (x) above, shall be the last day that is a Business Day in the relevant month and the provisions of (B) below of this subparagraph (1) shall apply *mutatis mutandis* or (ii) in the case of (y) above, shall be postponed to the next day which is a Business Day unless it would thereby fall into the next calendar month, in which event (A) such Interest Payment Date shall be brought forward to the immediately preceding Business Day and (B) each subsequent Interest Payment Date shall be the last Business Day in the month which falls the Specified Period after the preceding applicable Interest Payment Date occurred; or

(2) the Following Business Day Convention, such Interest Payment Date shall be postponed to the next day which is a Business Day; or

(3) the Modified Following Business Day Convention, such Interest Payment Date shall be postponed to the next day which is a Business Day unless it would thereby fall into the next calendar month, in which event such Interest Payment Date shall be brought forward to the immediately preceding Business Day; or

(4) the Preceding Business Day Convention, such Interest Payment Date shall be brought forward to the immediately preceding Business Day.

In these Conditions, "**Business Day**" means a day which is both:

(A) a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in London and, in the case of an issue of Notes cleared through the CMU Service, Hong Kong, and any Additional Business Centre specified in the applicable Pricing Supplement; and

(B) either (1) in relation to any sum payable in a Specified Currency other than Euro and Renminbi, a day on which commercial banks and foreign exchange markets settle payments in the principal financial centre of the country of the relevant Specified Currency (if other than London and Hong Kong, as applicable, and any Additional Business Centre) and which, if the Specified Currency is Australian dollars or New Zealand dollars shall be Sydney or Auckland, respectively) or (2) in relation to any sum payable in Euro, a day on which the T2 is open or (3) in relation to any sum payable in Renminbi, a day (other than a Saturday, Sunday or public holiday) on which commercial banks and foreign exchange markets are open for business and settle Renminbi payments in Hong Kong.

(ii) *Rate of Interest*

The Rate of Interest payable from time to time in respect of Floating Rate Notes and Index Linked Interest Notes will be determined in the manner specified in the applicable Pricing Supplement.

(A) *ISDA Determination for Floating Rate Notes*

Where ISDA Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period will be the relevant ISDA Rate plus or minus (as indicated in the applicable Pricing Supplement) the Margin (if any). For the purposes of this sub-paragraph (A), "**ISDA Rate**" for an Interest Period means a rate equal to the Floating Rate that would be determined by the Principal Paying Agent under an interest rate swap transaction if the Principal Paying Agent were acting as Calculation Agent for that swap transaction under the terms of an agreement incorporating the 2006 ISDA Definitions as amended and updated as at the Issue Date of the first tranche of the Notes, published by the International Swaps and Derivatives Association, Inc. (the "**ISDA Definitions**") and under which:

(1) the Floating Rate Option is as specified in the applicable Pricing Supplement;

(2) the Designated Maturity is a period specified in the applicable Pricing Supplement; and

(3) the relevant Reset Date is either (i) if the applicable Floating Rate Option is based on the Euro-zone inter- bank offered rate ("**EURIBOR**") or on the Hong Kong inter-bank offered rate ("**HIBOR**") for a currency, the first day of that Interest Period or (ii) in any other case, as specified in the applicable Pricing Supplement.

For the purposes of this sub-paragraph (A), (i) "**Floating Rate**", "**Calculation Agent**", "**Floating Rate Option**", "**Designated Maturity**" and "**Reset Date**" have the meanings given to those terms in the ISDA Definitions, (ii) the definition of "**Banking Day**" in the ISDA Definitions shall be amended to insert after the words "are open for" in the second line the word "general" and (iii) "**Euro-zone**" means the region comprised of Member States of the European Union that adopt or have adopted the single currency in accordance with the Treaty establishing the European Community, as amended by the Treaty on European Union.

When this sub-paragraph (A) applies, in respect of each relevant Interest Period the Agent will be deemed to have discharged its obligations under Condition 5(b)(iv) in respect of the determination of the Rate of Interest if it has determined the Rate of Interest in respect of such Interest Period in the manner provided in this sub-paragraph (A).

(B) *Screen Rate Determination for Floating Rate Notes*

(1) Where Screen Rate Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period will, subject as provided below, be either:

(A) the offered quotation; or

(B) the arithmetic mean (rounded if necessary to the fifth decimal place, with 0.000005 being rounded upwards) of the offered quotations, (expressed as a percentage rate per annum) for the Reference Rate which appears or appear, as the case may be, on the Relevant Screen Page as at 11:00 a.m. (Brussels time, in the case of EURIBOR or Hong Kong time, in the case of HIBOR) on the second business day before the beginning of each Interest Period (each an "**Interest Determination Date**") in question plus or minus (as indicated in the applicable Pricing Supplement) the Margin (if any), all as determined by the Calculation Agent. If five or more of such offered quotations are available on the Relevant Screen Page, the highest (or, if there is more than one such highest quotation, one only of such quotations) and the lowest (or, if there is more than one such lowest quotation, one only of such quotations) shall be disregarded by the Calculation Agent for the purpose of determining the arithmetic mean (rounded as provided above) of such offered quotations.

(2) If the Relevant Screen Page is not available or, if in the case of Condition 5(b)(ii)(B)(1)(A) above, no such offered quotation appears or, in the case of Condition 5(b)(ii)(B)(1)(B) above, fewer than three such offered quotations appear, in each case as at the time specified in the preceding paragraph the Determination Agent (as defined below) shall request each of the Reference Banks (as defined below) to provide the Determination Agent with its offered quotation (expressed as a percentage rate per annum) for the Reference Rate at approximately 11:00 a.m. (Brussels time, in the case of EURIBOR, or Hong Kong time, in the case of HIBOR) on the Interest Determination Date in question. If two or more of the Reference Banks provide the Determination Agent with such offered quotations, the Rate of Interest for such Interest Period shall be the arithmetic mean (rounded if necessary to the fifth decimal place with 0.000005 being rounded upwards) of such offered quotations plus or minus (as appropriate) the Margin (if any), all as determined by the Calculation Agent.

(3) If on any Interest Determination Date one only or none of the Reference Banks provides the Determination Agent with such offered quotations as provided in the preceding paragraph, the Rate of Interest for the relevant Interest Period shall be the rate per annum which the Calculation Agent determines as being the arithmetic mean (rounded if necessary to the fifth decimal place, with 0.000005 being rounded upwards) of the rates, as communicated to (and at the request of) the Determination Agent by the Reference Banks or any two or more of them, at which such banks were offered, at approximately 11:00 a.m. (Brussels time, in the case of EURIBOR, or Hong Kong time, in the case of HIBOR) on the relevant Interest Determination Date, deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate by the Euro-zone inter-bank market (if the Reference Rate is EURIBOR) or the Hong Kong inter-bank market (if the Reference Rate is HIBOR) plus or minus (as appropriate) the Margin (if any) or, if fewer than two of the Reference Banks provide the Determination Agent with such offered rates, the offered rate for deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate, or the arithmetic mean (rounded as provided above) of the offered rates for deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate, at which, at approximately 11:00 a.m. (Brussels time, in the case of EURIBOR, or Hong Kong time, in the case of HIBOR) on the relevant Interest Determination Date, any one or more banks (which bank or banks is or are in the opinion of the Issuer suitable for such purpose) informs the Determination Agent it is quoting to leading banks in the Euro-zone inter-bank market (if the Reference Rate is EURIBOR) or the Hong Kong inter-bank market (if the Reference Rate is HIBOR) plus or minus (as appropriate) the Margin (if any), **provided that**, if the Rate of Interest cannot be determined in accordance with the foregoing provisions of this paragraph, the Rate of Interest shall be determined as at the last preceding Interest Determination Date (though substituting, where a different Margin is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin relating to the relevant Interest Period, in place of the Margin relating to that last preceding Interest Period).

(4) "**Reference Banks**" means, in the case of Condition 5(b)(ii)(B)(1)(A) above, those banks whose offered rates were used to determine such quotation when such quotation

last appeared on the Relevant Screen Page and, in the case of Condition 5(b)(ii)(B)(1)(B) above, those banks whose offered quotations last appeared on the Relevant Screen Page when no fewer than three such offered quotations appeared.

(5) If the Reference Rate from time to time in respect of Floating Rate Notes is specified in the applicable Pricing Supplement as being other than EURIBOR or HIBOR, the Rate of Interest in respect of such Notes will be determined as provided in the applicable Pricing Supplement.

(6) "**Determination Agent**" means an independent bank of international repute selected by and acting as an agent of the Issuer for the purposes of Condition 5(b)(ii) and notified to the Principal Paying Agent and Calculation Agent in writing.

(C) *Screen Rate Determination for Floating Rate Notes where the Reference Rate is specified as being SOFR Benchmark*

(1) Where Screen Rate Determination is specified as the manner in which the Rate of Interest is to be determined and the Reference Rate is specified as SOFR Benchmark in the applicable Pricing Supplement, the Rate of Interest for each Interest Period will, subject as provided below, be equal to the relevant SOFR Benchmark plus or minus the Margin (if any), all as determined by the Calculation Agent on the relevant Interest Determination Date.

The "**SOFR Benchmark**" will be determined based on Compounded Daily SOFR or SOFR Index, as follows (subject in each case to Condition 5(f) as further specified hereon):

(A) If Compounded Daily SOFR is specified in the applicable Pricing Supplement as the manner in which the SOFR Benchmark will be determined, the SOFR Benchmark for each Interest Period shall be equal to the compounded average of daily SOFR reference rates for each day during the relevant Interest Period (where SOFR Lag is specified in the applicable Pricing Supplement to determine Compounded Daily SOFR) or the SOFR Observation Period (where SOFR Observation Shift is specified in the applicable Pricing Supplement to determine Compounded Daily SOFR).

Compounded Daily SOFR shall be calculated by the Calculation Agent in accordance with one of the formulas referenced below depending upon which is specified in the applicable Pricing Supplement:

(a) SOFR Lag:

$$\left(\prod_{i=1}^{d_o}\left(1+\frac{SOFR_{i-xUSBD}\times n_i}{360}\right)-1\right)\times\frac{360}{d}$$

with the resulting percentage being rounded, if necessary, to the nearest one hundred-thousandth of a percentage point, with 0.000005 per cent. being rounded upwards (e.g., 9.876541 per cent. (or 0.09876541) being rounded down to 9.87654 per cent. (or 0.0987654) and 9.876545 per cent. (or 0.09876545) being rounded up to 9.87655 per cent. (or 0.0987655)) and where:

"**$SOFR_{i-xUSBD}$**" for any U.S. Government Securities Business Day "i" in the relevant Interest Period, is equal to the SOFR reference rate for the U.S. Government Securities Business Day falling the number of Lookback Days prior to that U.S. Government Securities Business Day "i";

"**Lookback Days**" means such number of U.S. Government Securities Business Days as specified in the applicable Pricing Supplement;

"**d**" means the number of calendar days in the relevant Interest Period;

"$\mathbf{d_0}$" for any Interest Period, means the number of U.S. Government Securities Business Days in the relevant Interest Period;

"**i**" means a series of whole numbers ascending from one to do, representing each relevant U.S. Government Securities Business Day from (and including) the first U.S. Government Securities Business Day in the relevant Interest Period (each a "U.S. Government Securities Business Day "I""); and

"$\mathbf{n_i}$" for any U.S. Government Securities Business Day "i" in the relevant Interest Period means the number of calendar days from (and including) such U.S. Government Securities Business Day "i" up to (but excluding) the following U.S. Government Securities Business Day for which $SOFR_{i-xUSBD}$ applies.

(b) SOFR Observation Shift:

$$\left(\prod_{i=1}^{d_o}\left(1+\frac{SOFR_i \times n_i}{360}\right)-1\right)\times\frac{360}{d}$$

with the resulting percentage being rounded, if necessary, to the nearest one hundred-thousandth of a percentage point, with 0.000005 per cent. being rounded upwards (e.g., 9.876541 per cent. (or 0.09876541) being rounded down to 9.87654 per cent. (or 0.0987654) and 9.876545 per cent. (or 0.09876545) being rounded up to 9.87655 per cent. (or 0.0987655)) and where:

"$\mathbf{SOFR_i}$" for any U.S. Government Securities Business Day "i" in the relevant SOFR Observation Period, is equal to the SOFR reference rate for that U.S. Government Securities Business Day "i";

"**SOFR Observation Period**" means, in respect of an Interest Period, the period from (and including) the date falling the number of SOFR Observation Shift Days prior to the first day of such Interest Period to (but excluding) the date falling the number of SOFR Observation Shift Days prior to the Interest Payment Date for such Interest Period;

"**SOFR Observation Shift Days**" means the number of U.S. Government Securities Business Days as specified in the applicable Pricing Supplement;

"**d**" means the number of calendar days in the relevant SOFR Observation Period;

"$\mathbf{d_0}$" for any SOFR Observation Period means the number of U.S. Government Securities Business Days in the relevant SOFR Observation Period;

"**i**" means a series of whole numbers ascending from one to d_0, representing each U.S. Government Securities Business Day from (and including) the first U.S. Government Securities Business Day in the relevant SOFR Observation Period; and

"$\mathbf{n_i}$" for any U.S. Government Securities Business Day "i" in the relevant SOFR Observation Period means the number of calendar days from (and including) such U.S. Government Securities Business Day "i" up to (but excluding) the following U.S. Government Securities Business Day for which $\mathbf{SOFR_i}$ applies.

The following defined terms shall have the meanings set out below for purpose of this Condition 5(b)(ii)(C)(1):

"**Bloomberg Screen SOFRRATE Page**" means the Bloomberg screen designated "SOFRRATE" or any successor page or service;

"**Reuters Page USDSOFR=**" means the Reuters page designated "USDSOFR=" or any successor page or service;

"**SOFR**" means, in respect of a U.S. Government Securities Business Day, the reference rate determined by the Calculation Agent in accordance with the following provisions:

(i) the Secured Overnight Financing Rate published at the SOFR Determination Time as such reference rate is reported on the Bloomberg Screen SOFRRATE Page; the Secured Overnight Financing Rate published at the SOFR Determination Time as such reference rate is reported on the Reuters Page USDSOFR=; or the Secured Overnight Financing Rate published at the SOFR Determination Time on the SOFR Administrator's Website;

(ii) if the reference rate specified in (i) above does not appear and a SOFR Benchmark Transition Event and its related SOFR Benchmark Replacement Date have not occurred, the SOFR reference rate shall be the reference rate published on the SOFR Administrator's Website for the first preceding U.S. Government Securities Business Day for which SOFR was published on the SOFR Administrator's Website; or

(iii) if the reference rate specified in (i) above does not appear and a SOFR Benchmark Transition Event and its related SOFR Benchmark Replacement Date have occurred, the provisions set forth in Condition 5(f) shall apply as specified in the applicable Pricing Supplement;

"**SOFR Determination Time**" means approximately 3:00 p.m. (New York City time) on the immediately following U.S. Government Securities Business Day.

(2) If SOFR Index is specified in the applicable Pricing Supplement, the SOFR Benchmark for each Interest Period shall be equal to the compounded average of daily SOFR reference rates for each day during the relevant SOFR Observation Period as calculated by the Calculation Agent as follows:

$$\left(\frac{SOFR\ Index_{End}}{SOFR\ Index_{Start}} - 1\right) \times \left(\frac{360}{d_c}\right)$$

with the resulting percentage being rounded, if necessary, to the nearest one hundred-thousandth of a percentage point, with 0.000005 per cent. being rounded upwards (e.g., 9.876541 per cent. (or 0.09876541) being rounded down to 9.87654 per cent. (or 0.0987654) and 9.876545 per cent. (or 0.09876545) being rounded up to 9.87655 per cent. (or 0.0987655)) and where:

"**SOFR Index**" means, in respect of a U.S. Government Securities Business Day, the SOFR Index value as published on the SOFR Administrator's Website at the SOFR Index Determination Time on such U.S. Government Securities Business Day, provided that:

(a) if the value specified above does not appear and a SOFR Benchmark Transition Event and its related SOFR Benchmark Replacement Date have not occurred, the "SOFR Index" shall be calculated on any Interest Determination Date with respect to an Interest Period, in accordance with the Compounded Daily SOFR formula described above in Condition 5(b)(ii)(C)(1)(A)(b)"SOFR Observation Shift", and the term "SOFR Observation Shift Days" shall mean five U.S. Government Securities Business Days; or

(b) if the value specified above does not appear and a SOFR Benchmark Transition Event and its related SOFR Benchmark Replacement Date have occurred, the provisions set forth in Condition 5(f) shall apply as specified in the applicable Pricing Supplement;

"**SOFR Index$_{\mathbf{End}}$**" means, in respect of an Interest Period, the SOFR Index value on the date that is the number of U.S. Government Securities Business Days specified in the applicable Pricing Supplement prior to the Interest Payment Date for such Interest Period (or in the final Interest Period, the Maturity Date);

"**SOFR Index$_{\mathbf{Start}}$**" means, in respect of an Interest Period, the SOFR Index value on the date that is the number of U.S. Government Securities Business Days specified in the applicable Pricing Supplement prior to the first day of such Interest Period;

"**SOFR Index Determination Time**" means, in respect of a U.S. Government Securities Business Day, approximately 3:00 p.m. (New York City time) on such U.S. Government Securities Business Day;

"**SOFR Observation Period**" means, in respect of an Interest Period, the period from (and including) the date falling the number of SOFR Observation Shift Days prior to the first day of such Interest Period to (but excluding) the date falling the number of SOFR Observation Shift Days prior to the Interest Payment Date for such Interest Period;

"**SOFR Observation Shift Days**" means the number of U.S. Government Securities Business Days as specified in the applicable Pricing Supplement; and

"$\mathbf{d_c}$" means the number of calendar days in the applicable SOFR Observation Period.

The following defined terms shall have the meanings set out below for purpose of this Condition 5(b)(ii)(C):

"**Interest Determination Date**" means, with respect to a Rate of Interest and Interest Period, the date specified as such in the applicable Pricing Supplement or, if none is so specified, the fifth U.S. Government Securities Business Day prior to the last day of each Interest Period;

"**SOFR Administrator's Website**" means the website of the Federal Reserve Bank of New York or any successor source;

"**SOFR Benchmark Replacement Date**" means the date of occurrence of a Benchmark Event with respect to the then-current SOFR Benchmark;

"**SOFR Benchmark Transition Event**" means the occurrence of a Benchmark Event with respect to the then-current SOFR Benchmark; and

"**U.S. Government Securities Business Day**" means any day except for a Saturday, a Sunday or a day on which the Securities Industry and Financial Markets Association recommends that the fixed income departments of its members be closed for the entire day for purposes of trading in U.S. government securities.

(iii) *Minimum and/or Maximum Interest Rate*

If the applicable Pricing Supplement specifies a Minimum Interest Rate for any Interest Period, then, in the event that the Rate of Interest in respect of such Interest Period determined in accordance with the provisions of paragraph (ii) above is less than such Minimum Interest Rate, the Rate of Interest for such Interest Period shall be such Minimum Interest Rate. If the applicable Pricing Supplement specifies a Maximum Interest Rate for any Interest Period, then, in the event that the Rate of Interest in respect of such Interest Period determined in accordance with the provisions of paragraph (ii) above is greater than such Maximum Interest Rate, the Rate of Interest for such Interest Period shall be such Maximum Interest Rate.

(iv) *Determination of Rate of Interest and Calculation of Interest Amounts*

The Principal Paying Agent or the Determination Agent, as the case may be, in the case of Floating Rate Notes, and the Calculation Agent, in the case of Index Linked Interest Notes, will at or as soon as practicable after each time at which the Rate of Interest is to be determined, determine the Rate of Interest for the relevant Interest Period. In the case of Floating Rate Notes, the Determination Agent (if applicable) or, in the case of Index Linked Interest Notes, the Calculation Agent will notify the Principal Paying Agent of the Rate of Interest for the relevant Interest Period as soon as practicable after calculating the same.

The Principal Paying Agent will calculate the amount of interest (the "**Interest Amount**") payable on the Floating Rate Notes or the Calculation Agent will calculate the amount of interest payable on the Index Linked Interest Notes in respect of each Specified Denomination for the relevant Interest Period. Each Interest Amount shall be calculated by applying the Rate of Interest to each Specified Denomination, multiplying such sum by the applicable Day Count Fraction, and rounding the resultant figure to the nearest sub-unit of the relevant Specified Currency half of any such sub-unit being rounded upwards or otherwise in accordance with applicable market convention.

"**Day Count Fraction**" means, in respect of the calculation of an amount of interest for any Interest Period:

(1) if "**Actual/Actual (ISDA)**" or "**Actual/Actual**" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365 (or, if any portion of that Interest Period falls in a leap year, the sum of (A) the actual number of days in that portion of the Interest Period falling in a leap year divided by 366 and (B) the actual number of days in that portion of the Interest Period falling in a non-leap year divided by 365);

(2) if "**Actual/365 (Fixed)**" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365;

(3) if "**Actual/365 (Sterling)**" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365 or, in the case of an Interest Payment Date falling in a leap year, 366;

(4) if "**Actual/360**" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 360;

(5) if "**30/360**", "**360/360**" or "**Bond Basis**" is specified in the applicable Pricing Supplement, the number of days in the Interest Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \text{ x } (Y_2 - Y_1)] + [30 \text{ x } (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"$\mathbf{Y_1}$" is the year, expressed as a number, in which the first day of the Interest Period falls;

"$\mathbf{Y_2}$" is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

"$\mathbf{M_1}$" is the calendar month, expressed as a number, in which the first day of the Interest Period falls;

"$\mathbf{M_2}$" is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

"$\mathbf{D_1}$" is the first calendar day, expressed as a number, of the Interest Period, unless such number is 31, in which case D_1 will be 30; and

"$\mathbf{D_2}$" is the calendar day, expressed as a number, immediately following the last day included in the Interest Period, unless such number would be 31 and D_1 is greater than 29, in which case D_2 will be 30;

(6) if "**30E/360**" or "**Eurobond Basis**" is specified in the applicable Pricing Supplement, the number of days in the Interest Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \text{ x } (Y_2 - Y_1)] + [30 \text{ x } (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"$\mathbf{Y_1}$" is the year, expressed as a number, in which the first day of the Interest Period falls;

"$\mathbf{Y_2}$" is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

"$\mathbf{M_1}$" is the calendar month, expressed as a number, in which the first day of the Interest Period falls;

"$\mathbf{M_2}$" is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

"$\mathbf{D_1}$" is the first calendar day, expressed as a number, of the Interest Period, unless such number would be 31, in which case D_1 will be 30; and

"$\mathbf{D_2}$" is the calendar day, expressed as a number, immediately following the last day included in the Interest Period, unless such number would be 31, in which case D_2 will be 30;

(7) if "**30E/360 (ISDA)**" is specified in the applicable Pricing Supplement, the number of days in the Interest Period divided by 360, calculated on a formula basis as follows:

$$\text{Day Count Fraction} = \frac{[360 \times (Y_2 - Y_1)] + [30 \times (M_2 - M_1)] + (D_2 - D_1)}{360}$$

where:

"$\mathbf{Y_1}$" is the year, expressed as a number, in which the first day of the Interest Period falls;

"$\mathbf{Y_2}$" is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

"$\mathbf{M_1}$" is the calendar month, expressed as a number, in which the first day of the Interest Period falls;

"$\mathbf{M_2}$" is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

"$\mathbf{D_1}$" is the first calendar day, expressed as a number, of the Interest Period, unless (i) that day is the last day of February or (ii) such number would be 31, in which case D_1 will be 30; and

"$\mathbf{D_2}$" is the calendar day, expressed as a number, immediately following the last day included in the Interest Period, unless (i) that day is the last day of February but not the Maturity Date or (ii) such number would be 31, in which case D_2 will be 30.

(v) *Notification of Rate of Interest and Interest Amounts*

Provided that the Determination Agent or the Calculation Agent (if applicable) has notified the Principal Paying Agent, the Principal Paying Agent will cause the Rate of Interest and each Interest Amount for each Interest Period and the relevant Interest Payment Date to be notified to the Issuer and notice thereof to be published in accordance with Condition 15 as soon as possible after their determination but in no event later than the fourth Relevant Business Day thereafter. Each Interest Amount and Interest Payment Date so notified may subsequently be amended (or appropriate alternative arrangements made by way of adjustment) without notice in the event of an extension or shortening of the Interest Period. Any such amendment will be promptly notified to each stock exchange on which the relevant Floating Rate Notes or Index Linked Interest Notes are for the time being listed and to the Noteholders in accordance with Condition 15. For purposes of this paragraph, the expression "**Relevant Business Day**" means a day (other than a Saturday or Sunday) on which banks and foreign exchange markets are open for business in London or, if the specified currency is Renminbi, Hong Kong.

(vi) *Certificates to be Final*

All certificates, communications, opinions, determinations, calculations, quotations and decisions given, expressed, made or obtained for the purposes of the provisions of this Condition 5(b), whether by the Principal Paying Agent or, if applicable, the Determination Agent or the Calculation Agent, shall (in the absence of wilful default, fraud or manifest error) be binding on the Issuer, the Principal Paying Agent, the Registrar, the Calculation Agent (if applicable), the Determination Agent (if applicable), the other Paying Agents and all Noteholders, Receiptholders and Couponholders and (in the absence as aforesaid) no liability of the Issuer, the Noteholders, the Receiptholders or the Couponholders shall attach to the Principal Paying Agent, the Determination Agent (if applicable) or the Calculation Agent (if applicable) in connection with the exercise or non-exercise by it of its powers, duties and discretions pursuant to such provisions.

(c) ***Special Provisions Relating to Interest on Tier I Subordinated Notes***

Notwithstanding any provisions to the contrary in these Terms and Conditions, the following will apply with respect to interest on the Tier I Subordinated Notes:

(i) Interest on any Series of Tier I Subordinated Notes will be paid only out of the amount legally available under applicable Korean Law for payment of dividends on equity of the Issuer or, if higher, the amount legally available under applicable Korean Law for payment of interest on such Tier I Subordinated Notes (the "**Dividend Reserve**"). To the extent that the sum of (x) the amount of interest payable on any Series of Tier I Subordinated Notes on any Interest Payment Date (or, if applicable, during a fiscal year) and (y) the aggregate amount of interest and other distributions payable by the Issuer on the other Tier I Obligations during the fiscal quarter in which such Interest Payment Date falls (or, if applicable, during such fiscal year) exceeds the Dividend Reserve as of the relevant date (or, if applicable, for such fiscal year) pursuant to, and as calculated in accordance with, the requirements of applicable Korean Law, the amount of interest payable on such Tier I Subordinated Notes on such Interest Payment Date (or, if applicable, during such fiscal year) will be reduced by an amount equal to the pro rata portion (calculated based on the relative aggregate amounts of interest and other distributions payable on each Tier I Obligation during such fiscal quarter or, if applicable, such fiscal year) of such excess.

(ii) The Issuer may, in its sole discretion, elect not to pay, in whole or in part, any interest payable on any Series of Tier I Subordinated Notes on any Interest Payment Date; provided, however, that if the Issuer makes such an election, it will (unless it has set aside and deposited into an escrow account the full amount of interest that would become payable on such Tier I Subordinated Notes on the next succeeding Interest Payment Date) also make a similar election, in whole or in part on a pro rata basis, as applicable (to the fullest extent permitted by their respective terms and conditions), with respect to interest and other distributions that become payable on the other Tier I Obligations during the applicable Dividend Suspension Period (as defined below).

(iii) The Tier I Subordinated Notes will not bear any interest during an Interest Cancellation Period (as defined below), and any interest payable on the Tier I Subordinated Notes on any Interest Payment Date falling within an Interest Cancellation Period will not be paid.

(iv) Interest on the Tier I Subordinated Notes is non-cumulative. All amounts of such interest not paid in whole or in part pursuant to the preceding paragraphs will be deemed irrevocably cancelled, without the need for the consent of the holders of the Tier I Subordinated Notes, and will not be restored in any circumstances. For the avoidance of doubt, (A) any non-payment of interest, in whole or in part, by the Issuer pursuant to the preceding paragraphs will not constitute an Event of Default under the Notes, (B) holders of the Tier I Subordinated Notes will not have any claim or entitlement to any amount of such unpaid interest, and (C) any and all amounts of such unpaid interest may be applied by the Issuer for any purpose, including without limitation for the satisfaction of its other obligations that are due and payable.

(v) In the event that (x) any interest payable on any Series of Tier I Subordinated Notes on any Interest Payment Date will not be paid in whole or in part pursuant to the preceding paragraphs or (y) an Interest Cancellation Period has commenced or terminated, the Issuer will, no later than 10 Business Days prior to the relevant Interest Payment Date or five Business Days after the commencement or termination of an Interest Cancellation Period, as applicable, provide notice of such non-payment or commencement/termination to the Paying Agents and to the holders of such Tier I Subordinated Notes in accordance with Condition 15, stating the reason for such non-payment (and specifying the amount of interest payable that will not be paid) or commencement/termination; provided, however, that the failure of the Issuer to provide such notice shall not affect the effectiveness of the cancellation of the applicable interest amounts.

(vi) In the event that any interest payable on any Series of Tier I Subordinated Notes on any Interest Payment Date is not (or, if applicable, will not be) paid in whole or in part pursuant to the preceding paragraphs, the Issuer will not:

(A) declare or pay any dividends or other distributions in cash with respect to any of its common shares; and

(B) purchase, acquire or redeem any of its common shares or permit any of its Subsidiaries to do so;

in each case during the applicable Dividend Suspension Period.

As used herein:

"**Dividend Suspension Period**" means the period from and including the applicable Interest Payment Date (or, if applicable, the first day of the relevant fiscal year) to but excluding the earlier of (x) the next succeeding Interest Payment Date on which the interest payable on the applicable Series of Tier I Subordinated Notes on such date is paid in full (or, if applicable, the last day of the relevant fiscal year) and (y) the date of redemption in full or Write-Off (as defined in Condition 8) of the applicable Series of Tier I Subordinated Notes.

"**Interest Cancellation Period**" means any of the following: (x) the period during which either a "management improvement recommendation", a "management improvement requirement" or a "management improvement order" has been issued by the Financial Services Commission of Korea (the "**FSC**") against the Issuer pursuant to Article 34, 35 or 36, respectively, of the Regulation on Supervision of Banking Business and is pending; or (y) the period during which "emergency measures" have been imposed by the FSC or its chairman against the Issuer pursuant to Article 38 of the Regulation on Supervision of Banking Business and are pending.

(d) ***Interest Rate Reset***

If "Interest Rate Reset" is specified in the applicable Pricing Supplement, the Rate of Interest applicable to the Notes will be reset to the Reset Interest Rate (as defined below) effective as of each Interest Reset Date (as specified in the applicable Pricing Supplement), such that the Notes will bear interest at the Reset Interest Rate during each period from (and including) an Interest Reset Date to (but excluding) the next succeeding Interest Reset Date or, if earlier, the date of redemption (each a "**Reset Interest Period**").

The Calculation Agent will, on the Calculation Date (as defined below) for each Reset Interest Period, calculate the Reset Interest Rate for such Reset Interest Period and cause such Reset Interest Rate and the relevant Interest Reset Date to be notified to the Issuer and any stock exchange on which the Notes are for the time being listed, and the Issuer will cause notice to the Noteholders of such Reset Interest Rate and Interest Reset Date to be published in accordance with Condition 15 as soon as possible after such Calculation Date but in no event later than the fourth New York Business Day (as defined below) thereafter.

All certificates, communications, opinions, determinations, calculations, quotations and decisions given, expressed, made or obtained for the purposes of the provisions of this Condition 5(d) by the Calculation Agent shall (in the absence of wilful default, fraud or manifest error) be binding on the Issuer, the other Paying Agents and all Noteholders, Receiptholders and Couponholders and (in the absence as aforesaid) no liability to the Issuer, the Noteholders, the Receiptholders or the Couponholders shall attach to the Principal Paying Agent in connection with the exercise or non-exercise by it of its powers, duties and discretions pursuant to such provisions.

As used in this Condition 5(d), unless otherwise specified in the applicable Pricing Supplement:

"**Base Rate**" means the U.S. Treasury Rate or such other rate as specified in the applicable Pricing Supplement.

"**Calculation Date**" means, in relation to a Reset Interest Period, the fifth New York Business Day (as defined below) preceding the Interest Reset Date on which such Reset Interest Period commences.

"**Comparable Treasury Issue**" means the U.S. Treasury security having a maturity comparable to the Reset Interest Period and selected by the Issuer as one that would be utilised, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities with a maturity comparable to the Reset Interest Period.

"**Comparable Treasury Price**" means, with respect to a Calculation Date, the average of the three Reference Treasury Dealer Quotations (as defined below) for such Calculation Date.

"**New York Business Day**" means a day (other than a Saturday or a Sunday) on which banks and foreign exchange markets are open for general business (including dealing in foreign exchange and foreign currency deposits) in New York City.

"**Reference Treasury Dealer Quotations**" means, with respect to a Calculation Date, the average, as determined by the Principal Paying Agent, of the bid and asked yields for the Comparable Treasury Issue, expressed in each case as a percentage of its principal amount, quoted in writing to the Issuer at 5:00 p.m. New York time on such Calculation Date by each of the three nationally recognised investment banking firms selected by the Issuer that are primary U.S. government securities dealers.

"**Reset Interest Rate**" means, in relation to a Reset Interest Period, a fixed percentage rate per annum equal to the sum of (x) the Base Rate for such Reset Interest Period and (y) the Spread (as specified in the applicable Pricing Supplement).

"**U.S. Treasury Rate**" means, in relation to a Reset Interest Period, the percentage rate per annum equal to the yield, appearing in the most recently published statistical release designated "H.15(519)" or any successor publication that is published weekly by the Board of Governors of the U.S. Federal Reserve System (available on the website thereof at http://www.federalreserve.gov/releases/h15/current/default.htm, or any successor site), within the column that presents the average yields for the week ending immediately prior to the Calculation Date for such Reset Interest Period, under the caption "U.S. government securities — Treasury constant maturities — Nominal," for U.S. Treasury securities having a maturity comparable to the Reset Interest Period. If such release does not appear on such website, "U.S. Treasury Rate" means the percentage rate per annum equal to the semi-annual or quarterly (as applicable) equivalent yield to maturity of the Comparable Treasury Issue, calculated using a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such Calculation Date.

(e) ***Benchmark Discontinuation (General)***

(i) **Independent Adviser**: If a Benchmark Transition Event occurs in relation to an Original Reference Rate when any Rate of Interest (or any component part thereof) remains to be determined by reference to such Original Reference Rate, the Issuer shall use its reasonable endeavours to appoint an Independent Adviser, as soon as reasonably practicable, to determine a Successor Rate, failing which an Alternative Rate (in accordance with Condition 5(e)(ii)) and, in either case, an Adjustment Spread and any Benchmark Amendments (in accordance with 5(e)(iv)). In making such determination, the Independent Adviser appointed pursuant to this Condition 5(e) shall act in good faith and in a commercially reasonable manner as an expert. In the absence of bad faith or fraud, the Independent Adviser shall have no liability whatsoever to the Issuer, the Paying Agents, or the Noteholders for any determination made by it, pursuant to this Condition 5(e).

If (i) the Issuer is unable to appoint an Independent Adviser, or (ii) the Independent Adviser appointed by it fails to determine a Successor Rate or, failing which, an Alternative Rate in accordance with this Condition 5(e)(i) prior to the date which is 10 business days prior to the relevant Interest Determination Date, the Rate of Interest applicable to the next succeeding Interest Period shall be equal to the Rate of Interest last determined in relation to Floating Rate Notes in respect of the immediately preceding Interest Period. If there has not been a first Interest Payment Date, the Rate of Interest shall be the initial Rate of Interest determined using the Original Reference Rate last displayed on the Relevant Screen Page prior to the relevant Interest Determination Date. Where a different Margin or Maximum or Minimum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin or Maximum or Minimum Rate of Interest relating to the relevant Interest Period shall be substituted in place of the Margin or Maximum or Minimum Rate of Interest relating to that last preceding Interest Period. For the avoidance of doubt, this paragraph shall apply to the relevant next succeeding Interest Period only and any subsequent Interest Periods are subject to the subsequent operation of, and to adjustment as provided in, the first paragraph of this Condition 5(e)(i).

(ii) **Successor Rate or Alternative Rate**: If the Independent Adviser, determines that:

(A) there is a Successor Rate, then such Successor Rate and the applicable Adjustment Spread shall subsequently be used in place of the Original Reference Rate to determine the Rate of Interest (or the relevant component part thereof) for all future payments of interest on Floating Rate Notes (subject to the operation of this Condition 5(e)); or

(B) there is no Successor Rate but that there is an Alternative Rate, then such Alternative Rate and the applicable Adjustment Spread shall subsequently be used in place of the Original Reference Rate to determine the Rate of Interest (or the relevant component part thereof) for all future payments of interest on Floating Rate Notes (subject to the operation of this Condition 5(e)).

(iii) **Adjustment Spread**: The Adjustment Spread (or the formula or methodology for determining the Adjustment Spread) shall be applied to the Successor Rate or the Alternative Rate (as the case may be). If the Independent Adviser is unable to determine the quantum of, or a formula or methodology for determining, such Adjustment Spread, then the Successor Rate or Alternative Rate (as applicable) will apply without an Adjustment Spread.

(iv) **Benchmark Amendments**: If any Successor Rate or Alternative Rate and, in either case, the applicable Adjustment Spread is determined in accordance with this Condition 5(e) and the Independent Adviser determines (i) that amendments to these Conditions and/or the Agency Agreement are necessary to ensure the proper operation of such Successor Rate or Alternative Rate and/or (in either case) the applicable Adjustment Spread (such amendments, the "Benchmark Amendments"), and (ii) the terms of the Benchmark Amendments, then the Issuer shall, subject to giving notice thereof in accordance with Condition 5(e)(v), without any requirement for the consent or approval of Noteholders, vary these Conditions and/or the Agency Agreement to give effect to such Benchmark Amendments with effect from the date specified in such notice.

Notwithstanding any other provision of this Condition 5(e), neither the Calculation Agent nor any Paying Agent is obliged to concur with the Issuer or the Independent Adviser in respect of any changes or amendments as contemplated under this Condition 5(e) which, in the sole opinion of the Calculation Agent or the relevant Paying Agent, as the case may be, would impose more onerous obligations upon it or expose it to any additional duties, responsibilities or liabilities or reduce or amend the protective provisions afforded to the Calculation Agent or the relevant Paying Agent (as applicable) in the Agency Agreement and/or these Conditions.

(v) **Notices, etc.:** Any Successor Rate, Alternative Rate, Adjustment Spread and the specific terms of any Benchmark Amendments determined under this Condition 5(e) will be notified at least 10 business days prior to the relevant Interest Determination Date by the Issuer to the Calculation Agent, the Paying Agents and, in accordance with Condition 15, the Noteholders. Such notice shall be irrevocable and shall specify the effective date of the Benchmark Amendments, if any.

No later than notifying the Noteholders of the same, the Issuer shall deliver to the Calculation Agent and the Paying Agents a certificate signed by an authorised officer of the Issuer:

(A) confirming (i) that a Benchmark Transition Event has occurred, (ii) the Successor Rate or, as the case may be, the Alternative Rate, (iii) the applicable Adjustment Spread and (iv) the specific terms of the Benchmark Amendments (if any), in each case as determined in accordance with the provisions of this Condition 5(e); and

(B) certifying that the Benchmark Amendments (if any) are necessary to ensure the proper operation of such Successor Rate or Alternative Rate and (in either case) the applicable Adjustment Spread.

Each of the Calculation Agent and the Paying Agents shall be entitled to rely on such certificate (without liability to any person) as sufficient evidence thereof. The Successor Rate or Alternative Rate and the Adjustment Spread and the Benchmark Amendments (if any) specified in such certificate will (in the absence of manifest error or bad faith in the determination of the Successor Rate or Alternative Rate and the Adjustment Spread and the Benchmark Amendments (if any) and without prejudice to the Calculation Agent's or the Paying Agents' ability to rely on such certificate as aforesaid) be binding on the Issuer, the Calculation Agent, the Paying Agents and the Noteholders.

Notwithstanding any other provision of this Condition 5(e), if following the determination of any Successor Rate, Alternative Rate, Adjustment Spread or Benchmark Amendments (if any), in the Calculation Agent's opinion there is any uncertainty between two or more alternative courses of action in making any determination or calculation under this Condition 5(e), the Calculation Agent shall promptly notify the Issuer thereof and the Issuer shall direct the Calculation Agent in writing as to which alternative course of action to adopt. If the Calculation Agent is not promptly provided with such direction, or is otherwise unable (other than due to its own gross negligence, wilful default or fraud) to make such calculation or determination for any reason, it shall notify the Issuer thereof and the Calculation Agent shall be under no obligation to make such calculation or determination and (in the absence of such gross negligence, wilful default or fraud) shall not incur any liability for not doing so.

(vi) **Survival of Original Reference Rate**: Without prejudice to the obligations of the Issuer under Condition 5(e)(i), Condition 5(e)(ii), Condition 5(e)(iii) and Condition 5(e)(iv), the Original Reference Rate and the fallback provisions provided for in Condition 5(b)(i) will continue to apply unless and until a Benchmark Transition Event has occurred.

(vii) **Definitions:** As used in this Condition 5(e):

"**Adjustment Spread**" means either (x) a spread (which may be positive, negative or zero) or (y) a formula or methodology for calculating a spread, in each case to be applied to the Successor Rate or the Alternative Rate (as the case may be) and is the spread, formula or methodology which:

(A) in the case of a Successor Rate, is formally recommended in relation to the replacement of the Original Reference Rate with the Successor Rate by any Relevant Nominating Body; or;

(B) if no such recommendation has been made, or in the case of an Alternative Rate, the Independent Adviser determines, is customarily applied to the relevant Successor Rate or the Alternative Rate (as the case may be) in international debt capital markets transactions to produce an industry-accepted replacement rate for the Original Reference Rate; or

(C) if the Independent Adviser determines that no such spread is customarily applied, the Independent Adviser determines is recognised or acknowledged as being the industry standard for over-the-counter derivative transactions which reference the Original Reference Rate, where such rate has been replaced by the Successor Rate or the Alternative Rate (as the case may be);

"**Alternative Rate**" means an alternative benchmark or screen rate which the Independent Adviser determines in accordance with Condition 5(e)(ii) is customarily applied in international debt capital markets transactions for the purposes of determining rates of interest (or the relevant component part thereof) in the same Specified Currency as the Floating Rate Notes;

"**Benchmark Amendments**" has the meaning given to it in Condition 5(e)(iv);

"**Benchmark Replacement Conforming Changes**" means, with respect to the Benchmark Amendments, any technical, administrative or operational changes (including changes to the timing and frequency of determining rates and making payments of interest, rounding of amounts or tenors, and other administrative matters) that the Issuer or its designee decides may be appropriate to reflect the adoption of such Benchmark Amendments in a manner substantially consistent with market practice (or, if the Issuer or its designee decides that adoption of any portion of such market practice is not administratively feasible or if the Issuer or its designee determine that no market practice for use of the Benchmark Amendments exists, in such other manner as the Issuer or its designee determines is reasonably necessary);

"**Benchmark Transition Event**" means:

(A) the Original Reference Rate ceasing to be published for a period of at least 5 Business Days or ceasing to exist; or

(B) a public statement by the administrator of the Original Reference Rate that it has ceased or that it will cease publishing the Original Reference Rate permanently or indefinitely (in circumstances where no successor administrator has been appointed that will continue publication of the Original Reference Rate); or

(C) a public statement by the supervisor of the administrator of the Original Reference Rate, that the Original Reference Rate has been or will be permanently or indefinitely discontinued; or

(D) a public statement by the supervisor of the administrator of the Original Reference Rate as a consequence of which the Original Reference Rate will be prohibited from being used either generally, or in respect of the Floating Rate Notes; or

(E) the making of a public statement by the supervisor of the administrator of the Original Reference Rate that the Original Reference Rate is or will be (or is or will be deemed by such supervisor to be) no longer representative of its relevant underlying market; or

(F) it has become unlawful for any Paying Agent, the Calculation Agent, the Issuer or other party to calculate any payments due to be made to any Noteholders using the Original Reference Rate, provided that the Benchmark Transition Event shall be deemed to occur (i) in the case of sub-paragraphs (b) and (c) above, on the date of the cessation of publication of the Original Reference Rate or the discontinuation of the Original Reference Rate, as the case may be, (ii) in the case of sub-paragraph (d) above, on the date of the prohibition of use of the Original Reference Rate and (iii) in the case of sub-paragraph (e) above, on the date with effect from which the Original Reference Rate will no longer be (or will be deemed by the relevant supervisor to no longer be) representative of its relevant underlying market and which is specified in the relevant public statement, and, in each case, not the date of the relevant public statement.

The occurrence of a Benchmark Transition Event shall be determined by the Issuer and promptly notified to the Calculation Agent and the Paying Agents. For the avoidance of doubt, neither the Calculation Agent nor the Paying Agents shall have any responsibility for making such determination;

"**designee**" means a designee as selected and separately appointed by the Issuer in writing;

"**Independent Adviser**" means an independent financial institution of international repute or an independent financial adviser with appropriate expertise appointed by the Issuer under Condition 5(e)(i);

"**Original Reference Rate**" means the originally-specified benchmark or screen rate (as applicable) used to determine the Rate of Interest (or any component part thereof) on the Floating Rate Notes;

"**Relevant Nominating Body**" means, in respect of a benchmark or screen rate (as applicable):

(A) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, or any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable); or

(B) any working group or committee sponsored by, chaired or co-chaired by or constituted at the request of (i) the central bank for the currency to which the benchmark or screen rate (as applicable) relates, (ii) any central bank or other supervisory authority which is responsible for supervising the administrator of the benchmark or screen rate (as applicable), (ii) a group of the aforementioned central banks or other supervisory authorities or (iv) the Financial Stability Board or any part thereof; and

"**Successor Rate**" means a successor to or replacement of the Original Reference Rate which is formally recommended by any Relevant Nominating Body. In connection with the implementation of the Benchmark Amendments, the Issuer or its designee will have the right to make Benchmark Replacement Conforming Changes (as defined herein) from time to time.

(f) ***Benchmark Discontinuation (SOFR)***

The following provisions shall apply if SOFR Benchmark Discontinuation is specified in the applicable Pricing Supplement:

(i) **Benchmark Replacement**

If the Issuer or its designee determines that a Benchmark Event (as defined herein) and its related Benchmark Replacement Date (as defined herein) have occurred on or prior to the Reference Time (as defined herein) with respect to the then-current Benchmark (as defined herein), the Benchmark Replacement (as defined herein) will replace the then-current Benchmark for all purposes relating to the applicable Notes in respect of all determinations on such date and all determinations on all subsequent dates.

(ii) **SOFR Benchmark Replacement Conforming Changes**

In connection with the implementation of a Benchmark Replacement, the Issuer or its designee will have the right to make SOFR Benchmark Replacement Conforming Changes (as defined herein) from time to time. For the avoidance of doubt, any of the Agents shall, at the direction and expense of the Issuer, effect such consequential amendments to the Agency Agreement and these Conditions as may be required to give effect to this Condition 5(f). Noteholders' consent shall not be required in connection with effecting any such changes, including the execution of any documents or any steps to be taken by the Agents (if required). Further, none of the Calculation Agent, the Paying Agents, the Registrars or the Transfer Agents shall be responsible or liable for any determinations, decisions or elections made by the Issuer or its designee with respect to any Benchmark Replacement or any other changes and shall be entitled to rely conclusively on any certifications provided to each of them in this regard.

(iii) **Decisions and Determinations**

Any determination, decision or election that may be made by the Issuer or its designee pursuant to this Condition 5(f), including any determination with respect to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date and any decision to take or refrain from taking any action or any selection (A) will be conclusive and binding absent manifest error, (B) will be made in the sole discretion of the Issuer or its designee, as applicable, and (C) notwithstanding anything to the contrary in the documentation relating to the Notes, shall become effective without consent from the holders of the Notes or any other party.

(iv) **Certain Defined Terms**

As used in this Condition 5(f):

"**Benchmark**" means, initially, the relevant SOFR Benchmark specified in the applicable Pricing Supplement; provided that if the Issuer or its designee determines on or prior to the Reference Time that a Benchmark Event and its related Benchmark Replacement Date have occurred with respect to the relevant SOFR Benchmark (including any daily published component used in the calculation thereof) or the then-current Benchmark, then "Benchmark" means the applicable Benchmark Replacement;

"**Benchmark Event**" means the occurrence of one or more of the following events with respect to the then-current Benchmark (including any daily published component used in the calculation thereof):

(A) a public statement or publication of information by or on behalf of the administrator of the Benchmark (or such component) announcing that such administrator has ceased or will cease to provide the Benchmark (or such component), permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark (or such component); or

(B) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark (or such component), the central bank for the currency of the Benchmark (or such component), an insolvency official with jurisdiction over the administrator for the Benchmark (or such component), a resolution authority with jurisdiction over the administrator for the Benchmark (or such component) or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark, which states that the administrator of the Benchmark (or such component) has ceased or will cease to provide the Benchmark (or such component) permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark (or such component); or

(C) a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark announcing that the Benchmark is no longer representative;

"**Benchmark Replacement**" means the first alternative set forth in the order below that can be determined by the Issuer or its designee as of the Benchmark Replacement Date:

(A) the sum of:

(1) the alternate reference rate that has been selected or recommended by the Relevant Governmental Body as the replacement for the then-current Benchmark (including any daily published component used in the calculation thereof); and

(2) the Benchmark Replacement Adjustment;

(B) the sum of:

(1) the ISDA Fallback Rate; and

(2) the Benchmark Replacement Adjustment; or

(C) the sum of:

(1) the alternate reference rate that has been selected by the Issuer or its designee as the replacement for the then-current Benchmark (including any daily published component used in the calculation thereof) giving due consideration to any industry-accepted reference rate as a replacement for the then-current Benchmark (including any daily published component used in the calculation thereof) for U.S. dollar-denominated Floating Rate Notes at such time; and

(2) the Benchmark Replacement Adjustment;

"**Benchmark Replacement Adjustment**" means the first alternative set forth in the order below that can be determined by the Issuer or its designee as of the Benchmark Replacement Date:

(A) the spread adjustment, or method for calculating or determining such spread adjustment, (which may be a positive or negative value or zero) that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement;

(B) if the applicable Unadjusted Benchmark Replacement is equivalent to the ISDA Fallback Rate, the ISDA Fallback Adjustment; or

(C) the spread adjustment (which may be a positive or negative value or zero) that has been selected by the Issuer or its designee giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark (including any daily published component used in the calculation thereof) with the applicable Unadjusted Benchmark Replacement for U.S. dollar-denominated Floating Rate Notes at such time;

"**Benchmark Replacement Date**" means the earliest to occur of the following events with respect to the then-current Benchmark (including any daily published component used in the calculation thereof):

(A) in the case of sub-paragraph (A) or (B) of the definition of "Benchmark Event," the later of:

(1) the date of the public statement or publication of information referenced therein; and

(2) the date on which the administrator of the Benchmark permanently or indefinitely ceases to provide the Benchmark (or such component); or

(B) in the case of sub-paragraph (C) of the definition of "Benchmark Event", the date of the public statement or publication of information referenced therein.

For the avoidance of doubt, if the event giving rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for such determination;

"**designee**" means a designee as selected and separately appointed by the Issuer in writing;

"**ISDA Definitions**" means the 2006 ISDA Definitions published by the International Swaps and Derivatives Association, Inc. or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time;

"**ISDA Fallback Adjustment**" means the spread adjustment (which may be a positive or negative value or zero) that would apply for derivatives transactions referencing the ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to the Benchmark;

"**ISDA Fallback Rate**" means the rate that would apply for derivatives transactions referencing the ISDA Definitions to be effective upon the occurrence of an index cessation date with respect to the Benchmark (including any daily published component used in the calculation thereof) for the applicable tenor excluding the applicable ISDA Fallback Adjustment;

"**Reference Time**" with respect to any determination of the Benchmark means (1) if the Benchmark is the SOFR Benchmark, the SOFR Determination Time (where Compounded Daily SOFR is specified as applicable hereon) or SOFR Index Determination Time (where SOFR Index is specified as applicable hereon), or (2) if the Benchmark is not the SOFR Benchmark, the time determined by the Issuer or its designee after giving effect to the SOFR Benchmark Replacement Conforming Changes;

"**Relevant Governmental Body**" means the Federal Reserve Board and/or the Federal Reserve Bank of New York, or a committee officially endorsed or convened by the Federal Reserve Board and/or the Federal Reserve Bank of New York or any successor thereto;

"**SOFR Benchmark Replacement Conforming Changes**" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the timing and frequency of determining rates and making payments of interest, rounding of amounts or tenors, and other administrative matters) the Issuer or its designee decides may be appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or, if the Issuer or its designee decides that adoption of any portion of such market practice is not administratively feasible or if the Issuer or its designee determines that no market practice for use of the Benchmark Replacement exists, in such other manner as the Issuer or its designee determines is reasonably necessary); and

"**Unadjusted Benchmark Replacement**" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

6. Payments

(a) ***Method of Payment***

Subject as provided below:

(i) payments in a Specified Currency other than Euro will be made by credit or transfer to an account in the relevant Specified Currency (which, in the case of a payment in Japanese Yen to a non-resident of Japan, shall be a non-resident account) maintained by the payee with a bank in the principal financial centre of the country of such Specified Currency (which, if the Specified Currency is Australian dollars, New Zealand dollars or Renminbi, shall be Sydney, Auckland or Hong Kong, respectively); and

(ii) payments in Euro will be made by credit or transfer to a Euro account (or any other account to which Euro may be credited or transferred) specified by the payee.

Payments will be subject in all cases to (i) any fiscal or other laws and regulations applicable thereto in the place of payment, but without prejudice to the provisions of Condition 9 and (ii) any withholding or deduction required pursuant to an agreement described in Section 1471(b) of the Code or otherwise imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, official interpretations thereof, or any law implementing an intergovernmental approach thereto ("**FATCA**"). References to "**Specified Currency**" will include any successor currency under applicable law.

(b) ***Payments in respect of Definitive Bearer Notes***

Payments of principal in respect of definitive Bearer Notes will (subject as provided below) be made in the manner provided in paragraph (a) above only against surrender of definitive Bearer Notes, and payments of interest in respect of definitive Bearer Notes will (subject as provided below) be made as aforesaid only against surrender of Coupons, in each case at the specified office of any Paying Agent outside the United States (which expression, as used herein, means the United States of America (including the States and the District of Columbia, its territories, its possessions and other areas subject to its jurisdiction)) and in each case payments will not be made by a transfer of funds to an account maintained by the payee in the United States or mailed to an address in the United States.

Notwithstanding the foregoing, if any amount of principal and/or interest in respect of any Bearer Notes is payable in U.S. dollars, such U.S. dollar payments of principal and/or interest in respect of the Bearer Notes will be made at the specified office of a Paying Agent in the United States if:

(i) the Issuer has appointed Paying Agents with specified offices outside the United States with the reasonable expectation that such Paying Agents would be able to make payment in U.S. dollars at such specified offices outside the United States of the full amount of principal and interest on the Bearer Notes in the manner provided above when due;

(ii) payment of the full amount of such principal and interest at all such specified offices outside the United States is illegal or effectively precluded by exchange controls or other similar restrictions on the full payment or receipt of principal and interest in U.S. dollars; and

(iii) such payment is then permitted under United States law without involving, in the opinion of the Issuer, adverse tax consequences to the Issuer.

In respect of definitive Bearer Notes, payments of instalments of principal (if any), other than the final instalment, will (subject as provided below) be made in the manner provided in paragraph (a) above against surrender of the relevant Receipt. Payment of the final instalment will be made in the manner provided in paragraph (a) above only against surrender of the relevant Bearer Note. Each Receipt must be presented for payment of the relevant instalment together with the definitive Bearer Note to which it appertains. Receipts presented without the definitive Bearer Note to which they appertain do not constitute valid obligations of the Issuer. Upon the date on which any definitive Bearer Note becomes due and repayable, unmatured Receipts (if any) relating thereto (whether or not attached) shall become void and no payment shall be made in respect thereof.

Fixed Rate Notes in definitive bearer form (other than Dual Currency Notes or Long Maturity Notes (as defined below)) should be presented for payment together with all unmatured Coupons appertaining thereto (which expression shall for this purpose include Coupons falling to be issued on exchange of matured Talons), failing which the amount of any missing unmatured Coupon (or, in the case of payment not being made in full, the same proportion of the amount of such missing unmatured Coupon as the sum so paid bears to the sum due) will be deducted from the sum due for payment. Each amount of principal so deducted will be paid in the manner mentioned above against surrender of the relative missing Coupon at any time before the expiry of 10 years after the Relevant Date (as defined in Condition 9) in respect of such principal (whether or not such Coupon would otherwise have become void under Condition 10) or, if later, five years from the date on which such Coupon would otherwise have become due, but in no event thereafter. Upon any Fixed Rate Note becoming due and repayable prior to its Maturity Date, all unmatured Talons (if any) appertaining thereto will become void and no further Coupons will be issued in respect thereof.

Upon the date on which any Floating Rate Note, Dual Currency Note or Index Linked Note or Long Maturity Note in definitive bearer form becomes due and repayable, unmatured Coupons and Talons (if any) relating thereto (whether or not attached) shall become void and no payment or, as the case may be, exchange for further Coupons shall be made in respect thereof. A "**Long Maturity Note**" is a Fixed Rate Note whose nominal amount on issue is less than the aggregate interest payable thereon **provided that** such Note shall cease to be a Long Maturity Note on the Interest Payment Date on which the aggregate amount of interest remaining to be paid after that date is less than the nominal amount of such Note.

If the due date for redemption of any definitive Bearer Note is not a Fixed Interest Date or an Interest Payment Date, interest (if any) accrued in respect of such Note from (and including) the preceding Fixed Interest Date or Interest Payment Date or, as the case may be, the Interest Commencement Date shall be payable only against surrender of the relevant definitive Bearer Note.

(c) ***Payments in respect of Bearer Global Notes***

Payments of principal and interest (if any) in respect of Bearer Notes represented by any global Bearer Note will (subject as provided below) be made in the manner provided in paragraph (a) above and otherwise in the manner specified in the relevant global Bearer Note (i) in the case of a global Bearer Note lodged with the CMU Service, at the direction of the bearer to the CMU Accountholders, or (ii) in the case of a global Bearer Note not lodged with the CMU Service, against presentation or surrender, as the case may be, of such global Bearer Note at the specified office of any Paying Agent outside the United States. A record of each payment made against presentation or surrender of such global Bearer Note, distinguishing between any payment of principal and any payment of interest, will be made on such global Bearer Note (in the case of a global Bearer Note not lodged with the CMU Service) by such Paying Agent or in the records of Euroclear and Clearstream, Luxembourg, as applicable or (in the case of a global Bearer Note lodged with the CMU Service) on withdrawal of such global Bearer Note by the CMU Lodging Agent, and in such case such record shall be *prima facie* evidence that the payment in question has been made.

(d) ***Payments in respect of Registered Notes***

Payments of principal (other than instalments of principal (if any) prior to the final instalment) in respect of each Registered Note (whether in definitive or global form) will be made against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of the

Registered Note at the specified office of the Registrar, any of the Paying Agents or, in the case of CMU Notes, the CMU Lodging Agent. Such payments will be made by transfer to the Designated Account (as defined below) of the holder (or the first named of joint holders) of the Registered Note appearing in the register of holders of the Registered Notes maintained by the Registrar (the "**Register**") (i) where in global form, at the close of the business day (being for this purpose (x) in respect of Notes clearing through Euroclear and/or Clearstream, Luxembourg, a day on which Euroclear and/or Clearstream, Luxembourg are open for business, (y) in respect of Notes clearing through the CMU Service, a day on which the CMU Service is open for business, and (z) in respect of Notes clearing through the DTC, a day on which the DTC is open for business) immediately prior to the relevant due date, and (ii) where in definitive form, at the close of business on the third business day (being for this purpose a day on which banks are open for business in the city where the specified office of the Registrar is located) prior to the relevant due date. Notwithstanding the previous sentence, if (i) a holder does not have a Designated Account or (ii) the principal amount of the Notes held by a holder is less than U.S.$250,000 (or its approximate equivalent in any other Specified Currency), payment will instead be made by a cheque in the Specified Currency drawn on a Designated Bank (as defined below). For these purposes, "**Designated Account**" means the account (which, in the case of a payment in Japanese Yen to a non-resident of Japan, shall be a non-resident account) maintained by a holder with a Designated Bank and identified as such in the Register and "**Designated Bank**" means (in the case of payment in a Specified Currency other than Euro) a bank in the principal financial centre of the country of such Specified Currency (which, if the Specified Currency is Australian dollars, New Zealand dollars or Renminbi, shall be Sydney, Auckland or Hong Kong, respectively) and (in the case of a payment in Euro) any bank which processes payments in Euro.

Payments of interest and payments of instalments of principal (other than the final instalment) in respect of each Registered Note (whether or not in global form) will be made in the manner specified in paragraph (a) to the holder (or the first named of joint holders) of the Registered Note appearing in the Register (i) where in global form, at the close of the business day (being for this purpose (i) (x) in respect of Notes clearing through Euroclear and/or Clearstream, Luxembourg, a day on which Euroclear and Clearstream, Luxembourg are open for business, (y) in respect of Notes clearing through the CMU Service, a day on which the CMU Service is open for business and (z) in respect of Notes clearing through the DTC, a day on which the DTC is open for business) immediately prior to the relevant due date, and (ii) where in definitive form, at the close of business on the fifteenth day (whether or not such day is a business day) prior to the relevant due date (the "**Record Date**") at his address shown in the Register on the Record Date and at his risk. Upon application of the holder to the specified office of the Registrar not less than three business days in the city where the specified office of the Registrar is located before the due date for any payment of interest in respect of a Registered Note, the payment may be made by transfer on the due date in the manner provided in the preceding paragraph. Any such application for transfer shall be deemed to relate to all future payments of interest (other than interest due on redemption) and instalments of principal (other than the final instalment) in respect of the Registered Notes which become payable to the holder who has made the initial application until such time as the Registrar is notified in writing to the contrary by such holder. Payment of the interest due in respect of each Registered Note on redemption and the final instalment of principal will be made in the same manner as payment of the principal amount of such Registered Note.

Holders of Registered Notes will not be entitled to any interest or other payment for any delay in receiving any amount due in respect of any Registered Note as a result of a cheque posted in accordance with this Condition arriving after the due date for payment or being lost in the post. No commissions or expenses shall be charged to such holders by the Registrar in respect of any payments of principal or interest in respect of the Registered Notes.

If payment in respect of any Registered Notes is required by transfer as referred to in paragraph (a) above, application for such payment must be made by the holder to the Registrar not later than the relevant Record Date.

All amounts payable to DTC or its nominee as registered holder of a Registered Global Note in respect of Notes denominated in a Specified Currency other than U.S. dollars shall be paid by transfer by the Registrar to an account of the Exchange Agent in the relevant Specified Currency on behalf of DTC or its nominee for payment in such Specified Currency or conversion into U.S. dollars in accordance with the provisions of the Agency Agreement.

In the case of Registered Notes (whether or not in global form) held in the CMU Service, payment of all amounts payable to the CMU Service or its sub-custodian as registered holder of a Registered Note (whether or not in global form) will be made at the direction of the registered holder to the CMU Accountholders and such payment shall discharge the obligations of the Issuer in respect of that payment.

None of the Issuer or the Agents will have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the Registered Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

(e) ***General provisions applicable to payments***

The holder of a Global Note (if the Global Note is not lodged with the CMU Service), or the CMU Accountholder at the direction of the holder of a Global Note (if the Global Note is lodged with the CMU Service), shall be the only person entitled to receive payments in respect of Notes represented by such Global Note and the Issuer will be discharged by payment to, or to the order of, the holder of such Global Note in respect of each amount so paid. Each of the persons shown in the records of Euroclear, Clearstream, Luxembourg, the CMU Service or DTC as the beneficial holder of a particular nominal amount of Notes represented by such Global Note must look solely to Euroclear, Clearstream, Luxembourg, the CMU Service or DTC, as the case may be, for his share of each payment so made by the Issuer to, or to the order of, the holder of such Global Note. No person other than the holder of such Global Note shall have any claim against the Issuer in respect of any payments due on such Global Note.

(f) ***Payment Day***

If the date for payment of any amount in respect of any Note, Receipt or Coupon is not a "**Payment Day**", the holder thereof shall not be entitled to payment until the next following Payment Day in the relevant place and shall not be entitled to further interest or other payment in respect of such delay unless as otherwise specified in these Conditions or the Pricing Supplement. For these purposes, "**Payment Day**" means any day which is:

(i) a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in:

(A) in the case of Notes in definitive form only, the relevant place of presentation;

(B) London; and

(C) any Additional Financial Centre specified in the applicable Pricing Supplement;

(ii) either (1) in relation to any sum payable in a Specified Currency other than Euro, a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in the principal financial centre of the country of the relevant Specified Currency (which if the Specified Currency is Australian dollars, New Zealand dollars or Renminbi shall be Sydney, Auckland or Hong Kong, respectively) or (2) in relation to any sum payable in Euro, a day on which the T2 is open; and

(iii) in the case of any payment in respect of a Registered Note denominated in a Specified Currency other than U.S. dollars and registered in the name of DTC or its nominee and in respect of which an accountholder of DTC (with an interest in such Registered Note) has elected to receive any part of such payment in U.S. dollars, a day on which commercial banks are not authorised or required by law or regulation to be closed in New York City.

(g) ***Interpretation of Principal and Interest***

Any reference in these Terms and Conditions to principal in respect of the Notes shall be deemed to include, as applicable:

(i) any additional amounts which may be payable with respect to principal under Condition 9;

(ii) the Final Redemption Amount of the Notes;

(iii) the Early Redemption Amount of the Notes;

(iv) the Optional Redemption Amount(s) (if any) of the Notes;

(v) in relation to Notes redeemable in instalments, the Instalment Amounts;

(vi) in relation to Zero Coupon Notes, the Amortised Face Amount; and

(vii) any premium and any other amounts which may be payable by the Issuer under or in respect of the Notes.

Any reference in these Terms and Conditions to interest in respect of the Notes shall be deemed to include, as applicable, any additional amounts which may be payable with respect to interest under Condition 9.

(h) ***Renminbi Currency Event***

If "**Renminbi Currency Event**" is specified in the applicable Pricing Supplement and a Renminbi Currency Event, as determined by the Issuer acting in good faith, exists on a date for payment of any amount in respect of any Note, Receipt or Coupon, the Issuer's obligation to make a payment in Renminbi under the terms of the Notes may be replaced by an obligation to pay such amount in the Relevant Currency (selected by the Issuer, if applicable, and converted at the Alternate Settlement Rate as of a time selected by the Alternate Settlement Rate Determination Agent as specified in the applicable Pricing Supplement).

Upon the occurrence of a Renminbi Currency Event, the Issuer shall give notice not less than five days nor more than 30 days prior to the due date for payment to the Noteholders in accordance with Condition 15 stating the occurrence of the Renminbi Currency Event, giving details thereof and the action proposed to be taken in relation thereto.

For the purposes of this Condition 6(h) and unless stated otherwise in the applicable Pricing Supplement:

"**Alternate Settlement Rate**" means the spot rate, determined by the Alternate Settlement Rate Determination Agent, between Renminbi and the Relevant Currency, taking into consideration all available information which the Alternate Settlement Rate Determination Agent deems relevant (including, but not limited to, the pricing information obtained from the Renminbi non-deliverable market outside the People's Republic of China and/or the Renminbi exchange market within the People's Republic of China);

"**Governmental Authority**" means any de facto or de jure government (or any agency or instrumentality thereof), court, tribunal, administrative or other governmental authority or any other entity (private or public) charged with the regulation of the financial markets (including the central bank) of Hong Kong;

"**Relevant Currency**" means United States dollars or such other currency as may be specified in the applicable Pricing Supplement;

"**Renminbi Currency Event**" means any one of Renminbi Illiquidity, Renminbi Non- Transferability and Renminbi Inconvertibility;

"**Renminbi Illiquidity**" means the general Renminbi exchange market in Hong Kong becoming illiquid as a result of which the Issuer cannot obtain sufficient Renminbi in order to satisfy its obligation to pay interest or principal (in whole or in part) in respect of the Notes, as determined by the Issuer acting in good faith and in a commercially reasonable manner following consultation with two independent foreign exchange dealers of international repute active in the Renminbi exchange market in Hong Kong;

"**Renminbi Inconvertibility**" means the occurrence of any event that makes it impossible for the Issuer to convert any amount due in respect of the Notes in the general Renminbi exchange market in Hong Kong, other than where such impossibility is due solely to the failure of the Issuer to comply with any law, rule or regulation enacted by any Governmental Authority (unless such law, rule or regulation is enacted after the Issue Date of the first Tranche of the relevant Series and it is impossible for the Issuer, due to an event beyond the control of the Issuer, to comply with such law, rule or regulation); and

"**Renminbi Non-Transferability**" means the occurrence of any event that makes it impossible for the Issuer to deliver Renminbi between accounts inside Hong Kong or from an account inside Hong Kong to an account outside Hong Kong or from an account outside Hong Kong to an account inside Hong Kong (including where the Renminbi clearing and settlement system for participating banks in Hong Kong is disrupted or suspended), other than where such impossibility is due solely to the failure of the Issuer to comply with any law, rule or regulation enacted by any Governmental Authority (unless such law, rule or regulation is enacted after the Issue Date of the first Tranche of the relevant Series and it is impossible for the Issuer due to an event beyond the control of the Issuer, to comply with such law, rule or regulation).

Any reference in these Terms and Conditions to interest in respect of the Notes shall be deemed to include, as applicable, any additional amounts which may be payable with respect to interest under Condition 9.

7. **Redemption and Purchase**

(a) ***At Maturity***

Unless previously redeemed or purchased and cancelled as specified below, each Note will be redeemed by the Issuer at its Final Redemption Amount specified in, or determined in the manner specified in, the applicable Pricing Supplement in the relevant Specified Currency on the Maturity Date.

Notwithstanding any provisions to the contrary in these Terms and Conditions, the following will apply with respect to the redemption of the Tier I Subordinated Notes:

(i) The Tier I Subordinated Notes are undated perpetual securities and shall have no fixed Maturity Date. Subject to Condition 3(c), the principal amount of the Tier I Subordinated Notes will become due and payable by the Issuer on the date on which voluntary or involuntary winding up proceedings are instituted in respect of the Issuer in accordance with, as the case may be, (x) a resolution passed at a shareholders' meeting of the Issuer, (y) any provision of the Issuer's articles of incorporation or (z) any applicable law or any decision of any judicial or administrative authority.

(ii) The Tier I Subordinated Notes may not be redeemed at any time without the prior approval of the Financial Supervisory Service of Korea (the "**FSS**") or such other relevant regulatory authorities in Korea, to the extent such approval is necessary.

(b) ***Redemption for Tax Reasons***

The Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time (if this Note is neither a Floating Rate Note nor an Index Linked Interest Note) or on any Interest Payment Date (if this Note is either a Floating Rate Note or an Index Linked Interest Note), on giving not less than 30 nor more than 60 days' notice to the Principal Paying Agent and, in accordance with Condition 15, the Noteholders (which notice shall be irrevocable), if:

(i) on the occasion of the next payment due under the Notes, the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 9 as a result of any change in, or amendment to, the laws or regulations of Korea or, if the Issuer is acting through a particular branch (as specified in the applicable Pricing Supplement (the "**Specified Branch**")), the country where that branch is located (the "**Specified Country**"), or any political subdivision or any authority thereof or therein having power to tax, or any change in the application or official interpretation of such laws or regulations (including the cessation of tax exemptions presently applicable), which change or amendment becomes effective on or after the Issue Date of the first Tranche of the Notes; and

(ii) such obligation cannot be avoided by the Issuer taking reasonable measures available to it,

provided that (1) in the case of Subordinated Notes, the prior approval of the Financial Supervisory Service of Korea (the "**FSS**") or such other relevant regulatory authorities in Korea shall have been obtained, if necessary, and (2) no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which the Issuer would be obliged to pay such additional amounts were a payment in respect of the Notes then due. Prior to the publication of any notice of redemption pursuant to this Condition, the Issuer shall deliver to the Principal Paying Agent a certificate signed by two duly authorised officers of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred, and an opinion of independent legal advisers or tax consultants of recognised standing to the effect that the Issuer has or will become obliged to pay such additional amounts as a result of such change or amendment.

Notes redeemed pursuant to this Condition 7(b) will be redeemed at their Early Redemption Amount referred to in paragraph (e) below together (if appropriate) with interest accrued to (but excluding) the date of redemption.

(c) ***Redemption at the Option of the Issuer ("Issuer Call")***

If Issuer Call is specified in the applicable Pricing Supplement, the Issuer shall, having given:

(i) not less than 15 nor more than 30 days' notice to the Noteholders in accordance with Condition 15; and

(ii) not less than 15 days before the giving of the notice referred to in (i), notice to the Principal Paying Agent (and the CMU Lodging Agent if applicable) and, in the case of a redemption of Registered Notes, the Registrar; (which notices shall be irrevocable), redeem all or some of the Notes then outstanding on any Optional Redemption Date and at the Optional Redemption Amount(s) specified in, or determined in the manner specified in, the applicable Pricing Supplement together, if appropriate, with interest accrued to (but excluding) the relevant Optional Redemption Date; **provided, however, that** in the case of Subordinated Notes, (1) such redemption may not occur within five years of the Issue Date and (2) such redemption shall be subject to the prior approval of the FSS pursuant to regulations of the Financial Services Commission of Korea (the "**FSC**") in effect at the applicable time relating to, *inter alia*, capital adequacy ratios, replacement capital and interest rates. Any such redemption must be of a nominal amount equal to the Minimum Redemption Amount or a Higher Redemption Amount. In the case of a partial redemption of Notes, the Notes to be redeemed ("**Redeemed Notes**") will be selected individually by lot, in the case of Redeemed Notes represented by definitive Notes, and in accordance with the rules of Euroclear and/or Clearstream, Luxembourg and/or, as the case may be, DTC, in the case of Redeemed Notes represented by a global Note, not more than 15 days prior to the date fixed for redemption (such date of selection being hereinafter called the "**Selection Date**"). In the case of Redeemed Notes represented by definitive Notes, a list of the serial numbers of such Redeemed Notes will be published in accordance with Condition 15 not less than 15 days prior to the date fixed for redemption. The aggregate nominal amount of Redeemed Notes represented by definitive Notes shall bear the same proportion to the aggregate nominal amount of all Redeemed Notes as the aggregate nominal amount of definitive Notes outstanding bears to the aggregate nominal amount of the Notes outstanding, in each case on the Selection Date, **provided that** such first mentioned nominal amount shall, if necessary, be rounded downwards to the nearest integral multiple of the Specified Denomination, and the aggregate nominal amount of Redeemed Notes represented by a Global Note shall be equal to the balance of the Redeemed Notes. No exchange of the relevant Global Note will be permitted during the period from and including the Selection Date to and including the date fixed for redemption pursuant to this sub-paragraph (c) and notice to that effect shall be given by the Issuer to the Noteholders in accordance with Condition 15 at least 5 business days prior to the Selection Date.

(d) ***Redemption of the Senior Notes only at the Option of the Noteholders ("Investor Put")***

If Investor Put is specified in the applicable Pricing Supplement with respect to any Series of Senior Notes only, upon the holder of any Senior Note giving to the Issuer in accordance with Condition 15 not less than 15 nor more than 30 days' notice or such other period of notice as is specified in the applicable Pricing Supplement, the Issuer will, upon the expiry of such notice, redeem, subject to, and in accordance with, the terms specified in the applicable Pricing Supplement, in whole (but not in part), such Senior Note on the Optional Redemption Date and at the Optional Redemption Amount specified in, or determined in the manner specified in, the applicable Pricing Supplement together, if appropriate, with interest accrued to (but excluding) the Optional Redemption Date. Registered Notes may be redeemed under this Condition in any multiple of their lowest specified denomination.

If this Senior Note is in definitive form, to exercise the right to require redemption of this Senior Note the holder of this Senior Note must deliver such Senior Note at the specified office of any Paying Agent (in the case of a Bearer Note) or any Transfer Agent (in the case of a Registered Note) at any time during normal business hours of such Paying Agent or Transfer Agent, as the case may be, falling within the notice period, accompanied by a duly completed and signed notice of exercise in the form (for the time being current) obtainable from any specified office of any Paying Agent or Transfer Agent (a "**Put Notice**") and in which the holder must specify a bank account (or, if payment is by cheque, an address) to which payment is to be made under this Condition.

Any Put Notice given by a holder of any Senior Note pursuant to this paragraph shall be irrevocable except where prior to the due date of redemption an Event of Default shall have occurred and be continuing in which event such holder, at its option, may elect by notice to the Issuer to withdraw the notice given pursuant to this paragraph and instead to declare such Senior Note forthwith due and payable pursuant to Condition 11.

Each Senior Note should be presented for redemption together with all unmatured Coupons relating to it, failing which such Senior Note will be redeemed only against provision of such indemnity as the Issuer may require. Upon the date on which any Senior Note falls due for redemption or is purchased for cancellation, all unmatured Coupons appertaining thereto will become void and no payment will thereafter be made in respect thereto.

(e) ***Early Redemption Amounts***

For the purpose of paragraph (b) above and Condition 11, the Notes will be redeemed at the Early Redemption Amount calculated as follows:

(i) in the case of Notes with a Final Redemption Amount equal to the Issue Price, at the Final Redemption Amount thereof;

(ii) in the case of Notes (other than Zero Coupon Notes but including Instalment Notes and Partly Paid Notes) with a Final Redemption Amount which is or may be less or greater than the Issue Price or which is payable in a Specified Currency other than that in which the Notes are denominated, at the amount specified in, or determined in the manner specified in, the applicable Pricing Supplement or, if no such amount or manner is so specified in the Pricing Supplement, at their nominal amount; or

(iii) in the case of Zero Coupon Notes, at an amount (the "**Amortised Face Amount**") calculated in accordance with the following formula:

Early Redemption Amount = $RP \times (1 + AY)^{y}$

where:

"**RP**" means the Reference Price;

"**AY**" means the Accrual Yield expressed as a decimal; and

"**y**" is a fraction, the numerator of which is equal to the number of days (calculated on the basis of a 360-day year consisting of 12 months of 30 days each) from (and including) the Issue Date of the first Tranche of the Notes to (but excluding) the date fixed for redemption or (as the case may be) the date upon which such Note becomes due and repayable and the denominator of which is 360; or

(iv) on such other calculation basis as may be specified in the applicable Pricing Supplement.

(f) ***Instalments***

If the Notes are repayable in instalments, they will be redeemed in the Instalment Amounts and on the Instalment Dates. In the case of early redemption, the Early Redemption Amount will be determined pursuant to paragraph (e) above.

(g) ***Partly Paid Notes***

If the Notes are Partly Paid Notes, they will be redeemed, whether at maturity, early redemption or otherwise, in accordance with the provisions of this Condition and the applicable Pricing Supplement.

(h) ***Purchases***

The Issuer may at any time purchase Senior Notes at any price (**provided that**, in the case of Bearer Notes in definitive form, these are purchased together with all unmatured Receipts, Coupons and Talons appertaining thereto) in the open market or otherwise. Such Notes may be held, reissued, resold or, at the option of the Issuer, surrendered to any Paying Agent, the Registrar or the CMU Lodging Agent for cancellation. In case of the Subordinated Notes, the Issuer and any person or entity over which the Issuer exercises substantial control including any affiliated company or subsidiary of the Issuer (the "Issuer Related Party") shall not purchase the Subordinated Notes nor provide, directly or indirectly, the fund to acquire the Subordinated Notes by providing any collateral, guarantee or loan in favor of the person or entity which will acquire such Notes. In addition, neither the Issuer nor any Issuer Related Party shall enhance, legally or economically, the payment seniority of the Subordinated Notes, nor provide, directly or indirectly through its affiliated company or subsidiary, any collateral or guaranty in favor of the person or entity which acquires such Notes.

(i) ***Cancellation***

All Notes which are redeemed will forthwith be cancelled (together with all unmatured Receipts, Coupons and Talons attached thereto or surrendered therewith at the time of redemption). All Notes so cancelled and the Notes purchased and cancelled pursuant to paragraph (h) above (together with all unmatured Receipts, Coupons and Talons cancelled therewith) shall be forwarded to the Principal Paying Agent (and the CMU Lodging Agent if applicable) which shall notify the Registrar of such cancelled Notes in the case of Registered Notes and such Notes cannot be reissued or resold.

(j) ***Late payment on Zero Coupon Notes***

If the amount payable in respect of any Zero Coupon Note upon redemption of such Zero Coupon Note pursuant to paragraph (a), (b), (c) or (d) above or upon its becoming due and repayable as provided in Condition 11 is improperly withheld or refused, the amount due and repayable in respect of such Zero Coupon Note shall be the amount calculated as provided in paragraph (e)(iii) above as though the references therein to the date fixed for the redemption or the date upon which such Zero Coupon Note becomes due and payable were replaced by references to the date which is the earlier of:

(i) the date on which all amounts due in respect of such Zero Coupon Note have been paid; and

(ii) the date on which the full amount of the moneys payable has been received by the Principal Paying Agent, the Registrar or the CMU Lodging Agent, as the case may be, and notice to that effect has been given to the Noteholders in accordance with Condition 15.

(k) ***Obligation to redeem***

Upon the expiry of any notice as is referred to in paragraph (b), (c) or (d) above, the Issuer shall be bound to redeem the Notes to which the notice referred at the relevant redemption price applicable at the date of such redemption together with, if appropriate, interest accrued to (but excluding) the relevant redemption date.

(l) ***Redemption of Tier I Subordinated Notes for tax non-deductibility or regulatory reasons***

Any Series of Tier I Subordinated Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time, on giving not less than 30 nor more than 60 days' notice to the Principal Paying Agent (and the CMU Lodging Agent if applicable) and, in accordance with Condition 15, the Noteholders (which notice shall be irrevocable), if either a Tax Non-deductibility Event or a Regulatory Event (each as defined below) has occurred and is continuing; **provided that** (1) the prior approval of the FSS or such other relevant regulatory authorities in Korea shall have been obtained, if necessary and (2) no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which (x) the Issuer would cease to be able to claim the relevant tax deduction pursuant to such Tax Non-deductibility Event or (y) such Series of Tier I Subordinated Notes would cease to qualify (in whole or in part) as additional Tier I capital pursuant to such Regulatory Event, as applicable.

Any Series of Tier II Subordinated Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time, on giving not less than 30 nor more than 60 days' notice to the Principal Paying Agent (and the CMU Lodging Agent if applicable) and, in accordance with Condition 15, the

Noteholders (which notice shall be irrevocable), if a Regulatory Event (as defined below) has occurred and is continuing; **provided that** (1) the prior approval of the FSS or such other relevant regulatory authorities in Korea shall have been obtained, if necessary and (2) no such notice of redemption shall be given earlier than 90 days prior to the earliest date on which such Series of Tier II Subordinated Notes would cease to qualify (in whole or in part) as Tier II capital pursuant to such Regulatory Event.

Prior to the publication of any notice of redemption pursuant to this Condition, the Issuer shall deliver to the Principal Paying Agent (1) a certificate signed by two duly authorised officers of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred and (2) an opinion of independent legal advisers of recognised standing to the effect that such Tax Non-deductibility Event or Regulatory Event, as applicable, has occurred and is continuing.

Notes redeemed pursuant to this Condition will be redeemed at their Final Redemption Amount, together (subject to Condition 5(e)) with interest accrued to (but excluding) the date of redemption.

As used herein:

"**Regulatory Event**" means, (i) with respect to any Series of Tier I Subordinated Notes, such Notes (after having qualified as such at the time of their issuance) will no longer qualify (in whole or in part) as additional Tier I capital of the Issuer under applicable Korean Law or (ii) with respect to any Series of Tier II Subordinated Notes, such Notes (after having qualified as such at the time of their issuance) will no longer qualify (in whole or in part) as Tier II capital of the Issuer under applicable Korean Law, in the case of either (i) or (ii), as a result of a change in or amendment to, or a change in the application or official interpretation of, such Korean Law; provided, however, that such change or amendment was not pending or foreseeable at the time of issuance of such Notes.

"**Tax Non-deductibility Event**" means, with respect to any Series of Tier I Subordinated Notes, the Issuer (after having been entitled to claim such a deduction at the time of issuance of such Notes) will no longer be entitled to claim a deduction in respect of interest paid or payable on such Notes for the purposes of Korean corporation tax or tax on corporate income, as a result of a change in or amendment to, or a change in the application or official interpretation of, such Korean Law; provided, however, that such tax non-deductibility cannot be avoided by the Issuer taking reasonable measures available to it at no material cost to it.

8. Loss Absorption Upon a Trigger Event in Respect of Subordinated Notes

(a) ***Write-off on a Trigger Event***

Effective as of the third Korean Business Day from the occurrence of a Trigger Event, each Subordinated Note, including the then outstanding principal amount thereof and any accrued but unpaid interest thereon, shall be irrevocably cancelled in whole, without the need for the consent of the holders of the Subordinated Notes (such cancellation being referred to herein as a "**Write-off**," and "**Written-off**" shall be construed accordingly). Once the principal amount of, and any accrued but unpaid interest under, the Subordinated Notes has been Written-off, such amounts will not be restored in any circumstances, including where the relevant Trigger Event ceases to continue.

The Issuer shall provide a Trigger Event Notice to the holders of the Subordinated Notes, but such Write-off shall be effective irrespective of whether the Issuer has provided such Trigger Event Notice.

For the avoidance of doubt, any Write-off pursuant to this Condition 8(a) will not constitute an Event of Default under the Notes or any other insolvency events of the Issuer.

(b) ***Interpretation***

In these Conditions and unless stated otherwise in the applicable Pricing Supplement:

a "**Korean Business Day**" means a day (other than a Saturday or Sunday) on which banks and foreign exchange markets are open for business in Seoul, Korea;

a "**Trigger Event**" means (i) the designation of the Issuer as an "insolvent financial institution" pursuant to the Act on the Structural Improvement of the Financial Industry or (ii) the designation of the Issuer as an "insolvent financial company" pursuant to the Depositor Protection Act; and a "**Trigger Event Notice**" means the notice specifying that a Trigger Event has occurred, which shall be issued by the Issuer not more than two Korean Business Days after the occurrence of a Trigger Event to the holders of the Subordinated Notes and the Principal Paying Agent in accordance with Condition 15 and which shall state in reasonable detail the nature of the relevant Trigger Event. Notwithstanding any provisions of Condition 15 to the contrary, any such notice shall be effective as of the date of its issuance by the Issuer.

9. **Taxation**

All payments of principal and interest in respect of the Notes, Receipts and Coupons by the Issuer will be made without withholding or deduction for or on account of any present or future taxes, duties, levies, imposts, assessments or other government charges and any interest, penalties or other liabilities with respect thereto ("**Taxes**") imposed or levied by or on behalf of any Tax Jurisdiction unless such withholding or deduction is required by law. In such event, the Issuer will pay such additional amounts as shall be necessary in order that the net amounts received by the holders of the Notes, Receipts or Coupons after such withholding or deduction shall equal the amounts which would otherwise have been receivable in respect of the Notes, Receipts or Coupons, as the case may be, in the absence of such withholding or deduction; except that no such additional amounts shall be payable with respect to:

(i) any Taxes with respect to a Note, Receipt or Coupon presented for payment (where presentation is necessary) in Korea (solely to the extent such Taxes would not have been imposed if such Note, Receipt or Coupon, as the case may be, were presented at an office of a Paying Agent outside Korea); or

(ii) any withholding or deduction imposed on a payment received by or on behalf of a holder of a Note, Receipt or Coupon in circumstances where such withholding or deduction would not have been required but for such holder of the Note (or fiduciary, settlor, beneficiary, member or shareholder of, or possessor of power over the relevant holder, if the relevant holder is an estate, nominee, trust or corporation) being or having been connected with a Tax Jurisdiction (as defined below) otherwise than merely by holding such Note, Receipt or Coupon, or enforcing rights thereunder; or

(iii) any Taxes with respect to a Note, Receipt or Coupon presented for payment (where presentation is necessary) more than 30 days after the Relevant Date (as defined below) except to the extent that the holder thereof would have been entitled to additional amounts on presenting the same for payment on any date during such 30-day period; or

(iv) a Note, Receipt or Coupon presented for payment by or on behalf of a holder of such Note, Receipt or Coupon who, at the time of such presentation, is able to avoid such withholding or deduction by making a declaration of non-residence or other similar claim for exemption and does not make such declaration or claim; or

(v) any withholding or deduction that would not have been imposed but for a failure by the holder or beneficial owner (or any financial institution through which the holder or beneficial owner holds any Note, Receipt or Coupon or through which payment on the Note, Receipt or Coupon is made) to comply with any certification, information, identification, documentation or other reporting requirements (including entering into and complying with an agreement with the U.S. Internal Revenue Service) imposed pursuant to Sections 1471 through 1474 of the Code, any regulations or agreements thereunder, official interpretations thereof or any law, treaty or agreement implementing an intergovernmental approach thereto; or

(vi) any combination of paragraphs (i), (ii), (iii), (iv) or (v) above;

nor will additional amounts be paid with respect to any payment on a Note, Receipt or Coupon to a holder who is a fiduciary, a partnership, a limited liability company or a holder other than the sole beneficial owner of that payment to the extent that a beneficiary or settlor with respect to such fiduciary, a member of such a partnership, an interest holder in such a limited liability company or the beneficial owner of the payment would not have been entitled to the additional amounts had the beneficiary, settlor, member or beneficial owner been the holder of such Note, Receipt or Coupon.

As used herein:

"**Tax Jurisdiction**" means Korea or any political subdivision or any authority thereof or therein having power to tax or, in addition, if the Issuer is acting through a Specified Branch, the Specified Country, or any political subdivision or any authority thereof or therein having power to tax; and the "**Relevant Date**" means the date on which such payment first becomes due, except that, if the full amount of the moneys payable has not been duly received by the Principal Paying Agent or the Registrar, as the case may be, on or prior to such due date, it means the date on which, the full amount of such moneys having been so received, notice to that effect is duly given to the Noteholders in accordance with Condition 15.

The obligation to pay additional amounts shall not apply in relation to (a) any withholding or deduction for or on account of any estate, inheritance, gift, sales, transfer, personal property or any similar tax, assessment or other governmental charge or (b) any tax, duty, levy, impost, assessment or other governmental charge which is payable otherwise than by deduction or withholding from payments on the Notes, Receipts or Coupons; **provided that**, except as otherwise set forth in these Terms and Conditions, the Issuer shall pay all stamp and similar duties, if any, which may be imposed by Korea, the United Kingdom, the United States or any respective political subdivision or any taxing authority thereof or therein, as a consequence of the initial issuance of the Notes.

Whenever there is mentioned in any context the payment of principal of, and any premium or interest on, any Note, Receipt or Coupon, such mention shall be deemed to include payment of additional amounts to the extent that, in such context, additional amounts are, were or would be payable in respect thereof.

10. **Prescription**

The Notes, Receipts and Coupons will become void unless presented for payment within a period of 10 years (in the case of principal) and five years (in the case of interest) after the Relevant Date (as defined in Condition 9) therefor.

There shall not be included in any Coupon sheet issued on exchange of a Talon any Coupon the claim for payment in respect of which would be void pursuant to this Condition or Condition 6(b) or any Talon which would be void pursuant to Condition 6(b).

11. **Events of Default**

(a) ***Applicable to Senior Notes only***

If any of the following events (each an "**Event of Default**") occurs and is continuing:

(i) *Non-payment*: default is made in the payment of any amount of principal or interest in respect of the Senior Notes on the due date for payment thereof and such default remains unremedied for ten days or, in the case of default in the payment of interest, 15 days thereafter; or

(ii) *Breach of other obligations*: default is made in the performance or observance of any other material obligation of the Issuer under or in respect of the Senior Notes and such default remains unremedied for 30 days after written notice thereof, addressed to the Issuer by any holder of Senior Notes, has been delivered to the Issuer; or

(iii) *Cross-acceleration*: any Indebtedness (as defined below) in aggregate exceeding U.S.$20,000,000 (or its equivalent in one or more other currencies) of the Issuer either (1) becoming due and payable prior to the due date for payment thereof by reason of acceleration following a default by the Issuer or (2) not being repaid by the Issuer at, and remaining unpaid after, maturity (as extended by an originally applicable period of grace, if any) applicable thereto, or any guarantee given by the Issuer in respect of Indebtedness of any other person not being honoured and remaining dishonoured after becoming due and called; **provided that**, in the case of (1) above, if any such default under any such Indebtedness shall be cured or waived, then the default under the Notes shall be deemed not to have occurred; or

(iv) the Issuer becomes insolvent or unable to pay its debts when due or commits or permits any act of bankruptcy which terms shall include (1) the filing of a petition in any bankruptcy, reorganisation, winding-up or liquidation proceeding or other proceedings analogous in purpose or effect and the failure by the Issuer to have any such petition filed by another party discharged within 30 days, (2) the appointment of a receiver or trustee for the bankruptcy, reorganisation, winding-up or liquidation of the Issuer and such appointment is not discharged within thirty days, (3) the making by the Issuer of an assignment or an arrangement or composition with or for the benefit of its creditors, (4) the admission in writing by the Issuer of its inability to pay its debts as they fall due, (5) the entry of any court order or judgement confirming the bankruptcy or insolvency of the Issuer or, as the case may be, in relation to a substantial portion of its properties or assets, or (6) the Issuer takes corporate action to authorise or give effect to any of the foregoing; or

(v) a moratorium is agreed or declared in respect of any Indebtedness of the Issuer or any governmental agency or authority confiscates or seizes or compulsorily purchases or expropriates all or a material part of the assets or capital of the Issuer,

then the holders of not less than 25% in aggregate principal amount of the Senior Notes outstanding may, by written notice addressed to the Issuer and delivered to the Issuer or to the Principal Paying Agent in accordance with Condition 15, declare such Note to be immediately due and payable whereupon it shall become immediately due and payable at its principal amount together with accrued interest without further action or formality. Any such notice shall specify the serial number of each Note in respect of which it is given.

The Issuer shall fully indemnify each Noteholder from and against any reasonable costs, expenses, liabilities and losses which such Noteholder may suffer or incur as a direct result of the occurrence of any Event of Default (including, but without limitation, any expenses incurred in connection with legal proceedings to enforce repayment of such Note).

Nothing contained in these Conditions shall prevent the Issuer from, without the consent of the Noteholders, Receiptholders or Couponholders, consolidating with, or merging into, or selling, transferring, leasing or conveying its assets as an entirety or substantially as an entirety to any corporation organised under the laws of the respective jurisdiction of its incorporation; **provided that** (i) any successor corporation either (a) expressly assumes the applicable obligations of the Issuer under the Notes and the Agency Agreement or (b) succeeds to the applicable obligations of the Issuer under the Notes and the Agency Agreement by way of universal succession, (ii) after giving effect to the transaction, with respect to the Issuer or any such successor corporation, no Event of Default and no event which, after notice or lapse of time or both, would become an Event of Default, shall have occurred and be continuing, and (iii) the Issuer has delivered to the Principal Paying Agent a certificate executed by a duly authorised officer of the Issuer and an opinion of counsel as to matters of law stating that such consolidation, merger, sale, transfer, lease or conveyance and, if a supplemental agency agreement is required in connection with such transaction, such supplemental agency agreement comply with the Agency Agreement and the Notes and that all conditions precedent herein provided for relating to such transaction have been complied with.

(b) ***Applicable to Subordinated Notes only***

(i) If any Bankruptcy Event or Liquidation Event of the Issuer shall occur and be continuing (and **provided that** a Trigger Event has not occurred) then, in any such event, the holder of any Subordinated Note may by written notice to the Issuer declare such Note to be forthwith due and payable upon receipt of such notice by the Issuer whereupon such Note shall become due and repayable at its principal amount plus accrued interest (if any).

(ii) Except as expressly provided in this Condition 11(b), no holder of any Subordinated Note shall have any right to accelerate any payment of principal or interest in respect of the Subordinated Notes.

(iii) The only action the holder of a Subordinated Note may take in Korea against the Issuer on acceleration of the Subordinated Notes is to prove claims in the liquidation or other applicable proceedings in respect of the Issuer in Korea (subject to the satisfaction of the relevant requirements under applicable laws).

(c) ***Interpretation***

In these Conditions "**Indebtedness**" means any obligation or obligations (whether present or future, actual or contingent) for the payment or repayment of money borrowed and/or interest thereon.

12. **Replacement of Notes, Receipts, Coupons and Talons**

Should any Note, Receipt, Coupon or Talon be lost, stolen, mutilated, defaced or destroyed, it may be replaced at the specified office of the Principal Paying Agent or the relevant Paying Agent (in the case of Bearer Notes, Receipts, Coupons and Talons) or of any Transfer Agent (in the case of Registered Notes) upon payment by the claimant of such costs and expenses as may be incurred in connection therewith and on such terms as to evidence and indemnity as the Issuer and the relevant Paying Agent or the Transfer Agent, as the case may be, may reasonably require. Mutilated or defaced Notes, Receipts, Coupons or Talons must be surrendered before replacements will be issued.

13. **Principal Paying Agent, Registrar, Exchange Agent, Paying and Transfer Agents**

The names of the initial Principal Paying Agent, the other initial Paying Agents, the initial Exchange Agent, the initial Registrar and the other initial Transfer Agents and their initial specified offices are set out below.

The Issuer is entitled to vary or terminate the appointment of any Paying Agent, Exchange Agent Registrar or Transfer Agent and/or appoint additional or other Paying Agents, Registrars, Exchange Agents or Transfer Agents and/or approve any change in the specified office through which any of the same acts, **provided that**:

(i) so long as the Notes are listed on any stock exchange, there will at all times be a Paying Agent and, if appropriate, a Registrar and Transfer Agent with a specified office in such place as may be required by the rules and regulations of the relevant stock exchange;

(ii) there will at all times be a Paying Agent and a Transfer Agent with a specified office in a city in continental Europe;

(iii) there will at all times be a Registrar and a Transfer Agent each having a specified office in New York City;

(iv) so long as any of the Registered Global Notes payable in a Specified Currency other than U.S. dollars are held through DTC or its nominee, there will at all times be an Exchange Agent with a specified office in New York City;

(v) there will at all times be a Principal Paying Agent; and

(vi) so long as the Notes are listed on the Singapore Exchange Securities Trading Limited (the "**Singapore Stock Exchange**") and the rules of the Singapore Stock Exchange so require, if the Notes are issued in definitive form, there will at all times be a Paying Agent in Singapore unless the Issuer obtains an exemption from the Singapore Stock Exchange.

In addition, the Issuer shall forthwith appoint a Paying Agent having a specified office in New York City in the circumstances described in the second paragraph of Condition 6(b). Any variation, termination, appointment or change shall only take effect (other than in the case of insolvency, when it shall be of immediate effect) after not less than 30 nor more than 45 days' prior notice thereof shall have been given to the Noteholders in accordance with Condition 15.

In acting under the Agency Agreement, the Principal Paying Agent, the Registrar, the Exchange Agent, the other Paying Agents and the Transfer Agents act solely as agents of the Issuer and do not assume any obligation or trust for or with any Noteholders.

14. **Exchange of Talons**

On and after the Fixed Interest Date or the Interest Payment Date, as appropriate, on which the final Coupon comprised in any Coupon sheet matures, the Talon (if any) forming part of such Coupon sheet may be surrendered at the specified office of the Principal Paying Agent or any other Paying Agent in exchange for a further Coupon sheet including (if such further Coupon sheet does not include Coupons to (and including) the final date for the payment of interest due in respect of the Bearer Note to which it appertains) a further Talon, subject to the provisions of Condition 10. Each Talon shall, for the purposes of these Terms and Conditions, be deemed to mature on the Fixed Interest Date or the Interest Payment Date (as the case may be) on which the final Coupon comprised in the relative Coupon sheet matures.

15. **Notices**

Notices to holders of Registered Notes will be deemed to be validly given (i) if sent by first class mail or (if posted to an overseas address) by air mail to them at their respective addresses as recorded in the Register and (ii) if and for so long as the Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, if published in a daily newspaper of general circulation in Singapore. Any such notice will be deemed to have been validly given on the latter of the fourth day after the date of such mailing and, if applicable, the date of such first publication.

All notices regarding the Bearer Notes shall be published (i) in a leading English language daily newspaper of general circulation in London and (ii) if and for so long as the Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, in a daily newspaper of general circulation in Singapore. It is expected that such publication will be made in the *Financial Times* in London and the *Wall Street Journal Asia Edition*. The Issuer shall also ensure that notices are duly published in a manner which complies with the rules and regulations of any other stock exchange on which the Notes are for the time being listed. Any such notice will be deemed to have been given on the date of the first publication or, where required to be published in more than one newspaper, on the date of first publication in each such newspaper or where published in such newspapers on different dates, the last date of such first publication.

Until such time as any definitive Notes are issued, there may (**provided that**, in the case of Notes listed on a stock exchange, the rules of the stock exchange allow for and further **provided that**, for so long as the Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, notices will always be published in a daily newspaper of a general circulation in Singapore), so long as the Global Note(s) is or are held in its/their entirety on behalf of (i) Euroclear and/or Clearstream, Luxembourg or DTC, be substituted for such publication in such newspaper(s), the delivery of the relevant notice to Euroclear and/or Clearstream, Luxembourg or DTC for communication by them to the holders of the Notes and (ii) the CMU Service, be substituted for such publication in such newspaper(s) the delivery of the relevant notice to the persons shown in a CMU Instrument Position Report issued by the CMU Service on the second business day preceding the date of dispatch of such notice as holding interests in the relevant Global Note and, in addition, for so long as any Notes are listed on a stock exchange and the rules of that stock exchange (or any other relevant authority) so require, such notice will be published in a manner specified by those rules. Any such notice shall be deemed to have been given to the holders of the Notes on the seventh day after the day on which the said notice was given to Euroclear and/or Clearstream, Luxembourg or DTC or the persons shown in the relevant CMU Instrument Position Report.

Notices to be given by any holder of the Notes shall be in writing and given by lodging the same, together with the relative Note or Notes, with the Principal Paying Agent. While any of the Notes are represented by a Global Note, such notice or demand may be given or made by any holder of a Note to the Principal Paying Agent or, the Registrar through Euroclear, Clearstream, Luxembourg and/or DTC or, in the case of Notes lodged with the CMU Service, by delivery by such holder of such notice to the CMU Lodging Agent in Hong Kong, as the case may be, in such manner as the Principal Paying Agent and Registrar and Euroclear, Clearstream, Luxembourg, the CMU Service and/or DTC, as the case may be, may approve for this purpose.

16. **Meetings of Noteholders, Modification and Waiver**

The Agency Agreement contains provisions for convening meetings of the Noteholders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution of a modification of the Notes, the Receipts, the Coupons or any of the provisions of the Agency Agreement. Such a meeting may be convened by the Issuer or Noteholders holding not less than ten% in nominal amount of the Notes for the time being remaining outstanding. The quorum at any such meeting for passing an Extraordinary Resolution is one or more persons holding or representing not less than 50% in nominal amount of the Notes for the time being outstanding, or at any adjourned meeting one or more persons being or representing Noteholders whatever the nominal amount of the Notes so held or represented, except that at any meeting the business of which includes the modification of certain provisions of the Notes, Receipts or Coupons (including modifying the date of maturity of the Notes or any date for payment of interest thereof, reducing or cancelling the amount of principal or the rate of interest payable in respect of the Notes or altering the currency of payment of the Notes, Receipts or Coupons), the quorum shall be one or more persons holding or representing not less than 75% in nominal amount of the Notes for the time being outstanding, or at any adjourned such meeting one or more persons holding or representing a clear majority, in nominal amount of the Notes for the time being outstanding. An Extraordinary Resolution passed at any meeting of the Noteholders shall be binding on all the Noteholders, whether or not they are present at the meeting, and on all Receiptholders and Couponholders.

The Principal Paying Agent and the Issuer may agree, without the consent of the Noteholders, Receiptholders or Couponholders, to:

(i) any modification (except as mentioned above) of any of the provisions of the Notes, the Receipts, the Coupons, the Conditions, the Deed of Covenant or the Agency Agreement which is not prejudicial to the interests of the Noteholders; or

(ii) any modification of the Notes, the Receipts, the Coupons, the Conditions, the Deed of Covenant or the Agency Agreement which is of a formal, minor or technical nature or is made to correct a manifest error or to comply with mandatory provisions of the law of the jurisdiction in which the Issuer is incorporated.

Any such modification shall be binding on the Noteholders, the Receiptholders and the Couponholders and any such modification shall be notified to the Noteholders in accordance with Condition 15 as soon as practicable thereafter.

17. **Further Issues**

The Issuer shall be at liberty from time to time without the consent of the Noteholders, Receiptholders or Couponholders to create and issue further notes having terms and conditions the same as the Notes or the same in all respects save for the amount and date of the first payment of interest thereon and so that the same shall be consolidated and form a single Series with the outstanding Notes, **provided that** such further issuance constitutes a qualified reopening for U.S. federal income tax purposes.

18. **Provision of Information**

The Issuer has covenanted in the Deed Poll for the benefit of the Noteholders, Receiptholders and Couponholders that for so long as any Notes remain outstanding and are "**restricted securities**" (as defined in Rule 144(a)(3) under the Securities Act), the Issuer shall, during any period in which it is neither subject to Section 13 or 15(d) of the Exchange Act nor exempt from reporting pursuant to Rule 12g3-2(b) under the Exchange Act, make available to any Noteholder, Receiptholder or Couponholder of, or beneficial owner of an interest in, such Notes, Receipts or Coupons in connection with any resale thereof and to any prospective purchaser designated by such Noteholder, Receiptholder, Couponholder or beneficial owner, in each case upon request, the information specified in, and meeting the requirements of, Rule 144A(d)(4) under the Securities Act.

19. **Governing Law and Submission to Jurisdiction**

(a) The Agency Agreement, the Deed of Covenant, the Deed Poll, the Notes, the Receipts and the Coupons and all non-contractual obligations arising out of or in connection with such agreements and deeds are governed by English law, except that in the case of Subordinated Notes, Conditions 3(b) and 3(c) are governed by, and shall be construed in accordance with, Korean Law.

(b) The Issuer agrees, for the exclusive benefit of the Noteholders, the Receiptholders and the Couponholders that the courts of England are to have jurisdiction to settle any disputes which may arise out of or in connection with the Agency Agreement, the Deed of Covenant, the Deed Poll, the Notes, the Receipts and/or the Coupons and that accordingly any suit, action or proceedings (together referred to as "**Proceedings**") arising out of or in connection with the Agency Agreement, the Deed of Covenant, the Deed Poll, the Notes, the Receipts and the Coupons may be brought in such courts. The Issuer hereby irrevocably waives any objection which it may have now or hereafter to the laying of the venue of any such Proceedings in any such court and any claim that any such Proceedings have been brought in an inconvenient forum and hereby further irrevocably agrees that a judgement in any such Proceedings brought in the English courts shall be conclusive and binding upon it and may be enforced in the courts of any other jurisdiction. Nothing contained in this Condition shall limit any right to take Proceedings against the Issuer in any other court of competent jurisdiction, nor shall the taking of Proceedings in one or more jurisdictions preclude the taking of Proceedings in any other jurisdiction, whether concurrently or not. The Issuer appoints KEB Hana Bank, London Branch at its registered office for the time being, currently at 8 Old Jewry, London EC2R 8DN, United Kingdom as its agent for service of process, and undertakes that, in the event of it ceasing so to act or ceasing to be registered in England, it will appoint another person as its agent for service of process in England in respect of any Proceedings. Nothing herein shall affect the right to serve proceedings in any other manner permitted by law. The Issuer hereby irrevocably and unconditionally waives with respect to the Agency Agreement, the Deed of Covenant, the Deed Poll, the Notes, the Receipts and/or the Coupons any right to claim immunity from jurisdiction or execution and any similar defence and irrevocably and unconditionally consents to the giving of any relief or the issue of any process, including without limitation, the making, enforcement or execution against any property whatsoever (irrespective of its use or intended use) of any order or judgement made or given in connection with any proceedings.

20. **Contracts (Rights of Third Parties) Act 1999**

Unless expressly provided to the contrary in the terms of the Notes, any third party may not enforce any of the terms of the Notes notwithstanding the provisions in the Contracts (Rights of Third Parties) Act 1999.

USE OF PROCEEDS

The net proceeds from each issue of Notes will be applied by the Issuer for its general corporate purposes; and/or if so specified in the relevant Pricing Supplement, the amount equivalent to the net proceeds from each issue of Notes will be allocated by the Issuer towards the financing or refinancing, in whole or in part, of Green Eligible Categories, Social Eligible Categories (each as defined below) or a combination of the two categories (in the case of Sustainability Bonds) in accordance with the Issuer's Sustainable Financing Framework (see "*Sustainable Financing Framework*").

According to the definition criteria set out by the ICMA Green Bond Principles, the ICMA Social Bond Principles or the ICMA Sustainability Bond Guidelines (as defined herein), only Tranches of Notes allocated exclusively to financing or refinancing Green Eligible Categories, Social Eligible Categories or a combination of the two categories (in the case of Sustainability Bonds) may be designated as "Green Bonds," "Social Bonds" or "Sustainability Bonds".

Green Eligible Categories, Social Eligible Categories or a combination of the two categories (in the case of Sustainability Bonds) have been defined in accordance with the broad categorisation of eligibility for Green Projects, Social Projects or Sustainability Projects set out by the ICMA Green Bond Principles, the ICMA Social Bond Principles or the ICMA Sustainability Bond Guidelines.

"Green Eligible Categories" are those which comprise financing within the Green Eligible Categories set out in the Issuer's Sustainable Financing Framework. Such Green Eligible Categories include those which relate to: renewable energy, energy efficiency, clean transportation, green buildings, pollution prevention and control and sustainable management of living natural resources and land use.

"Social Eligible Categories" are those which comprise financing within the Social Eligible Categories set out in the Issuer's Sustainable Financing Framework. Such Social Eligible Categories include those which relate to: access to essential services, affordable housing, employment generation and socioeconomic advancement and empowerment.

Financings within categories related to the luxury sectors, industries associated with elevated risk of child labour, adult entertainment, weapons, alcohol, tobacco, fossil fuel, nuclear, large-scale hydro-power projects with a generating capacity of more than 25MW and biomass suitable for food production are specifically excluded from consideration for eligibility.

SUSTAINABLE FINANCING FRAMEWORK

As part of its commitment to responsible corporate citizenship, the Issuer has elected to create a Sustainability Financing Framework (the "**Framework**"), which will help the Issuer to issue financing instruments such as bonds and loans that contribute to sustainable development. Capitalized terms used but not otherwise defined herein shall have the same meanings as in the Framework, which is publicly available on the following website: https://www.hanafn.com/esg/report/esgbond/archive.do

The objective of the Framework is to reinforce the Issuer's capabilities in financing green and social projects and contribute to the achievement of the UN Sustainable Development Goals.

The Framework is in line with:

- The ICMA Green Bond Principles (GBP), Social Bond Principles (SBP) and the Sustainability Bond Guidelines (SBG)
- The LMA Green Loan Principles (GLP) and Social Loan Principles (SLP) jointly published by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications and Trading Association

The Framework is presented through the following four key pillars:

(1) Use of Proceeds

(2) Process for Project Evaluation and Selection

(3) Management of Proceeds

(4) Reporting

The Framework enables the Issuer to launch sustainable financing transactions in the following formats (the "**Sustainability Financing Transaction**" or "**SFT**"):

- Green SFT: Financing of Eligible Green Assets (as defined in the Framework) and/or green bonds/loans for refinancing
- Social SFT: Finance of Eligible Social Assets (as defined in the Framework) and/or social bonds/loans for refinancing
- Sustainability SFT: Finance of a mix of Eligible Green Assets and Eligible Social Assets and/or sustainability bonds/loans for refinancing

Use of Proceeds

The amount equivalent to the net proceeds of SFTs issued under the Framework will be used to finance or refinance Eligible Assets that fall under one of the Eligible Categories defined in the Framework.

Process for Evaluation and Selection of Projects

The project evaluation and selection process will ensure that the amount equivalent to the net proceeds of the Issuer's SFT are allocated to new lending or existing projects/expenditures that meet the criteria set out in the Framework.

In addition, the eligibility of assets will also be subject to consistency with the Issuer's environmental and/or social (E&S) screening process applied during loan origination. The Issuer has enhanced the monitoring, assessment, and management of ESG-related issues and established clear direction and process for E&S risk management, including establishing a thorough screening and oversight process to minimize both direct and indirect negative E&S consequences that may be generated through the Issuer's business activities and operations.

The Issuer has also set up an ESG Planning Section ("**ESG PS**") to carry out the evaluation and selection process. The ESG PS collaborates with Hana Financial Group's ESG Planning Section to align procedures between the Issuer and the Group.

On an ongoing basis, Eligible Assets from the Issuer's lending book will be identified and proposed by the Issuer's business units. Relevant business units will screen customer information against the Eligibility Criteria set out in the Framework and recommend eligible projects or expenditures for inclusion as Eligible Assets to the ESG PS. The ESG PS will evaluate and monitor the eligibility requests of the recommended projects at controversy and decide whether to include the recommended projects as Eligible Assets.

On an annual basis, the ESG PS will review all proposed Eligible Assets to determine their compliance with the Framework to approve the allocation of proceeds. The ESG PS will also review the allocation of the proceeds to the Eligible Use of Proceeds annually and determine if any changes are necessary (for instance, if assets have been prepaid, sold or otherwise become ineligible). Moreover, ESG PS will also review the management of proceeds and facilitate reporting.

Management of Proceeds

To manage the proceeds of its SFT, the Issuer will establish a Sustainable Financing Register. The amount equivalent to the net proceeds of each SFT will be deposited in general funding accounts and earmarked for allocation in the Sustainable Financing Register.

The Sustainable Financing Register will be reviewed annually by the ESG PS to account for any repayments and drawings on the Eligible Assets. The portfolio will be managed with a view to ensure that the amount of Eligible Assets allocated will be equal to or exceed the balance of the net proceeds of outstanding SFT issued over time.

Reporting

The Issuer will publish the Sustainable Bond Report on an annual basis until the full allocation of the proceeds or the maturity of the relevant bond. In the instances of any material changes in the projects allocated or replacement of the allocated assets, the Issuer will also publish an updated allocation report. The Sustainable Bond Report will cover the allocation and impact metrics and will be published on the following website:
https://www.hanafn.com/esg/report/esgbond/archive.do

External Review

The Issuer has engaged DNV to provide an External Review in the form of a Second Party Opinion that confirms the alignment of the Framework with the ICMA GBP, SBP, SBG, and the LMA GLP and SLP.

The Second Party Opinion will be made available on the following website:
https://www.hanafn.com/esg/report/esgbond/archive.do

Neither the Second Party Opinion nor the Issuer's Framework is and shall be deemed to be incorporated into and/or form part of this Offering Circular.

None of the Dealers makes any representation or warranty, express or implied, concerning any information in the Framework, and nothing contained in the Framework is, or shall be relied upon as, a promise or representation, from the Dealers. None of the Dealers accepts any responsibility for the contents of the Framework. The Dealers have not separately verified nor will make any assurances as to (i) whether any Green Bonds, Social Bonds or Sustainability Bonds will meet the investor criteria and expectations regarding environmental impact and sustainability performance of any investor, (ii) whether an amount equal to the net proceeds will be used for financing the Green Eligible Categories, Social Eligible Categories or a combination of the two categories (in the case of Sustainability Bonds) or (iii) the characteristics of the Green Eligible Categories or Social Eligible Categories, including their environmental and sustainability criteria.

EXCHANGE RATES

The table below sets out, for the periods and dates indicated, information concerning the Market Average Exchange Rate, which is rounded to the nearest tenth of one Won. No representation is made that the Won or U.S. dollar amounts referred to herein 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.

Year ended 31 December	Low	High	Average[(1)]	Period-end
		(Won per US$1.00)		
2019	1,111.6	1,218.9	1,165.7	1,157.8
2020	1,082.7	1,280.1	1,180.1	1,088.0
2021	1,083.1	1,199.1	1,144.4	1,185.5
2022	1,185.5	1,436.6	1,292.0	1,267.3
2023	1,185.5	1,436.6	1,292.0	1,267.3
October	1,339.6	1,360.6	1,350.7	1,352.8
November	1,287.7	1,356.9	1,310.4	1,289.0
December	1,289.4	1,322.7	1,304.0	1,289.4
2024 (through 4 April)	1,289.4	1,353.0	1,330.0	1,349.1
January	1,289.4	1,343.2	1,323.6	1,330.6
February	1,325.1	1,337.9	1,331.7	1,334.0
March	1,311.1	1,346.8	1,330.7	1,346.8
April (through 4 April)	1,346.8	1,353.0	1,348.7	1,349.1

Source: Seoul Money Brokerage Services, Ltd.

(1) Represents the average of the daily Market Average Exchange Rate over the relevant period.

INVESTMENT CONSIDERATIONS

Prospective purchasers of Notes should carefully review the information contained in this Offering Circular, including the following matters.

Risks Relating to Our Business

Uncertainties and instability in global market conditions could adversely affect our business, financial condition and results of operations, as well as the value of the Notes.

Most of our assets are located in Korea, where we generate most of our income. Accordingly, our business and profitability are largely dependent on the general economic and social conditions in Korea, including interest rates, inflation, exports, personal expenditure 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. Accordingly, adverse global market conditions could adversely affect economic conditions in Korea and in turn our business, financial condition and results of operations. See "*—Risks Relating to Korea —Adverse developments in Korea may have adverse effects on us*."

While there have been mixed signs of recovery in the global economy in recent years, the global economic outlook for the near future continues to remain uncertain, the general uncertainty about economic and political conditions in Europe and Latin America, the slowdown of economic growth in China and other major emerging market economies, a potential escalation in trade conflicts between the United States and China, continuing geopolitical and social instability in various parts of the Middle East and the escalating conflicts between Israel and Palestine and Russia's ongoing invasion of Ukraine and ensuing sanctions against Russia, among others. Furthermore, rapid increases in interest rates globally since the second half of 2021 to combat inflation have materially and adversely affected the global economy and the financial markets. The Korean economy also continues to face difficulties, including sluggishness in domestic consumption and investment, volatility in the real estate market, rising household debt, potential declines in productivity due to ageing demographics and low birth rates, and a rise in income disparities. Any future deterioration of the global and Korean economies could adversely affect our business, financial condition and results of operations.

Our exposure to large Korean conglomerates, known as "chaebols", could have an adverse effect on us.

One of our core banking businesses has historically been, and continues to be, lending to large corporations. As of 31 December 2023, on a separate basis, our loan exposure (consisting of loans, confirmed guarantees, acceptances and debt securities) to our 10 largest borrowers was ₩33.9 trillion, which represented 9.8% of our total exposures, and a majority of such borrowers were named in the "Main Debtor Group", as identified and designated by the FSS. The Main Debtor Group is a list of companies maintained by the FSS which sets forth those companies whose outstanding credit amount to a financial institution is not less than 0.075% of the total credit provided by such financial institution and total debt is not less than 0.1% of the nominal GDP of Korea, and includes most of the Korean conglomerates, or *chaebols*. Our largest exposure, on a separate basis, to a single *chaebol* group as of 31 December 2023 was ₩4.2 trillion, which represented 1.2% of our total exposures. See "*Description of Assets and Liabilities — Loan Concentrations*". As of 31 December 2023, our 10 largest credits were all classified as normal. However, if any of our large credits were to become non-performing, the quality of our total loan portfolio could be adversely affected and additional provisions may be required. In addition, we may decide to reduce or freeze the amount of credit available to certain large conglomerates in order to avoid excessive credit concentration in any single borrower or related group of borrowers, which may have an adverse impact on our profitability.

Exposure to small- and medium-sized enterprises ("SMEs"), and financial difficulties experienced by such enterprises, may result in a deterioration of our asset quality.

We provide an extensive range of loan products and other banking services to SMEs. As of 31 December 2023, our total loans to SMEs (before allowance for loan losses and net deferred loan fees and costs) amounted to ₩143.4 trillion, representing 41.1% of our total loan portfolio. In addition, as of 31 December 2021, 2022 and 2023, on a separate basis, our delinquent loans (which represent loans the principal and interest amount of which is past due for one month or more) to SMEs were ₩223.6 billion, ₩381.0 billion and ₩516.6 billion, respectively, representing delinquency ratios (defined, on a separate basis, as delinquent SME loan amount divided by total SME loan amount, net of charge-offs and loan sales) of 0.19%, 0.31% and 0.38%, respectively.

Compared to loans to large corporate borrowers, which tend to be better capitalised 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 SMEs have historically had a relatively higher delinquency ratio. Many SMEs represent sole proprietorships or very 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, SMEs 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 these enterprises, as compared to large corporate borrowers. In addition, many SMEs have close business relationships with *chaebols* in Korea, primarily as suppliers. Any difficulties encountered by those *chaebols* would likely hurt the liquidity and financial condition of related SMEs, including those to which we have exposure, also resulting in an impairment of their ability to repay loans. In recent years, some *chaebols* have expanded into China and other countries with lower labour costs and other expenses by relocating their production plants and facilities to such countries, which may have a material adverse impact on such SMEs.

Due to the relatively vulnerable financial position faced by SMEs in Korea, the Government has historically introduced policies and initiatives intended to encourage Korean banks to provide financial support to SME borrowers. In addition, in response to the adverse market conditions induced by the COVID-19 pandemic, in April 2020 the FSC requested 14 Korean banks, including us, to extend special low interest rate loans to small merchants affected by the COVID-19 pandemic, the aggregate amount of which is estimated to have been approximately ₩3.5 trillion as of 31 December 2021. In January 2022, the FSC requested that Korean banks, including us, provide additional loans to small merchants affected by the COVID-19 pandemic, and we began providing such loans starting from 24 January 2022, but have ceased to provide such loans to small merchants since December 2022. Furthermore, the Korean financial regulatory authorities, including the FSC and the FSS, adopted guidelines for Korean banks to extend loan terms and defer interest payments with respect to small- and medium-sized enterprises and small merchants affected by the COVID-19 pandemic. Most recently, in December 2023, commercial banks in Korea, including us, announced a joint statement with the FSC and the FSS according to which more than Won 2 trillion has been committed as a relief measure to relieve the financially vulnerable groups affected by the COVID-19 pandemic such as self-employed and small business owners of the burden of high-interest rates. Our participation in such Government-led initiatives may lead us to extend credit to SME borrowers that we would not otherwise extend, or offer terms for such credit that we would not otherwise offer, in the absence of such initiatives. There is no guarantee that the financial condition and liquidity position of our SME borrowers benefiting from such initiatives will improve sufficiently for them to service their debt on a timely basis, or at all. Accordingly, increases in our exposure to SME borrowers resulting from such Government-led initiatives may have a material adverse effect on our business, financial condition and results of operations.

We have been taking active steps to curtail delinquency among our SME customers, including by way of increasing our exposure to so-called "blue-chip" companies with low credit risk profiles and reducing our exposure to companies with high credit risk profiles. Despite such efforts, there can be no assurance that delinquency levels for our loans to SMEs will not rise in the future. In addition, aggressive marketing and intense competition among banks to lend to this segment, may lead to a deterioration in the asset quality of our loans to this segment in the future. Any such deterioration would result in increased charge-offs, higher provisioning and reduced interest and fee income from this segment, which could have an adverse impact on our business, financial condition and results of operations.

The asset quality of our household loan portfolio may deteriorate.

In recent years, consumer debt, including lending to small unincorporated businesses, has continued to increase in Korea. Our portfolio of household loans is comprised of two principal product types, namely secured household loans (which are primarily comprised of housing loans secured by real estate) and general purpose household loans (which are unsecured loans and tend to carry a higher credit risk). As of 31 December 2021, 2022 and 2023, our household loan portfolio (before allowance for loan losses and net deferred loan fees and costs) was ₩133.2 trillion, ₩132.5 trillion and ₩131.9 trillion, representing 42.9%, 40.0% and 37.8% of our total loans outstanding, respectively.

Our large exposure to household loans means that we are exposed to changes in economic conditions affecting Korean consumers. For example, a rise in unemployment or an increase in interest rates in Korea could adversely affect the ability of consumers to make payments and increase the likelihood of potential defaults. Accordingly, 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 would in turn require us to record increased provisions for credit loss and charge-offs and may materially and adversely affect our business, financial condition and results of operations.

In response to increasing levels of household loans in recent years and amid concerns over the debt-servicing capacity of borrowers if interest rates were to rise, the Government has led a series of initiatives for Korean commercial banks, including us, to participate to help manage the debt-servicing capacity of borrowers. For example, under a pre-workout programme for household borrowers, maturity extensions and/or interest reductions are provided for borrowers with total loans of ₩1.5 billion or less (consisting of no more than ₩500 million of unsecured loans and ₩1 billion of secured loans) who are in arrears on their payments for more than 30 days but less than 90 days, or for retail borrowers with an annual income of ₩40 million or less who have been in arrears on their payments for 30 days or more on an aggregate basis for the 12 months prior to their application, among others. Our participation in such refinancing programme may lead to a decrease in our interest income on our outstanding mortgage loans, as well as in our overall net interest margin. More generally, our participation in such Government-led initiatives to provide financial support to retail borrowers may lead us to offer credit terms for such borrowers that we would not otherwise offer in the absence of such initiatives, which may have an adverse effect on our business, financial condition and results of operations.

In addition, 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.

In particular, the regulations on mortgage and home equity loans are susceptible to the changing 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 policies 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 the 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, and as a result, only Gangnam-Gu, Seocho-Gu, Songpa-Gu and Yongsan-Gu in the greater Seoul metropolitan area are currently left as the regulated areas. The Government also increased the loan to value ratio applicable to the regulated areas from 40% to 50%, removed the application of stricter loan to value ratio to new loans secured by high-priced houses located in the regulated areas and, since March 2023, allowed the extension of new loans secured by houses located in the regulated areas to a household that already owns one or more house with the maximum loan-to-value ratio of 30%.

The Government's relaxation of many of the restrictions on household loans, including on mortgage loans, was in response to rising base interest rate set by the Bank of Korea driven by global hyperinflation and depressed domestic real estate market. If such trends of rising interest rates and depression of real estate market continue, the quality and composition of our household loan portfolio may be negatively impacted, which could lead to an adverse impact on the future growth of our secured household loan portfolio.

We have significant exposure through our lending and other activities to a number of industries, and financial difficulties of any companies within these industries may adversely impact us.

Many Korean companies, including certain of our borrowers in the construction, shipbuilding and shipping sectors, are continuing to face financial difficulties rooted from the aftermath of the 2008 global financial crisis and accentuated by the COVID-19 pandemic. The construction industry in Korea has been stagnant for many years due to stringent government regulations on real estate and a decrease in overseas construction orders, among others. In particular, a rise in the costs of raw materials including steel and cement as well as the base interest rate set by the Bank of Korea in recent years has increased the financial costs and contingent liabilities of many Korean construction companies in the industry with added uncertainties arising from construction companies' exposures to project financing loans. For example, Taeyoung E&C, a Korean construction company ranked 16th by building capacity in 2023, filed for a debt workout process in December 2023 after failing to repay its real estate project financing loan. As of December 31, 2023, the amount of loans we had provided to Taeyoung E&C was approximately ₩60.4 billion, including short-term loans of ₩58.2 billion and project finance loans of ₩2.2 billion, for which we set aside allowances for possible loan losses in the amount of ₩60.2 billion as of the same date. The shipbuilding industry in Korea has experienced a severe downturn in recent years reflecting a significant decrease in ship orders, primarily due to oversupply. Although shipbuilding companies in Korea have seen a gradual increase in ship orders resulting from an increase in global trading activities and higher demand for eco-friendly ships due to the strengthening of global environmental regulations, the financial condition of many of these companies continues to suffer from the effects of stagnant demand for ships and rising costs in recent years. The shipping industry in Korea experienced a severe downturn in recent years due to movement restrictions and reduced traffic caused by the onset of the COVID-19 pandemic, although it has since seen strong growth due to increased global traffic resulting from increases in consumer spending and shipments as well as higher shipping rates reflecting more stringent global environmental regulations.

As of 31 December 2023, on a separate basis, we had exposures of ₩10.0 trillion, ₩7.3 trillion and ₩0.5 trillion to borrowers in the construction, shipbuilding and shipping sectors, respectively, which represented 3.0%, 2.2% and 0.1%, respectively, of our total credits (including loans, guarantees, purchases of securities (only in the nature of a credit) and such other transactions which directly or indirectly create credit risk as reported to the FSC based on the FSC's asset classification criteria). As of the same date, we had set aside allowances for possible loan losses in the amount of ₩192.8 billion, ₩80.4 billion and ₩3.6 billion for our general loans to borrowers in the construction, shipbuilding and shipping sectors, respectively.

In addition to our on-balance sheet loan exposures, we have other exposures to such borrowers, in the form of guarantees extended for the benefit of such borrowers (which included, on a separate basis, confirmed guarantees of ₩1,171.9 billion for construction companies, ₩4,760.4 billion for shipbuilding companies and ₩44.7 billion for shipping companies as of 31 December 2023) and debt and equity securities of such borrowers held by us. For example, in the case of construction companies, such exposures include guarantees provided to us by general contractors with respect to financing extended by us for residential and commercial real estate development projects. In the case of shipbuilding companies, such exposures include refund guarantees extended by us on behalf of shipbuilding companies to cover their obligation to return a portion of the ship order contract amount to customers in the event of performance delays or defaults under shipbuilding contracts.

As of 31 December 2023, our largest single exposure (consisting of loans, confirmed guarantees and acceptances, and debt and equity securities) in the construction, shipbuilding and shipping sectors was to HD Hyundai Heavy Industries Co., Ltd., which amounted to ₩2,072.5 billion, on a separate basis, for which we established allowances of ₩0.7 billion. Our other significant exposures as of the same date include Samsung Heavy Industries Co., Ltd. and Booyoung Housing Co., Ltd. in the amount of ₩1,688.3 billion and ₩912.2 billion, respectively, on a separate basis, for which we had allowances of ₩1.6 billion and ₩0.5 billion, respectively.

Companies in the cable TV network industry in Korea have also been experiencing financial difficulties due to decreasing revenue and subscription base, as many subscribers opt for new forms of media such as Internet streaming, Internet Protocol Television, online video sharing platforms and OTT (over-the-top) platforms in lieu of cable TV subscription. As of 31 December 2023, our exposure to D'Live Co., Ltd. ("**D'Live**"), a major cable TV network and subsidiary of Kookmin Cable Investment Inc. ("**Kookmin Cable**"), amounted to ₩43.7 billion, on a separate basis, and we established allowances for the entire exposure amount. Since 2016, D'Live has faced the risk of defaulting on the loans from us and other creditors due to their inability to make interest payments. We and other creditors have extended maturity and lowered interest rates of the loans and converted loans to Kookmin Cable into equity. As of 31 December 2023, we held 4.42% interest in Kookmin Cable. D'Live is undergoing a sale process as of the date of this Offering Circular. Subject to market conditions, we plan to liquidate our equity investments in Kookmin Cable after the successful completion of the sale.

The allowances that we have established against our credit exposures to Korean companies in the above described industries may be insufficient to cover all future losses arising from such exposures. If the credit quality of our exposures to such Korean companies declines, we may be required to take substantial additional provisions for credit loss, which could adversely impact our business, financial condition and results of operations. Furthermore, although a portion of our loans to such Korean companies may be secured by collateral, such collateral may be insufficient to cover uncollectible amounts in respect of such loans. See "— *A decline in the value of the collateral securing our loans or our inability to fully realise the collateral value may adversely affect us.*"

We have exposure to companies that are currently or may in the future be put in restructuring, and we may suffer losses as a result of additional loan loss provisions which may be required and/or the adoption of restructuring plans with which we do not agree.

As of 31 December 2023, on a separate basis, our loans to companies that were in restructuring (in the form of either workout or rehabilitation) amounted to ₩143.8 billion, representing 0.04% of our total loans. Our allowances for losses on these loans may not be sufficient to cover all future losses arising from our exposure to these companies. Furthermore, we have other exposure to such companies, in the form of guarantees extended for the benefit of such companies and debt and equity securities of such companies held by us (including equity securities we acquired as a result of debt-to-equity conversions). With respect to those companies that are in or may in the future enter into workout or liquidation proceedings, we may not be able to make any recoveries against such companies. We may, therefore, experience future losses with respect to those loans. In addition, in the case of borrowers that are or become subject to workout, we may be forced to restructure our credits pursuant to restructuring plans approved by other creditor financial institutions or to dispose of our credits to other creditors on unfavourable terms, which may adversely affect our business, financial condition and results of operations.

In particular, as of 31 December 2023, on a separate basis, we had ₩64.3 billion of outstanding loans and ₩499.0 billion of outstanding guarantees (mainly in the form of refund guarantees relating to shipbuilding contracts), to Hanwha Ocean Co., Ltd. ("**Hanwha Ocean**"), formerly known as Daewoo Shipbuilding & Marine Engineering Co., Ltd. ("**DSME**"). In April 2017, the creditors of DSME agreed on a plan to provide additional financial support to DSME in connection with its voluntary restructuring programme, under which The Korea Development Bank and The Export-Import Bank of Korea would provide ₩2.9 trillion of new loans to DSME, on the condition that DSME's other creditors and bondholders agree to a ₩2.9 trillion debt-to-equity swap. The financial support plan required the Korean commercial bank creditors of DSME, including us, to swap 80% of their outstanding unsecured loans into equity of DSME and extend the maturity of the remaining loans for a period of three years. The financial support plan also required DSME's creditors, including us, to provide additional refund guarantees in connection with future shipbuilding contracts of DSME. As a result of the debt-to-equity swap, we converted our loans in the amount of ₩364 billion and received 8.40% of equity interest in DSME, which was subsequently reduced to 1.88% as of 31 December 2023 as a result of the completion of acquisition of 49.3% equity interest in DSME by a group of subsidiaries of Hanwha Group in April 2023 and an additional paid-in capital increase in May 2023. Our current exposure to Hanwha Ocean includes the refund guarantee, which may require us to increase our loan loss provisions and recognise write-offs and impairment losses, and may therefore have a material adverse impact on our results of operations and financial condition.

In furtherance of policy objectives, the Government may promote lending and financial support to certain types of institutions to which we would not lend or provide support absent such policies, and such lending or other forms of support may negatively impact our financial condition.

Through its policies and recommendations, the Government has promoted and, as a matter of policy, may continue to attempt to promote lending by the Korean financial industry to particular types of borrowers. For example, the Government has in the past provided and may continue to provide policy loans, which encourage lending to particular types of borrowers. The Government has generally provided such loans by identifying sectors of the economy it wishes to promote and making low-interest funding available to financial institutions that may voluntarily choose to lend to these sectors. For example, the Government has in this manner provided policy loans intended to promote mortgage lending to low-income individuals and lending to SMEs. 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. All loans or credits we choose to make pursuant to these policy loans would be subject to review in accordance with our credit approval procedures. However, the availability of policy loans may influence us to lend to certain sectors or in a manner in which we otherwise would not have done in the absence of such policy initiatives from the Government, and the policy-driven lending may create enhanced difficulties for us in terms of risk management and may lead to deterioration of our asset quality and reduced earnings.

In addition, the Government has requested and may in the future request financial institutions in Korea, including us, to make investments in or provide other forms of financial support to particular sectors of the Korean economy as a matter of policy, which such financial institutions, including us, may decide to accept. We may incur costs or losses as a result of providing such financial support.

Competition in the Korean banking industry is intense and may further intensify.

We compete principally with other national banks in Korea. We also face competition from a number of additional sources including regional banks, Government policy banks, specialised banks, branches of foreign banks operating in Korea and various other types of financial service institutions. In particular, competition in the retail and SME lending business, which has traditionally been an important business for us, has increased significantly in recent years and is expected to increase further. In addition, the profitability of our retail banking operations may decline as a result of growing market saturation in the retail lending segment, increased interest rate competition and higher marketing expenses. Intense and increasing competition has made and continues to make it more difficult for us to secure retail and SME customers with the credit quality and on credit terms necessary to achieve our business objectives in a commercially acceptable manner.

Consolidation among our rival institutions and the Government's privatisation efforts may also add competition in the markets in which we conduct business. For example, pursuant to the implementation of the Government's privatisation plan with respect to Woori Finance Holdings Co., Ltd. (the former financial holding company of Woori Bank) and its former subsidiaries, certain subsidiaries of Woori Finance Holdings Co., Ltd. were sold to other financial institutions and Woori Finance Holdings Co., Ltd. itself was merged into Woori Bank in 2014. In January 2019, Woori Financial Group Inc. was established as Woori Bank's new financial holding company. Furthermore, large financial groups have been focused on further growing their asset size and strengthening their non-banking businesses over the past few years by actively seeking acquisition targets. For example, Shinhan Financial Group acquired Orange Life Insurance Ltd. (formerly ING Life Insurance Korea Ltd.) in February 2019 and agreed to acquire BNP Paribas Cardif General Insurance in October 2021. In September 2020, KB Financial Group acquired Prudential Life Insurance Co. of Korea. In line with this trend, Hana Financial Group, our parent holding company, also acquired The-K Non-Life Insurance in May 2020. We expect that consolidation 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 significantly greater competition for us. Increased competition and continuing consolidation may lead to decreased margins, resulting in a material adverse impact on our future profitability.

We also face rising competition in the online arena. K Bank, the first online-only bank in Korea, commenced operations in April 2017, and Kakao Bank, another online-only bank, commenced operations in July 2017 and went public in August 2021. Toss Bank, in which we hold an 8.99% interest, also commenced operations in October 2021. Online-only banks may have advantages over traditional banks as the former can pass savings in labour 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 represent a growing customer base compared to traditional customers who have primarily conducted banking in-person at physical banking branches. Furthermore, online service providers and technology companies with large-scale user networks, such as Kakao Corp., NAVER and Samsung Electronics, have made 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." Accordingly, competition for online customers is growing not just among commercial banks, but also from mobile payment service providers.

The Government has identified fintech as a future growth industry as part of the fourth industrial revolution, and pursuant to the Special Act on Support for Financial Innovation, which came into effect in April 2019, the Government has established a framework to provide "sandbox" regulations and expedited regulatory approvals to promising fintech companies, including those providing banking and mobile payment services. In December 2019, we participated in the formal launch of open banking services, along with other major commercial banks and fintech companies, which allows customers to access nearly all banking services offered by any bank through a single smartphone banking app chosen by the customers and provides fintech companies access to a bank's payment systems, increasing competition among commercial banks and fintech companies.

In August 2020, amendments to the Credit Information Use and Protection Act established the framework for MyData services in Korea, which allow the collection of customers' personal credit information from credit information providers/users or public institutions upon the customer's request and subject to compliance requirements, so that customers may access such collected personal credit information in whole or in part. As of February 2024, the FSC had granted licenses to 69 companies to operate as MyData service providers, 25 of which were fintech or IT firms, and competition between traditional financial institutions and fintech firms is expected to intensify, particularly with respect to asset management services. MyData services are currently offered through several channels including Hana Hap, our MyData-based asset management service application.

As the Korean economy further develops and new business opportunities arise, in particular with the advancement of technology, more competitors may enter the Korean banking and other financial services industry. There can be no assurance that we will be able to compete effectively in the face of such increased competition. Increased competition in the Korean banking industry may make it difficult for us to increase the size of our loan portfolio and deposit base and maintain or improve our margins, which could have a material adverse effect on our business, financial condition and results of operations.

Changes in interest rates could hurt our net interest margin due to a mismatch in our assets and liabilities structures and other factors, which could have a material adverse effect on our asset quality and profitability.

Historically, the Bank of Korea has utilised monetary policies, including adjusting the base interest rate to stimulate economic growth or curb inflationary pressures. Between 2009 and 2019, the base interest rate set by the Bank of Korea, to which the market interest rates correlate, has fluctuated within a range of 1.25% and 3.25%. In March 2020, amid growing concerns over the COVID-19 pandemic, the Bank of Korea cut the base interest rate by 50 basis points to 0.75% and in May 2020 further to 0.50%. However, as the pandemic began to recede and the economy showed some signs of recovery starting from the second half of 2021, the Bank of Korea gradually raised the base interest rate multiple times to reach a pre-pandemic level of 1.25% from August 2021 through January 2022. More recently, in response to rising levels of household debt and inflation in Korea as well as globally, the Bank of Korea again raised the base interest rate to 1.50% in April 2022, 1.75% in May 2022, 2.25% in July 2022, 2.50% in August 2022, 3.00% in October 2022, 3.25% in November 2022 and 3.50% in January 2023 in an effort to address rising consumer prices. Furthermore, on 22 February 2024, the Bank of Korea once again decided to maintain the base interest rate at 3.50%.

Interest rate movements, in terms of magnitude and timing, 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 minimise our exposure to interest rate volatility, such efforts may not mitigate the impact of interest rate volatility in a timely or effective manner, and our net interest margin, and in turn our business, financial condition and results of operations, could suffer significantly.

We cannot assure when and to what extent the Government 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 minimise 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, 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.

The global pandemic of COVID-19 and any possible recurrence of other types of widespread infectious diseases could result in difficulties in financial and economic conditions globally and in Korea, which in turn may adversely affect our business, financial condition and results of operations.

Our business could be adversely affected by health epidemics impacting the markets and communities in which we operate. The outbreak of communicable diseases such as COVID-19, H7N9 strain of flu, the H1N1 virus and

MERS on a global scale has affected, and may also affect in the future, investment sentiment in Korea and globally, resulting in sporadic volatility in global capital markets and economies.

In particular, the global outbreak of COVID-19 has resulted in changes in consumer behavior, and the implementation of restrictions intended to slow the spread of COVID-19, including quarantines, government-mandated actions, stay-at-home orders, restrictions on travel and public transport, prolonged closures of workplaces and other restrictions, has negatively impacted the global and Korean economy as well as our business and created significant volatility and disruption of financial markets.

Since 2021, the Korean and global economies have showed signs of recovery from the pandemic recession in 2020, due largely to aggressive fiscal and monetary measures implemented by the governments. In addition, the Government and other governmental authorities across the world lifted most of the restrictions put in place to slow the spread of COVID-19 and, in May 2023, the World Health Organization declared that the COVID-19 pandemic was still ongoing but no longer represented a public health emergency. However, the risk remains that circumstances could deteriorate, for instance, with the spread of a new COVID-19 variant. In addition, rising energy prices and supply disruptions have resulted in higher and more broad-based inflation than anticipated in many economies including Korea.

We are unable to accurately predict the impact that COVID-19 will continue to have on Korean financial institutions and industry due to uncertainties, including the existence, severity and duration of future outbreaks and additional actions that may be taken by businesses and governmental authorities. To the extent the COVID-19 pandemic or an unrelated epidemic, pandemic or other health crisis adversely affects our business, it may also have the effect of heightening many of the other risks described in these risk factors relating to our business and industry, and the cumulative effects of these developments could have a material adverse effect on our business, results of operations, financial condition and prospects.

A decline in the value of the collateral securing our loans or our inability to fully realise the collateral value may adversely affect us.

A substantial portion of our home and mortgage loans are secured by borrowers' homes, other real estate or other securities and guarantees (which are principally provided by the Government and other financial institutions), and a large portion of our corporate loans are also secured, including by real estate. The secured portion of our loans amounted to ₩231.2 trillion, or 79.8%, of our total loans as of 31 December 2023, on a separate basis. Although our general policy for home and mortgage loans is to lend up to 70% (or lower in the case of houses priced over a certain amount in accordance with Government regulations and located in areas designated by the Government as a regulated area) of the appraised value of the collateral and to periodically re-appraise the value of the collateral, the recent downturn in the real estate market in Korea has resulted in declines in the value of the collateral securing our home and mortgage loans. If collateral values continue to decline in the future, they may not be sufficient to cover uncollectible amounts in respect of our secured loans. Any further declines 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 declines, may result in the deterioration of our asset quality and require us to take additional loan loss provisions.

In Korea, foreclosure on collateral generally requires a written petition to a Korean court. Foreclosure procedures in Korea typically take ten to fourteen 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. We cannot assure that we will be able to realise the full value of the collateral as there can be, among other factors, delays in foreclosure proceedings, defects in the perfection of the collateral and general declines in the collateral value. Our failure to recover the expected value of the collateral could expose us to significant losses.

Payment guarantees received in connection with our real estate financing may not provide sufficient coverage.

We, alone or together with other financial institutions, provide financing to real estate development projects, which are concentrated in the construction of residential and, to a lesser extent, commercial complexes. Developers in Korea commonly use project financing to acquire land and to cover related project development costs. It is market practice for general contractors to guarantee loans raised by special purpose financing vehicles established by the developers in order to procure the construction orders, as most developers tend to be small and highly leveraged. While general contractors tend to be large and well-established construction companies, there can be no guarantee that even such companies will have sufficient liquidity to back up their payment guarantees if the real estate development projects do not generate sufficient cash flow from pre-sales of the residential or commercial units. If defaults arise under our loans to real estate development projects and payment guarantees are not paid in sufficient amounts to cover the amount of our financings, our business, financial condition and results of operations may be adversely affected.

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

In the normal course of our banking activities, we make various commitments and incur certain contingent liabilities in the form of guarantees and acceptances, which are recorded as off-balance sheet items in the notes to our financial statements. As of 31 December 2023, we had aggregate guarantees and acceptances of ₩17.5 trillion, on a separate basis, for which we provided allowances for losses of ₩65 billion. No assurance can be given that such allowances will be sufficient to cover any actual losses resulting in respect of these instruments.

We may incur 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 the fixed income markets, primarily through our treasury and investment business. We also maintain smaller trading positions, including securities and derivative financial instruments, as part of our banking operations. Maintaining these positions entails making assessments about financial market conditions and trends. The revenues and profits that 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 securities, a decline in market prices, as a result of fluctuating market interest rates, can expose us to losses. In 2022, for instance, as the global financial market entered into recession, the value of our debt securities declined as a result of the rising interest rates compared to 2021. 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 the price directions, the 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 incur losses from our commission- and fee-based business.

Downturns in stock markets are likely to lead to a decline in the volume of transactions that we execute for our customers and, therefore, to a decline in our non-interest revenues. In addition, because the fees that we charge for managing our clients' portfolios are in many cases based on the size of the assets under management, a market downturn which has the effect of reducing the value of our clients' portfolios or increasing the amount of withdrawals may reduce the revenues that we receive from our trust account management. Even in the absence of a market downturn, below-market performance by our trust account services may result in increased withdrawals and reduced inflows, which may reduce the revenue that we receive from these businesses. In addition, protracted market movements resulting in declines of 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.

Our business may be adversely affected by legal claims and regulatory actions against us.

We and our employees are subject to the risk of legal claims and regulatory actions, which may expose us to monetary damages and legal costs, injunctive relief, criminal and civil penalties, sanctions against our management and employees and regulatory restrictions on our operations, as well as reputational harm. See "*Hana Bank — Legal and Regulatory Proceedings*."

We are unable to predict the outcome of the legal claims and regulatory actions in which we and our employees are involved, and the scope of the claims or actions or the total amount in dispute in such matters may increase. Furthermore, adverse final determinations, decisions or resolutions in such matters could encourage other parties to bring related claims and actions against us. Accordingly, the outcome of current and future legal claims and regulatory actions, particularly those for which it is difficult to assess the maximum potential exposure or the ultimate adverse impact with any degree of certainty, may materially and adversely impact our business, reputation, financial condition and results of operations.

We may not be able to successfully execute our overseas expansion strategy.

As part of our business strategy, we have been seeking opportunities to expand our operations in markets outside Korea, including through the opening of additional overseas branches and offices as well as strategic acquisitions and investments, particularly in China and Southeast Asia, and entering into MOUs with leading banks in Eastern Europe, India and the Middle East. In 2019, we acquired a 15% stake in the Bank of Investment and Development of Vietnam ("**BIDV**"), one of the largest banks controlled by the State Bank of Vietnam, for over ₩1 trillion. In April 2022, we established a branch office in Taipei, Taiwan as the first and only Korean bank to establish presence in Taiwan. More recently, we entered into MOUs with several leading banks in Eastern Europe, in India and Saudi Arabia as part of our strategies to explore further expansion of our presence in such regions. While we will continue to explore opportunities to expand our global presence, the expansion of our operations abroad may be difficult due to the presence of established competitors in the relevant local markets. In addition, overseas expansion and the management of international operations may require significant financial expenditures as well as management resources, and will subject us to the challenges of operating in an unfamiliar business environment with different regulatory, legal and taxation systems and political, economic and social risks. Accordingly, there is no guarantee that we will be successful in executing our overseas expansion strategy. The failure of our overseas expansion strategy could have an adverse impact on our business, financial condition and results of operations.

Reductions in our credit ratings could, among other things, increase the cost of borrowing funds and may have an adverse impact on our ability to raise new funds or refinance maturing debt on commercially acceptable terms.

Credit ratings are an indicator of our financial and liquidity profile. Among other factors, our credit ratings are based on our financial strength, the credit quality of and concentrations in our loan portfolio, the level and volatility of our earnings, our capital adequacy, the quality of our management, the liquidity of our balance sheet, the availability of a significant base of core and retail deposits and our ability to access a broad range of funding sources. Any reduction in our credit ratings could adversely affect our liquidity and competitive position, increase our borrowing costs and limit our access to the capital markets and funding sources on commercially acceptable terms. Such events could adversely affect our business, financial condition and results of operations. A reduction in our ratings could also adversely affect the ratings of the Notes.

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 exposure through a comprehensive risk management platform, encompassing centralised risk management organisation 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 "*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 techniques may not be fully effective at all times in mitigating risk exposures in all market environments or against all types of risk, including risks that are unidentified or unanticipated. Management of credit, market and operational risks requires, among other things, policies and procedures to properly record and verify a large number of transactions and events, and we cannot assure that these policies and procedures will prove to be fully effective at all times against all the risks that we face.

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

We rely on our IT systems for our daily operations, including billing, effecting online and offline financial transactions and recordkeeping. We also upgrade from time to time our group-wide customer data sharing and other customer relations management systems. We may experience disruptions, delays or other difficulties relating to our IT systems, and may not integrate or upgrade our systems as currently planned. Any of these developments may have an adverse effect on our business and adversely impact our customers' confidence in us.

We are subject to cyber security risk.

We are subject to a risk of cyber-attacks, the nature of which is continually evolving. Cyber security risks include unauthorised 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 Internet-and mobile phone-based banking services for various types of financial transactions. While we vigilantly protect customer data through encryption and other security programmes and have made substantial investments to build and upgrade our systems to address the growing threats from cyber-attacks, there is no assurance that such data will not be subject to future security breaches as a result of illegal activities by our employees, outside consultants or hackers, or otherwise.

We have not experienced any material security breaches in the past. However, major financial institutions in Korea have fallen victim to cyber security attacks in the past, and 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. As such, in light of the various incidents of security breaches involving financial institutions, the Government has implemented heightened consumer protection measures. For example, under the Personal Information Protection Act, financial institutions, as personal information managers, may not collect, store, maintain, utilise or provide resident registration numbers of their customers, except in any of the following cases: (i) where other laws or regulations specifically require or permit the management of resident registration numbers; (ii) where it is deemed manifestly necessary for the protection, from imminent danger, of life, bodily and property interests of a data subject or a third party; (iii) where it is inevitable to process resident registration numbers in line with the above cases prescribed by Notification of the Protection Commission. Further, under the Use and Protection of Credit Information Act, a financial institution has a higher duty to protect all information that it collects from its customers and is required to treat such information as credit information. In order for a financial institution to transfer or provide the information to its affiliate or holding company, it must comply with the procedures for providing customer information prescribed by the Financial Services Commission, and in case of violation of this, an administrative fine may be imposed on the financial institution. In addition, under the Electronic Financial Transaction Act, a financial institution is primarily responsible for compensating its customers harmed by a cybersecurity breach affecting the financial institution, even if the breach is not directly attributable to the financial institution.

If a cyber or other security breach were to happen, 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 security 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, financial condition and results of operations.

We may be required to raise additional capital if our capital adequacy ratio deteriorates or the applicable capital requirements change in the future, but we may not be able to do so on favourable terms or at all.

Pursuant to the capital adequacy requirements of the FSC, as of the date of this Offering Circular, we are required to maintain a minimum common equity Tier I capital adequacy ratio of 8.0%, a minimum Tier I capital adequacy ratio of 9.5% and a combined Tier I and Tier II capital adequacy ratio of 11.5%, each on a consolidated basis (including applicable additional capital buffers and requirements as described below). Our Tier I capital adequacy ratio and our combined Tier I and Tier II capital adequacy ratio were 16.26% and 17.93%, respectively, as of 31 December 2023, each of which exceeded the minimum levels required by the FSC. See "*Capitalisation — Capital Adequacy*." However, our capital base and capital adequacy ratio may deteriorate in the future if our business, financial condition or results of operations deteriorates for any reason, including as a result of a deterioration in the asset quality of our loans to households, SMEs and/or large conglomerates, or if we are not able to deploy our funding into suitably low-risk assets.

The current capital adequacy requirements of the FSC are derived from a new set of bank capital measures, referred to as Basel III ("**Basel III**"), which the Basel Committee on Banking Supervision initially introduced in 2009 and began phasing in starting from 2013. Commencing in July 2013, the FSC promulgated a series of amended regulations implementing Basel III, pursuant to which Korean banks and bank holding companies are currently required to maintain a minimum ratio of Tier I common equity capital (which principally includes equity capital, capital surplus and retained earnings) to risk-weighted assets of 4.5% and Tier I capital to risk-weighted assets of 6.0%. Such requirements are in addition to the pre-existing requirement for a total minimum ratio of Tier I and Tier II capital (less any capital deductions) to risk-weighted assets of 8.0%. The amended regulations also require an additional capital conservation buffer of 2.5%, as well as a potential counter-cyclical capital buffer of up to 2.5%, which is determined on a quarterly basis by the FSC. Furthermore, beginning in 2016, the FSC has annually designated "systemically important banks", which are required to maintain higher capital buffers. We have been designated as one of the "systemically important banks" by the FSC since 2016 and have been subject to an additional capital requirement of 1.0%. The implementation of Basel III in Korea has had, and may continue to have, a significant effect on the capital requirements of Korean financial institutions, including us.

We may be required to obtain additional capital in the future in order to remain in compliance with more stringent capital adequacy and other regulatory requirements. However, we may not be able to obtain additional capital on favourable terms, or at all. Our ability to obtain additional capital at any time may be constrained to the extent that banks or other financial institutions in Korea or from other Asian countries are seeking to raise capital at the same time. To the extent that we fail to comply with applicable capital adequacy ratios or other regulatory requirements in the future, Korean regulatory authorities may impose penalties on us ranging from a warning to suspension or revocation of our banking licence.

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.

Under the Financial Consumer Protection Act, banks as financial instrument distributors will be subject to heightened investor and consumer protection measures, including stricter distribution guidelines, improved financial dispute resolution system, increased liability for damages borne by direct financial instrument distributors and newly imposed penalty surcharges starting from March 2021. 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 requirements under Basel III, which are being adopted in phases in Korea in consideration of, among other things, the pace and scope of international adoption of such requirements. Specifically, Basel III includes a minimum liquidity standard, known as the liquidity coverage ratio ("**LCR**"), 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 LCR is computed as (a) the value of a banking organisation's HQLA, divided by (b) its total expected net cash outflows over the next 30 calendar days under stress scenarios. The FSC had required us and other Korean commercial banks to maintain LCR of not less than 100% starting from 1 January 2019, but, due to the volatility and uncertainty facing the financial markets as a result of the COVID-19 pandemic, temporarily adjusted LCR requirement to 85%. The FSS had subsequently decided to extend the measures to relax financial regulations and apply the 92.5% ratio until the end of June 2023 and the 95% ratio from July to the end of December 2023. Afterwards, at a financial market inspection meeting in October 2023, the FSS decided again to temporarily delay the restoration process and to retain the 92.5% ratio until the end of June 2024, in order to contain the possibility of a credit crunch and to continue pre-emptive responses. The FSS plans to decide whether to resume the gradual normalization plan based on market conditions in the second quarter of 2024. In addition, we are required to maintain a minimum foreign currency liquidity coverage ratio ("**FLCR**"). The FLCR is computed as (a) the value of a banking organisation's HQLA, divided by (b) its total expected net cash outflows over the next 30 calendar days under stress scenarios, each in terms of its foreign currency assets and liabilities. The FSC required us and other Korean commercial banks to maintain FLCR of not less than 80%, but, due to the volatility and uncertainty facing the financial markets as a result of the COVID-19 pandemic, had temporarily adjusted FLCR requirement to 70%. As of the date of this Offering Circular, the applicable FLCR requirement has been restored to 80%. Any of these regulatory developments may have a material adverse effect on our ability to expand operations or adequately manage our risks and liabilities.

In addition, violations of law and regulations could expose us to significant liabilities and sanctions. See "*Hana Bank — Legal and Regulatory Proceedings*." The FSC conducts periodic audits on banks and, from time to time, we have received institutional warnings from the FSC. If the FSC determines as part of such audit or otherwise that our financial condition is unsound or that we have violated applicable law or regulations, including FSC orders, or if we fail to meet applicable regulatory standards, such as minimum capital adequacy and liquidity ratios, as the case may be, set forth under Korean law, the FSC may order, among other things, capital increases or reductions, suspension of officers from performing their duties and appointment of custodians, stock cancellations, consolidations, transfers of business, sales of assets, closures of branch offices, mergers with other financial institutions and/or suspensions of a part or all of our business operations. If any of such measures is imposed on us 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 our business, financial condition and results of operations.

For further details on the principal laws and regulations applicable to us, see "*Regulation and Supervision*".

We may be assessed additional taxes in respect of prior periods as a result of tax audits by Korean tax authorities.

From time to time, we are subject to tax audits by Korean tax authorities. The most recent tax audit by the Seoul Regional Tax Office was completed in March 2023. Although we believe that we have complied with our obligations under applicable Korean tax laws and regulations in all material respects, there can be no assurance that we will not be involved in disputes with, or will not be assessed additional income or other taxes with respect to prior periods or in connection with the Merger by, Korean tax authorities as a result of tax audits of us. Any such additional taxes assessed against us, if significant, may have an adverse effect on our business, financial condition and results of operations.

We engaged in limited activities with sanctions targets in the Russian Federation ("Russia") and operated as a settlement bank for Euro-denominated transactions with Iran, any of which may subject us to legal and 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 U.S. persons with respect to dealings with or related to certain countries, governments, entities and individuals that are the subject of OFAC Sanctions, including Russia and 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. OFAC also publishes a Sectoral Sanctions Identifications ("**SSI**") list to identify certain persons operating in sectors of the Russian economy identified by the Secretary of the Treasury pursuant to Executive Order 13662 and the four directives issued thereunder. Depending on the directive implicated, U.S. persons are prohibited from engaging in certain activities with those entities designated on the SSI list. 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 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 OFAC Sanctions on various legal grounds, such as causing violations by U.S. persons by engaging in transactions completed in part in the United States or engaging in certain transactions with Iran and Iranian entities.

The European Union ("**EU**") 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 the past, we had engaged in certain dealings with VTB Bank by maintaining a Russian ruble account, and our Russian subsidiary (KEB HNB Rus LLC) also maintained a Russian ruble account with Sberbank. Both Sberbank and VTB Bank are currently the targets of OFAC sanctions including Directive 1 (as amended) issued under Executive Order 13662, and as such they are included on OFAC's SSI list. Under Directive 1, certain activities by U.S. persons or conducted within the United States relating to debt or equity of certain SSI targets are prohibited. Sberbank is also subject to Directive 2 under E.O. 14024 ("**CAPTA sanction**"), which prohibits U.S. financial institutions from opening and maintaining correspondent and payable through-accounts on behalf of Sberbank. Sberbank has further been added by OFAC to the SDN List on 6 April 2022 and VTB Bank has been added by OFAC to the SDN List on 24 February 2022. Sberbank and VTB Bank are also targets of European Union restrictive measures under Council Regulation (EU) 2014/833 ("**Regulation 2014/833**"). Additionally, the EU has issued Council Regulation (EU) 2022/345 ("**Regulation 2022/345**") prohibiting the provision of specialized financial messaging services, which are used to exchange financial data, to VTB Bank and Council Regulation (EU) 2022/879 ("**Regulation 2022/879**") removing Sberbank's access to the SWIFT payment network. Both Sberbank and VTB Bank are also subject to UK economic sanctions.

While SSI sanctions on Sberbank and VTB Bank and CAPTA sanction on Sberbank do not apply to non-U.S. persons and entities and the designations of Sberbank and VTB Bank as SDNs do not prohibit a non-U.S. person from certain dealings with such entities, we have completely stopped all dealings and transactions with Sberbank and VTB Bank since 24 February 2022 and moved all balances in the VTB Bank account to our Russian subsidiary's (KEB HNB Rus LLC) account. Since 11 March 2022, we have maintained zero balance in the VTB Bank account and have no other nexus or business with any of the other sanctioned targets in Russia or around the world. Despite these efforts, non-U.S. persons may be exposed to sanctions risk in relation to activities with persons subject to blocking sanctions and there is no guarantee that such activities will not be found to violate applicable sanctions laws. Moreover, future changes in law concerning Sberbank or VTB Bank specifically or Russia generally could also adversely affect us. Accordingly, our historical activities relating to Russia may subject us to legal and reputational risks.

With regard to our Iran dealings, in August 2016, the Government authorised us to act as a settlement bank for Euro-denominated transactions between South Korean and Iranian businesses. Pursuant to this authorisation, we processed Euro-denominated settlement transactions involving Iranian companies for a limited period of time. In April 2018, however, we suspended our settlement system for Euro-denominated transactions with Iranian businesses, and as of the date of this Offering Circular, we have no plans to resume operating this system in the future. We are committed to engaging only in lawful activities and obeying all relevant OFAC and EU sanctions but cannot guarantee that actions taken by our employees will not violate such sanctions should we re-engage in settling transactions involving Iranian businesses.

On 8 May 2018, then-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 ending on 6 August 2018 and the other ending on 4 November 2018, all Iran-related Secondary Sanctions that had been waived pursuant to the JCPOA were re-imposed and on 27 May 2020, then-U.S. Secretary of State Michael Pompeo further announced that the United States would terminate all remaining sanctions waivers allowing for nonproliferation cooperation projects in Iran. On 18 February 2021, the newly inaugurated Biden administration formally rescinded Trump's request that all sanctions lifted in accordance with the JCPOA be re-imposed. However, it remains uncertain whether the United States would rejoin the JCPOA or which sanctions relief would be reinstated. As a result, non-U.S. persons may 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. Thus, our activities related to Iran may subject us to OFAC Sanctions and to potential legal and reputational risks in the future.

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

We are a corporation with limited liability organised under the laws of Korea. Substantially all of our directors and officers and other persons named in this Offering Circular reside in Korea, and all or a significant portion of the assets of our directors and officers and other persons named in this Offering Circular as well as substantially all of our assets are located in Korea. As a result, it may not be possible for investors to effect service of process within the United States or certain other jurisdictions, or to enforce against them or us in the United States or certain other jurisdictions judgements obtained in courts in such jurisdictions based on the civil liability provisions of such jurisdictions. There is doubt as to the enforceability in Korea, either in original actions or in actions for enforcement of judgements of courts in such jurisdictions, of civil liabilities predicated on the laws of such jurisdictions.

Risks Relating to Korea

Adverse developments in Korea may have adverse effects on us.

We are incorporated in Korea, where most of our assets are located and most of our income is generated. As a result, our performance and successful fulfilment of our operational strategies are necessarily dependent on the overall Korean economy. In 2020, the economic indicators, such as GDP, in Korea and globally deteriorated largely due to the adverse macroeconomic conditions induced by the COVID-19 pandemic. In 2021, such indicators generally improved as stimulus packages were implemented around the world, but inflation continued to rise throughout 2022 and 2023 due to rising energy and commodity costs, labour shortages and ongoing supply chain disruptions.

Adverse conditions and volatility in the worldwide financial markets, fluctuations in oil and commodity prices and the general weakness of the global economy have contributed to the uncertainty of global economic prospects in general and have adversely affected, and may continue to adversely affect, the Korean economy. See "*— Risks Relating to Our Business — Uncertainties and instability in global market conditions could adversely affect our business, financial condition and results of operations, as well as the value of the Notes*." The value of the Won relative to major foreign currencies in general and the U.S. dollar in particular has also fluctuated significantly. Furthermore, as a result of adverse global and Korean economic conditions, there has been volatility in the stock prices of Korean companies in recent years. Future declines in the Korea Composite Stock Price Index ("**KOSPI**") and large amounts of sales of Korean securities by foreign investors and subsequent repatriation of the proceeds of such sales may adversely affect the value of the Won, the foreign currency reserves held by financial institutions in Korea, and the ability of Korean companies to raise capital. Any future deterioration of the Korean or global economy could adversely affect our business, financial condition and results of operations.

Additional developments that could have an adverse impact on Korea's economy include:

- continued volatility or deterioration in Korea's credit and capital markets;
- declines in consumer confidence and a slowdown in consumer spending in the Korean or global economy;
- adverse conditions in the economies of countries and regions that are important export markets for Korea, such as China, the United States, Europe and Japan, or in emerging market economies in Asia or elsewhere, including as a result of economic and trade tensions between the United States and China;
- 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 Japanese Yen exchange rates or revaluation of the Chinese Renminbi), interest rates, inflation rates or stock markets;
- 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, in particular the ongoing trade disputes with Japan;
- increased sovereign default risk in select countries and the resulting adverse effects on the global financial markets, including the possibility of global inflation and the spread of economic recession to Europe as a result of geopolitical risks arising from the Russia-Ukraine conflict;
- investigations of large Korean business groups and their senior management for possible misconduct;
- a continuing rise in the level of household debt and increasing delinquencies and credit defaults by retail and small- and medium-sized enterprise borrowers in Korea;
- social and labour unrest;
- substantial fluctuations in the market prices of Korean real estate and uncertainties arising from construction companies' exposures to project financing loans;
- the economic impact of any pending or future free trade agreements or changes in existing free trade agreements;
- 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 programmes 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 or corporate governance issues at certain Korean companies;
- increases in social expenditures to support an ageing population in Korea or decreases in economic productivity due to the declining population size in Korea;
- geopolitical uncertainty and the risk of further attacks by terrorist groups around the world;
- the occurrence of severe health epidemics in Korea or other parts of the world including the COVID-19 pandemic;
- natural or man-made disasters that have a significant adverse economic or other impact on Korea or its major trading partners;
- political uncertainty or increasing strife among or within political parties in Korea;
- hostilities, political or social tensions involving Russia (including the invasion of Ukraine by Russia and ensuing actions that the United States and other countries have taken or may take in the future) as well as other oil producing countries in the Middle East (including the escalated conflict between Israel and Palestine) and North Africa and the resulting adverse effects on the global supply of oil and other natural resources and the global financial markets;

- volatility of the won-dollar exchange rate as internal and external uncertainties, such as from the Russia-Ukraine conflict, continue to grow and preference for safe assets also grow; and
- an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States.

Escalations in tensions with North Korea could have an adverse effect on us and the market value of the Notes.

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of current and future events. In particular, there have been heightened security concerns in recent years stemming from North Korea's nuclear weapon and ballistic missile programs as well as its hostile military actions against Korea. Some of the significant incidents in 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. North Korea has increased the frequency of its missile tests in 2022, firing over 60 ballistic missiles, including eight intercontinental ballistic missiles. In response, the Government has repeatedly condemned the provocations and flagrant violations of relevant United Nations Security Council resolutions. In February 2016, the Government also closed the inter-Korea Gaeseong Industrial Complex in response to North Korea's fourth nuclear test in January 2016. 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, in December 2017, in response to North Korea's intercontinental ballistic missile test in November 2017. Over the years, the United States and the European Union have also expanded their sanctions applicable to North Korea.

Since April 2018, North Korea has held a series of bilateral summit meetings with Korea and the United States to discuss peace and denuclearization of the Korean peninsula. At the end of July 2021, the inter-Korean communication lines were restored for the first time since June 2020, when North Korea severed all inter-Korean governmental communication, but days later, North Korea stopped answering routine calls from Korea in apparent protest of the joint U.S.-Korea military exercises scheduled for August 2021. Although in October 2021, North Korea began answering military and liaison office communication lines again, there can be no assurance that the level of tensions affecting the Korean peninsula will not escalate in the future or that such escalation will not have a material adverse impact on the Korean economy and the Company. Despite some mixed signs of improved relationship between North Korea and Korea as well as the United States in recent years, North Korea has not ceased its missile testing, heightening tensions, and the outlook of discussions with North Korea remains uncertain.

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 may suddenly occur in the future, which would entail significant economic commitment and expenditure by Korea that may outweigh any resulting economic benefits of reunification. 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 our business, financial condition and results of operations, as well as the credit rating of Korea, us or the Notes.

We are generally subject to Korean accounting, regulatory, corporate governance and disclosure standards, which differ from those applicable to banks in other countries.

Banks in Korea, including us, are subject to Korean accounting standards and disclosure requirements, which may differ in significant respects from those applicable to banks in certain other countries, including the United States. Our financial statements are prepared in accordance with K-IFRS, which may differ in certain respects from IFRS applied in other countries. In addition, we are subject to corporate governance standards applicable to Korean banks, which differ in many respects from standards applicable in other countries. There may also be less publicly available information about Korean banks, such as us, than is regularly made available by public or non-public companies in other countries. Such differences in accounting and corporate governance standards as well as less available public information could result in corporate governance practices or disclosures that are perceived as less than satisfactory by investors in certain countries.

Risks Relating to the Notes

Capitalised terms used but not defined in this section shall have the meanings given to them in the "*Terms and Conditions of the Notes*".

The Notes are unsecured obligations.

Because the Notes are unsecured obligations, their repayment may be compromised if:

- we enter into bankruptcy, liquidation, reorganisation or other winding-up proceedings;
- there is a default in payment under our future secured indebtedness or other unsecured indebtedness; or
- there is an acceleration of any of our indebtedness.

If any of these events occurs, our assets may not be sufficient to pay amounts due on any of the Notes.

The Notes may have limited liquidity.

The Notes, when issued, will constitute a new issue of securities for which there will be no existing trading market. Although the Dealers may make a market for the Notes, they are not obligated to do so, and any market-making activity with respect to the Notes, if commenced, may be discontinued at any time without notice.

No assurances can be given that a market for the Notes will develop in the future. If such a market were to develop, the Notes could trade at prices that may be higher or lower than the offering price depending on many factors, including, among others:

- prevailing interest rates;
- our financial condition, performance and prospects;
- the rate of exchange between Won and the currency of the Notes;
- political and economic developments in Korea; and
- the market conditions for similar securities.

The Notes are subject to transfer restrictions.

The Notes will not be registered under the Securities Act or any state securities laws and may not be offered or sold within the United States, except to certain persons in offshore transactions in reliance on Regulation S, or, if available, pursuant to another exemption from, or in another transaction not subject to, the registration requirements of the Securities Act and, in each case, in accordance with applicable state securities laws. For a further discussion of the transfer restrictions applicable to the Notes, see "*Subscription and Sale and Transfer and Selling Restrictions*".

The Notes may be redeemed by us in certain circumstances.

The Notes may be redeemable at our option, in whole but not in part, on any of the optional redemption dates specified in the applicable Pricing Supplement at their outstanding principal amount together (if applicable) with interest accrued to (but excluding) the date of redemption. Furthermore, the Notes may be redeemable at our option, in whole but not in part, at their outstanding principal amount together (if applicable) with interest accrued to (but excluding) the date of redemption, upon the occurrence of certain changes in applicable tax laws and regulations which (i) require us to pay additional amounts on payments of principal and interest in respect of the Notes due to withholding or deduction required by law or (ii) in the case of Notes that are Tier I Subordinated Notes, cause us to no longer be entitled to claim a deduction in respect of interest paid on the Tier I Subordinated Notes for purposes of Korean corporation tax. In addition, the Notes that are Subordinated Notes may be redeemed by us, in whole but not in part, at their outstanding principal amount together (if applicable) with interest accrued to (but excluding) the date of redemption, upon the occurrence of a regulatory event that would cause the Subordinated Notes to no longer qualify as (in case of the Tier I Subordinated Notes) additional Tier I capital or (in case of the Tier II Subordinated Notes) Tier II capital (as the case may be) of the Issuer. Such redemptions at our option are subject to necessary prior approval by the FSS or such other relevant regulatory authorities in Korea. See "*Terms and Conditions of the Notes — Redemption and Purchase*".

Accordingly, holders of the Notes should not rely on being able to hold the Notes until their maturity date. The date on which we may elect to redeem the Notes may not align with the preference of holders of the Notes, and such election by us may be disadvantageous to holders of the Notes in light of market conditions or the individual circumstances of such holders. In addition, if the Notes are redeemed prior to their maturity date, there is no guarantee that the holders of the Notes will be able to reinvest the amounts received upon redemption at a rate that will provide the same return as the investment in the Notes.

The Notes that are Subordinated Notes are subordinated and have only limited rights of acceleration.

The relevant Pricing Supplement may specify that the Notes will be Subordinated Notes (as defined in Condition 3(c) of the Terms and Conditions of the Notes), which will be our subordinated obligations. Payments on the Subordinated Notes will be subordinate in right of payment upon the occurrence of a Subordination Event (as defined in Condition 3(c) of the Terms and Conditions of the Notes) to the prior payment in full of all deposits and other liabilities of us, except those liabilities which rank equally with or junior to the Subordinated Notes. As a consequence of these subordination provisions, if any of such events should occur, the holders of the Subordinated Notes may recover proportionately less than the holders of our deposit liabilities or the holders of our other unsubordinated liabilities.

Only those limited events described herein regarding our bankruptcy or liquidation will permit a holder of Subordinated Notes to accelerate payment of such Subordinated Notes. In such event, the only action the holder may take in Korea against us is to make a claim in our liquidation or other applicable proceeding. Furthermore, if our indebtedness were to be accelerated, our assets may be insufficient to repay in full borrowings under all such debt instruments, including the Subordinated Notes.

In addition, subject to complying with applicable regulatory requirements in respect of our leverage and capital ratios, there is no restriction on the amount or type of other securities or indebtedness that we may issue or incur, as the case may be, that rank senior to, or *pari passu* with, the Subordinated Notes. The issue of any such other securities or the incurrence of any such other indebtedness may reduce the amount, if any, recoverable by holders of the Subordinated Notes on our liquidation or winding-up and may increase the likelihood of a non-payment or reduction of interest on the Subordinated Notes. The issue of any such other securities or the incurrence of any such other indebtedness might also have an adverse impact on the market price of the Subordinated Notes and the ability of holders to sell the Subordinated Notes.

Holders of Notes that are Subordinated Notes will have no creditor objection rights in connection with our future merger with another entity.

Under the Korean Commercial Code, a Korean company that has resolved to merge with another entity is required to provide notice of the impending merger to its creditors and, if any creditor raises an objection to the merger during the applicable creditor objection period, to either repay the relevant debt owed to such creditor or provide adequate collateral to secure such debt. In addition, similar creditor objection rights are also applicable in the case of a capital reduction, merger, split-off or merger-after-split-off of a Korean company under the Korean Commercial Code. However, pursuant to Condition 3(c) of the Terms and Conditions of the Notes, holders of Subordinated Notes will be deemed to have waived, and agreed not to exercise, any such creditor objection rights that may arise in connection with our merger, capital reduction, merger, split-off or merger after split-off. Accordingly, holders of Subordinated Notes will have no creditor objection rights in connection with our future merger, capital reduction, split-off or merger after split-off.

The Notes that are Subordinated Notes may be fully written off upon the occurrence of certain trigger events, in which case holders of the Subordinated Notes will lose all of their investment.

The Subordinated Notes will be subject to loss absorption provisions pursuant to which we will irrevocably effect a full write-off of the outstanding principal amount and accrued but unpaid interest on the Subordinated Notes (without the need for the consent of the holders) upon the occurrence of a trigger event tied to our performance and viability. A trigger event would occur upon (i) the designation of us as an "insolvent financial institution" pursuant to the Act on Structural Improvement of the Financial Industry or (ii) the designation of us as an "insolvent financial company" pursuant to the Depositor Protection Act. Such write-off will come into effect on the third business day in Korea from the date of occurrence of such trigger event.

An "insolvent financial institution" under Article 2 of the Act on Structural Improvement of the Financial Industry or an "insolvent financial company" under Article 2 of the Depositor Protection Act is defined as a financial institution that is:

- determined by the FSC or the Deposit Insurance Committee (the "**DIC**") established within the Korea Deposit Insurance Corporation (the "**KDIC**"), based on an actual survey of such financial institution's business operations as (i) having liabilities that exceed its assets (each as valued and calculated in accordance with standards established by the FSC), or (ii) facing apparent difficulty in its normal operations because its liabilities exceed its assets (each as valued and calculated in accordance with standards established by the FSC) as a result of the occurrence of a major financial scandal or the accrual of non-performing loans;
- subject to a suspension of payment of claims (including deposits) or repayment of money borrowed from other financial institutions; or
- determined by the FSC or the DIC to be unable to make payments of claims (including deposits) or repayments of money borrowed, without external support or additional borrowings (other than borrowings accruing from ordinary course financial transactions).

In the event that the Subordinated Notes are written off, such written-off amount will be irrevocably lost and holders of the Subordinated Notes will cease to have any claims for any principal amount and accrued but unpaid interest on the Subordinated Notes. See "*Terms and Conditions of the Notes — Loss Absorption Upon a Trigger Event in Respect of Subordinated Notes*".

Potential investors should consider the risk that, due to the existence of such loss absorption features, a holder of Subordinated Notes may lose all of its investment in such Subordinated Notes in the event that a trigger event occurs.

The applicable Korean laws and regulations relating to the trigger event and loss absorption features of capital instruments like the Subordinated Notes are relatively new and have yet to be tested. There is considerable uncertainty as to the circumstances under which the relevant Korean regulatory authorities will decide to effect a trigger event with respect to a particular financial institution. The occurrence of a trigger event with respect to us is therefore inherently unpredictable and is subject to factors that are outside our control, which will make it difficult for investors to anticipate when, if at all, a write-off of the Subordinated Notes will take place. Accordingly, the trading behaviour with respect to the Subordinated Notes may not follow trading behaviour associated with other types of securities of us or other issuers. Any indication that we are trending towards a possible trigger event could have a material adverse effect on the market price of the Subordinated Notes. A potential investor should not invest in the Subordinated Notes unless it has knowledge and expertise to evaluate how the Subordinated Notes will perform under changing market conditions and the resulting effect on the likelihood of a write-down and on the market value of the Notes.

Under Article 38 of the Depositor Protection Act, the KDIC (upon a resolution by the DIC) may provide financial assistance to an insured financial institution (such as us) or a financial holding company holding the insured financial institution that becomes an "insolvent or similar financial institution" (including an "insolvency-threatened financial institution") in the following circumstances: (i) there is a request to the KDIC for financial support in merging, receiving business transfer from, or receiving assignment of agreement from an insolvent or similar financial institution or from a financial holding company holding such institution or such financial assistance is deemed necessary for an orderly merger etc. of an insolvent or similar financial institution, (ii) the improvement of the financial structure of such institution is deemed necessary for the protection of depositors and the preservation of order in credit transactions, or (iii) there is a request from the FSC pursuant to Article 12(1) of the Act on Structural Improvement of the Financial Industry in consideration that the insolvent or similar financial institution can no longer continue its business due to deteriorated financial structure. An "insolvency-threatened financial institution" is defined under Article 2 of the Depositor Protection Act as an insured financial institution determined by the DIC as having a high possibility of becoming an insolvent financial institution due to its weak financial standing. The financial assistance to be provided can take the form of a loan or deposit of funds, a purchase of assets, a guarantee or assumption of obligations and an equity injection or contribution.

In addition, upon the issuance of a management improvement demand with respect to a financial institution (the "**Subject Financial Institution**") pursuant to Article 11 of the Act on Structural Improvement of the Financial Industry and Article 35 of the Regulation on Supervision of Banking Business, the FSC may demand that the

Subject Financial Institution merge with another financial institution, and the KDIC may provide financial assistance or arrangements to the financial institution acquiring the Subject Financial Institution pursuant to such demand.

Pursuant to Article 8 of the Act on Structural Improvement of the Financial Industry, even where the Subject Financial Institution has not become subject to such a demand for merger from the FSC, if the Subject Financial Institution voluntarily merges with another financial institution for the improvement of its financial structure, the Government may provide financial assistance to the merged financial institution through: (i) the KDIC, (ii) the purchase by the Government's Public Capital Management Fund of certain government bonds held by the merged financial institution (such as bonds issued by the Government or local governments or bonds guaranteed by the Government), and (iii) a capital injection by the Government of state-owned assets into the merged financial institution.

In light of our size and scale and our relative importance to the Korean banking system, it is possible that, prior to the occurrence of a trigger event that leads to a write-off of the Subordinated Notes, we will be classified as an insolvency-threatened financial institution and receive some form of financial assistance from the KDIC, or that the Government will decide to provide other forms of financial assistance or capital support to us. However, since the provision of any such financial assistance or capital support would be at the discretion of the KDIC or the Government, as applicable, there is no guarantee that we will receive any financial assistance or capital support prior to the occurrence of a trigger event or that any such financial assistance or capital support received by us will be sufficient to prevent the occurrence of a trigger event leading to a write-off of the Subordinated Notes.

Pursuant to the Conditions, we will issue a Trigger Event Notice not more than two Korean Business Days after the occurrence of a Trigger Event, confirming that a Trigger Event has occurred. Although we will notify the Principal Paying Agent and the holders of the Subordinated Notes not more than two Korean Business Days after the occurrence of a Trigger Event, there may be a delay between a Trigger Event and the time that the clearing systems and the holders of the Subordinated Notes are notified of the occurrence of the relevant Trigger Event. Such delay may exceed several days during which trading and settlement in the Subordinated Notes may continue. Any such delay will not change or delay the effect of a Trigger Event or our obligations under the Subordinated Notes or the rights of the Subordinated Noteholders. We will provide at least five Business Days advance notice to the clearing systems and the Principal Paying Agent of any mark down of the Notes.

The clearing systems are expected to suspend all clearance and settlement of transfers of the Subordinated Notes by the Subordinated Noteholders following receipt of a Trigger Event Notice, and any transfer of Subordinated Notes which are scheduled to settle after commencement of such suspension is expected to be rejected by clearing systems and will not be settled within the clearing systems.

It is possible that transfers that are initiated prior to any suspension following receipt by the clearing systems of a Trigger Event Notice and scheduled to settle on a date before the clearing systems commence such suspension will be settled through the clearing system even though such transfers were initiated after the Trigger Event. In such circumstances, transferees of the Subordinated Notes may be required to pay consideration through the clearing systems even though, upon the occurrence of a Trigger Event, no amounts under the Subordinated Notes will thereafter become due, and such transferees will have no rights whatsoever under the Conditions or the Subordinated Notes to take any action or enforce any rights whatsoever against us. The settlement of the Subordinated Notes following a Trigger Event will be subject to procedures of the clearing system for the time being in effect.

The Agency Agreement contains certain protections and disclaimers as applicable to the Agents in relation to Condition 8. Each holder of Subordinated Notes shall be deemed to have authorised, directed and requested the taking of any and all necessary action to give effect to any loss absorption feature and any Write-off following the occurrence of the Trigger Event.

The Notes that are Tier I Subordinated Notes have no fixed maturity date and holders of the Tier I Subordinated Notes have no right to call for redemption of the Tier I Subordinated Notes.

The Tier I Subordinated Notes are undated perpetual securities and accordingly have no fixed final maturity date. Subject to the subordination provisions of Condition 3(c) of the Terms and Conditions of the Notes, the principal amount of the Tier I Subordinated Notes will become due and payable by us on the date on which voluntary or involuntary winding-up proceedings are instituted in respect of us in accordance with, as the case may be, (i) a resolution passed at a meeting of our shareholders, (ii) any provision of our articles of incorporation or (iii) any applicable law or any decision of any judicial or administrative authority. In addition, the holders of Tier I Subordinated Notes have no right to call for the redemption of the Tier I Subordinated Notes. Although we may redeem the Tier I Subordinated Notes at our option on any of the optional redemption dates specified in the applicable Pricing Supplement or at any time for certain tax or regulatory reasons, there are limitations on redemption of the Tier I Subordinated Notes, including a requirement to obtain the necessary prior approval of the FSS or such other relevant regulatory authorities in Korea. See "*Terms and Conditions of the Notes — Redemption and Purchase*". Accordingly, there is no guarantee as to whether or when the Tier I Subordinated Notes will be redeemed.

Interest payments on the Notes that are Tier I Subordinated Notes are discretionary and are not cumulative.

The rate of interest applicable to the Tier I Subordinated Notes may be subject to reset periodically, based on the prevailing base rate plus the spread as specified in the applicable Pricing Supplement. Furthermore, interest on Tier I Subordinated Notes may not be paid in full, or at all. We may elect, in our sole discretion, to not pay any interest, or to pay only partial interest, on Tier I Subordinated Notes on any interest payment date for any reason. In addition, Tier I Subordinated Notes will not bear any interest, and any interest payable on Tier I Subordinated Notes on any interest payment date will not be paid, during an interest cancellation period, which will be triggered upon the issuance of a management improvement recommendation, a management improvement requirement or a management improvement order, or the imposition of emergency measures, by the FSC against us.

Article 36 of the Regulation on Supervision of Banking Business provides that the FSC shall issue a management improvement order to a bank where:

- the bank constitutes an "insolvent financial institution" under the Act on Structural Improvement of the Financial Industry;
- its combined Tier I and Tier II capital adequacy ratio is no greater than 2.0% or its Tier I capital adequacy ratio is no greater than 1.5% or its Tier I common equity capital ratio is no greater than 1.2%; or
- the bank has difficulty continuing its normal operations, even though it has previously become subject to a management improvement requirement under Article 35(1), and has been urged (but has failed) to implement a management improvement plan under Article 39(6), of the Regulation on Supervision of Banking Business.

Prior to issuing a management improvement order to a bank, the FSC would be expected to (i) issue a management improvement recommendation to such bank (for example, if its combined Tier I and Tier II capital adequacy ratio is no greater than 8.0% or its Tier I capital adequacy ratio is no greater than 6.0% or its Tier I common equity capital ratio is no greater than 4.5%) under Article 34 of the Regulation on Supervision of Banking Business and (ii) subject such bank to a management improvement requirement (for example, if its combined Tier I and Tier II capital adequacy ratio is no greater than 6.0% or its Tier I capital adequacy ratio is no greater than 4.5% or its Tier I common equity capital ratio is no greater than 3.5%) under Article 35 of the Regulation on Supervision of Banking Business.

Article 38(1) of the Regulation on Supervision of Banking Business provides that the FSC or its chairman shall impose emergency measures on a bank where:

- a drastic deterioration in the liquidity of the bank causes it to experience, among others, shortages of reserves and assets for repayment of deposits or an inability to repay its external debts;
- it becomes impracticable or impossible for the bank to conduct normal business operations due to the occurrence of events such as, among others, a strike, work stoppage, labour dispute or a run on its deposits; or
- there is a manifest risk of bankruptcy or insolvency of the bank or the bank is unable to repay its deposits.

Such emergency measures may include (i) restrictions on acceptance of deposits and provision of loans by the bank; (ii) a suspension on repayment of all or any part of the bank's deposits; (iii) a prohibition on repayment of debts by the bank; and (iv) mandatory dispositions of the bank's assets under Article 38(2) of the Regulation on Supervision of Banking Business.

Furthermore, interest on any Series of Tier I Subordinated Notes will be paid only out of such amounts legally available to us from time to time under applicable Korean law for payment of dividends on our equity (or, if higher, such amounts for payment of interest on such Tier I Subordinated Notes). Under the Korean Commercial Code, we may pay an annual dividend only out of the excess of our net assets, on a non-consolidated basis, over the sum of (i) our stated capital (i.e., paid-in capital), (ii) the total amount of our capital surplus reserve and legal reserve accumulated up to the end of the relevant dividend period, (iii) the earned surplus reserve to be set aside for the annual dividend and (iv) any increase in net assets caused by the valuation of assets and liabilities performed in accordance with Korean accounting principles, against which no unrealised loss is set off. Depending on our ability to meet certain capital ratios, such amounts legally available to us under the Korean Commercial Code are subject to further restrictions pursuant to Articles 26(4) of the Regulation on Supervision of Banking Business, which sets forth upper limits on the amounts a bank may use from its legally available amounts under the Korean Commercial Code to pay discretionary dividends, including discretionary interest payments on capital securities such as the Tier I Subordinated Notes. Specifically, we would be able to use only a certain percentage (ranging from 0% to 100%, depending on the degree of the shortfall in the applicable capital adequacy ratios) of our annual consolidated net income (attributable to the controlling shareholder) as stated in our latest audited financial report after deducting the regulatory reserve for credit loss (attributable to the controlling shareholder) if our Tier I common equity capital ratio, Tier I capital adequacy ratio or combined Tier I and Tier II capital adequacy ratio were to fall below 8.0%, 9.5% or 11.5%, respectively. The foregoing thresholds have been calculated based on (i) an additional capital conservation buffer of 2.5%, (ii) a potential countercyclical capital buffer set at 0% (which may be subject to change within the range of 0 to 2.5% based on the FSC's determination on a quarterly basis, and will increase to 1.0% from May 2024) and (iii) an additional capital requirement of 1.0% for being designated as one of six domestic systemically important banks in 2022. See "*— Risks Relating to Our Business — We may be required to raise additional capital if our capital adequacy ratio deteriorates or the applicable capital requirements change in the future, but we may not be able to do so on favourable terms or at all*" and "*Regulation and Supervision — Principal Regulations Applicable to Banks — Capital Adequacy and Allowances*".

To the extent the aggregate amount of interest and other distributions payable on any Series of Tier I Subordinated Notes and other Tier I obligations exceed such amounts legally available to us, the aggregate amount of interest payable on such Tier I Subordinated Notes would be reduced by an amount equal to the pro rata portion of such excess. Moreover, because we are entitled to not pay interest on any interest payment date in our sole discretion, we may choose to do so even if amounts are legally available for payment of dividends or interest. See "*Terms and Conditions of the Notes — Interest — Special Provisions Relating to Interest on Tier I Subordinated Notes*".

Interest payments on the Tier I Subordinated Notes are not cumulative. Accordingly, if interest is not paid or is reduced on any interest payment date as a result of any of the foregoing, such unpaid interest will be irrevocably lost, and holders of Tier I Subordinated Notes will not be entitled to receive such unpaid interest on any subsequent interest payment date or any other date, whether or not funds are, or subsequently become, available. Any non-payment of interest by us will not constitute an event of default under the Tier I Subordinated Notes. Due to these interest cancellation features, the trading behaviour with respect to the Tier I Subordinated Notes may not follow trading behaviour associated with other types of our securities or of other issuers. A potential investor should not invest in Tier I Subordinated Notes unless it has knowledge and expertise to evaluate how the Tier I Subordinated Notes will perform under changing market conditions and the resulting effect on the likelihood of an interest cancellation and on the market value of the Tier I Subordinated Notes.

Non-payment of interest may adversely affect the trading price of the Notes that are Tier I Subordinated Notes.

If interest is not paid on the Tier I Subordinated Notes on any interest payment date, the Tier I Subordinated Notes may trade at a price which is lower than the issue price or the prevailing market price prior to such interest payment date. The sale of the Tier I Subordinated Notes during any period of non-payment of interest thereon may result in the holder receiving lower returns on the investment than a holder who continues to hold the Tier I Subordinated Notes until the interest payments resume (if at all). In addition, because of the interest cancellation provisions applicable to the Tier I Subordinated Notes, the market price of the Tier I Subordinated Notes may be more volatile than that of other securities that are not subject to such provisions.

The Notes may be subject to the Proposed Financial Transactions Tax ("FTT").

On 14 February 2013, the European Commission published a proposal (the "**Commission's Proposal**") for a Directive for a common FTT in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (the "**participating Member States**"). However, Estonia has since stated that it will not participate.

The Commission's Proposal has very broad scope and could, if introduced, apply to certain dealings in Notes (including secondary market transactions) in certain circumstances. The issuance and subscription of Notes should, however, be exempt.

Under the Commission's Proposal, the FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in Notes where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, "established" in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

However, the FTT proposal remains subject to negotiation between the participating Member States. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional EU Member States may decide to participate.

Prospective holders of Notes are advised to seek their own professional advice in relation to the FTT.

Payments made on or with respect to the Notes may be subject to U.S. withholding tax.

Pursuant to certain provisions of the Code, commonly known as FATCA, a "foreign financial institution" may be required to withhold on certain payments it makes ("**foreign passthru payments**") to persons that fail to meet certain certification, reporting, or related requirements. A number of jurisdictions (including Korea) have entered into, or have agreed in substance to, intergovernmental agreements with the United States to implement FATCA ("**IGAs**"), which modify the way in which FATCA applies in their jurisdictions. Under the provisions of IGAs as currently in effect, a foreign financial institution in an IGA jurisdiction would generally not be required to withhold under FATCA or an IGA from payments that it makes. Certain aspects of the application of the FATCA provisions and IGAs to instruments such as the Notes, including whether withholding would ever be required pursuant to FATCA or an IGA with respect to payments on instruments such as the Notes, are uncertain and may be subject to change. Even if withholding would be required pursuant to FATCA or an IGA with respect to payments on instruments such as the Notes, Notes treated as debt for U.S. federal income tax purposes issued on or prior to the date that is six months after the date on which final regulations defining "foreign passthru payments" are filed with the U.S. Federal Register generally would be "grandfathered" for purposes of FATCA withholding unless materially modified after such date. Additionally, under proposed regulations, any withholding on "foreign passthru payments" on Notes that are not otherwise grandfathered would apply to such payments made on or after the date that is two years after the date of publication in the U.S. Federal Register of final regulations defining "foreign passthru payments." Taxpayers generally may rely on these proposed regulations until final regulations are issued. However, if additional notes (as described under "*Terms and Conditions of the Notes — Further Issues*") that are not distinguishable from previously issued Notes are issued after the expiration of the grandfathering period and are subject to withholding under FATCA, then withholding agents may treat all Notes, including the Notes offered prior to the expiration of the grandfathering period, as subject to withholding under FATCA. Holders should consult their own tax advisors regarding how these rules may apply to their investment in the Notes. In the event any withholding would be required pursuant to FATCA or an IGA with respect to payments on the Notes, no person will be required to pay additional amounts as a result of the withholding.

The regulation or reform of certain benchmark rates may adversely affect the value of Floating Rate Notes linked to or referencing such benchmark rates.

The Euro Interbank Offered Rate ("**EURIBOR**") and other interest rate or other types of rates and indices which are deemed to be benchmarks are the subject of ongoing national and international regulatory discussions and proposals for reform. Some of these reforms are already effective whilst others are still to be implemented. These reforms may cause such benchmarks to perform differently than in the past, to disappear entirely, or have other consequences which cannot be predicted. Any such consequence could have a material adverse effect on any Floating Rate Notes linked to or referencing such a "benchmark".

Regulation (EU) No. 2016/1011 (the "**EU Benchmarks Regulation**") and Regulation (EU) No. 2016/1011 as it forms part of domestic law of the United Kingdom by virtue of the European Union (Withdrawal) Act 2018 (the "**UK Benchmarks Regulation**") apply to the provision of benchmarks, the contribution of input data to a benchmark and the use of a benchmark, within the EU and the UK, respectively. The EU Benchmark Regulation and UK Benchmark Regulation could have a material impact on any Floating Rate Notes linked to EURIBOR or another benchmark rate or index, in particular, if the methodology or other terms of the benchmark are changed in order to comply with the terms of the EU Benchmark Regulation or UK Benchmark Regulation, and such changes could (amongst other things) have the effect of reducing or increasing the rate or level, or affecting the volatility of the published rate or level, of the benchmark. More broadly, any of the international, national or other proposals for reform, or the general increased regulatory scrutiny of benchmarks, could increase the costs and risks of administering or otherwise participating in the setting of a benchmark and complying with any such regulations or requirements. Such factors may have the effect of discouraging market participants from continuing to administer or contribute to certain "benchmarks," trigger changes in the rules or methodologies used in certain "benchmarks" or lead to the discontinuance or unavailability of quotes of certain "benchmarks."

As an example of such benchmark reforms, on September 21, 2017, the European Central Bank announced that it would be part of a new working group tasked with the identification and adoption of a "risk free overnight rate," which can serve as a basis for an alternative to current benchmarks used in a variety of financial instruments and contracts in the euro area. On September 13, 2018, the working group on Euro risk-free rates recommended the new Euro short-term rate ("**€STR**") as the new risk-free rate for the euro area. The €STR was published for the first time on October 2, 2019. Although EURIBOR has been reformed in order to comply with the terms of the Benchmark Regulation, it remains uncertain as to how long it will continue in its current form, or whether it will be further reformed or replaced with €STR or an alternative benchmark.

Where the Interest Rate specified in the relevant Pricing Supplement is SOFR, if we determine that a Benchmark Transition Event and its related Benchmark Replacement Date has occurred, the then-current Benchmark will be replaced by a Benchmark Replacement (determined by us in accordance with the Terms and Conditions of the Notes) for all purposes relating to the relevant Floating Rate Notes in respect of all determinations on such date and for all determinations on all subsequent dates. We will have to exercise our discretion to determine (or to elect not to determine) a Benchmark Replacement and, if applicable, a Benchmark Replacement Adjustment, in a situation in which it is presented with a conflict of interest.

The use of a Benchmark Replacement may result in interest payments that are substantially lower than or that do not otherwise correlate over time with the payments that could have been made on the relevant Floating Rate Notes if the relevant benchmark remained available in its current form.

Any of the above changes or any other consequential changes to benchmarks as a result of EU, UK, or other international, national, or other proposals for reform or other initiatives or investigations, or any further uncertainty in relation to the timing and manner of implementation of such changes could have a material adverse effect on the trading market for, value of and return on any Notes linked to such benchmark. Investors should consult their own independent advisers and make their own assessment about the potential risks imposed by the Benchmark Regulation reforms or possible cessation or reform of certain reference rates in making any investment decision with respect to any Notes linked to or referencing a benchmark.

The market continues to develop in relation to risk-free rates as a reference rate for Floating Rate Notes.

Investors should be aware that the market continues to develop in relation to risk-free rates, such as the Secured Overnight Financing Rate ("**SOFR**"). This relates not only to the substance of the calculation and the development and adoption of market infrastructure for the issuance and trading of bonds referencing such rates, but also how widely such rates and methodologies might be adopted.

The market or a significant part thereof may adopt an application of SOFR that differs significantly from that set out in the Terms and Conditions as applicable to the Notes. Furthermore, the Issuer may in future issue Notes referencing SOFR that differ materially in terms of interest determination when compared with the Notes.

In addition, the manner of adoption or application of SOFR reference rates in the Eurobond markets may differ materially compared with the application and adoption of SOFR in other markets, such as the derivatives and loan markets. Noteholders should carefully consider how any mismatch between the adoption of SOFR reference rates across these markets may impact any hedging or other financial arrangements which they may put in place in connection with any acquisition, holding or disposal of Notes referencing SOFR.

SOFR has a limited history.

Publication of SOFR began in April 2018 and it therefore has a limited history. The future performance of SOFR may therefore be difficult to predict based on the limited historical performance. The level of SOFR during the term of the Notes may bear little or no relation to the historical level of SOFR. Prior observed patterns, if any, in the behavior of market variables and their relation to SOFR such as correlations, may change in the future.

Furthermore, the Interest Rate is only capable of being determined at the end of the relevant Reference Period and immediately prior to the relevant Interest Payment Date. It may be difficult for Noteholders to estimate reliably the amount of interest which will be payable on the Notes, and some investors may be unable or unwilling to trade such Notes without changes to their IT systems, both of which factors could adversely impact the liquidity of the Notes. Further, if the Notes become due and payable as a result of an Event of Default under Condition 11 (*Events of Default*), or are otherwise redeemed early on a date which is not an Interest Payment Date, the final Interest Rate payable in respect of the Notes shall be determined by reference to a shortened period ending immediately prior to the date on which the Notes become due and payable.

The administrator of SOFR may make changes that could change the value of SOFR or discontinue SOFR.

The New York Federal Reserve (or a successor), as administrator of SOFR, may make methodological or other changes that could change the value of SOFR, including changes related to the method by which SOFR is calculated, eligibility criteria applicable to the transactions used to calculate SOFR, or timing related to the publication of SOFR. In addition, the administrator may alter, discontinue or suspend calculation or dissemination of SOFR (in which case a fallback method of determining the interest rate on the Notes will apply). The administrator has no obligation to consider the interests of Noteholders when calculating, adjusting, converting, revising or discontinuing SOFR.

The Notes may be represented by Global Notes and holders of a beneficial interest in a Global Note must rely on the procedures of the relevant Clearing System(s).

Notes issued under the Programme may be represented by one or more Global Notes. Such Global Notes will be deposited with a common depositary for Euroclear and Clearstream, Luxembourg and/or a sub-custodian for the HKMA as operator of the CMU and/or DTC (each of Euroclear, Clearstream, Luxembourg, the CMU and DTC, a "**Clearing System**"). Except in the circumstances described in the relevant Global Note, investors will not be entitled to receive definitive Notes. The relevant Clearing System(s) will maintain records of the beneficial interests in the Global Notes. While the Notes are represented by one or more Global Notes, investors will be able to trade their beneficial interests only through the Clearing Systems.

While the Notes are represented by one or more Global Notes, we will discharge our payment obligations under the Notes by making payments to the relevant Clearing System for distribution to their account holders.

A holder of a beneficial interest in a Global Note must rely on the procedures of the relevant Clearing System(s) to receive payments under the relevant Notes. We have no responsibility or liability for the records relating to, or payments made in respect of, beneficial interests in the Global Notes.

Notes issued as Green Bonds, Social Bonds or Sustainability Bonds may not be a suitable investment for all investors seeking exposure to green assets, social assets or sustainability assets.

We may issue Notes under the Programme which are specified to be "Green Bonds," "Social Bonds" or "Sustainability Bonds" in the applicable Pricing Supplement (any such Notes, Green Bonds, Social Bonds or Sustainability Bonds, respectively), in accordance with our Sustainable Financing Framework. See "*Sustainable Financing Framework*". In connection with an issue of Green Bonds, Social Bonds or Sustainability Bonds, we may request a sustainability rating agency or sustainability consulting firm to issue a Second Party Opinion confirming that any Green Bonds, Social Bonds or Sustainability Bonds are in compliance with the GBP 2021, ICMA (the "**ICMA Green Bond Principles**"), the SBP 2021, ICMA (the "**ICMA Social Bond Principles**"), the SBG 2021, ICMA (the "**ICMA Sustainability Bond Guidelines**"), the GLP 2023, LMA (the "**LMA Green Loan Principles**") or SLP 2023, LMA (the "**LMA Social Loan Principles**"). The ICMA Green Bond Principles, the ICMA Social Bond Principles, the ICMA Sustainability Bond Guidelines, the LMA Green Loan Principles and the LMA Social Loan Principles are a set of voluntary guidelines that recommend transparency and disclosure and promote integrity in the development of the green bond, social bond and sustainability bond markets.

There is currently no market consensus on what precise attributes are required for a particular project to be defined as "green," "social" or "sustainability," and therefore no assurance can be provided to potential investors that the Green Eligible Categories, Social Eligible Categories or a combination of the two categories (in the case of Sustainability Bonds) will continue to meet the relevant eligibility criteria. Although applicable green projects, social projects or sustainability projects are expected to be selected in accordance with the categories recognised by the ICMA Green Bond Principles, the ICMA Social Bond Principles, the ICMA Sustainability Bond

Guidelines, the LMA Green Loan Principles or the LMA Social Loan Principles and are expected to be developed in accordance with applicable legislation and standards, there can be no guarantee that adverse environmental and/or social impacts will not occur during the design, construction, commissioning and/or operation of any such green projects, social projects or sustainability projects. Where any negative impacts are insufficiently mitigated, green projects, social projects or sustainability projects may become controversial, and/or may be criticised by activist groups or other stakeholders.

Additionally, in accordance with the coal phase-out commitment declared by Hana Financial Group in March 2021, we have committed to stop any financings of new or expansion of coal-related projects and aim to reduce exposure to coal projects to zero by 2050. Our current exposure to coal projects was approximately 0.12% of our total loans outstanding as of 31 December 2023 on a separate basis. For the avoidance of doubt, any projects related to the development, construction or production/transmission of energy from fossil fuels such as coal are excluded from the "renewable energy" category of Eligible Green Categories, as set forth in our Sustainable Financing Framework.

Potential investors should be aware that any Second Party Opinion will not be incorporated into, and will not form part of, this Offering Circular or the applicable Pricing Supplement. Any such Second Party Opinion may not reflect the potential impact of all risks related to the structure of the relevant Series of Green Bonds, Social Bonds or Sustainability Bonds, their marketability, trading price or liquidity or any other factors that may affect the price or value of the Green Bonds, Social Bonds or Sustainability Bonds. Any such Second Party Opinion is not a recommendation to buy, sell or hold securities and is only current as of its date of issue.

Furthermore, although we may agree at the relevant issue date of any Green Bonds, Social Bonds or Sustainability Bonds to allocate the amount equivalent to the net proceeds towards the financing and/or refinancing of Green Eligible Categories, Social Eligible Categories or a combination of the two categories (in the case of Sustainability Bonds) in accordance with certain prescribed eligibility criteria as described under the Sustainable Financing Framework, it would not be an event of default under the Green Bonds, Social Bonds or Sustainability Bonds if (i) we were to fail to comply with such undertaking or were to fail to allocate the proceeds in the manner specified in the applicable Pricing Supplement and/or (ii) any Second Party Opinion issued in connection with such Green Bonds, Social Bonds or Sustainability Bonds were to be withdrawn. Any failure to allocate the amount equivalent to the net proceeds of any Series of Green Bonds, Social Bonds or Sustainability Bonds in connection with green projects, social projects or sustainability projects and/or any failure to meet, or to continue to meet, the investment requirements of certain environmentally or socially focused investors with respect to such Green Bonds, Social Bonds or Sustainability Bonds may affect the value and/or trading price of the Green Bonds, Social Bonds or Sustainability Bonds, and/or may have consequences for certain investors with portfolio mandates to invest in green assets, social assets or sustainability assets.

Neither we nor the Dealers make any representation as to the suitability for any purpose of any Second Party Opinion or whether any Green Bonds, Social Bonds or Sustainability Bonds fulfil the relevant environmental or social criteria. Prospective investors should have regard to the relevant Green Eligible Categories, Social Eligible Categories or a combination of the two categories (in the case of Sustainability Bonds) and the use of proceeds described in the applicable Pricing Supplement. Each potential purchaser of any Series of Green Bonds, Social Bonds or Sustainability Bonds should determine for itself the relevance of the information contained in this Offering Circular and in the applicable Pricing Supplement regarding the use of proceeds and its purchase of any Green Bonds, Social Bonds or Sustainability Bonds should be based upon such investigation as it deems necessary.

Risks Relating to Notes Denominated in Renminbi

A description of risks which may be relevant to an investor in Notes denominated in Renminbi ("**Renminbi Notes**") are set out below.

Renminbi is not completely freely convertible and there are significant restrictions on the remittance of Renminbi into and outside the PRC which may adversely affect the liquidity of Renminbi Notes.

Renminbi is not completely freely convertible at present. The government of the PRC (the "**PRC Government**") continues to regulate conversion between Renminbi and foreign currencies, including the Hong Kong dollar, despite significant reduction in control by it in recent years over trade transactions involving import and export of goods and services as well as other frequent routine foreign exchange transactions. These transactions are known as current account items.

However, remittance of Renminbi by foreign investors into the PRC for the purposes of capital account items, such as capital contributions, is generally only permitted upon obtaining specific approvals from, or completing specific registrations or filings with, the relevant authorities on a case-by-case basis and is subject to a strict monitoring system.

Regulations in the PRC on the remittance of Renminbi into the PRC for settlement of capital account items are developing gradually. In recent years, the People's Bank of China ("**PBoC**") and the Ministry of Commerce of the PRC have issued circulars providing guidance on simplifying certain remittance requirements for settlement of capital account items. However, such circulars are relatively new and are subject to interpretation and application by the relevant authorities in the PRC.

In the event that we decide to remit some or all of the proceeds into the PRC in Renminbi, our ability to do so will be subject to obtaining all necessary approvals from, and/or registration or filing with, the relevant PRC government authorities. Investors may be required to provide certifications and other information (including Renminbi account information) in order to be allowed to receive payments in Renminbi in accordance with the Renminbi clearing and settlement system for participating banks in Hong Kong, Singapore and Taiwan. However, there is no assurance that the necessary approvals from, and/or registration or filing with, the relevant PRC government authorities will be obtained at all or, if obtained, they will not be revoked or amended in the future.

There is no assurance that the PRC Government will continue to gradually liberalise control over cross-border remittance of Renminbi in the future, that the pilot schemes for Renminbi cross-border utilisation will not be discontinued or that new regulations in the PRC will not be promulgated in the future which have the effect of restricting or eliminating the remittance of Renminbi into or outside the PRC. In the event that funds cannot be repatriated outside the PRC in Renminbi, this may affect the overall availability of Renminbi outside the PRC and our ability to source Renminbi to finance our obligations under Notes denominated in Renminbi.

There is only limited availability of Renminbi outside the PRC, which may affect the liquidity of the Renminbi Notes and our ability to source Renminbi outside the PRC to service Renminbi Notes.

As a result of the restrictions by the PRC Government on cross-border Renminbi fund flows, the availability of Renminbi outside the PRC is limited. While the PBoC has entered into settlement agreements on the clearing of Renminbi business with financial institutions in a number of financial centres and cities (the "**Renminbi Clearing Banks**"), including but not limited to Hong Kong and is in the process of establishing Renminbi clearing and settlement mechanisms in several other jurisdictions (the "**Settlement Arrangements**"), the current size of Renminbi-denominated financial assets outside the PRC is limited.

There are restrictions imposed by PBoC on Renminbi business participating banks in respect of cross-border Renminbi settlement, such as those relating to direct transactions with PRC enterprises. Furthermore, Renminbi business participating banks do not have direct Renminbi liquidity support from the PBoC. The Renminbi Clearing Banks only have access to onshore liquidity support from the PBoC for the purpose of squaring open positions of participating banks for limited types of transactions and are not obliged to square for participating banks any open positions resulting from other foreign exchange transactions or conversion services. In such cases, the participating banks will need to source Renminbi from outside the PRC to square such open positions.

Although it is expected that the offshore Renminbi market will continue to grow in depth and size, its growth is subject to many constraints as a result of PRC laws and regulations on foreign exchange. There is no assurance that new PRC regulations will not be promulgated or the existing Settlement Arrangements will not be terminated or amended in the future which will have the effect of restricting availability of Renminbi outside the PRC. The limited availability of Renminbi outside the PRC may affect the liquidity of the Renminbi Notes. To the extent we are required to source Renminbi in the offshore market to service our Renminbi Notes, there is no assurance that we will be able to source such Renminbi on satisfactory terms, if at all.

Investment in the Renminbi Notes is subject to exchange rate risks.

The value of Renminbi against the U.S. dollar and other foreign currencies fluctuates from time to time and is affected by changes in the PRC and international political and economic conditions as well as many other factors. We will make all payments of interest and principal with respect to the Renminbi Notes in Renminbi unless otherwise specified. As a result, the value of these Renminbi payments may vary with the changes in the prevailing exchange rates in the marketplace. If the value of Renminbi depreciates against the U.S. dollar or other currencies, the value of the investment made by a holder of the Renminbi Notes in U.S. dollars or any other foreign currency terms will decline.

Investment in the Renminbi Notes is subject to interest rate risks.

The PRC Government has gradually liberalised its regulation of interest rates in recent years. Further liberalisation may increase interest rate volatility. Consequently, the trading price of the Renminbi Notes will vary with the fluctuations in the Renminbi interest rates. If holders of the Renminbi Notes propose to sell their Notes before their maturity, they may receive an offer lower than the amount they have invested.

Payments with respect to the Renminbi Notes may be made only in the manner designated in the Renminbi Notes.

Except in the limited circumstances where the Renminbi is not available for delivery outside the PRC, all payments to investors in respect of the Renminbi Notes will be made solely (i) for so long as the Renminbi Notes are represented by global certificates held with the common depositary or common safekeeper, as the case may be, for Clearstream, Luxembourg, Euroclear or the CMU Service, as the case may be, by transfer to a Renminbi bank account maintained in Hong Kong, or (ii) for so long as the Renminbi Notes are in definitive form, by transfer to a Renminbi bank account maintained in Hong Kong in accordance with prevailing rules and regulations of Clearstream, Luxembourg, Euroclear or the CMU Service, as the case may be. We cannot be required to make payment by any other means (including in any other currency or by transfer to a bank account in the PRC).

Gains on the transfer of the Renminbi Notes may be subject to income tax under PRC tax laws.

Under the New Enterprise Income Tax Law and its implementation rules, any gains realised on the transfer of Renminbi Notes by holders who are deemed under the New Enterprise Income Tax Law as non-resident enterprises may be subject to PRC enterprise income tax if such gains are regarded as income derived from sources within the PRC. However, there remains uncertainty as to whether the gains realised from the transfer of the Renminbi Notes would be treated as income derived from sources within the PRC and be subject to PRC tax. This will depend on how the PRC tax authorities interpret, apply or enforce the relevant laws and rules. According to an arrangement between the PRC and Hong Kong, for the avoidance of double taxation, noteholders who are Hong Kong residents, including both enterprise holders and individual holders, will be exempted from PRC income tax on capital gains derived from a sale or exchange of the Renminbi Notes.

Therefore, if a noteholder, being a non-resident enterprise, is required to pay any PRC income tax on gains on the transfer of the Renminbi Notes (such enterprise income tax is currently levied at the rate of 10% of the gross proceeds, unless there is an applicable tax treaty between the PRC and the jurisdiction in which such non-resident enterprise holders of Renminbi Notes reside that reduces or exempts the relevant tax), the value of their investment in the Renminbi Notes may be materially and adversely affected.

Similarly, if a noteholder, as a non-resident individual holder, is required to pay any PRC income tax on gains on the transfer of the Renminbi Notes (such individual income tax is currently levied at the rate of 20% of the gross proceeds, unless there is an applicable tax treaty between the PRC and the jurisdiction in which the relevant non-resident individual holder of the Renminbi Notes resides that reduces or exempts the relevant tax), the value of such noteholder's investment in the Renminbi Notes may be affected.

Investors should contact their own financial, legal, accounting and tax advisers about the risks associated with an investment in the Renminbi Notes, the appropriate tools to analyse that investment, and the suitability of the investment in each investor's particular circumstances. No investor should purchase the Renminbi Notes unless that investor understands and has sufficient financial resources to bear the price, market liquidity, structure and other risks associated with an investment in the Renminbi Notes.

Before entering into any transaction, investors should ensure that they fully understand the potential risks and rewards of that transaction and independently determine that the transaction is appropriate given their objectives, experience, financial and operational resources and other relevant circumstances. Investors should consider consulting with such advisers as they deem necessary to assist them in making these determinations.

CAPITALISATION

The following table shows our capitalisation, which is equal to the sum of borrowings, debentures and total equity, as of 31 December 2023. This information has been extracted from our audited annual consolidated financial statements as of 31 December 2023.

	As of 31 December 2023
	(In billions of Won)
Indebtedness	
Borrowings	₩22,034
Debentures	26,542
Total indebtedness	48,576
Equity	
Capital stock	5,360
Capital surplus	6,161
Hybrid equity securities	354
Capital adjustments	(38)
Retained earnings	21,050
Accumulated other comprehensive loss	(1,104)
Equity attributable to owners of the parent	31,783
Non-controlling interests	302
Total equity	32,084
Total capitalisation	₩80,660

There have been no material changes to our capitalisation since 31 December 2023.

Capital Adequacy

Pursuant to the capital adequacy requirements of the FSC as of the date hereof, we are required to maintain a minimum common equity Tier I capital adequacy ratio of 8.0%, a minimum Tier I capital adequacy ratio of 9.5% and a combined Tier I and Tier II capital adequacy ratio of 11.5%.

The following table sets out a summary of our capital base and capital adequacy ratios, on a consolidated basis and calculated in accordance with the standards set by the FSC, as of 31 December 2023.

	As of 31 December 2023
	(In billions of Won, except percentages)
Tier I capital(1)	
Common equity capital(2)	₩ 30,072
Other basic capital(3)	371
Total Tier I capital	₩ 30,443
Tier II capital(4)	₩ 3,143
Total Tier I and II capital	₩ 33,585
Risk-weighted assets ("RWA")(5)	
Credit RWA	₩164,378
Operational RWA	16,010
Market RWA	6,877
Total RWA	₩187,265
BIS capital ratio	
Common equity Tier I capital adequacy ratio	16.06%
Tier I capital adequacy ratio	16.26%
Tier II capital adequacy ratio	1.68%
Combined Tier I and Tier II capital adequacy ratio	17.93%

(1) Tier I capital is a sum of common equity capital and other basic capital.

(2) Common equity capital includes, among others, capital incurred in connection with common stock issued to meet the eligible requirement, capital surplus and capital adjustments, retained earnings, accumulated other comprehensive income and other capital surplus, capital adjustments and non-controlling interest on common shares issued by banks and affiliated subsidiaries.

(3) Other basic capital includes, among others, capital securities to meet accreditation requirements of other basic capital, capital surplus associated with the issuance of other basic capital, non-qualifying capital securities and accredited amount as other basic capital of a non-controlling interest on equity securities issued by a subsidiary.

(4) Tier II capital indicates supplementary capital, which includes, among others, capital securities to meet supplementary capital accreditation requirements, capital surplus associated with the issuance of supplementary capital, accredited amount of supplementary capital of non-qualifying capital securities, accredited amount as supplementary capital of a non-controlling interest on equity securities issued by a subsidiary, eligible allowance for possible loan losses on "normal" or "precautionary" category assets and allowance for possible loan losses in excess of the total amount of expected losses.

(5) Based on market risks.

There have been no material changes to our capital base and capital adequacy ratios since 31 December 2023.

SELECTED FINANCIAL INFORMATION

The following tables set forth selected financial data in respect of the Bank as of and for the years ended 31 December 2021, 2022 and 2023. The selected financial data set forth below have been derived from the audited consolidated financial statements of the Bank as of and for the years ended 31 December 2021, 2022 and 2023, each included elsewhere in this Offering Circular.

The audited consolidated financial statements of the Bank as of and for the year ended 31 December 2021 have been audited by Ernst & Young Han Young, whose independent auditor's report thereon are included elsewhere in this Offering Circular. The audited annual consolidated financial statements of the Bank as of and for the years ended 31 December 2022 and 2023 have been audited by Deloitte Anjin LLC, whose reports thereon are included elsewhere in this Offering Circular. The financial statements included in this Offering Circular have been prepared in accordance with K-IFRS.

Consolidated Statement of Profit or Loss and Other Comprehensive Income Data

	Year Ended 31 December		
	2021	2022	2023
	(In billions of Won, except per share information)		
Net interest income			
Interest income	₩ 8,787	₩13,347	₩ 19,793
Interest expenses	(2,636)	(5,739)	(11,876)
	₩ 6,151	₩ 7,609	₩ 7,917
Net fee and commission income			
Fee and commission income	838	875	932
Fee and commission expenses	(285)	(281)	(270)
	₩ 553	₩ 594	₩ 661
Net gain (loss) on financial instruments			
Net gain on financial instruments at FVTPL(1)	549	125	492
Net gain (loss) on derivative financial instruments used for hedging	(48)	(64)	26
Net gain on financial instruments at FVOCI(2)	79	2	84
Net gain (loss) on financial instruments measured at amortized costs	0	0	0
	₩ 580	₩ 63	₩ 603
Provision for allowance for credit loss	(243)	(658)	(658)
General and administrative expenses	(2,973)	(3,319)	(3,449)
Net other operating income (expenses)			
Other operating income	4,791	7,616	7,934
Other operating expenses	(5,440)	(7,838)	(8,403)
	(649)	(223)	(469)
Operating income	₩ 3,418	₩ 4,067	₩ 4,606
Net non-operating income (expenses)			
Non-operating income	238	267	223
Non-operating expenses	(178)	(162)	(215)
	60	105	8
Income before income tax expenses	3,478	4,171	4,613
Income tax expenses	(903)	(1,060)	(1,126)
Net income	₩ 2,575	₩ 3,112	₩ 3,487
Other comprehensive income (loss)	141	(664)	521
Total comprehensive income	₩ 2,716	₩ 2,448	₩ 4,009
Owners of the parent	2,694	2,444	3,989
Non-controlling interests	23	5	20
Earnings per share			
Basic and diluted earnings per share	₩ 2,389	₩ 2,866	₩ 3,221

(1) Fair value through profit or loss.

(2) Fair value through other comprehensive income.

Consolidated Statement of Financial Position Data

	As of 31 December		
	2021	2022	2023
	(In billions of Won)		
Assets			
Cash and due from banks	₩ 27,694	₩ 41,088	₩ 30,564
Financial assets at FVTPL(1)	10,919	18,455	17,515
Derivative assets used for hedging	69	8	2
Financial assets measured at FVOCI(2)	35,234	32,961	36,894
Securities at amortized cost	22,468	37,583	36,338
Loans	309,178	330,186	347,247
Property and equipment	2,004	2,426	2,415
Miscellaneous assets(3)	22,628	22,601	27,868
Total assets	₩430,194	₩485,308	₩498,843
Liabilities			
Deposits	₩321,125	₩359,858	₩369,749
Financial liabilities at FVTPL	4,188	11,228	6,729
Derivative liabilities used for hedging	111	516	391
Borrowings	17,524	22,257	22,034
Debentures	27,700	26,233	26,542
Miscellaneous liabilities(4)	30,788	35,250	41,313
Total liabilities	₩401,437	₩455,342	₩466,759
Equity			
Capital stock	₩ 5,360	₩ 5,360	₩ 5,360
Capital surplus	9,654	6,160	6,161
Hybrid equity securities	533	533	354
Capital adjustments	(38)	(38)	(38)
Retained earnings	13,897	19,236	21,050
Accumulated other comprehensive loss	(916)	(1,566)	(1,104)
Equity attributable to owners of the parent	28,490	29,686	31,783
Non-controlling interests	266	279	302
Total equity	₩ 28,756	₩ 29,965	₩ 32,084
Total liabilities and equity	₩430,194	₩485,308	₩498,843

(1) Fair value through profit or loss.
(2) Fair value through other comprehensive income.
(3) Includes investments in associates and a joint venture, investment properties, intangible assets, net defined benefit assets, current tax assets, deferred tax assets, other assets, merchant banking account assets and non-current assets held for sale.
(4) Includes net defined benefit liabilities, provisions, current tax liabilities, deferred tax liabilities, other liabilities and merchant banking account liabilities.

Selected Ratios

	As of or for the Year Ended 31 December		
	2021	2022	2023
Average return on assets(1)	0.62%	0.66%	0.70%
Average return on equity(2)	9.42	10.72	11.29
Net interest margin(3)	1.41	1.62	1.59
Net interest spread(4)	1.40	1.59	1.51
Cost-to-income ratio(5)	44.78	41.15	38.74
Equity to total assets(6)	6.68	6.17	6.43
Non-performing loans/total credits(7)	0.26	0.21	0.26
Allowance/non-performing loans(8)	163.96%	212.22%	205.53%

(1) Defined as net income divided by the arithmetic average of the quarterly ending balances of total assets.
(2) Defined as net income divided by the arithmetic average of the quarterly ending balances of total equity.
(3) Defined, on a separate basis, as net interest income divided by the average of the daily ending balances of interest earning assets (calculated in accordance with FSS reporting guidelines).

(4) Represents, on a separate basis, the difference between the average yield on interest earning assets and the average cost of interest bearing liabilities (calculated in accordance with FSS reporting guidelines).
(5) Calculated as the ratio of general and administrative expenses to operating income (prior to deducting general and administrative expenses and impairment losses on financial instruments).
(6) Represents the ratio of total equity to total assets.
(7) Represents, on a separate basis, the ratio of non-performing assets to total credits. Non-performing assets are defined as those assets that are classified as substandard or below based on the FSC's asset classification criteria.
(8) Represents, on a separate basis, the ratio of the sum of allowance for possible loan losses and reserve for bad debts to non-performing loans.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with, and is qualified in its entirety by reference to, the historical consolidated financial statements and the notes thereto included elsewhere in this Offering Circular. The discussion contains forward-looking statements that involve risks, uncertainties and assumptions. Actual results may differ materially from those anticipated in these forward-looking statements as a result of certain factors such as those set forth under "Investment Considerations" and elsewhere in this Offering Circular. Any discrepancies in any table between totals and the sums of the amounts listed are due to rounding.

Overview

We are one of the leading commercial banks in Korea in terms of total assets, revenues, profitability and capital adequacy. As of 31 December 2023, we had total assets, total net loans (after allowance for loan losses and net deferred loan fees and expenses), total deposits and total equity of ₩498.8 trillion, ₩347.2 trillion, ₩369.7 trillion and ₩32.1 trillion, respectively.

As a full-service financial institution, we operate an extensive nationwide and overseas banking network, consisting of 597 domestic branches and sub-branches, as well as 19 international branches, one sub-branch of such international branches, four overseas representative offices, 12 overseas subsidiaries and 161 sub-branches of such overseas subsidiaries as of 31 December 2023. Our overseas operations span across 25 countries outside of Korea, the most among all major commercial banks in Korea.

We also operated over 3,520 ATMs throughout Korea as of 31 December 2023, and offer Internet and mobile banking services. Through this nationwide and global network, we serve corporate and retail customers with a full complement of banking and financial services. We continue to hold strong market positions in the business segments where we have historically maintained competitive strengths, such as large corporate banking, foreign exchange and trade financing, and following the Merger, we have also gained a leading position in other business areas, such as retail banking, private banking and wealth management. Our leading presence in the market has been widely recognised by a number of significant industry awards over the years. In 2023, we received the "Best Private Bank in Korea" award from The Banker, the "Best Bank in Korea", the "Best Sub-Custodian Bank in Korea", the "Best Foreign Exchange Bank in Korea" and the "Best Trade Finance Provider in Korea" awards from Global Finance Magazine, and the "Best Private Bank in Korea" award from Euromoney Magazine. In 2022, we received the "Best Bank in Korea", the "Best Trade Finance Provider in Korea" and the "Best Private Bank in Korea" awards from Global Finance Magazine, the "Best Private Bank in Korea" award from Euromoney Magazine and the "Best Bank in Korea" and the "Innovation in Digital Banking" awards from The Banker. In 2021, we received the "Best Bank in Korea" award from Global Finance Magazine, the "Best Private Bank in Korea" award from Euromoney Magazine for the fourteenth time, the "Best Private Bank in Korea" award from The Banker and the "Best Foreign Exchange Bank in Korea" award from Global Finance Magazine.

Trends in the Korean Economy and the Commercial Banking Industry

Our financial condition and results of operations have been, and will continue to be, significantly affected by the economic conditions in Korea. Since 2020, the economic indicators in Korea and globally have deteriorated largely due to the adverse macroeconomic conditions induced by the COVID-19 pandemic as well as rising price levels, interrupting the slow but steady growth of the Korean economy in previous years. According to the Bank of Korea, Korea's GDP growth was 4.0% in 2021, 2.6% in 2022 and 1.4% in 2023. Meanwhile, in November 2023, the Bank of Korea forecasted GDP growth to be 2.1% in 2024. Housing prices in Korea, particularly those in the Seoul metropolitan area, have fluctuated significantly in recent years.

We are also exposed to changes and volatility in global and Korean financial markets as a result of our liabilities and assets denominated in foreign currencies and our holdings of trading and investment securities, including structured products. The value of the Won relative to major foreign currencies in general and the U.S. dollar in particular has fluctuated in recent years, and a depreciation of the Won will have the impact of increasing our cost in Won of servicing our foreign currency-denominated debt, while continued exchange rate volatility may also result in foreign exchange losses for us. Furthermore, as a result of continued uncertainty in global and Korean economic conditions, there has been continued volatility in securities prices, including the prices of debt and equity securities held by us. Such volatility may lead to further trading and valuation losses on our trading and investment securities portfolio as well as impairment losses on our investments accounted for under the equity method.

Currently, we consider the following as potential risks to the Korean economy and financial markets: (i) a potential decline in exports resulting from a global economic slowdown, especially in light of Korea's heavy dependence on trade with China, which may be further aggravated by trade disputes between China and the United States and adverse foreign exchange rate movements, (ii) the weakening of Korea's growth potential due to declines in investment and labour force, which may inhibit economic recovery in the future, and (iii) potential credit risks stemming from the rising interest rates, growth in household loans and increasing default risks of households and corporations that have been affected by the COVID-19 pandemic and the recent inflationary pressures.

As for interest rate movements, like many other countries, Korea experienced a low interest rate environment between 2009 and 2019 despite some marginal fluctuations, in part due to the Government's policy to stimulate the economy through active rate-lowering measures. Between 2009 and 2019, the base interest rate set by the Bank of Korea, to which the market interest rates correlate, fluctuated within a range of 1.25% and 3.25%. In March 2020, amid growing concerns over the COVID-19 pandemic, the Bank of Korea cut the base interest rate by 50 basis points to 0.75% and in May 2020 further to 0.50%. However, as the pandemic began to recede and the economy showed some signs of recovery starting from the second half of 2021, the Bank of Korea gradually raised the base interest rate multiple times to reach a pre-pandemic level of 1.25% from August 2021 through January 2022. More recently, in response to rising levels of household debt and inflation in Korea as well as globally, the Bank of Korea again raised the base interest rate to 1.50% in April 2022, 1.75% in May 2022, 2.25% in July 2022, 2.50% in August 2022, 3.00% in October 2022, 3.25% in November 2022 and 3.50% in January 2023 in an effort to address rising consumer prices. Furthermore, on 22 February 2024, the Bank of Korea once again decided to maintain the base interest rate at 3.50%. All else being equal, further increases in interest rates in the future could lead to a decline in the value of our portfolio of debt securities, which generally pay interest based on a fixed rate. A sustained increase in interest rates will also raise our funding costs, while reducing loan demand, especially among consumers. Rising interest rates may therefore require us to re-balance our asset portfolio and our liabilities in order to minimise the risk of potential mismatches and maintain our profitability.

We are currently not aware of any major regulatory developments that may have a material adverse effect on the commercial banking industry in Korea.

Furthermore, with the growing popularity of online financial service platforms and promotion of the fintech industry by the Government, we face growing competition from online-only banks and fintech companies, which compete, to a certain extent, with the financial services provided by traditional commercial banks like us. See "*Investment Considerations—Risks Relating to Our Business—Competition in the Korean banking industry is intense and may further intensify.*" Accordingly, commercial banks, like us, will likely face increasing pressure to upgrade their service platforms to attract and maintain online users, which represent a growing customer base compared to traditional customers who have primarily conducted banking in-person at physical banking branches and ATMs.

As a result of volatile conditions in the Korean and global economies, as well as factors such as the COVID-19 pandemic, trade disputes and global geopolitics, anticipation of the policy rate moves by the U.S. Federal Reserve, fluctuations in oil and commodity prices and exchange rates, potential changes in fiscal and monetary policies, continued developments involving North Korea, Russia and Ukraine, Israel and Palestine, and ongoing evolution in the finance industry, the outlook for the commercial banking sector in Korea remains uncertain.

Changes in Securities Values, Exchange Rates and Interest Rates

Fluctuations of exchange rates, interest rates and stock prices affect, among other things, the demand for our products and services, the value of and rate of return on our assets, the availability and cost of funding and the financial condition of our customers. The following table shows, for the dates indicated, the stock price index of all equities listed on the KRX KOSPI Market as published in the KOSPI, the Won to U.S. dollar exchange rates and benchmark Won borrowing interest rates.

	As of 31 December		
	2021	2022	2023
KOSPI	2,977.65	2,236.40	2,655.28
₩/US$ exchange rates(1)	₩ 1,185.5	₩ 1,267.3	₩ 1,289.4
Corporate bond rate(2)	2.41%	5.30%	4.08%
Treasury bond rate(3)	1.80%	3.63%	3.35%

Source: KRX KOSPI Market, Seoul Money Brokerage Services, Ltd., The Bank of Korea.

(1) Represents the Market Average Exchange Rate in effect on such dates.

(2) Measured by the yield on three-year Korean corporate bonds rated as AA- by the Korean credit rating agencies.

(3) Measured by the yield on three-year treasury bonds issued by the Ministry of Economy and Finance of Korea.

Critical Accounting Policies

The preparation of our financial statements requires management to make judgements, involving significant estimates and assumptions, in the application of certain accounting policies about the effects of matters that are inherently uncertain. These estimates and assumptions, which may materially affect the reported amounts of certain assets, liabilities, revenues and expenses, are based on information available to us as of the date of the financial statements, and changes in this information over time could materially impact amounts reported in the financial statements as a result of the use of different estimates and assumptions. Certain accounting policies, by their nature, have a greater reliance on the use of estimates and assumptions, and could produce results materially different from those originally reported because of the possibility that future events affecting these estimates and assumptions may differ significantly from our current judgement.

See "— *Changes in Accounting Standards*" as well as Note 2 of the notes to our consolidated financial statements included in this Offering Circular for summaries of our significant accounting policies that involve critical accounting estimates.

Changes in Accounting Standards

For discussions of new accounting standards, interpretations and amendments applicable to us, see Note 2.2 of the notes to our consolidated financial statements included elsewhere in this Offering Circular.

Results of Operations

Net Interest Income

The following table sets out the principal components of our net interest income for the periods indicated, as well as changes in these components over such periods in percentage terms.

	Year Ended 31 December			Percentage Change	
	2021	2022	2023	2021/ 2022	2022/ 2023
	(In billions of Won)			(percentage)	
Interest income					
Due from banks	₩ 63	₩ 278	₩ 658	338.2%	136.8%
Loans	7,839	11,762	17,120	50.0	45.6
Financial assets at FVOCI	441	544	837	23.2	53.9
Securities at amortized cost	403	699	1,003	73.3	43.5
Financial assets at FVTPL	40	65	176	63.5	170.9
Total interest income	₩8,787	₩13,347	₩19,793	51.9%	48.3%

	Year Ended 31 December			Percentage Change	
	2021	2022	2023	2021/ 2022	2022/ 2023
	(In billions of Won)			(percentage)	
Interest expenses					
Deposit liabilities	2,041	4,559	9,773	123.3%	114.4%
Borrowings	107	342	782	220.5	128.5
Financial liabilities at FVTPL	5	4	5	(11.9)	21.3
Debentures	438	671	986	53.2	46.9
Lease liabilities	11	16	24	40.7	50.9
Others	34	146	306	334.4	109.0
Total interest expenses	₩2,636	₩5,739	₩11,876	117.7%	106.9%
Net interest income	₩6,151	₩7,609	₩ 7,917	23.7%	4.1%
Net interest margin(1)	1.41%	1.62%	1.59%		

(1) Defined, on a separate basis, as net interest income divided by the average of the daily ending balances of interest earning assets (calculated in accordance with FSS reporting guidelines).

Comparison of 2023 to 2022

Interest Income

Our interest income increased by 48.3% from ₩13,347 billion in 2022 to ₩19,793 billion in 2023, primarily due to a 45.6% increase in interest income from loans as a result of the higher general level of interest rates in Korea in 2023 compared to 2022, coupled with an increase in the average balance of loans. On a separate basis, the average balance of our interest-earning assets increased from ₩382,346 billion in 2022 to ₩403,446 billion in 2023, principally due to an increase in the average balance of loans from ₩305,379 billion in 2022 to ₩317,121 billion in 2023 and an increase in the average balance of securities from ₩61,394 billion in 2022 to ₩71,647 billion in 2023. Such increases in the average balance of loans and securities were primarily due to our efforts to attract new customers. On a separate basis, our average yields on interest-earning assets (defined, on a separate basis, as interest divided by the average balance of interest-earning assets) increased from 3.13% in 2022 to 4.51% in 2023, primarily due to the higher general level of interest rates in Korea in 2023 compared to 2022.

Interest Expenses

Our interest expenses increased by 106.9% from ₩5,739 billion in 2022 to ₩11,876 billion in 2023, primarily due to a 114.4% increase in interest expense on deposit liabilities as a result of higher general level of interest rates in Korea in 2023 compared to 2022 and an increase in the average balance of deposits. On a separate basis, the average balance of our interest-bearing liabilities increased from ₩374,431 billion in 2022 to ₩392,868 billion in 2023. The increase in the average balance of our interest-bearing liabilities was principally due to an increase in the average balance of deposits from ₩318,855 billion in 2022 to ₩338,366 billion in 2023, which was mainly due to an increase in bank savings deposits as a result of higher interest rates and increased uncertainties of global economy. On a separate basis, the average cost of our interest-bearing liabilities increased from 1.54% in 2022 to 2.99% in 2023, primarily due to the higher general level of interest rates in Korea in 2023 compared to 2022.

Net Interest Margin

Net interest margin represents the ratio of net interest income to the average of the daily ending balances of interest-earning assets. Our net interest margin on a separate basis decreased from 1.62% in 2022 to 1.59% in 2023, primarily due to a 5.5% increase in the average balance of interest-earning assets outpaced a 4.1% increase in our net interest income. Net interest spread represents the difference between the average yield on interest-earning assets and the average cost of interest-bearing liabilities. Our net interest spread on a separate basis decreased from 1.59% in 2022 to 1.51% in 2023, primarily due to the fact that the financial instruments we utilize for fund management have relatively shorter terms of interest rate period and therefore the effect of an increase in base interest rates was reflected fast, whereas the same effect was slow to be reflected in the interest-bearing liabilities which have relatively longer terms.

Comparison of 2022 to 2021

Interest Income

Our interest income increased by 51.9% from ₩8,787 billion in 2021 to ₩13,347 billion in 2022, primarily due to a 50.0% increase in interest income from loans as a result of the higher general level of interest rates in Korea in 2022 compared to 2021, coupled with an increase in the average balance of loans. On a separate basis, the average balance of our interest-earning assets increased from ₩341,566 billion in 2021 to ₩382,346 billion in 2022, principally due to an increase in the average balance of loans from ₩280,707 billion in 2021 to ₩305,379 billion in 2022. The average balance of loans increased primarily due to our efforts to attract large companies and SMEs as new client base. On a separate basis, our average yields on interest-earning assets (defined, on a separate basis, as interest divided by the average balance of interest-earning assets) increased from 2.22% in 2021 to 3.13% in 2022, which primarily reflected the higher general level of interest rates in Korea in 2022 compared to 2021.

Interest Expenses

Our interest expenses increased by 117.7% from ₩2,636 billion in 2021 to ₩5,739 billion in 2022, primarily due to a 123.3% increase in interest expense on deposit liabilities as a result of the higher general level of interest rates in Korea in 2022 compared to 2021 and an increase in the average balance of deposits. On a separate basis, the average balance of our interest-bearing liabilities increased from ₩336,548 billion in 2021 to ₩374,431 billion in 2022. The increase in the average balance of our interest-bearing liabilities was principally due to an increase in the average balance of deposits from ₩288,580 billion in 2021 to ₩318,855 billion in 2022, which was mainly due to an increase in bank savings deposits as a result of higher interest rates and increased uncertainties of global economy. On a separate basis, the average cost of our interest-bearing liabilities increased from 0.83% in 2021 to 1.54% in 2022, primarily due to the higher general level of interest rates in Korea in 2022 compared to 2021.

Net Interest Margin

Net interest margin represents the ratio of net interest income to the average of the daily ending balances of interest-earning assets. Our net interest margin on a separate basis increased from 1.41% in 2021 to 1.62% in 2022, as a 23.7% increase in our net interest income outpaced an 11.9% increase in the average balance of interest-earning assets. Net interest spread represents the difference between the average yield on interest-earning assets and the average cost of interest-bearing liabilities. Our net interest spread on a separate basis also increased from 1.40% in 2021 to 1.59% in 2022, primarily due to improvements in the loan-deposit pricing and our efforts to defend the procurement portfolio against rising interest rates.

Net Fees and Commission Income

The following table sets forth the components of our net fees and commission income for the periods indicated, as well as changes in these components over such periods in percentage terms.

	Year Ended 31 December			Percentage Change	
	2021	2022	2023	2021/ 2022	2022/ 2023
	(In billions of Won)			*(percentage)*	
Fees and commission income	₩838	₩875	₩932	4.4%	6.5%
Fees and commission expenses	285	281	270	(1.3)	(3.9)
Net fees and commission income	₩553	₩594	₩661	7.4%	11.4%

Comparison of 2023 to 2022

Our net fees and commission income increased by 11.4% from ₩594 billion in 2022 to ₩661 billion in 2023, as fees and commission income increased by 6.5% from ₩875 billion in 2022 to ₩932 billion in 2023, while fees and commission expenses decreased by 3.9% from ₩281 billion in 2022 to ₩270 billion in 2023. The increase in fees and commission income was mainly attributable to an 11.4% increase in commissions received from loans and others from ₩522 billion in 2022 to ₩581 billion in 2023. The increase in commissions received from loans and others was due to increases in commissions from our bancassurance and trust account operations. The decrease in fees and commission expenses was primarily due to a 6.4% decrease in commissions paid borrowings and others from ₩227 billion in 2022 to ₩212 billion in 2023.

Comparison of 2022 to 2021

Our net fees and commission income increased by 7.4% from ₩553 billion in 2021 to ₩594 billion in 2022, as fees and commission income increased by 4.4% from ₩838 billion in 2021 to ₩875 billion in 2022, while fees and commission expenses decreased by 1.3% from ₩285 billion in 2021 to ₩281 billion in 2022. The increase in fees and commission income was mainly attributable to an 11.8% increase in commissions related to foreign exchange from ₩235 billion in 2021 to ₩263 billion in 2022 and an increase in commissions received on guarantees from ₩78 billion in 2021 to ₩90 billion in 2022. The increase in commissions related to foreign exchange was due to an increase in foreign exchange fees as a result of the increased volume of export and import transactions, as well as the recovery in demands for overseas travel as the pandemic situation subsides. The increase in commissions received on guarantees was due to an increase in the average balance of our acceptances and guarantees in foreign currency as a result of the increased volume of export transactions. The decrease in fees and commission expenses was primarily due to a 37.4% decrease in commissions related to foreign exchange from ₩87 billion in 2021 to ₩54 billion in 2022.

Net Gain (Loss) on Financial Instruments

The following table sets forth the components of our net gain (loss) on financial instruments for the periods indicated, as well as changes in these components over such periods in percentage terms.

	Year Ended 31 December			Percentage Change	
	2021	2022	2023	2021/ 2022	2022/ 2023
	(In billions of Won)			*(percentage)*	
Net gain on financial instruments at FVTPL	₩549	₩125	₩492	(77.3)%	294.3%
Net gain (loss) on derivative financial instruments used for hedging	(48)	(64)	26	33.3	N.M.
Net gain on financial instruments at FVOCI	79	2	84	(97.3)	N.M.
Net gain on financial instruments at amortized cost	0	0	0	(80.0)	N.M.
Total net gain (loss) on financial instruments	₩580	₩ 63	₩603	(89.1)%	852.0%

N.M. means not meaningful.

Comparison of 2023 to 2022

Our net gain on financial instruments increased by 852.0% from ₩63 billion in 2022 to ₩603 billion in 2023. Such an increase was primarily attributable to an increase in net gain on financial instruments at fair value through profit or loss from ₩91 billion in 2022 to ₩504 billion in 2023, which was due to an increase in gains from currency- and interest-related transaction and valuations, resulting from fluctuations in exchange rates and favourable interest rate movements in 2023.

Comparison of 2022 to 2021

Our net gain on financial instruments decreased by 89.1% from ₩580 billion in 2021 to ₩63 billion in 2022. This decrease was primarily attributable to a decrease in net gain on financial instruments at fair value through profit or loss from ₩539 billion in 2021 to ₩91 billion in 2022 and a decrease in net gain on financial instruments at fair value through other comprehensive income from ₩79 billion in 2021 to ₩2 billion in 2022, which were due to a decrease in gains from currency- and interest-related transaction and valuations, resulting from fluctuations in exchange rates and unfavourable interest rate movements in 2022.

Provision for Allowance for Credit Loss

Provision for allowance for credit loss includes provision (reversal) of credit loss of debt securities at fair value through other comprehensive income, provision for possible loan loss for debt for securities at amortized cost, provision for bad debts of loan losses and provision for bad debts of other asset losses.

Comparison of 2023 to 2022

Our provision for allowance for credit loss remained relatively stable, increasing by 0.1% from ₩658 billion in 2022 to ₩658 billion in 2023.

Comparison of 2022 to 2021

Our provision for allowance for credit loss increased by 170.3% from ₩243 billion in 2021 to ₩658 billion in 2022. Such an increase was primarily attributable to a 152.9% increase in provision for bad debts of loan losses from ₩231 billion in 2021 to ₩585 billion in 2022 and a substantial increase in provision for possible loan loss for bad debts for securities at amortized cost from ₩10 billion in 2021 to ₩67 billion in 2022. The increase in provision for bad debts of loan losses was mainly due to increased provisioning in 2022 as a pre-emptive risk management strategy to prepare for a recession in global economy and high interest rate environment. The increase in provision for bad debts for securities at amortized cost was primarily due to an increase in securities at amortized cost from ₩22,468 billion in 2021 to ₩37,583 billion in 2022.

General and Administrative Expenses

Comparison of 2023 to 2022

Our general and administrative expenses in 2023 was ₩3,449 billion, which increased from ₩3,319 billion in 2022. Specifically:

- Depreciation increased by 15.4% from ₩342 billion in 2022 to ₩395 billion in 2023, primarily due to an increase in intangible assets resulting from the recent expansion of our IT investments and a one-time increase in depreciation expense related to the disposal of our old headquarters building.
- Salaries increased by 2.5% from ₩1,615 billion in 2022 to ₩1,655 billion in 2023, primarily due to an increase in the number of employees as part of our efforts to enhance our sales capability and an increase in the salary base of our employees.

Such an increase in general and administrative expenses was partially offset by a decrease in termination benefits by 27.9% from ₩177 billion in 2022 to ₩128 billion in 2023, primarily due to the base effect of the one-time implementation of a retirement programme in 2022.

Comparison of 2022 to 2021

Our general and administrative expenses in 2022 was ₩3,319 billion, which increased from ₩2,973 billion in 2021. Specifically:

- Termination benefits increased substantially from ₩2 billion in 2021 to ₩177 billion in 2022, primarily due to the effect of one-time implementation in 2022 of a retirement programme aimed to reorganize our workforce structure and enhance the efficiency of our resource management.
- Advertising expenses increased by 65.4% from ₩109 billion in 2021 to ₩181 billion in 2022, primarily due to our efforts to expand our client base.

Other Operating Income (Expenses)

The following table sets forth the components of our net other operating income (expenses) for the periods indicated, as well as changes in these components over such periods in percentage terms.

	Year Ended 31 December			Percentage Change	
	2021	2022	2023	2021/ 2022	2022/ 2023
	(In billions of Won)			*(percentage)*	
Other operating income	₩4,791	₩7,616	₩7,934	59.0%	4.2%
Other operating expenses	5,440	7,838	8,403	44.1	7.2
Total net other operating income (expenses)	₩ (649)	₩ (223)	₩ (469)	(65.7)%	110.8%

The principal component of our other operating income is gain on foreign exchange transaction. Other items that comprise our other operating income include gain on disposal of loans, reversal of provision for payment guarantees, reversal of allowances for unused commitments, trust commissions, gain on merchant banking accounts and dividends income.

The principal component of our other operating expenses is loss on foreign exchange transaction. Other items that comprise our other operating expenses include loss on disposal of loans, provision of payment guarantees transferred, provisions for unused commitments, provisions for other allowances, contribution to Korea Credit Guarantee Fund, insurance fee on deposit and loss on merchant banking accounts.

Comparison of 2023 to 2022

Our net other operating expenses increased by 110.8% from ₩223 billion in 2022 to ₩469 billion in 2023.

Our other operating income increased by 4.2% from ₩7,616 billion in 2022 to ₩7,934 billion in 2023, primarily due to a 2.9% increase in gain on foreign exchange transaction from ₩7,170 billion in 2022 to ₩7,375 billion in 2023 as a result of fluctuations in foreign exchange rate.

Our other operating expenses increased by 7.2% from ₩7,838 billion in 2022 to ₩8,403 billion in 2023, primarily due to an increase in provision for other allowances from nil in 2022 to ₩182 billion in 2023 and a 3.5% increase in loss on foreign exchange transaction from ₩6,794 billion in 2022 to ₩7,035 billion in 2023. The increase in provision of payment guarantees transferred was mainly due to new allowances we set aside in response to our participation in the Government-led initiatives, together with other commercial banks in Korea, to commit a relief measure to relieve the financially vulnerable groups affected by the COVID-19 pandemic of the burden of high-interest rates. The increase in loss on foreign exchange transaction was mainly due to fluctuations in foreign exchange rate.

On a net basis, our net gain on foreign exchange transaction decreased by 9.7% from ₩376 billion in 2022 to ₩339 billion in 2023. In terms of the Market Average Exchange Rate, the Won depreciated from Won 1,267.3 to US$1.00 as of 31 December 2022 to Won 1,289.4 to US$1.00 as of 31 December 2023. In 2023, the Market Average Exchange Rate ranged between Won 1,219.3 and Won 1,360.6 per US$1.00.

Comparison of 2022 to 2021

Our net other operating expenses decreased by 65.7% from ₩649 billion in 2021 to ₩223 billion in 2022.

Our other operating income increased by 59.0% from ₩4,791 billion in 2021 to ₩7,616 billion in 2022. The increase was mainly attributable to a 64.9% increase in gain on foreign exchange transaction from ₩4,348 billion in 2021 to ₩7,170 billion in 2022 induced by fluctuations in foreign exchange rate.

Our other operating expenses increased by 44.1% from ₩5,440 billion in 2021 to ₩7,838 billion in 2022. This increase was primarily attributable to a 49.2% increase in loss on foreign exchange transaction from ₩4,554 billion in 2021 to ₩6,794 billion in 2022 induced by fluctuations in foreign exchange rate.

On a net basis, we recorded a net gain on foreign exchange transaction of ₩376 billion in 2022, compared to a net loss on foreign exchange transaction of ₩206 billion in 2021. Both the gain and loss on foreign exchange transaction increased in 2022 compared to 2021 due primarily to fluctuations in foreign exchange rate. In terms of the Market Average Exchange Rate, the Won depreciated from Won 1,185.5 to US$1.00 as of 31 December 2021 to Won 1,267.3 to US$1.00 as of 31 December 2022. In 2022, the Market Average Exchange Rate ranged between Won 1,185.5 and Won 1,436.6 per US$1.00.

Non-operating Income (Expenses)

Non-operating income principally includes rental fee income, gain on disposal of property and equipment, gain on disposal of investment properties, gain on disposal of intangible assets, reversal of impairment of intangible assets, gain on disposal of non-current assets held for sale, gain on disposal of investments in associates, gain on equity method and gain on termination of right-of-use assets.

Non-operating expenses principally include loss on disposal of property and equipment, impairment loss on property and equipment, loss on disposal of investment properties, impairment loss on investment properties, loss on disposal of intangible asset, impairment loss on intangible asset, loss on equity method, collection expenses for written-off claims, collection commissions for written-off claims, loss on disposal of investments in associates, impairment loss on investments in associates, loss on termination of right-of-use assets and donations.

Comparison of 2023 to 2022

Our net non-operating income decreased by 92.8% from ₩105 billion in 2022 to ₩8 billion in 2023.

Our non-operating income decreased by 16.7% from ₩267 billion in 2022 to ₩223 billion in 2023, primarily due to a ₩42 billion decrease in gain on equity method, mainly caused by a decrease in profit of BIDV, our equity investee in Vietnam.

Our non-operating expenses increased by 32.4% from ₩162 billion in 2022 to ₩215 billion in 2023, primarily due to a ₩67 billion increase in donations, mainly caused by our efforts to strengthen ESG management.

Comparison of 2022 to 2021

Our net non-operating income increased by 74.7% from ₩60 billion in 2021 to ₩105 billion in 2022.

Our non-operating income increased by 12.4% from ₩238 billion in 2021 to ₩267 billion in 2022. Such an increase was primarily attributable to a ₩85 billion increase in gain on equity method, reflecting gains from our equity investments in BIDV.

Our non-operating expenses decreased by 8.7% from ₩178 billion in 2021 to ₩162 billion in 2022, primarily due to a ₩13 billion decrease in donations in 2022 compared to 2021.

Income Tax Expenses

Comparison of 2023 to 2022

Our income tax expenses increased by 6.2% from ₩1,060 billion in 2022 to ₩1,126 billion in 2023, primarily due to the effect of recognizing changes in deferred tax assets of ₩433 billion in 2023, compared to changes in deferred tax liabilities of ₩282 billion in 2022, which was partially offset by a 19.7% decrease in current income taxes from ₩1,214 billion in 2022 to ₩975 billion in 2023. Our effective income tax rate was 25.4% in 2022 and 24.4% in 2023, compared to the maximum statutory tax rate of 27.5% and 26.4% in Korea in 2022 and 2023, respectively.

See Note 47 of the notes to our consolidated financial statements for the years ended 31 December 2023 and 2022 included elsewhere in this Offering Circular.

Comparison of 2022 to 2021

Our income tax expenses increased by 17.4% from ₩903 billion in 2021 to ₩1,060 billion in 2022, primarily due to a 19.4% increase in current income taxes for the period from ₩1,017 billion in 2021 to ₩1,214 billion in 2022 and a substantial increase in income tax directly recognized in equity from ₩37 billion in 2021 to ₩224 billion in 2022. Our effective income tax rate was 26.0% in 2021 and 25.4% in 2022, compared to the maximum statutory tax rate of 27.5% in Korea in 2021 and 2022.

See Note 47 of the notes to our consolidated financial statements for the years ended 31 December 2022 and 2021 included elsewhere in this Offering Circular.

Net Income

Due to the factors described above, our net income was ₩2,576 billion in 2021, ₩3,112 billion in 2022 and ₩3,487 billion in 2023.

Financial Condition

Assets

The following table sets forth the principal components of our assets as of the dates indicated, as well as changes in these components over such dates in percentage terms.

	As of 31 December			Percentage Change	
	2021	2022	2023	2021/ 2022	2022/ 2023
	(In billions of Won)			*(percentage)*	
Cash and due from banks	₩ 27,694	₩ 41,088	₩ 30,564	48.4%	(25.6)%
Financial assets at FVTPL	10,919	18,455	17,515	69.0	(5.1)
Derivative assets used for hedging	69	8	2	(88.3)	(78.6)
Financial assets at FVOCI	35,234	32,961	36,894	(6.5)	11.9
Securities at amortized cost	22,468	37,583	36,338	67.3	(3.3)
Loans	309,178	330,186	347,247	6.8	5.2
Property and equipment	2,004	2,426	2,415	21.0	(0.4)
Miscellaneous assets(1)	22,628	22,601	27,868	(0.1)	23.3
Total assets	₩430,194	₩485,308	₩498,843	12.8%	2.8%

(1) Includes investments in associates and a joint venture, investment properties, intangible assets, net defined benefit assets, current tax assets, deferred tax assets, other assets, merchant banking account assets and non-current assets held for sale.

For further information on our assets, see "*Description of Assets and Liabilities*."

Comparison as of 31 December 2023 to 31 December 2022

Our total assets increased by 2.8% from ₩485,308 billion as of 31 December 2022 to ₩498,843 billion as of 31 December 2023, mainly due to increases in loans and financial assets at fair value through other comprehensive income. Our loans increased by 5.2% from ₩330,186 billion as of 31 December 2022 to ₩347,247 billion as of 31 December 2023, primarily due to an increase in loans extended to corporate borrowers. Our financial assets at fair value through other comprehensive income increased by 11.9% from ₩32,961 billion as of 31 December 2022 to ₩36,894 billion as of 31 December 2023, primarily due to our proactive efforts to enhance our gains in the high-interest-rate environment. Such increases were partially offset by a 3.3% decrease in securities at amortized cost from ₩37,583 billion in 2022 to ₩36,338 billion in 2023, primarily due to bonds reaching maturity.

Comparison as of 31 December 2022 to 31 December 2021

Our total assets increased by 12.8% from ₩430,194 billion as of 31 December 2021 to ₩485,308 billion as of 31 December 2022, mainly due to an increase in loans, an increase in securities at amortized cost and an increase in financial assets at fair value through profit or loss. Our loans increased by 6.8% from ₩309,178 billion as of 31 December 2021 to ₩330,186 billion as of 31 December 2022, primarily due to our efforts to increase interest-earning assets with good quality. Our securities at amortized cost increased by 67.3% from ₩22,468 billion as of 31 December 2021 to ₩37,583 billion as of 31 December 2022, primarily due to changes in asset allocations to cope with rising interest rates. Our financial assets at fair value through profit or loss increased by 69.0% from ₩10,919 billion as of 31 December 2021 to ₩18,455 billion as of 31 December 2022, mainly due to our efforts to minimize loss on valuation in anticipation of the rising interest rates. Such increases were partially offset by a decrease in financial assets at fair value through other comprehensive income. Our financial assets at fair value through other comprehensive income decreased by 6.5% from ₩35,234 billion as of 31 December 2021 to ₩32,961 billion as of 31 December 2022, primarily as a result of changes in our asset allocations and rising interest rates.

Liabilities and Equity

The following table sets forth the principal components of our liabilities and equity as of the dates indicated, as well as changes in these components over such dates in percentage terms.

	As of 31 December			Percentage Change	
	2021	**2022**	**2023**	**2021/ 2022**	**2022/ 2023**
	(In billions of Won)			*(percentage)*	
Liabilities					
Deposits	₩321,125	₩359,858	₩369,749	12.1%	2.7%
Financial liabilities at FVTPL	4,188	11,228	6,729	168.1	(40.1)
Derivative liabilities used for hedging	111	516	391	364.4	(24.3)
Borrowings	17,524	22,257	22,034	27.0	(1.0)
Debentures	27,700	26,233	26,542	(5.3)	1.2
Miscellaneous liabilities(1)	30,788	35,250	41,313	14.5	17.2
Total liabilities	₩401,437	₩455,342	₩466,759	13.4%	2.5%
Equity					
Capital stock	₩ 5,360	₩ 5,360	₩ 5,360	— %	— %
Capital surplus	9,654	6,160	6,161	(36.2)	0.0
Hybrid equity securities	533	533	354	—	(33.7)
Capital adjustments	(38)	(38)	(38)	(1.5)	0.6
Retained earnings	13,897	19,236	21,050	38.4	9.4
Accumulated other comprehensive loss	(916)	(1,566)	(1,104)	70.9	(29.5)
Equity attributable to owners of the parent	28,490	29,686	31,783	4.2	7.1
Non-controlling interests	266	279	302	4.8	7.9
Total equity	₩ 28,756	₩ 29,965	₩ 32,084	4.2	7.1
Total liabilities and equity	₩430,194	₩485,308	₩498,943	12.8%	2.8%

(1) Includes net defined benefit liabilities, provisions, current tax liabilities, deferred tax liabilities, other liabilities and merchant banking account liabilities.

For further information on our liabilities, see "*Description of Assets and Liabilities*."

Comparison as of 31 December 2023 to 31 December 2022

Our total liabilities increased by 2.5% from ₩455,342 billion as of 31 December 2022 to ₩466,759 billion as of 31 December 2023, primarily due to a 2.7% increase in deposits from ₩359,858 billion in 2022 to ₩369,749 billion in 2023. The increase in deposits was due to an increase in bank savings deposits as a result of higher interest rates and increased uncertainties of global economy. Such an increase was partially offset by a 40.1% decrease in financial liabilities at fair value through profit or loss from ₩11,228 billion in 2022 to ₩6,729 billion in 2023, which was mainly caused by the fluctuations in interest rates and changes in our liability management structure to respond to such fluctuations. Our total equity increased by 7.1% from ₩29,965 billion as of 31 December 2022 to ₩32,084 billion as of 31 December 2023, primarily due to an increase in retained earnings from ₩19,236 billion as of 31 December 2022 to ₩21,050 billion as of 31 December 2023 as a result of an increase in our net income.

Comparison as of 31 December 2022 to 31 December 2021

Our total liabilities increased by 13.4% from ₩401,437 billion as of 31 December 2021 to ₩455,342 billion as of 31 December 2022, principally as a result of an increase in deposits and, to a lesser extent, increases in financial liabilities at fair value through profit or loss and borrowings. Our deposits increased by 12.1% from ₩321,125 billion as of 31 December 2021 to ₩359,858 billion as of 31 December 2022, due to an increase in procurement liabilities accompanying our efforts to expand assets, as well as an increase in bank saving deposits in response to higher interest rates and increased uncertainties of global economy. Our financial liabilities at fair value through profit or loss increased by 168.1% from ₩4,188 billion as of 31 December 2021 to ₩11,228 billion as of 31 December 2022, due to the management of our liability structure as well as fluctuations in interest rates. Our borrowings increased by 27.0% from ₩17,524 billion as of 31 December 2021 to ₩22,257 billion as of 31 December 2022, primarily due to our proactive financing in response to rising interest rates. Our total equity increased by 4.2% from ₩28,756 billion as of 31 December 2021 to ₩29,965 billion as of 31 December 2022, principally due to an increase in retained earnings from ₩13,897 billion as of 31 December 2021 to ₩19,236 billion as of 31 December 2022 as a result of an increase in net income and the conversion of our capital surplus into retained earnings, despite dividend payments.

Liquidity and Capital Resources

We are exposed to liquidity risk arising from withdrawals of deposits and maturities of our borrowings and debentures, as well as our need to fund our lending, trading and investment activities and to manage our trading positions. Our goal in managing liquidity is to be able, even under adverse conditions, to meet all of our liability repayments on time and to fund all investment opportunities. For a discussion of how we manage liquidity risk, see "*Risk Management — Market Risk Management — Non-Trading Activities — Liquidity Risk Management*" and Note 8 of the notes to our consolidated financial statements appearing elsewhere in this Offering Circular. In our opinion, we have sufficient working capital to meet our requirements for the next 12 months.

The following table sets forth our source of capital as of the dates indicated.

	As of 31 December		
	2021	2022	2023
	(In billions of Won)		
Deposits	₩321,125	₩359,858	₩369,749
Borrowings in Korean Won	9,886	10,732	10,420
Borrowings denominated in foreign currencies	5,443	10,045	9,519
Call money	1,092	971	934
Bonds sold under repurchase agreements	1,079	488	1,141
Bills sold	26	26	27
Debentures in Korean Won	21,703	20,359	20,341
Debentures in foreign currencies	5,997	5,875	6,201
Capital stock	5,360	5,360	5,360
Total	₩371,711	₩413,714	₩423,692

Our primary source of funding has historically been and continues to be customer deposits. Deposits amounted to ₩321,125 billion as of 31 December 2021, ₩359,858 billion as of 31 December 2022, and ₩369,749 billion as of 31 December 2023, which represented 86.4%, 87.0% and 87.3%, respectively, of our total funding as of each relevant date.

As customers typically roll over a substantial majority of deposits upon maturity, deposits have generally been a stable source of funding for us. However, in times of a bullish stock market, customers tend to transfer a significant amount of bank deposits to alternative investment products, such as money market funds and other brokerage accounts maintained at securities companies, in search of higher returns, which may result in temporary difficulties in finding sufficient funding for Korean banks in general, including us. On the other hand, when the economy shows signs of slowing down, customers generally revert back to bank deposits as their investment priorities shift to maintaining the safety of their principal and stable returns, and deposits also increase due to an overall increase in liquidity from more expansionary fiscal and monetary policies designed to stimulate the economy. We cannot assure you that there will not be significant outflows in bank deposits in the future resulting from upturns in the stock market, the availability of other attractive investment alternatives or a tightening in market liquidity. While we are not facing liquidity difficulties currently, if we are unable to obtain the funding we need on terms commercially acceptable to us for an extended period of time, we may not be able to ensure our financial viability, meet regulatory requirements, implement our strategies or compete effectively.

We may use secondary and other funding sources, such as issuances of debt and equity securities, denominated in both Won and foreign currencies, to complement, or if necessary, replace, funding through customer deposits. We depend on borrowings in foreign currencies as a significant source of funding, principally in the form of corporate debt securities denominated in foreign currencies. As of 31 December 2021, 2022 and 2023, our borrowings in foreign currencies amounted to ₩5,443 billion, ₩10,045 billion and ₩9,519 billion, respectively. Secondary funding sources also include call money and bonds denominated in both Won and foreign currencies, which in the aggregate amounted to ₩28,791 billion, ₩27,204 billion, ₩27,476 billion as of 31 December 2021, 2022 and 2023, respectively, representing 7.7%, 6.6% and 6.5% of our total funding as of each relevant date, respectively.

For a description of liquidity requirements, see "*Regulation and Supervision — Principal Regulations Applicable to Banks — Liquidity*."

Cash Flows

The following table sets forth, for the periods indicated, the principal components of our cash flows.

	Year Ended 31 December		
	2021	2022[(1)]	2023
	(In billions of Won)		
Net cash flows provided by (used in) operating activities	₩ 4,079	₩ 27,163	₩ (4,229)
Net cash flows provided by (used in) investing activities	(7,277)	(14,765)	(2,506)
Net cash flows provided by (used in) financing activities	1,441	1,023	(3,266)
Net increase (decrease) in cash and cash equivalents	(1,757)	13,421	(10,001)
Cash and cash equivalents at the beginning of the year and period	6,290	25,479	38,500
Effect of exchange rate changes on cash and cash equivalents	158	(399)	(217)
Cash and cash equivalents at the end of the year and period	₩ 4,692	₩ 38,500	₩ 28,282

(1) Reserve deposits, which were classified previously as deposits, were classified as cash in 2022.

Contractual Obligations

In our ordinary course of business, we make 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. The following table sets forth our contractual cash obligations as of 31 December 2023.

	Payments Due by Period (as of 31 December 2023)						
	Immediate Payment	Less than 1 month	1 – 3 months	3 months – 1 year	1 year – 5 years	More than 5 years	Total
	(In billions of Won)						
On-balance accounts:							
Financial liabilities at FVTPL	₩ 6,494	₩ —	₩ —	₩ —	₩ —	₩ 422	₩ 6,917
Deposits	149,780	35,914	50,697	123,140	16,334	1,430	377,297
Borrowings	3,470	4,845	3,152	5,241	4,930	585	22,223
Debentures	0	1,121	1,542	8,509	13,754	2,208	27,135
Net liabilities of derivatives used for hedging	—	8	4	18	52	(81)	0
Other financial liabilities	7,841	22,129	1	22	36	2	30,033
Merchant banking account liabilities	1,537	2,618	—	—	—	—	4,155
Sub-total	₩169,123	₩66,635	₩55,397	₩136,932	₩35,107	₩4,566	₩467,759
Off-balance accounts:							
Financial guarantee	498	—	—	—	—	—	498
Payment guarantee	23,535	—	—	—	—	—	23,535
Loan commitment	109,726	—	—	—	—	—	109,726
Merchant banking account-commitment	770	—	—	—	—	—	770
Sub-total	₩134,529	₩ —	₩ —	₩ —	₩ —	₩ —	₩134,529
Total	₩303,652	₩66,635	₩55,397	₩136,932	₩35,107	₩4,566	₩602,289

Commitments and Guarantees

For a description of our commitments and guarantees, see "*Description of Assets and Liabilities — Commitments and Guarantees*."

Off-Balance Sheet Arrangements

We have several types of off-balance sheet arrangements, including guarantees for loans, bonds, trade financing arrangements, guarantees for other financings, credit lines, letters of credit and credit commitments.

Details of our off-balance sheet arrangements are provided in Note 8 of the notes to our consolidated financial statements included in this Offering Circular.

HANA BANK

Introduction

We are one of the leading commercial banks in Korea in terms of total assets, revenues, profitability and capital adequacy. As of 31 December 2023, we had total assets, total net loans (after allowance for loan losses and net deferred loan fees and expenses), total deposits and total equity of ₩498.8 trillion, ₩347.2 trillion, ₩369.7 trillion and ₩32.1 trillion, respectively.

As a full-service financial institution, we operate an extensive nationwide and overseas banking network, consisting of 597 domestic branches and sub-branches, as well as 19 international branches, one sub-branch of such international branches, four overseas representative offices, 12 overseas subsidiaries and 161 sub-branches of such overseas subsidiaries as of 31 December 2023. Our overseas operations span across 25 countries outside of Korea, the most among all major commercial banks in Korea.

We also operated over 3,520 ATMs throughout Korea as of 31 December 2023, and offer Internet and mobile banking services. Through this nationwide and global network, we serve corporate and retail customers with a full complement of banking and financial services. We continue to hold strong market positions in the business segments where we have historically maintained competitive strengths, such as large corporate banking, foreign exchange and trade financing, and following the Merger, we have also gained a leading position in other business areas, such as retail banking, private banking and wealth management. Our leading presence in the market has been widely recognised by a number of significant industry awards over the years. In 2023, we received the "Best Private Bank in Korea" award from The Banker, the "Best Bank in Korea", the "Best Sub-Custodian Bank in Korea", the "Best Foreign Exchange Bank in Korea" and the "Best Trade Finance Provider in Korea" awards from Global Finance Magazine, and the "Best Private Bank in Korea" award from Euromoney Magazine. In 2022, we received the "Best Bank in Korea", the "Best Trade Finance Provider in Korea" and the "Best Private Bank in Korea" awards from Global Finance Magazine, the "Best Private Bank in Korea" award from Euromoney Magazine and the "Best Bank in Korea" and the "Innovation in Digital Banking" awards from The Banker. In 2021, we received the "Best Bank in Korea" award from Global Finance Magazine, the "Best Private Bank in Korea" award from Euromoney Magazine for the fourteenth time, the "Best Private Bank in Korea" award from The Banker and the "Best Foreign Exchange Bank in Korea" award from Global Finance Magazine.

History

We were established in September 2015 through a merger of Original Hana Bank, the flagship commercial bank of Hana Financial Group, with Korea Exchange Bank, which was acquired by Hana Financial Group in February 2012 (the "**Merger**"). Upon completion of the Merger, Korea Exchange Bank as the surviving entity changed its name to KEB Hana Bank. In February 2020, we changed our brand name to "Hana Bank" while maintaining "KEB Hana Bank" as our legal name.

Original Hana Bank was founded in 1971 as Korea's first short-term finance and investment company. It obtained a commercial banking licence in 1991 and evolved into a full-service commercial bank, serving on a nationwide basis the three principal Korean banking market segments: large corporates, SMEs and households. Original Hana Bank expanded its operations, assets and deposit and customer bases primarily through mergers and acquisitions. It acquired certain assets and liabilities of Chungchong Bank in June 1998 and merged with Boram Bank in January 1999. Through the merger with Boram Bank, Original Hana Bank also strengthened its leading position in the high net-worth individuals market segment. Original Hana Bank continued its expansion by merging with Seoul Bank, then one of the largest commercial banks in Korea, in December 2002. Following the introduction of the Financial Holding Companies Act of Korea, Hana Financial Group was established in December 2005 and Original Hana Bank became the wholly-owned principal banking subsidiary of the group.

Korea Exchange Bank was established in 1967, pursuant to the Korea Exchange Bank Act, as a wholly Government-owned bank specialising in the foreign exchange and international trade finance businesses. Until 1977, Korea Exchange Bank was the only Korean bank to offer trade financing and foreign exchange services. Following the loss of its monopoly in trade financing and foreign exchange, Korea Exchange Bank expanded its operations and diversified its activities to include a full range of commercial banking services, through expansion of its branch network and diversification of its customer base and financial product and service offerings. Korea Exchange Bank was privatised in 1989 with the repeal of the Korea Exchange Bank Act, and its shares were first offered for public ownership in 1991. Its common stock, which was listed on the KRX KOSPI Market in 1994, was delisted in April 2013 when Hana Financial Group acquired the remaining 42.73%

stake in Korea Exchange Bank and became the beneficial owner of 100% of its issued and outstanding share capital. Until the Merger, Korea Exchange Bank remained independent from other member companies of Hana Financial Group with respect to its business, including its brand, employment and wage systems. In January 2019, we completed the operational and system integration of Korea Exchange Bank and Original Hana Bank.

Business

Corporate Banking

Overview

We provide comprehensive commercial banking services in Korea to corporate customers, ranging from SMEs to large corporations, including the member companies of Korea's major *chaebols*. Our corporate banking operations include lending to and taking deposits from our corporate customers, mostly in Won. As of 31 December 2023, our corporate loans (comprising loans to large-sized businesses, SMEs and public sector and others; before allowance for loan losses and net deferred loan fees and expenses) amounted to ₩217.0 trillion, accounting for 62.2% of our total loans. We also provide our corporate customers with a variety of fee- and commission-based services, such as investment banking and foreign exchange transactions. We focus our efforts on increasing our corporate exposure to so called "blue-chip" companies with low credit risk profiles, regardless of their size, and decreasing our corporate exposure to the companies with high credit risk profiles so as to improve our asset quality.

The following table sets forth the balances and percentages of the total loans (before allowance for loan losses and net deferred loan fees and costs) attributable to each category of our corporate lending business.

	As of 31 December					
	2021		2022		2023	
	Amount	%	Amount	%	Amount	%
	(In billions of Won, except percentages)					
Large-sized businesses	₩ 41,137	23.2%	₩ 49,305	24.8%	₩ 52,615	24.2%
SMEs	118,140	66.7	129,743	65.2	143,439	66.1
Public sector and others	17,754	10.0	19,908	10.0	20,929	9.6
Total corporate loans	₩177,031	100.0%	₩198,956	100.0%	₩216,982	100.0%

Large Corporate Banking

We pursue a focused, profit-oriented marketing approach toward large corporate customers. In particular, we orient our large corporate banking business around a fee-based income structure, offering a broad range of fee-earning products and services, rather than simply providing traditional lending services. Our large corporate banking business strategy includes developing new products and services, as well as cross-selling existing fee-based products and services to our core large corporate customers. As a result, we have increased the volume and proportion of our fee income from corporate banking areas such as investment banking, financial advisory services and derivatives transactions.

We also use our advanced customer relationship management technology, which allows us to segment customers by creditworthiness and profitability and identify high-quality large corporate customers on whom we can concentrate our marketing efforts. This technology also allows us to automate the pricing of products and services accordingly.

We market to potential large corporate banking customers primarily through our senior relationship managers and relationship managers, all of whom are sales professionals specifically dedicated to marketing to high credit large corporate customers.

Small- and Medium-Sized Enterprise Banking

The SME segment of the corporate banking market has grown significantly in recent years, primarily as a result of the Government's measures to encourage lending to those enterprises. As of 31 December 2023, our corporate loans to SMEs (before allowance for loan losses and net deferred loan fees and costs) amounted to ₩143.4 trillion, accounting for 41.1% of our total loans. We pursue a selective loan strategy that focuses on identifying and marketing to SME borrowers with low credit risk profiles based on our internal credit risk assessment.

Retail Banking

Overview

We offer a wide range of retail banking services in Korea through our national network of local branches and digital banking platform. While our retail banking operations are focused primarily on retail lending and deposit-taking activities, we also provide an array of ancillary fee-based services.

Our retail banking services include mortgage and retail lending, as well as demand, savings and time deposit-taking, digital banking (consisting of Internet and mobile banking services), bill paying services and payroll services.

We not only view retail banking as a significant source of income, but also believe that it is a business area through which we may further enhance our brand recognition as a customer-oriented provider of comprehensive banking services. In order to better understand, serve and market to our retail clients, we have increased our efforts to improve our marketing strategies and implement a customer management system which will allow us to target more effectively the various customer groups based on each customer's financial needs, career and current marital status. We assess the marketing procedures operating between our branches and headquarters in order to enhance the efficiency of our marketing strategies and have been recognised by retail customers for our superior banking services. In July 2020, we were selected as the Best Bank in the Customer Contact category of the Korean Service Quality Index conducted by Korean Management Association Consulting for the fifth consecutive year. In April 2020, we were awarded the 2020 Top Consumer Recommended Brand Awards Grand Prize for open banking category, sponsored by Ministry of Trade, Industry and Energy. In 2022, we received the "Innovation in Digital Banking" award from The Banker. In May 2023, "Hana Hap," our MyData-based asset management service application, was awarded the Service Marketing Awards Grand Prize from the Service Marketing Academic Society.

The following table sets forth our deposit portfolio on a separate basis as of the dates indicated.

	Year Ended 31 December								
	2021			2022			2023		
	Average Balance	Interest Expense	Average Rate Paid(1)	Average Balance	Interest Expense	Average Rate Paid	Average Balance	Interest Expense	Average Rate Paid
	(In billions of Won, except percentages)								
Low cost deposits	₩117,049	₩ 246	0.2%	₩121,220	₩ 592	0.5%	₩111,031	₩1,024	0.9%
Time deposits	130,855	1,381	1.1	141,226	2,936	2.1	164,341	6,368	3.9
Instalment deposits	6,270	122	1.9	5,775	118	2.0	6,013	199	3.3
Marketable deposits	1,921	22	1.2	11,750	309	2.6	19,074	796	4.2
Deposits in foreign currencies	35,210	30	0.1	41,594	279	0.7	40,647	939	2.3
Total deposits(2)	₩291,304	₩1,800	0.6%	₩321,565	₩4,234	1.3%	₩341,106	₩9,327	2.7%

(1) Defined as interest expense of each deposit divided by the average of its daily ending balances.

(2) Calculated as a sum of Won-denominated deposits, foreign currency deposits, certificate of deposits, Won-denominated bonds sold under repurchase agreements and bills sold.

We offer various types of household loans to individuals and small unincorporated businesses. Our household loans (before allowance for loan losses and net deferred loan fees and expenses) as of 31 December 2023 amounted to ₩128.4 trillion, on a separate basis, ₩20.1 trillion, or 15.6%, of which were unsecured loans.

Private Banking Operations

We offer private banking services to high net-worth retail customers. Through our private banking network, we offer diversified, packaged products and services such as standard retail banking, loan products, brokerage, bancassurance, investment products, real estate and estate management services. These products and services, along with customer relationship management, continue to be a focal point of our retail banking growth strategy. Our VIP Advisors across all our retail branches and private banking channel Gold Club serve the needs of high net-worth customers, advising them on tax matters and asset management. Our strength in private banking has been recognised by the industry and media through numerous awards, including the "Best Private Bank in Korea" awards from The Banker and Euromoney Magazine in 2023, the "Best Private Bank in Korea" awards from The Banker, Global Finance Magazine and Euromoney Magazine in 2022, the "Most Innovative Private Bank in the World" award from Global Finance Magazine in 2021 and "Best Private Bank in Korea" award from Euromoney Magazine in 2021. With the rising number of high net-worth retail customers, we believe the Korean wealth management market offers potential for significant growth.

In order to meet the enhanced expectations and sophisticated needs of our high net-worth retail customers, we pursue a "total financial service package" approach, which encompasses a wide range of services from traditional banking to advanced asset-allocation, and have started to offer highly personalized digital private banking service to our high net-worth customers via our mobile application, Hana 1Q, since January 2023. Our Wealth Management Group solely focuses on providing value-added and high-quality products and services to high net-worth customers. As of 31 December 2023, we had 309 professionals dedicated to private banking, working in 10 Gold Clubs (targeted for high net-worth customers with more than ₩500 million in total relationship balance) and 12 in-branch PB centres (targeted for high net-worth customers with more than ₩300 million in total relationship balance).

Trust Management Services

We offer our customers a variety of money trust products and manage the funds that they invest in money trusts, on a fee basis. We generally manage money trusts that allow investors to share in the investment performance of the trust in proportion to the amount of their investment in the trust. We also offer property trust management services, where we manage non-cash assets for a fee. The trust management services that we offer include (i) money trusts, consisting of pension trusts, specific money trusts and retired pension trusts, and (ii) property trusts, consisting of real estate collateral trusts and money receivable trusts.

Pursuant to Korean law, the assets of our money trusts are segregated from our assets and are not available to satisfy the claims of our creditors. Accordingly, trust accounts are accounted for, and reported separately from, bank accounts. For money trusts, under the Financial Investment Services and Capital Markets Act ("**FSCMA**"), we are permitted to offer only specified money trust account products. Specified money trusts are established on behalf of individual customers, typically corporations, which direct our investment of trust assets.

Investment Banking and Capital Markets

We engage in different types of investment banking and capital markets activities, primarily on behalf of corporate customers in Korea, as well as for our own account. Our principal investment banking activities include:

- arrangement of project financing and other international bond issues and syndicated loans;
- arrangement and advisory services relating to issuances of asset-backed securities;
- real estate financing and advisory services; and
- acquisition financing and financial advisory services.

We invest in and trade securities for our own account, primarily to maintain adequate sources of liquidity and to generate interest and dividend income and capital gains.

Foreign Exchange and Trade Financing

We are one of the leaders in the Korean foreign exchange market and believe that we continue to hold the largest market share of any Korean bank with respect to customer-related foreign exchange and trade financing transactions, with numerous awards from industry journals. In 2023, we received the "Best Foreign Exchange Bank in Korea" award from Global Finance Magazine and the "Best Trade Finance Provider in Korea" award for the twenty-second time from the same magazine. In 2022, we received the "Best Trade Finance Provider in Korea" award for the twenty-first time from Global Finance Magazine. In 2021, we received the "Best Foreign Exchange Bank in Korea" award for the twenty-first time, and the "Best Trade Finance Bank in Korea" award for the twenty-first time, both from Global Finance Magazine.

The foreign exchange services we offer include purchases and sales of foreign currencies in the spot and forward markets on behalf of customers, which enable them to satisfy payment obligations, hedge currency exposures and meet other needs for foreign currency. In 2023, the foreign exchange transaction volumes handled by us, which includes wire transfers of foreign currencies, amounted to US$376.4 billion. We also provide international trade financing services, including documentary letters of credit, bankers' acceptances and other forms of trade financing, to meet the complex needs of our customers in the export and import business. In 2023, our export and import volumes in the aggregate totalled US$475.2 billion. In December 2022, we signed a memorandum of understanding ("**MOU**") with Toss Securities to provide real time foreign exchange rate information and trading services 24-hour-a-day for the first time in the Korean foreign exchange market.

Merchant Banking

Our merchant banking services principally include the following:

- commercial paper discounting, which entails purchasing at a discount notes that are issued, endorsed or guaranteed by companies to supply them with short-term working capital; and
- payment guarantees, which entail issuing guarantees in respect of notes, corporate bonds and other Won and foreign currency payment obligations in return for fees.

Bancassurance

We work with third party insurance companies to offer insurance products through our branch network in the bancassurance market. We primarily offer our customers third-party insurance products, including the following:

- annuity insurance, which generally pays a fixed amount yearly or monthly during an insured's lifetime and for a fixed period after death;
- long-term savings insurance, which compensates for physical injury or disease occurring during the coverage period and reimburses the insured for premiums paid and interest accrued at the end of such coverage period; and
- travel and leisure insurance, which compensates for physical injury or disease, as well as loss of personal property incurred during travel.

We believe our focus on providing a wide variety of bancassurance products, rather than focusing on one product, allows us to better meet individual customer needs, increases customer satisfaction and drives increased sales. In addition, due to the tax favourable nature of our bancassurance products, we are seeing increased interest from high net-worth individuals, professionals and high income self-employed persons. As of 31 December 2023, our bancassurance business had alliances with 21 life insurance companies and 12 non-life insurance companies.

Domestic Branch and Digital Banking

Domestic Branch Network

As of 31 December 2023, we maintained 533 branches and 64 sub-branches in Korea, most of which are located in Seoul and the surrounding provinces. The sub-branches are "compact" branches opened to produce higher returns on investment with relatively lower operating costs, based on facility design, efficient staffing and location in relatively affluent areas. As of 31 December 2023, we maintained 3,520 ATMs located in our branches.

Our branch network is designed to provide one-stop banking services tailored to their respective target customers. We have grouped our branches based on regional characteristics and classified them into retail and corporate groups. Decisions as to whether to open, close or merge a branch office are based on considerations of profitability, growth potential in the branch's surrounding area, competitive concerns and impact on our branch network, among other factors.

The following table presents the geographical distribution of our domestic branch network as of 31 December 2023, according to major metropolitan areas.

	Number of Domestic Branches		
	Branch	**Sub-branch**	**Total**
Seoul metropolitan area	220	19	239
Gyeonggi Province	96	11	107
Six major cities:			
Incheon	25	6	31
Busan	35	2	37
Gwangju	10	—	10
Daegu	21	—	21
Ulsan	9	4	13
Daejeon	33	8	41
Sub-total	449	50	499
Others	84	14	98
Total	533	64	597

Digital Banking

Our digital banking platform consists of Internet and mobile banking services, which complements our branch network. As of 31 December 2023, we had approximately 17.1 million customers using our Internet banking services and 14.0 million customers using our mobile banking services.

The advancement of mobile technology and growing sophistication of smartphones in recent years has led to a growth in mobile banking. In response to such trends, we have launched a number of multilingual mobile apps and services. Our current portfolio of mobile apps includes Hana 1Q, our centralised mobile banking app with a "Single Sign On" function, allowing multiple services with a single login, and facial recognition login system. Hana EZ is our mobile app for international financial transactions, including overseas remittances and non-face-to-face currency exchange services. Hana Members is our members services and loyalty mobile app. We plan to launch additional mobile apps and services and build an open, web-based Internet banking platform that supports a number of operating systems and web browsers, strengthening our customers' access to our services on mobile devices. In addition, we are developing technologies to increase our level of support for people who have difficulty using computers and/or accessing the Internet.

In addition to building our portfolio of mobile apps and services, in recent years, we have also looked to invest in, and find synergies with, fintech companies. In August 2016, Hana Financial Group established Finnq Inc. (formerly Hana-SK Fintech Co., Ltd.; "**Finnq**"), a joint venture with a mobile service provider, SK Telecom Co., Ltd. ("**SK Telecom**"), to provide fintech-based services such as mobile-oriented asset management, simplified payment and overseas transactions through a mobile application launched in 2017. We collaborate with Finnq in connection with fintech-based services. Furthermore, since June 2015, we have fostered collaboration with fintech start-ups through our fintech accelerator, Fintech 1Q Lab. In addition, in 2020, we invested ₩7.5 billion for the acquisition of 7.5% equity in Toss Bank, and in 2021 acquired additional equity interest. Our stake in Toss Bank amounted to 8.99% as of 31 December 2023.

We focus our efforts to facilitate the digital transformation of our business. In March 2019, we implemented our first Robotic Process Automation, named Hanabot, an automated machine-learning software programme that handles tasks including personal, household and corporate lending as well as credit card transactions. Furthermore, in 2018 we opened a new division for artificially intelligent financial assistance, "HAI Banking Service," and commenced our "Exchange Wallet" and "Mobile Bancassurance" services through Hana Members' app.

In addition, we lead the development of blockchain technologies in the banking industry. In 2019, we became the first Korean bank to join Hyperledger and Enterprise Ethereum Alliance, the global blockchain consortia, and received patents for 46 new business models that will facilitate the adoption of blockchain technology to our business. More recently in September 2023, we signed a strategic business agreement with BitGo, a global crypto custodian company, to jointly enter the digital asset custody sector.

In 2021, we also launched a digital fund platform called "Fun Shop" which provides highly customized search functions for various investment options and a MyData-based asset management service called "Hana HAP" which provides optimized asset management solutions in digitalized format. In October 2022, we launched a new digital bank account service in collaboration with Naver Pay, one of the most common forms of mobile payment service in Korea, through which a user can benefit from the features that are commonly associated with traditional bank accounts, such as deposit protection and accrual of interests, and enjoy at the same time discounts and loyalty points offered by Naver Pay.

Overseas Network

We operate the largest network of overseas branches among Korean banks to meet the needs of our customers for foreign exchange, trade finance, funds remittance and other global banking services in Korea and elsewhere around the world.

As of 31 December 2023, our overseas network consisted of 197 business units in 25 countries (23 in the Americas, 10 in Europe and the Middle East, and 164 in Asia and Oceania). Specifically, we had 19 international branches, one sub-branch of such international branches, four overseas representative offices, 12 overseas subsidiaries and 161 sub-branches of such overseas subsidiaries located overseas.

We have over 50 years of experience operating in many high-growth regions of the world. In 2023, on a separate basis, our net income from our offshore operations was ₩264.1 billion, which represented 7.6% of our total net income, and we had total overseas assets of ₩26.7 trillion as of 31 December 2023.

We continue to adapt the focus of our network of overseas branch operations in response to changes in the global economy. To overcome the difficulties we may face due to current market volatility and instability, we are concentrating our efforts on maintaining quality assets and creating new products for our overseas business. Under our "Global Expansion and Profitable Growth" drive, we are promoting projects to help clients restructure assets, adjust their business models and develop their scope of business. In May 2020, Hana Financial Group, our holding company, entered into an MOU with Shinhan Financial Group, the holding company of Shinhan Bank, to strengthen their global businesses by creating synergies between the two banking groups. It is expected that such MOU will lead to greater opportunities to expand our overseas business.

The table below sets forth our overseas subsidiaries, branches (not including sub-branches) and representative offices as of 31 December 2023.

Business Unit[1]	Location	Year Established
Subsidiaries:		
Americas		
KEB Hana Bank Canada	Canada	1981
Banco KEB Hana do Brasil S.A.	Brazil	1998
KEB Hana NY Financial Corp.	United States	2004
KEB Hana LA Financial Corp.	United States	2004
KEB Hana Bank USA	United States	1986
Banco KEB Hana México S.A.	Mexico	2019
Europe and the Middle East		
KEB HNB Rus LLC	Russia	2014
KEB Hana Bank (D) AG	Germany	1992
Asia		
KEB Hana Bank (China) Co., Ltd	China	2007
KEB Hana Global Finance Limited	Hong Kong	2009
PT. Bank KEB Hana Indonesia	Indonesia	2014
Hana Micro Finance Ltd.	Myanmar	2014
Branches:		
Americas		
New York Agency	United States	1978
Panama Branch	Panama	1980
Europe and the Middle East		
London Branch	United Kingdom	1968
Paris Branch	France	1974
Amsterdam Branch	Netherlands	1979
Bahrain Branch	Bahrain	1977
Abu Dhabi Branch	United Arab Emirates	2012
Asia		
Tokyo Branch	Japan	1967
Osaka Branch	Japan	1967
Fukuoka Branch	Japan	2019
Hong Kong Branch	Hong Kong	1967
Singapore Branch	Singapore	1973
Manila Branch	Philippines	1983
Hanoi Branch	Vietnam	1999
Ho Chi Minh City Branch	Vietnam	2015
Sydney Branch	Australia	2014
Chennai Branch	India	2015
Gurugram Branch	India	2019
Taipei Branch	Taiwan	2022
Representative Offices:		
Americas		
Mexico City Representative Office	Mexico	2015
Europe and the Middle East		
Dubai Representative Office	United Arab Emirates	2003
Istanbul Representative Office	Turkey	2013
Asia		
Yangon Representative Office	Myanmar	2012

(1) Excludes subsidiaries, branches and representative offices planned for closure due to no actual operations.

In addition to our overseas networks of branches, representative offices and overseas subsidiaries, we have also looked at strategic acquisitions, investments and MOU opportunities to find business synergies outside of Korea, particularly in China, Southeast Asia and, more recently, Eastern Europe, India and the Middle East. For example, in November 2019, we completed the acquisition of a 15% stake in BIDV, one of the largest banks controlled by the State Bank of Vietnam, for over ₩1 trillion. We expect that this strategic investment will allow us to expand our network in Vietnam, where we currently have two branches, by gaining access to BIDV's vast chain of branches and ATMs. In April 2022, we established a branch office in Taipei, Taiwan as the first and only Korean bank to establish presence in Taiwan. More recently, we entered into MOUs with several leading banks in Eastern Europe, in India and Saudi Arabia as part of our strategies to explore further expansion of our presence in such regions.

Competition

We compete principally with other national banks in Korea. We also face competition from a number of additional sources including regional banks, Government policy banks, specialised banks, branches of foreign banks operating in Korea and various other types of financial service institutions. In particular, competition in the retail and SME lending business, which has traditionally been an important business for us, has increased significantly in recent years and is expected to increase further. In addition, the profitability of our retail banking operations may decline as a result of growing market saturation in the retail lending segment, increased interest rate competition and higher marketing expenses. Intense and increasing competition has made and continues to make it more difficult for us to secure retail and SME customers with the credit quality and on credit terms necessary to achieve our business objectives in a commercially acceptable manner.

Consolidation among our rival institutions and the Government's privatisation efforts may also add competition in the markets in which we conduct business. For example, pursuant to the implementation of the Government's privatisation plan with respect to Woori Finance Holdings Co., Ltd. (the former financial holding company of Woori Bank) and its former subsidiaries, certain subsidiaries of Woori Finance Holdings Co., Ltd. were sold to other financial institutions and Woori Finance Holdings Co., Ltd. itself was merged into Woori Bank in 2014. In January 2019, Woori Financial Group Inc. was established as Woori Bank's new financial holding company. Furthermore, large financial groups have been focused on further growing their asset size and strengthening their non-banking businesses over the past few years by actively seeking acquisition targets. For example, Shinhan Financial Group acquired Orange Life Insurance Ltd. (formerly ING Life Insurance Korea Ltd.) in February 2019 and agreed to acquire BNP Paribas Cardif General Insurance in October 2021. In September 2020, KB Financial Group acquired Prudential Life Insurance Co. of Korea. In line with this trend, Hana Financial Group, our parent holding company, also acquired The-K Non-Life Insurance in May 2020. We expect that consolidation 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 significantly greater competition for us. Increased competition and continuing consolidation may lead to decreased margins, resulting in a material adverse impact on our future profitability.

We also face rising competition in the online arena. K Bank, the first online-only bank in Korea, commenced operations in April 2017, and Kakao Bank, another online-only bank, commenced operations in July 2017 and went public in August 2021. Toss Bank, in which we hold an 8.99% interest, also commenced operations in October 2021. Online-only banks may have advantages over traditional banks as the former can pass savings in labour 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 represent a growing customer base compared to traditional customers who have primarily conducted banking in-person at physical banking branches. Furthermore, online service providers and technology companies with large-scale user networks, such as Kakao Corp., NAVER and Samsung Electronics, have made 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." Accordingly, competition for online customers is growing not just among commercial banks, but also from mobile payment service providers.

The Government has identified fintech as a future growth industry as part of the fourth industrial revolution, and pursuant to the Special Act on Support for Financial Innovation, which came into effect in April 2019, the Government has established a framework to provide "sandbox" regulations and expedited regulatory approvals to promising fintech companies, including those providing banking and mobile payment services. In December 2019, we participated in the formal launch of open banking services, along with other major commercial banks and fintech companies, which allows customers to access nearly all banking services offered by any bank through a single smartphone banking app chosen by the customers and provides fintech companies access to a bank's payment systems, increasing competition among commercial banks and fintech companies.

As the Korean economy further develops and new business opportunities arise, in particular with the advancement of technology, more competitors may enter the Korean banking and other financial services industry. There can be no assurance that we will be able to compete effectively in the face of such increased competition. Increased competition in the Korean banking industry may make it difficult for us to increase the size of our loan portfolio and deposit base and maintain or improve our margins, which could have a material adverse effect on our business, financial condition and results of operations.

Information Technology

We have a fully integrated IT system that provides information to all offices and branches. We believe that a sophisticated IT system is critical to supporting our operations management and providing high-quality customer service. Accordingly, we have made, and intend to continue to make, significant investments to upgrade and expand our IT systems in order to improve our risk management, operations management and customer service. In recent years, we have developed and implemented several new technologically advanced risk management systems, including our Basel II System, Anti-Money Laundering System and BIS Risk-Weighted Asset Management System. Currently, our IT systems are capable of collecting and generating data in compliance with the Basel III requirements.

We continuously allocate considerable resources to improve the capacity and reliability of our IT infrastructure in our business divisions, which we believe is crucial to supporting our operations management and providing high-quality customer service.

Properties

Our principal establishment is our self-owned headquarters building located in Seoul, Korea, which has a total floor area of approximately 53,981 square metres. In addition, we own or lease various land and buildings for our branches.

Legal and Regulatory Proceedings

We may from time to time become a party to various legal, arbitration or administrative proceedings arising in the ordinary course of business. As of 31 December 2023, the aggregate amounts of claims brought against us totalled ₩305.1 billion (relating to 181 cases), for which we recorded a provision of ₩3.4 billion. As of the same date, the aggregate amounts of claims brought by us totalled ₩371.2 billion (relating to 390 cases).

We are currently involved in several pending disputes or potential disputes against us and have recently been involved in certain regulatory matters, including the following:

- In August 2019, the FSS began an investigation into the structuring and sale of certain DLF products by financial institutions, including us, after investors faced heavy losses as a result of decreases in the interest rates linked to certain securities underlying the DLF products, such as U.S. and U.K. swap interest rates. These products have an annual return rate of 3.5% to 4% if the interest rates remain above a certain baseline level until maturity. However, if the interest rates fall below such baseline level, investors suffer a loss in principal up to the entire amount invested. The results of the FSS's investigation showed that we had sold approximately ₩184 billion of such DLF products to investors. In December 2019, the dispute settlement committee of the FSS recommended (i) the reimbursement of 40% to 80% of the related losses to certain customers by the financial institutions involved in the sale of such products, including us, and (ii) individual settlements with other customers who were not subject to the 40 to 80% reimbursement recommendation. In accordance with the recommendations, we have reimbursed the relevant customers. In February 2020, the FSC imposed on us a fine of ₩16.8 billion and a six-month ban on sales of new private equity funds, and our former President Young Joo Ham was issued a "reprimand" warning. Immediately following such decision, we filed a petition for an injunction against the six-month ban on sales of new private equity funds and Mr. Ham also filed a petition for an injunction to suspend the effect of the "reprimand" warning, both of which were granted by the Seoul Administrative Court in June 2020. As a result, our sales of new private equity funds temporarily resumed from July 2020. We filed actions with the Seoul Administrative Court for cancellation of the ₩16.8 billion fine and the six-month ban on sales of new private equity funds, and Mr. Ham also filed a lawsuit with the Seoul Administrative Court for the cancellation of the "reprimand" warning. On 14 March 2022, the Seoul Administrative Court ruled against us and Mr. Ham. We and Mr. Ham have subsequently appealed and such appeals are under review by the Seoul High Court.

- In October 2020, two individuals filed a civil lawsuit against us and our private banker for their loss from investment in DLF products alleging, among others, that we and our private banker did not sufficiently explain the risks involved with the investment. In January 2023, the Busan District Court ruled in favour of the plaintiffs ordering us and our private banker to jointly pay 60% of the amount of losses suffered by the plaintiffs. We have subsequently appealed.
- In February 2020, the Seoul Southern District Prosecutors' Office commenced an investigation into the management of trade finance funds by Lime Asset Management Co. ("**Lime**") which may have resulted in significant losses to certain customers who purchased such products from banks and securities companies in Korea, including us. Such trade finance funds of Lime had investments in certain funds managed by International Investment Group LLC, a New York-based investment adviser, which had its licence revoked by the Securities and Exchange Commission in November 2018 for concealing losses and selling fraudulent loan assets, triggering suspension of the redemption of such trade finance funds. In March 2020, the FSS began its investigation into Lime, and on 27 August 2020, the FSS recommended that the financial institutions that sold such trade finance funds, including us, nullify such investment and provide full refunds to affected investors. Following a meeting of the board of directors, we agreed to accept the recommendations of the FSS and the proposed full refunds to affected investors in the amounts of approximately ₩36.4 billion. In February 2022, we filed an indemnity lawsuit against Lime and Shinhan Securities Co., Ltd. (formerly known as Shinhan Investment Corp.), which had Total Return Swap contracts in place with Lime and was tasked with supervising and overseeing Lime, for damages of approximately ₩36.4 billion and the trial is currently ongoing as of the date of this Offering Circular.
- In June 2020, the Seoul Central District Prosecutor's Office commenced an investigation into the management of trade receivable funds by Optimus Asset Management ("**Optimus**"), whom we and another commercial bank acted as the custodian of the funds' assets, after Optimus had suspended withdrawals in four of the funds before maturity. Such funds were marketed as safe investments of trade receivables of government corporations and public institutions but the Prosecutor's Office found that Optimus had invested the assets of the funds elsewhere, which may have resulted in significant losses to investors. In July 2020, the CEO of Optimus, among others related to the funds, was arrested for fraud and other charges. In September 2020, the Prosecutor's Office executed a second search warrant at our headquarters, following the initial search warrant executed in June 2020, in connection with the ongoing investigation into the management of the funds. In May 2021, the Prosecutor's Office indicted us and our employees on charges of violation of the FSCMA and occupational breach of trust, and in 2022, the Seoul Central District Court acquitted us and the employees of all charges, which was affirmed by the appellate court in January 2024. In addition, in October 2021, NH Investment & Securities Co., Ltd. filed a lawsuit against Optimus, the Korea Securities Depository and us, among others, for damages. The trial is currently ongoing. Due to the ongoing nature of the investigation, we cannot predict its potential outcome, including any implication on us. Furthermore, as an administrative sanction for our violation of the FSCMA in connection with this case, on 2 March 2022, the FSC resolved to partially suspend us from accepting new general private equity fund assets for custody for three months. We filed an administrative lawsuit requesting the repeal of the FSC's suspension, but the Seoul Administrative Court ruled against us on 8 September 2023. We subsequently appealed, and the case is currently ongoing.
- From May 2008 to January 2014, we provided KT ENGCORE Co., Ltd. (formerly KT ENS Corporation) with a loan that was guaranteed by Korea Investment & Securities Co., Ltd. and Shinhan Securities Co., Ltd. (collectively, the "**Guarantors**" and each a "**Guarantor**") and securitized with each Guarantor's trade receivables that turned out to be fraudulent. In 2014, we filed a claim against the Guarantors, demanding payment of their guarantee obligations to us. In August 2016, the Seoul High Court ruled in favour of us and the Guarantors fulfilled their guarantee obligations as a result. The Guarantors subsequently appealed the case to the Supreme Court of Korea, and the Supreme Court dismissed the appeal. In addition, in January 2017, the Guarantors sued us for damages totalling ₩37 billion on grounds that we had not duly verified the substance of the fraudulent trade receivables before entering into the loan agreement. While the Seoul Central District Court ruled in favour of us, the Supreme Court of Korea, in April 2023, mandated that we pay the Guarantors ₩7.5 billion in damages.
- As part of a broad governmental initiative to foster fair recruitment practices, in December 2017, the FSS launched an examination of 11 Korean commercial banks and preliminarily concluded that several banks, including us, may have given preferential treatment to certain job applicants during the recruiting process. Based on these preliminary findings by the FSS, in February 2018, the Supreme Prosecutors' Office of Korea initiated an investigation of six major commercial banks, including us, for alleged irregularities in hiring new employees. As a result of the investigation, the Supreme Prosecutors' Office charged us and six of our officials, including our former President Young Joo Ham, whose term ended on March 2019, with

illegally influencing the hiring process of new employees and manipulating hiring standards for certain candidates. The Seoul Western District Court held trials for Mr. Ham starting from August 2018 in which Mr. Ham denied any involvement in hiring irregularities. The Supreme Prosecutors' Office sought a 3-year prison term and a fine of ₩5 million for Mr. Ham, but the Seoul Western District Court on 11 March 2022 found Mr. Ham not guilty on all charges. Since the indictment of our officials, we have taken measures to reform our procedures for hiring new employees, including abolishing the hiring recommendation system and outsourcing all hiring processes.

- In January 2022, the FSS held a sanctions review committee. On the grounds that we engaged in mis-selling of 11 private equity funds including the aforementioned trade finance funds of Lime, Italian Healthcare Fund, German Heritage Fund and Discovery Fund in violation of the FSCMA, the FSS resolved to propose to the FSC that (i) we be subject to partial business suspension for three months and a fine for negligence, and that (ii) disciplinary measures be taken against certain executives and employees of us. In April 2023, the Securities and Futures Commission of the FSC imposed penalties of ₩17.9 billion against us for conducting unfair business activities in violation of the Financial Investment Services and Capital Markets Act.
- In June 2023, the Fair Trade Commission (the "FTC") of Korea commenced its investigation into potential collusion among four largest commercial banks in Korea, including us, whereby such banks had allegedly structured their secured loans in similar terms in order to limit competition. The FTC had concluded its investigation and issued its investigation report on 8 January 2024, and, as of the date of this Offering Circular, is in the process of receiving comments on the investigation report from the involved banks. The disciplinary action against the involved banks, if any, will be finalized after the deliberation process by the FTC is concluded.
- In November 2023, the FSS began its investigation into the sale of equity-linked securities products tracking the Hang Seng China Enterprises Index ("HK ELS Products") by Korean financial institutions, including us, amidst the increasing concerns from investors that their investments in HK ELS Products are expected to suffer heavy losses due to a sharp decline of the Hang Seng China Enterprises Index which dropped more than 50% since hitting its peak in early 2021. According to the FSS data, the outstanding balance of Korea's HK ELS Products amounted to ₩19.3 trillion as of November 2023. We had sold approximately ₩2.1 trillion of such HK ELS Products to investors from March 2011 until November 2023, after which we ceased the sale due to increasing volatility in the financial markets and the continued decline of the Hang Seng China Enterprises Index. In January 2024, we expanded the suspension of sales to all equity-linked securities products. While the FSS's investigation is still ongoing and disciplinary actions by relevant authorities or investors' legal actions against us may follow, in March 2024 we have voluntarily set up a dedicated compensation committee and decided to compensate certain investors for their loss related to HK ELS Products. The amount of compensation will be determined after deliberation of the committee and negotiation with individual investors starting from April 2024.
- In February 2023, immediately following the designation of MTS Bank, a commercial bank in Russia, as a sanctions target on the SDN List, we implemented an asset freezing measure on the assets of MTS Bank in an account held by us. Following such measure, MTS Bank filed a lawsuit with the Moscow Commercial Court against us and our subsidiary in Russia seeking release of their frozen assets. As of the date of this Offering Circular, the first hearing is scheduled for July 2024.

Other than the matters discussed above, we are not a party to any legal or administrative proceedings, and no proceedings are known by us to be contemplated by governmental authorities or third parties, which, if adversely determined, may have a material adverse effect on our business, financial condition or results of operations.

DESCRIPTION OF ASSETS AND LIABILITIES

The tables below and accompanying discussions provide selected financial highlights regarding our assets and liabilities. Unless otherwise specified, the information provided below is presented on a consolidated basis.

Average Balance Sheets and Related Interest

The following tables set forth our average balances of assets and liabilities, on a separate basis, for the periods indicated. For interest-earning assets and interest-bearing liabilities, the tables provide the amount of interest earned or paid and the average rate of such interest. For the purposes of these tables, average balance has been determined based upon the average of the daily ending balances.

	Year Ended 31 December								
	2021			2022			2023		
	Average Balance	Interest	Yield/ Rate[1]	Average Balance	Interest	Yield/ Rate	Average Balance	Interest	Yield/ Rate
	(In billions of Won, except percentages)								
Interest earning assets									
Loans	₩280,707	₩6,794	2.4%	₩305,379	₩10,502	3.4%	₩317,121	₩15,650	4.9%
Won	253,483	6,423	2.5	270,598	9,601	3.5	282,539	13,911	4.9
Foreign currency	27,224	372	1.4	34,781	901	2.6	34,582	1,739	5.0
Due from banks	11,233	30	0.3	15,573	250	1.6	14,677	599	4.1
Won	382	2	0.5	433	9	2.1	348	12	3.5
Foreign currency	10,851	28	0.3	15,140	241	1.6	14,330	587	4.1
Securities	49,626	744	1.5	61,394	1,171	1.9	71,647	1,849	2.6
Won	43,555	641	1.5	54,402	1,040	1.9	63,778	1,638	2.6
Foreign currency	6,071	103	1.7	6,992	131	1.9	7,869	211	2.7
Other	—	30	N.M.	—	32	N.M.	—	80	N.M.
Won	—	30	N.M.	—	32	N.M.	—	80	N.M.
Foreign currency	—	—	N.M.	—	—	N.M.	—	—	N.M.
Total interest earning assets	₩341,566	₩7,599	2.2%	₩382,346	₩11,955	3.1%	₩403,446	₩18,178	4.5%
Non-interest earning assets	52,607	383	0.7	61,294	429	0.7	65,149	480	0.7
Total assets	₩394,173	₩7,982	2.0%	₩443,640	₩12,384	2.8%	₩468,595	₩18,658	4.0%
Interest bearing liabilities									
Deposits	₩288,580	₩2,238	0.8%	₩318,855	₩ 4,677	1.5%	₩338,366	₩ 9,788	2.9%
Won	253,370	2,162	0.9	277,261	4,346	1.6	297,719	8,796	3.0
Foreign currency	35,210	76	0.2	41,594	331	0.8	40,647	992	2.4
Borrowings	16,171	76	0.5	20,169	274	1.4	21,877	666	3.0
Won	8,471	51	0.6	9,631	121	1.3	9,426	218	2.3
Foreign currency	7,700	25	0.3	10,538	153	1.5	12,451	448	3.6
Debentures	25,694	433	1.7	28,454	671	2.4	24,833	988	4.0
Won	19,762	366	1.9	22,073	485	2.2	18,787	607	3.2
Foreign currency	5,932	68	1.1	6,381	186	2.9	6,046	381	6.3
Other	6,103	33	0.5	6,953	145	2.1	7,793	310	4.0
Won	5,434	33	0.6	6,132	124	2.0	7,009	268	3.8
Foreign currency	669	0	0.0	821	21	2.6	783	41	5.3
Total interest bearing liabilities	₩336,548	₩2,780	0.8%	₩374,431	₩ 5,767	1.5%	₩392,868	₩11,752	3.0%
Non-interest bearing liabilities and equity	57,625	(430)	(0.7)	69,209	(430)	(0.6)	75,726	(449)	(0.6)
Total liabilities and equity	₩394,173	₩2,350	0.6%	₩443,640	₩ 5,337	1.2%	₩468,595	₩11,303	2.4%

(1) Defined as interest earned from or borne by an individual asset or liability divided by the average of its daily ending balances.
N.M. means not meaningful.

Analysis of Changes in Net Interest Income — Volume and Rate Analysis

The following table provides analyses of our changes in interest income, interest expense and net interest income based on changes in volume and changes in rates, on a separate basis, for the periods indicated. Information is provided with respect to (i) effects attributable to changes in volume (changes in volume multiplied by prior rate) and (ii) effects attributable to changes in rate (changes in rate multiplied by prior volume). Changes attributable to the combined impact of changes in rate and volume have been allocated proportionately to the changes due to volume changes and changes due to rate changes.

	Year Ended 31 December 2022 Compared to the Year Ended 31 December 2021			Year Ended 31 December 2023 Compared to the Year Ended 31 December 2022		
	Changes in Average Volume	Changes in Average Rate	Net Change	Changes in Average Volume	Changes in Average Rate	Net Change
	(a)	(b)	(a) + (b)	(a)	(b)	(a) + (b)
			(In billions of Won)			
Increase (decrease) in interest income from:						
Loans in Won	₩ 459	₩ 2,720	₩ 3,178	₩ 440	₩ 3,869	₩ 4,310
Loans in foreign currency	125	404	529	(5)	844	838
Due from banks	15	205	220	(15)	365	349
Securities	199	228	427	218	461	678
Total increase (decrease) in interest income	₩ 798	₩ 3,557	₩ 4,355	₩ 638	₩ 5,538	₩ 6,176
Increase (decrease) in interest expense on:						
Deposits	₩ 257	₩ 2,182	₩ 2,439	₩ 303	₩ 4,808	₩ 5,111
Borrowings	23	175	198	25	367	392
Debentures	50	187	238	(95)	411	317
Other interest-bearing liabilities	5	107	112	19	145	165
Total increase (decrease) in interest expense	₩ 335	₩ 2,652	₩ 2,987	₩ 253	₩ 5,732	₩ 5,985
Net increase (decrease) in net interest income	₩ 463	₩ 905	₩ 1,368	₩ 385	₩ (194)	₩ 191

Loan Portfolio

As of 31 December 2021, 2022 and 2023, the balance of our total loans before allowance for loan losses and net deferred loan fees and expenses was ₩310,232 billion, ₩331,497 billion and ₩348,908 billion, respectively, 86.6%, 86.4% and 87.5%, respectively, of which was denominated in Won and 13.4%, 13.6% and 12.5%, respectively, of which was denominated in other currencies, principally in U.S. dollars.

As of 31 December 2021, 2022 and 2023, our total loans after allowance for loan losses and net deferred loan fees and expenses was ₩309,178 billion, ₩330,186 billion and ₩347,247 billion, respectively.

Guarantees are not categorised as loans unless and until we have made a payment on behalf of a customer in relation to the guarantee.

Borrower Types

The table below sets forth our summaries of loans by type of borrower (before allowance for loan losses and net deferred loan fees and costs) as of the dates indicated.

	As of 31 December					
	2021		2022		2023	
	Amount	%	Amount	%	Amount	%
			(In billions of Won, except percentages)			
Large-sized businesses	₩ 41,137	13.3%	₩ 49,305	14.9%	₩ 52,615	15.1%
SMEs	118,140	38.1	129,743	39.1	143,439	41.1
Households	133,202	42.9	132,541	40.0	131,926	37.8
Public sector and others	17,754	5.7	19,908	6.0	20,929	6.0
Total	₩310,232	100.0%	₩331,497	100.0%	₩348,908	100.0%

Loan Types

The following table presents our loans by type as of the dates indicated.

	As of 31 December		
	2021	2022	2023
	Amount	Amount	Amount
	(In billions of Won)		
Loans in Won	₩257,201	₩274,028	₩292,565
Loans denominated in foreign currencies	28,249	32,054	31,794
Domestic import usance	4,189	4,546	3,834
Call loans	1,289	1,378	1,388
Bills purchased in Won	187	937	173
Bills purchased denominated in foreign currencies	5,799	5,289	4,041
Advance payments on acceptances and guarantees	12	6	11
Bonds purchased under resale agreements	11,381	11,777	13,754
Privately-placed corporate bonds	1,302	1,081	1,080
Others	623	401	269
Total loans (before allowance for loan losses and net deferred loan fees)	₩310,232	₩331,497	₩348,908
Total loans in Won	₩268,599	₩286,258	₩305,146
Total loans in denominated in foreign currencies	41,634	45,239	43,762
Deferred loan fees and expenses	379	356	383
Allowance for loan losses	(1,434)	(1,667)	(2,045)
Total loans (after allowance for loan losses and net deferred loan fees)	₩309,178	₩330,186	₩347,247

Loan Concentrations

We limit our total exposure to any single borrower as required by Korean regulations and pursuant to our internal policies. "Exposures" refer to our credits and other exposures, including debt securities held by us. "Credits" refer to our total credits (as reported to the FSC based on the FSC's asset classification criteria), the principal components of which include the total loan portfolio of our bank accounts, loans provided from our trust accounts and merchant bank accounts, and confirmed guarantees and acceptances (which are off-balance sheet items).

We determine our exposure limit based on the borrower's credit rating provided by our Credit Analysis System and adjust it if it would otherwise exceed the limit imposed by Korean regulations.

10 Largest Exposures by Borrower

As of 31 December 2023, on a separate basis, our 10 largest exposures totalled ₩33,914 billion and accounted for 9.8% of our total exposure (consisting of loans and other on-balance sheet items, confirmed guarantees and acceptances, and debt securities). The following table sets forth our total exposures to these top 10 borrowers as of 31 December 2023, on a separate basis.

	As of 31 December 2023			
	Loans and Other On-Balance Sheet Items	Confirmed Guarantees and Acceptances	Debt Securities	Total
	(In billions of Won)			
Korea Housing Finance Corporation	₩—	₩—	₩ 8,645	₩ 8,645
Korea Development Bank	—	—	7,583	7,583
Industrial Bank of Korea	45	—	3,742	3,787
Korea Electric Power Corporation	500	26	2,323	2,849
Korea SMEs and Startups Agency	—	—	2,784	2,784
Korea Land and Housing Corporation	—	—	2,124	2,124
National Agricultural Cooperative Federation	—	—	1,798	1,798
Meritz Securities Co., Ltd.	—	—	1,720	1,720
KB Kookmin Bank	360	—	1,072	1,433
Shinhan Securities Co., Ltd.	—	—	1,190	1,190
Total	₩905	₩ 26	₩32,981	₩33,913

Exposure to Main Debtor Groups

As of 31 December 2023, on a separate basis, 4.9% of our total exposure was to the main debtor groups as designated by the FSS. The main debtor groups consist mostly of *chaebols*. The following table shows, as of 31 December 2023, on a separate basis, our total exposure to the 10 *chaebol* groups to which we have the largest exposure.

	As of 31 December 2023			
	Loans and Other On-Balance Sheet Items	Confirmed Guarantees and Acceptances	Debt Securities	Total
	(In billions of Won)			
HD Hyundai Heavy Industries	₩ 960	₩3,241	₩—	₩ 4,201
Samsung	1,388	1,826	288	3,501
SK	1,782	139	60	1,981
LG	1,143	652	—	1,795
Hyundai Motors	598	967	45	1,610
Lotte	1,126	400	40	1,566
LS	243	446	—	689
Hanwha	201	437	10	648
GS	460	150	—	610
CJ	11	510	10	531
Total	₩7,912	₩8,768	₩453	₩17,132

Loan Concentration by Industry

The following table shows, as of 31 December 2023, the aggregate balances of our total loans by industry concentration. The amounts disclosed are before allowance for loan losses and net deferred loan origination fees and costs.

	As of 31 December 2023	
	Aggregate Loan Balance	Percentage of Loan Balances
	(In billions of Won, except percentages)	
Corporate loans[1]		
Financial services	₩ 26,872	7.7%
Manufacturing	55,111	15.8
Construction	6,373	1.8
Wholesale and retail	24,891	7.1
Real estate rental	49,585	14.2
Others	54,151	15.5
Subtotal	₩216,982	62.2%
Household loans	131,926	37.8
Total loans	₩348,908	100.0%

(1) Includes public sector loans.

Maturity Analysis (Loans in Won)

The following table sets out the scheduled maturities (time remaining until maturity) of our loan portfolio, excluding delinquent loans, as of 31 December 2023, on a separate basis. The amounts disclosed below are before allowance for loan losses and net deferred loan fees and expenses.

	As of 31 December 2023			
	1 Year or Less	Over 1 Year but Not More than 5 Years	Over 5 Years	Total
	(In billions of Won)			
Corporate loans	₩113,382	₩43,536	₩ 4,027	₩160,945
Household loans	40,467	16,261	71,376	128,104
Total gross loans in Won	₩153,849	₩59,797	₩75,403	₩289,049

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 instalments) after we conduct our normal loan review in accordance with our loan review procedures. In general, our corporate loans may be extended for periods of up to one year for a maximum aggregate term of six years from the date the relevant loan is initially made. Facilities loans that are bullet loans may be extended for periods of up to one year for a maximum term of 10 years, with partial payment of 10% or more of the initial loan amount required for each extension. Our working capital loans may be extended on an annual basis for an aggregate term of three to five years for unsecured loans and up to five years for secured loans. Facilities loans, which are generally secured, may be extended once for a maximum term of five years from the date when the relevant loan is initially made. Retail loans may be extended for additional terms of up to 12 months for a maximum aggregate of 10 years for both unsecured loans and secured loans.

Interest Rate Sensitivity (Loans in Won)

The following table shows, on a separate basis, our loans, excluding delinquent loans, denominated in Won by interest rate sensitivity as of 31 December 2023.

	As of 31 December 2023		
	Due Within 1 Year	Due After 1 Year	Total
	(In billions of Won)		
Fixed rate loans[1]	₩ 20,650	₩ 13,967	₩ 34,616
Variable or adjustable rate loans[2]	133,199	121,234	254,433
Total gross loans in Won	₩153,849	₩135,201	₩289,049

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

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

For additional information regarding our management of interest rate risk for our loans, see "*Risk Management — Market Risk Management — Trading Activities*".

Asset Quality of Loans

Loan Classifications

The FSC generally requires Korean financial institutions to analyse and classify their assets by quality into one of five categories. In making these classifications, we take into account a number of factors, including the financial position, profitability and transaction history of the borrower, and the value of any collateral or guarantee taken as security for the extension of credit. This classification method and our related provisioning policy are intended to fully reflect the borrower's capacity to repay.

The following is a summary of the asset classification criteria we apply for corporate and retail credits based on the asset classification guidelines of the FSC. We also apply different criteria for other types of credits such as loans to the Government or to government related or controlled entities, certain bills of exchange and certain receivables.

Asset Classification	Characteristics
Normal	Credits 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 credits.
Precautionary	Credits to customers that: • based on our consideration of their business, financial position and future cash flows, show potential risks with respect to their ability to repay the credits, although showing no immediate default risk; or • are in arrears for one month or more but less than three months.
Substandard	Either: • credits 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 • the portion that we expect to collect of total credits (1) extended to customers that have been in arrears for three months or more, (2) 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 (3) extended to customers who have outstanding credits that are classified as "doubtful" or "estimated loss."
Doubtful	Credits exceeding the amount we expect to collect of total credits to customers that: • 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 • have been in arrears for three months or more but less than 12 months.
Estimated Loss	Credits exceeding the amount we expect to collect of total credits to customers that: • based on our consideration of their business, financial position and future cash flows, are judged to have to be accounted as a loss as the inability to repay became certain due to serious deterioration in their ability to repay; • have been in arrears for 12 months or more; or • 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.

We classify our corporate loans based on the borrower's capacity to repay in consideration of its business operations, financial position and future cash flows, the past due period (if any) of the loans and status of any bankruptcy proceedings in which the borrower is involved. Loans to small companies and to households, however, are classified not by evaluating the debt repayment capability of the borrower but by the past due period (if any) of the loans and the status of any bankruptcy proceedings in which the borrower is involved. We generally classify all credits to a single borrower in the same category of classification, but guaranteed credits or credits secured by bank deposits, real estate or other collateral may be classified differently based on the guarantor's capability to perform under its guarantee or based on the value of collateral securing the credits.

Loan Loss Provisioning Policy

We have established an allowance for loan losses to absorb losses that we incur in our loan portfolio.

We first assess whether objective evidence of impairment exists individually for financial assets that exceed the individual assessment threshold of ₩1 billion and are therefore considered individually significant. For financial assets that are not individually significant, we assess whether the objective evidence of impairment exists collectively. If we determine that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, we include the asset in a group of financial assets with similar credit risk characteristics and collectively assess them for impairment.

Impairment loss is deducted from allowance for possible losses on credits when it is considered unrecoverable. If it is subsequently recovered, allowance for possible losses on credits increases and the changes are recognised in net income.

Allowance for possible losses on credits by individual assessment

Allowance for possible losses on credits is recognised by the difference between the asset's carrying amount and the present value of future cash flows expected to be collected, considering the borrower's management performance, financial position, overdue period and mortgage amount.

Allowance for possible losses on credits by collective assessment

Allowance for possible losses on credits is recognised by adjusting probability of default and loss given default from Basel III for the purpose of accounting and applying that to carrying amount. Such approach considers various elements, including borrower type, credit rating, size of portfolio, loss emergence period and collection period, and applies consistent assumptions so as to model the measurement of inbuilt loss and determine variables based on historical loss experience and current conditions.

Similar provisioning requirements apply to other types of credits such as guarantees and acceptances and loans from the trust accounts.

Allowances for Loan Losses

Analysis of Allowance for Loan Losses

The following table presents the changes in our allowance for possible loan losses on a separate basis for the periods indicated.

	Year Ended 31 December		
	2021	**2022**	**2023**
	(In billions of Won)		
Balance at the beginning of the year	₩1,178	₩1,226	₩1,456
Provisions of allowance for loan losses	138	353	534
Write-offs	(228)	(202)	(316)
Disposal of non-performing loans	(15)	(31)	(51)
Recovering of loans written off	151	90	97
Exchange rate fluctuation and others	2	20	18
Balance at the end of the year	₩1,226	₩1,456	₩1,739

The following table sets forth summaries of our credits, on a separate basis and as reported to the FSC, as of the dates indicated. "Credits" refer to our total credits (as reported to the FSC based on the FSC's asset classification criteria), the principal components of which include the total loan portfolio of our bank accounts, loans provided from our trust accounts and merchant bank accounts, and confirmed guarantees and acceptances (which are off-balance sheet items).

	As of 31 December					
	2021		2022		2023	
	Principal Amount	% of Total Credits	Principal Amount	% of Total Credits	Principal Amount	% of Total Credits
	(In billions of Won, except percentages)					
Normal	₩292,672	99.2%	₩315,440	99.2%	₩331,038	99.1%
Precautionary	1,597	0.5	1,872	0.6	2,046	0.6
Substandard	470	0.2	428	0.1	571	0.2
Doubtful	179	0.1	124	0.0	151	0.0
Estimated loss	108	0.0	111	0.0	156	0.0
Total credits[(1)]	₩295,026	100%	₩317,975	100%	₩333,961	100%
Allowances for credit losses	₩ 1,226	0.4%	₩ 1,456	0.5%	₩ 1,739	0.5%

(1) Net of present value discounts; includes Won-denominated loans at fair value through profit or loss.

Allocation of Allowance for Loan Losses

The following table presents the allocation of our loan loss allowance by loan type as of the dates indicated, on a separate basis.

	As of 31 December					
	2021		2022		2023	
	Amount	Loans as % of Total Loans	Amount	Loans as % of Total Loans	Amount	Loans as % of Total Loans
	(In billions of Won, except percentages)					
Large-sized businesses	₩ 530	43.2%	₩ 542	37.2%	₩ 436	25.1%
SMEs	421	34.3	671	46.1	970	55.8
Individuals	248	20.2	230	15.8	321	18.5
Others	27	2.2	12	0.9	11	0.6
Total allowance for loan losses	₩1,226	100.0%	₩1,456	100.0%	₩1,739	100.0%

Loan Ageing Schedule

The following table shows the loan ageing schedules, excluding accrued interest and before allowance for loan losses and net deferred loan fees and costs, for all our loans as of the dates indicated.

	Current		Past Due up to 3 Months		Past Due 3 to 6 Months		Past Due More than 6 Months		Total
	Amount	%	Amount	%	Amount	%	Amount	%	Amount
As of:	*(In billions of Won, except percentages)*								
31 December 2021	₩282,689	99.6%	₩ 784	0.3%	₩ 96	0.0%	₩223	0.1%	₩283,792
31 December 2022	301,932	99.5	1,262	0.4	146	0.0	154	0.1	303,494
31 December 2023	314,291	99.3	1,811	0.6	224	0.1	117	0.0	316,444

Loans to Companies in Workout and Rehabilitation

Our loans to borrowers under restructuring are managed and collected by our Credit Group. As of 31 December 2021, 2022 and 2023, on a separate basis, 0.09%, 0.05% and 0.04%, respectively, of our total loans, or ₩237.1 billion, ₩163.7 billion and ₩143.8 billion, respectively, was to borrowers under restructuring, on a separate basis.

Non-Performing Loans

Non-performing loans are defined as loans past due by more than three months. These loans are generally rated "substandard" or below under the FSC guidelines.

The following tables set forth, as of the dates indicated, our total non-performing loans by type of borrower, on a separate basis.

	As of 31 December					
	2021			2022		
	Total Loans[1]	Non-Performing Loans	Non-Performing Loans %	Total Loans	Non-Performing Loans	Non-Performing Loans %
	(In billions of Won, except percentages)					
Corporate[2]	₩164,440	₩499	0.3%	₩188,236	₩453	0.2%
Household	130,586	258	0.2	129,738	210	0.2
Total	₩295,026	₩757	0.3%	₩317,974	₩663	0.2%

	As of 31 December		
	2023		
	Total Loans[1]	Non-Performing Loans	Non-Performing Loans %
	(In billions of Won, except percentages)		
Corporate[2]	₩205,053	₩594	0.3%
Household	128,908	284	0.2
Total	₩333,961	₩878	0.3%

(1) Before allowance for loan losses and net deferred loan fees and costs.
(2) Includes loans to large corporations, SMEs and public and other.

10 Largest Non-Performing Loans

As of 31 December 2023, on a separate basis, our 10 largest non-performing loans accounted for 23.8% of our total non-performing loan portfolio. The following table shows, as of 31 December 2023, certain information regarding our 10 largest non-performing loans, on a separate basis.

	As of 31 December 2023		
	Principal Outstanding	Allowance for Loan Losses	Industry
	(In billions of Won)		
Borrower 1	₩ 60	₩ 60	Construction
Borrower 2	51	52	Construction
Borrower 3	19	5	Manufacturing
Borrower 4	19	—	Finance
Borrower 5	18	18	Construction
Borrower 6	13	—	Importing
Borrower 7	8	8	Shipbuilding
Borrower 8	7	0	Wholesale
Borrower 9	7	0	Manufacturing
Borrower 10	6	3	Energy
Total	₩209	₩146	

Sales of Non-Performing Loans

We have also issued securities backed by non-performing loans and other assets through special purpose companies. Some of these transactions involved transfers of loans in connection with asset securitisations. The assets are not included in our balance sheet as these transactions are classified as sold under K-IFRS.

We sell non-performing loans to savings banks and the Korea Asset Management Corporation. The aggregate principal amounts, on a separate basis, of non-performing loans we sold in connection with asset securitisation transactions were ₩143.8 billion, ₩145.3 billion and ₩530.0 billion in 2021, 2022 and 2023 respectively.

Non-Performing Loan Strategy

One of our primary objectives is to prevent our loans from becoming non-performing. Through our corporate credit rating system, we strive to limit or reduce our credit risk relating to future non-performing loans. Our credit rating system is designed to prevent our loan officers from extending new loans to borrowers with high credit risks based on the borrower's credit rating. 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.

Notwithstanding the above, if a loan becomes non-performing, an officer at the branch level responsible for monitoring non-performing loans will commence due diligence of the borrower's assets, send a notice demanding payment or a notice that we will take legal action or prepare for legal action.

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

- 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;
- identifying loans subject to write-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
- on a limited basis, identifying commercial loans subject to normalisation efforts based on the cash flow situation of the borrower.

Once the details of a non-performing loan are identified, we pursue early solutions for recovery. Actual recovery efforts on non-performing loans are handled by several of our departments or units, depending on the nature of such loans and of the borrower.

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 requesting payment;
- continuing to assess and evaluate assets of our borrowers; and
- if necessary, initiating legal action such as foreclosures, attachments and litigation.

In order to promote speedy recovery on loans subject to foreclosures and litigation, our policy is to permit the branch responsible for handling these loans to transfer them to the relevant unit at headquarters or regional headquarters.

Foreclosure and Collateral

Generally, when a non-performing loan becomes overdue for more than three months, we foreclose on mortgages or exercise our security interests in respect of other collateral. At that time, we will petition a court to foreclose on collateral and to sell that collateral through a court-supervised auction. Under Korean law, that petition must be filed with a court that has jurisdiction over the mortgaged property, and must be filed together with a copy of the mortgage agreement and an extract of the court registry regarding the subject property. The court will then issue an order to commence the foreclosure auction, which will be registered in the court registry of the subject property. If no bidder bids at least the minimum amount set by the court on the first auction date, the court will set another date for a subsequent auction approximately one month later. Each time a new auction date is set, the minimum auction price will typically be lowered by 20.0%. Korean law does not provide for non-judicial foreclosure.

Korean financial institutions, including us, maintain general policies to assess a potential customer's eligibility for loans based on that entity's credit quality, rather than requiring a particular level of collateral, especially in the case of large corporate borrowers. As a result, the ratio of our collateral to non-performing corporate loans is relatively low when compared with our total exposures. For secured household loans, however, we generally impose limits on loan amounts based on the collateral we receive.

We reflect this collateral level when we estimate the future cash flow for our loans, which we calculate using a discounted cash flow method. With respect to loans to borrowers that we do not believe will be going concerns in the future, the lower collateral ratio has a direct effect on cash flow estimates and results in a higher level of allowances. With respect to loans to borrowers that we expect to be going concerns, the lower collateral ratio has an effect on cash flow estimates, but we also consider other factors, including future operating income and future asset disposals and restructuring, in determining allowance levels. Accordingly, for these latter borrowers, the effect of lower collateral levels on allowances is mitigated by other characteristics of the borrower, and that lower collateral level will not necessarily result in a higher level of allowances.

Loan Write-Offs

Our loan write-offs were ₩260.8 billion, ₩428.7 billion and ₩402.9 billion in 2021, 2022 and 2023, respectively.

Basic Principles

We attempt to minimise loans to be written-off, by practicing a sound credit approval process based on credit risk analysis prior to extending loans and a systematic management of outstanding loans.

Loans to be Written-Off

Loans are written-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, bankruptcy, dissolution or the shutting down of the business of the debtor;
- loans for which collection is not foreseeable due to the death or disappearance of the debtor;
- loans for which expenses of collection exceed the collectable amount;
- loans on which collection is not possible through legal or any other means; or
- the portion of loans classified as "estimated loss," net of any recovery from collateral, which is deemed to be uncollectible.

Procedure for Write-Offs

All applications for our loan write-off are submitted to our credit group, whether they are corporate loans or individual loans. Such applications for write-off are generally submitted immediately after the relevant loan becomes one month past due, which our credit group will then evaluate. Once loans are written-off, they are derecognised from our balance sheet.

Credit Portfolio

The table below sets forth, on a separate basis, our credit portfolio (as reported to the FSC based on FSC's asset classification criteria) as of the dates indicated.

	As of 31 December		
	2021	2022	2023
	(In billions of Won)		
Banking account			
Loans	₩296,518	₩317,265	₩333,255
Commercial papers (including guaranteed notes)	—	—	—
Other receivables	2	2	1
Confirmed acceptances and guarantees	11,234	14,480	17,518
Sub-total	₩307,753	₩331,747	₩350,774
Trust account			
Trust loans	₩ 175	₩ 84	₩ 76
Privately-placed corporate bonds	—	—	—
CP (including guaranteed notes)	—	—	—
Sub-total	₩ 175	₩ 84	₩ 76
Merchant banking account			
Loans	₩ 758	₩ 199	₩ 200
Financial leases	—	—	—
Confirmed acceptances and guarantees	—	—	—
Sub-total	₩ 758	₩ 199	₩ 200
Total credits(1)	₩308,686	₩332,029	₩351,050

(1) Before present value discounts; does not include Won-denominated loans at fair value through profit or loss.

Investment Portfolio

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

In making securities investments, we take into account a number of factors, including macroeconomic trends, industry analysis and evaluation of credit.

Our investments in securities are also subject to a number of guidelines, including limitations prescribed under the Bank Act. Under these regulations, we must limit our investments in shares and securities with a maturity in excess of three years (other than monetary stabilisation bonds issued by the Bank of Korea, national government bonds and government guaranteed bonds) to 100.0% of our total Tier I and Tier II capital. Generally, we are 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 as permitted under the Regulation on the Supervision of the Banking Business). Further information on the regulatory environment governing our investment activities is set out in "*Regulation and Supervision*".

Securities Classifications

The classification guidelines and methods of valuation for securities are as follows:

Classification	Description
Financial assets at FVTPL	Financial assets at fair value through profit or loss (FVTPL) include financial assets held-for-trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held-for-trading if they are acquired for the purpose of selling or repurchasing in the short term. Also, financial assets can be designated at FVTPL if assets or liabilities are measured in accordance with different standards or in order to get rid of or reduce accounting mismatch. Financial assets measured at FVTPL are measured at fair value and the gain or loss on valuation is recognised as profit or loss. Dividends and interest income from the financial assets are also recognised as profit or loss.
Financial assets at FVOCI	Financial assets that meet the following two conditions must be measured at fair value through other comprehensive income (FVOCI): (i) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, and (ii) the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. Financial assets at FVOCI are measured at fair value after initial recognition. Gain or loss from changes in the fair value is recognised as other comprehensive income, except for (i) interest income in accordance with the effective interest rate method, (ii) dividends and (iii) foreign exchange differences on monetary assets that are directly recognised as profit or loss. When financial assets measured at FVOCI are disposed of, the cumulative income recognised in other comprehensive income is transferred to the current profit or loss. However, the

Classification	Description
	cumulative income recognised for equity securities designated as financial assets measured at FVOCI is not transferred to the current profit or loss. The fair value of financial assets measured at FVOCI presented in foreign currencies is translated using the exchange rate as at the end of the reporting period. Changes in the fair value from exchange differences due to changes in amortised cost are recognised in the current profit or loss, while other changes are recognised directly in equity.
Financial assets at amortised cost	Financial assets that meet the following two conditions must be measured at amortised cost: (i) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, and (ii) the objective of the entity's business model is to hold the financial asset to collect the contractual cash flows. After initial recognition, the financial assets are recognised at amortised cost using the effective interest rate, net of the allowance for doubtful accounts.

Privately-placed commercial paper, privately-placed corporate bonds and guaranteed notes are not subject to the above valuation method. Instead, they are classified as loans and are subject to the corresponding loan loss provisioning method.

Book Value

The following table sets out the book value of securities in our investment portfolio as of the dates indicated.

	As of 31 December		
	2021	2022	2023
	(In billions of Won)		
Financial assets at FVTPL			
Stocks	₩ 117	₩ 64	₩ 118
Government and public bonds	1,031	2,069	4,555
Financial bonds	429	563	398
Corporate bonds	915	913	1,061
Beneficiary certificates	2,292	2,733	3,265
Securities denominated in foreign currencies	1,498	1,786	1,508
Derivative assets held for trading	4,101	9,852	5,966
Other securities (investment, etc.)	365	468	637
Convertible privately-placed bonds	171	7	7
Sub-total	₩10,919	₩18,455	₩17,515
Financial assets at FVOCI			
Stocks	₩ 801	₩ 715	₩ 610
Investments in partnership	0	0	—
Government and public bonds	9,783	9,875	9,261
Finance bonds	12,407	10,522	12,569
Corporate bonds and others	5,914	6,101	7,067
Other securities	80	89	33
Securities denominated in foreign currencies	6,249	5,659	7,355
Sub-total	₩35,234	₩32,961	₩36,894

	As of 31 December		
	2021	2022	2023
	(In billions of Won)		
Securities measured at amortized cost			
Government and public bonds	₩ 5,879	₩ 7,269	₩ 6,576
Finance bonds	1,353	7,892	7,376
Corporate bonds and others	12,089	18,615	18,726
Securities denominated in foreign currencies	3,166	3,890	3,680
Allowance for doubtful accounts	(19)	(83)	(20)
Sub-total	₩22,468	₩37,583	₩36,338
Total securities(1)	₩68,621	₩88,999	₩90,747

(1) Excluding investment stocks using the equity method.

Maturity Analysis

The following table categorises our debt securities (carrying amount) by maturity as of 31 December 2023, on a separate basis.

	As of 31 December 2023				
	Within 1 Year	Over 1 but Within 5 Years	Over 5 but Within 10 Years	Over 10 Years	Total
	(In billions of Won)				
Bonds	₩10,251	₩12,173	₩—	₩254	₩22,679
Subordinated bonds	774	1,300	2,021	—	4,095
Hybrid bonds	—	387	—	—	387
Others	—		—	—	—
Total	₩11,025	₩13,860	₩ 2,021	₩254	₩27,160

Concentrations of Risk

We held no securities of individual issuers where the aggregate book value of those securities exceeded 10% of our equity as of 31 December 2023.

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, payment guarantees for issuance of debentures, letters of guarantee for importers, commercial letters of credit and performance guarantees. The contractual amount of these financial instruments represents the maximum possible loss that would occur if the counterparty were to draw down the commitment or we were to fulfil our obligation under the guarantee and the counterparty were to fail to perform under the contract.

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

	As of 31 December		
	2021	2022	2023
	(In billions of Won)		
Acceptances and guarantees			
Financial guarantees in Won	₩ 365	₩ 445	₩ 496
Financial guarantees in foreign currencies	3	3	2
Confirmed payment guarantees in Won	1,858	2,446	2,447
Confirmed payment guarantees in foreign currencies	9,788	12,531	14,951
Contingent payment guarantees	4,845	5,657	6,137
Sub-total	₩16,859	₩ 21,081	₩ 24,033
Bills endorsed	12	11	1
Total acceptances and guarantees and bills endorsed	₩16,871	₩ 21,092	₩ 24,034

	As of 31 December		
	2021	2022	2023
	(In billions of Won)		
Commitments			
Loans in Won	₩57,398	₩ 60,463	₩ 65,144
Loans in foreign currencies	23,830	28,960	30,838
Credit lines on asset-backed securities	248	85	118
Purchase of securities(1)	9,343	11,875	13,626
Discounted notes from merchant banking	790	620	770
Total commitments	₩91,609	₩102,003	₩110,496

(1) Includes purchases of asset-backed commercial papers

We have credit-related commitments that are not reflected on the balance sheet, which primarily consist of commitments to extend credit and letters of credit. Commitments to extend credit, including credit lines, represent unfunded portions of authorisations 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 authorising third parties to draw drafts on us up to a stipulated amount under specific terms and conditions. They are generally short-term and collateralised by the underlying shipments of goods to which they relate and therefore have less risk.

Other financial and performance guarantees are irrevocable promises to make payments to beneficiaries in the event that our customers fail to fulfil their obligations or to perform under certain contracts. Liquidity facilities to special purpose entities ("**SPEs**") represent irrevocable commitments to provide contingent liquidity credit lines to SPEs 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.

Funding

We fund our lending and other activities using various sources, both domestic and foreign. Our primary funding strategy is to maintain stable and low-cost funding. We have in the past achieved this in part by increasing the average balances of low-cost customer deposits, in particular demand deposits and savings deposits. Customer deposits are our principal funding source. We also acquire funding through borrowings (including from other financial institutions, the Bank of Korea, other Government-affiliated funds and entities and other lenders, call money, bonds sold under repurchase agreements and bills sold) and debentures (including senior and subordinated debentures).

Deposits

Although the majority of our deposits are short-term, it has been our experience that the majority of our depositors generally roll over their deposits at maturity, providing us with a stable source of funding. The following tables show our average balances of deposits and the average rates paid on our deposits, on a separate basis, for the periods indicated.

	Year Ended 31 December								
	2021			2022			2023		
	Average Balance	Interest Expense	Average Rate Paid[(1)]	Average Balance	Interest Expense	Average Rate Paid	Average Balance	Interest Expense	Average Rate Paid
	(In billions of Won, except percentages)								
Low cost deposits	₩117,049	₩ 246	0.2%	₩121,220	₩ 592	0.5%	₩111,031	₩1,024	0.9%
Time deposits	130,855	1,381	1.1	141,226	2,936	2.1	164,341	6,368	3.9
Instalment deposits	6,270	122	1.9	5,775	118	2.0	6,013	199	3.3
Marketable deposits	1,921	22	1.2	11,750	309	2.6	19,074	796	4.2
Deposits in foreign currencies	35,210	30	0.1	41,594	279	0.7	40,647	939	2.3
Total deposits[(2)]	₩291,304	₩1,800	0.6%	₩321,565	₩4,234	1.3%	₩341,106	₩9,327	2.7%

(1) Defined as interest expense of each deposit divided by the average of its daily ending balances.

(2) Calculated as a sum of Won-denominated deposits, foreign currency deposits, certificate of deposits, Won-denominated bonds sold under repurchase agreements and bills sold.

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

Maturities of Deposits

The following table presents, on a consolidated basis, the remaining maturities of our deposits as of 31 December 2023.

	As of 31 December 2023						
	On Demand	**Less than 1 Month**	**1 – 3 Months**	**3 Months – 1 Year**	**1 Year – 5 Years**	**More than 5 Years**	**Total**
	(In billions of Won)						
Deposits	₩149,780	₩35,914	₩50,697	₩123,140	₩16,334	₩1,430	₩377,297

Borrowings

The following table presents information regarding our borrowings as of the dates indicated.

	As of 31 December					
	2021		**2022**		**2023**	
	Balance Outstanding	**Interest Rate**	**Balance Outstanding**	**Interest Rate**	**Balance Outstanding**	**Interest Rate**
	(In billions of Won, except percentages)					
Borrowing in Won						
Bank of Korea borrowings . . .	₩ 4,474	0.25%	₩ 5,085	0.25~1.75%	₩ 3,421	0.25~2.00%
Government borrowings	1,933	0.50~2.16%	2,062	0.50~5.61%	2,155	0.50~5.16%
Other borrowings	3,480	0.00~2.80%	3,585	0.00~3.43%	4,844	0.00~3.60%
Sub-total	₩ 9,886		₩10,732		₩10,420	
Borrowing in foreign currencies						
Bank overdrafts	313	0.58~9.99%	381	0.01~12.50%	268	0.00~20.13%
Other borrowings	5,130	-0.57~5.76%	9,665	0.66~8.50%	9,250	0.00~7.70%
Sub-total	₩ 5,443		₩10,045		₩ 9,519	
Call money						
Call money in foreign currencies	1,092	-0.30~17.71%	971	0.09~5.60%	934	0.07~7.40%
Bonds sold under repurchase agreements						
Bonds sold under repurchase agreements in Won	₩ 0	0.00%	₩ 0	0.00%	₩ 0	0.00%
Bonds sold under repurchase agreements in foreign currencies	1,079	0.81~1.06%	488	5.55~5.60%	1,141	6.03~6.50%
Sub-total	₩ 1,079		₩ 488		₩ 1,141	
Others						
Bills sold	26	0.00~1.65%	26	0.00~4.39%	27	0.00~4.06%
Deferred origination costs	—		(5)		(7)	
Total	₩17,524		₩22,257		₩22,034	

RISK MANAGEMENT

As a financial services provider, we are exposed to various risks related to our lending and trading businesses, our deposit-taking activities and our operating environment. We strive to maintain a comprehensive system of risk management to understand, measure and monitor such risks in order to ensure the soundness of our assets and stabilise long-term profitability.

Our Risk Management Group monitors and manages our risk exposure and directly implements and ensures compliance with our risk policies and guidelines at an operational level. It reports to our Risk Management Committee and our Risk Management Steering Committee and is divided into three departments:

- the credit risk management department, which is responsible for credit risk and credit concentration risk;
- the credit review department, which is responsible for planning and executing credit review policies; and
- the integrated risk management department, which is responsible for market risk, operational risk and other risks.

Our Risk Management Committee, comprised of three Outside Directors and one Non-Standing Director, is the centralised body ultimately responsible for risk management. It provides board-level direction regarding risk management strategies and policies and reports to our board of directors. Our Risk Management Steering Committee, consisting of the Heads of six Groups (Risk Management Group, Global Business Group, Marketing Group, Management Planning Group, Credit Group and Financial Markets Group), reports directly to the Risk Management Committee and our president and chief executive officer, and works with our Risk Management Group to implement the execution of these strategies and policies.

Credit Risk Management

Credit Risk Assessment and Management

Credit risk is the risk of losses in the event of borrower defaults. Our policy objectives in credit risk management are to improve asset quality, reduce non-performing loans and minimise credit concentration risk through diversified, balanced and risk-weighted loan portfolios. To this end, we manage credit risk by establishing credit risk limits, assessing current risk levels and monitoring the status of borrowers, including their compliance with risk limits, asset quality, default rate and level of risk exposure.

We assess and manage all types of credit exposures, including loans, guarantees, investment securities and derivative products. The current level of credit risk is determined by “expected” and “unexpected” loss levels. We calculate the expected loss level based on the probability of default, the loss given default and the exposure at default, and use the measured expected loss to determine interest rates and provision levels in relation to new or renewed credits. The unexpected loss level, which incorporates the possibility of fluctuations in the expected loss level, is calculated by the Advanced Internal Rating-Based method as proposed by the Basel Committee for internal control purposes and by a risk-weighted method approved by the FSS for use with regard to external regulations.

Credit Evaluation and Approval

In general, we evaluate the credit of every loan applicant and guarantor before approving any loans. The evaluation and approval process differs depending on whether the loan is a corporate loan or a retail loan.

Our corporate credit evaluation system assigns credit risk ratings to corporate borrowers by measuring and analysing various quantitative and qualitative risk factors. After a preliminary credit rating is generated in light of the borrower’s probability of default and past ratings, the rating is adjusted based on the borrower’s ownership structure, corporate history, outlook, contingent liabilities, credit history and other special considerations to produce a final credit rating. We may apply different models tailored to specific characteristics of the potential borrower to make the rating more predictive and ensure a more stable calculation of the probability of default. Evaluation results are used to determine loan approval and loan size and to set loan limits at the industry level and the individual loan account level.

Retail exposure consists of secured exposures (consisting primarily of housing loans) and other unsecured exposures. For evaluating and approving retail credit applications, we use a probability of default segmentation system that classifies retail exposures to appropriate asset categories based on borrower- and transaction-specific characteristics and arrears information. The system is designed to form asset categories consisting of exposures with similar risk characteristics and reclassifies exposures when there is reason for significant changes in the probability of default.

Market Risk Management — Non-Trading Activities

Liquidity Risk Management

Liquidity risk is the risk of insolvency, default or loss due to disparities between inflow and outflow of funds. It includes the risk of having to obtain funds at a high price or having to dispose of securities at an unfavourable price due to lack of available funds. We seek to minimise liquidity risk through early detection of risk factors related to sourcing and managing funds and by maintaining an appropriate level of liquidity through systematic management.

Our liquidity risk management covers all classes of assets and liabilities on and off the balance sheet that are related to capital inflows and outflows. Liquidity risk is managed in accordance with the risk limits and guidelines established internally and by relevant regulatory authorities. Pursuant to principal regulations applicable to banks as promulgated by the FSC, we are required to keep a specific Won currency liquidity coverage ratio and a foreign currency liquidity coverage ratio and we must maintain relevant ratios above certain minimum levels. Specifically, the FSC had required us and other Korean commercial banks to maintain LCR of not less than 100% starting from 1 January 2019, but, due to the volatility and uncertainty facing the financial markets as a result of the COVID-19 pandemic, temporarily adjusted LCR requirement to 85%. The FSS had subsequently decided to gradually restore this ratio on a quarterly basis from the third quarter of 2022 with 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 FSS 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. In a subsequent adjustment reflecting ongoing market concerns, the FSS, in June 2023, determined to set the ratio at 95%. Furthermore, the FSS decided in November 2023 to keep the LCR at 95% ratio until June 2024, ensuring a strategic approach to liquidity management amid unpredictable financial conditions. The FSC defines liquidity coverage ratio as high liquid assets that can be easily converted to cash, as divided by the net amount of cash outflow for the next thirty days 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 25 October 2018 (and further amended from time to time), to implement the liquidity coverage ratio requirements under Basel III. In addition, we are required to maintain a minimum FLCR. The FLCR is computed as (a) the value of a banking organisation's HQLA, divided by (b) its total expected net cash outflows over the next 30 calendar days under stress scenarios, each in terms of its foreign currency assets and liabilities. The FSC required us and other Korean commercial banks to maintain FLCR of not less than 80%, but, due to the volatility and uncertainty facing the financial markets as a result of the COVID-19 pandemic, had temporarily adjusted FLCR requirement to 70%. As of the date of this Offering Circular, the applicable FLCR requirement has been restored to 80%.

We use a customer behaviour model for more advanced forecasting of asset and liability maturities and manage a contingency plan for timely response to liquidity crises

The following tables show our (i) average liquidity coverage ratio and (ii) average foreign currency liquidity coverage ratio, each for the month of December 2023 in accordance with the regulations of the FSC.

Average Liquidity Coverage Ratio

	For the Month of December 2023
	(In billions of Won, except percentages)
High liquid assets (A)	₩ 79,307
Net cash outflows over the next 1 month (B)	78,946
Cash outflow	113,723
Cash inflow	34,777
Liquidity coverage ratio (A/B)	100.5%

Average Foreign Currency Liquidity Coverage Ratio

	For the Month of December 2023
	(In millions of US$, except percentages)
High liquid assets (A)	US$11,178
Net cash outflows over the next 1 month (B)	6,999
Liquidity coverage ratio (A/B)	159.7%

Market Risk Management — Trading Activities

Trading activities we recognise as entailing market risk exposure include:

- trading activities for our account to realise short-term profits in debt and equity markets and foreign exchange markets based on short-term forecast of changes in the market situation; and
- trading activities involving derivatives, such as swaps, forwards, futures and option transactions, to realise profits primarily from arbitrage transactions and, to a lesser extent, from selling derivative products to our customers and to hedge market risk incurred from those activities.

Our Risk Management Committee decides the overall price risk ceiling and distributes appropriate risk limits to each trading activity.

Commencing in 2023, we replaced the use of daily VaR with Basel III's revised standardized model to measure market risk. Under this model, we measure our market risk capital by aggregating (i) risk capital measured using the sensitivities-based method, (ii) default risk capital and (iii) residual risk add-on:

- risk capital measured using the sensitivities-based method represents the linear and non-linear losses that can result from adverse changes in interest rates, credit spreads, equity prices, foreign exchange rates and commodities prices;
- default risk capital represents the losses that can result from any unexpected default of an entity not contemplated under the sensitivities-based method; and
- residual risk add-on represents any other losses that are not contemplated under the sensitivities-based method or are not considered to result from the risk of default.

The following table shows our market risk capital for each category of market risk as of December 31, 2023:

Risk Categories		Risk Capital
		(in billions of Won)
Sensitivities-based risk	General interest rate risk	₩ 48,762
	Credit spread risk: non-securitizations	31,929
	Credit spread risk: securitizations (non-correlation trading portfolio)	—
	Credit spread risk: securitizations (correlation trading portfolio)	—
	Equity risk	24,666
	Foreign exchange risk	407,954
	Commodity risk	—
Default risk	Non-securitizations	36,230
	Securitizations (non-correlation trading portfolio)	—
	Securitizations (correlation trading portfolio)	—
Residual risk add-on		614
Total		₩550,155

Price Risk Management

Price risk is the risk of holding or taking positions in equities and equity-related derivatives' delta equivalent position. We separate price risk due to general market variables such as stock prices, exchange rates and interest rates from price risk due to events that only affect particular issuers.

Our trading equity portfolio consists of stocks listed on the KRX KOSPI Market or the KRX KOSDAQ Market and nearest-month or second nearest-month futures contracts under strict limits on diversification as well as limits on positions. We have been particularly focused on managing risk in these equities due to the level of volatility in the Korean stock market. On a separate basis, we held no equity securities denominated in Won in our trading account as of 31 December 2023.

Interest Rate Risk Management

Interest rate risk arises when interest rate fluctuations cause unexpected changes in the value of rate sensitive assets and liabilities. The principal objectives of our interest rate risk management are to generate stable net interest income and to protect our net asset value against such fluctuations.

We monitor and manage our interest rate risk based on various analytical measures such as interest rate gap, duration gap and net portfolio value and net interest income simulations, and also monitor our interest rate VaR limits, interest rate earnings at risk ("**EaR**") limits and interest rate gap ratio limits on a monthly basis. Using the standard framework established by the Bank for International Settlements, we measure our interest rate VaR and interest rate EaR based on simulated estimations of the maximum decrease in net asset value and net interest income in a one-year period based on various scenario analyses of historical interest rates. Our integrated risk management department monitors compliance with interest rate risk exposure limits set by our Risk Management Committee.

Operational and Other Risk Management

Operational Risk Management

We define operational risk broadly to include all financial and non-financial risks, other than credit and market risk, resulting from inadequate internal processes, personnel and systems or from external events. Such risks include legal risk, but exclude strategic and reputational risk.

Through our operational risk management, we strive to not only satisfy regulatory requirements, but also provide internal support through the cultivation of a strong risk management culture, reinforcement of internal controls, improvement of work processes and provision of timely feedback to our management members and staff. We regularly measure operational risk and refine operational risk policies and procedures to manage and control the level of risk arising from changes in operational environment and internal control. In addition, we maintain a risk and control self- assessment (RCSA) system to ensure proper monitoring and measurement of operational risk in each of our business groups and have internal control managers in all of our departments and branches to update such self-assessments on a quarterly basis.

Other Risk Management

Other risks include strategic and reputational risks. As these risks are difficult to quantify, we use qualitative risk and control self-assessments to monitor and limit the level of risk.

MANAGEMENT AND EMPLOYEES

Management

Board of Directors

Our board of directors has the ultimate responsibility for managing our affairs. The board currently comprises two Standing Directors, one Non-standing Director, and five Outside Directors.

Our articles of incorporation provide that the board must have at least five and up to eleven directors. Standing directors must comprise less than 50% of the total number of directors. Each standing director is elected for a term of office up to three years as decided in the meeting of shareholders, and each outside director is elected for a term of office up to two years. These terms are subject to the Korean Commercial Code, the Bank Act, the Act on the Corporate Governance of Financial Companies (in effect since 1 August 2016) and related regulations. Each director may be re-elected, subject to these laws and regulations.

Our board of directors meets regularly on a quarterly basis to discuss and resolve various corporate matters. The board may also convene for additional extraordinary meetings at the request of any of the directors.

The names and positions of our directors are set forth below. The business address of all of the directors is our registered office at 35 Eulji-ro, Jung-gu, Seoul, Korea.

Standing Directors

As of the date of this Offering Circular, we have two Standing Directors, who are full-time employees of the Bank and hold executive positions as below.

Name	Age	Position	Officer Since	Term Ends
Seung Lyul Lee	61	President and Chief Executive Officer	1 January 2023	31 December 2024
Byung Jin Min	57	Standing Member of Audit Committee	23 March 2023	Annual General Meeting 2024

Mr. Seung Lyul Lee, age 61, has served as our President and CEO since 2 January 2023. Prior to serving as our President and CEO, he served as the President and CEO of Hana Life Insurance and served at various roles with us and Hana Financial Group. Mr. Park has an undergraduate degree in economics from Seoul National University.

Mr. Byung Jin Min, age 57, has served as our Standing Member of Audit Committee since 23 March 2023. Prior to serving as our Standing Director, he served as the Deputy Governor and the Director General at the Financial Supervisory Service. Mr. Min has an undergraduate degree from Seoul National University in business administration and an M.B.A. from Thunderbird School of Global Management at Arizona State University.

Non-Standing Directors

As of the date of this Offering Circular, we have one Non-Standing Director, who is neither a full-time employee nor an executive officer of the Bank but is otherwise affiliated with the Bank, as below.

Name	Age	Position	Director Since	Term Ends	Position Outside the Bank
Jong Moo Park	57	Non-Standing Director	23 March 2023	Annual General Meeting 2023	Deputy President, Hana Financial Group

Outside Directors

Our Outside Directors are selected based on their experience and knowledge in diverse areas, which include law, finance, economics, management and accounting. We currently have five Outside Directors, all of whom were nominated by the Outside Director Candidate Recommendation Committee and approved by our shareholders. As of the date of this Offering Circular, our outside directors are as follows:

Name	Age	Position	Director Since	Term Ends
Jong Hak Sohn	63	Outside Director	12 August 2022	Annual General Meeting 2024
JinQ Jeon	53	Outside Director	25 April 2022	Annual General Meeting 2024
Hyun Cha Choe	62	Outside Director	9 July 2021	Annual General Meeting 2024
Young Sun Kwon	60	Outside Director	20 March 2024	Annual General Meeting 2025
Do Jin Kim	65	Outside Director	20 March 2024	Annual General Meeting 2025
Sangtai Choi	68	Outside Director	20 March 2024	Annual General Meeting 2025

Board Practices

Committees of the Board of Directors

We currently have five management committees that serve under the board:

- Audit Committee;
- Evaluation and Compensation Committee;
- Outside Director Candidate Recommendation Committee;
- Risk Management Committee; and
- Consumer Risk Management Committee.

The board appoints each member of the above committees except for members of the Audit Committee, who are elected by our shareholders at the annual general meeting.

Audit Committee

The Audit Committee consists of three Outside Directors, Sangtai Choi, Jong Hak Sohn and JinQ Jeon, and one Standing Director, Byun Jin Min. The appointment of the chairperson of the Audit Committee is pending as of the date of this Offering Circular, which will be determined at the 2024 general meeting of shareholders. This committee reviews all audit and compliance-related matters and makes recommendations to our board. It is also responsible for the following:

- establishing, executing and evaluating the results of our internal audit plan (including business, financial, management, compliance and IT audits);
- appointing and/or dismissing the general manager of our auxiliary audit division;
- evaluating our internal control system; and
- appointing and overseeing our outside auditors and setting internal procedures or making decisions on matters that are related to auditing.

The committee holds regular meetings quarterly.

The names and positions of our executive officers as of the date of this Offering Circular are set out below. All of our executive officers are employed on a full-time basis.

Name	Age	Position	Officer Since	Term Ends
Seung Lyul Lee	61	President and Chief Executive Officer	1 January 2023	31 December 2024
Byung Joon Park	58	Deputy President	1 January 2023	31 December 2024
Young Su Sung	59	Deputy President	1 January 2023	31 December 2024
Woo Hong Jun	59	Deputy President	1 January 2023	31 December 2024
Xiaofeng Mao	52	Deputy President	16 August 2022	15 August 2024
Young Il Kim	53	Deputy President	1 January 2023	31 December 2024
Yong Seok Kim	57	Deputy President	1 January 2023	31 December 2024
Han Uk Kim	56	Deputy President	1 January 2023	31 December 2024
Hyun Su Kim	58	Deputy President	1 January 2023	31 December 2024
Dong Won Yang	57	Deputy President	1 January 2023	31 December 2024
Jeong Taek Oh	56	Deputy President	1 January 2023	31 December 2024
Seon Yong Lee	57	Deputy President	1 January 2023	31 December 2024
Dong Won Lee	57	Deputy President	1 January 2024	31 December 2024
Tae Soon Park	55	Deputy President	1 January 2024	31 December 2024
Young Hun Kim	53	Deputy President	1 January 2024	31 December 2024
Ho Jin Jeon	56	Deputy President	1 January 2024	31 December 2024
Eun Bae Lee	56	Deputy President	1 January 2024	31 December 2024
Young Soon Cho	55	Deputy President	1 January 2024	31 December 2024
Jae Chol Lee	55	Deputy President	1 January 2024	31 December 2024
Dong Yeol Lee	53	Deputy President	1 January 2024	31 December 2024
Hyo Goo Hwang	55	Managing Director	1 January 2023	31 December 2024
Tae Gun Cha	54	Managing Director	1 January 2023	31 December 2024
Joon Hyung Chung	54	Managing Director	1 January 2024	31 December 2025
Myeong Hwan Bang	53	Managing Director	1 January 2024	31 December 2025
Kyeong Cheol Yoo	53	Managing Director	1 January 2024	31 December 2025
Chang Wook Pae	53	Managing Director	1 January 2024	31 December 2025
Hee Soo Jung	52	Managing Director	1 January 2024	31 December 2025
Beom Jun Cho	49	Managing Director	1 January 2024	31 December 2025

Employees

As of 31 December 2023, on a separate basis, we had a total of 11,885 employees consisting of 10,682 full-time employees and 1,203 contract-based employees (including 381 part-time contract-based employees). Employee compensation is based on a combination of base salary and wages, overtime and periodic bonuses. Bonuses are paid based on individual performance and business unit performance. We grant our full-time employees annual increases in base salary. For the years ended 31 December 2021, 2022 and 2023, our salaries (which include regular wages, overtime and bonuses) amounted to ₩1,618 billion, ₩1,615 billion and ₩1,655 billion, which represented 54.4%, 48.7% and 48.0% of our total general and administrative expenses, respectively. We also provide a wide range of benefits to our full-time employees, including medical insurance, employment insurance and life insurance. We believe that our compensation package is similar to that offered by our peer financial institutions. We have not experienced any material strikes or labour disputes in recent years, and we consider labour relations with members of our work-force to be good. However, there can be no assurance that we will be able to maintain such a working relationship with our employees and will not experience labour disputes resulting from disagreements with the labour unions in the future.

As of the date of this Offering Circular, we have one labour union, which was created on 1 January 2017 upon the merger of the two existing unions, the Korea Exchange Bank branch of the Korean Financial Industry Union (established in 1960) and the Hana Bank branch of the Korean Financial Industry Union (established in 1982). Every two years, our management and labour union negotiate and enter into a new collective bargaining agreement that has a two-year duration, while annual wage adjustments are negotiated every year. On 27 January 2023, we entered into a collective bargaining agreement with the labour union.

In accordance with the National Pension Act, we contribute an amount equal to 4.5% of employee wages, and each employee contributes 4.5% of his or her wage into each employee's personal pension account. In addition, in accordance with the Guarantee of Worker's Retirement Benefits Act, we have adopted a retirement pension plan for our employees. Contributions under the retirement pension plan are deposited annually into a financial institution, and an employee may elect to receive a monthly pension or a lump-sum amount upon retirement. Our retirement pension plan is in the form of a defined benefit plan, which guarantees a certain payout at retirement, according to a fixed formula based on the employee's average salary and the number of years for which the employee has been a plan member. Under Korean law, we may not terminate the employment of full-time employees except under certain circumstances.

Shareholders

The following table presents information regarding the beneficial ownership of our common shares as of 31 December 2023 by each person or entity known to us to own beneficially more than 5.0% of our outstanding common shares.

Except as otherwise indicated, each shareholder identified by name has:

- sole voting and investment power with respect to its shares; and
- record and beneficial ownership with respect to its shares.

Beneficial Owner	Number of Common Shares Owned	% of Ownership
Hana Financial Group	1,071,915,717	100%
Total	1,071,915,717	100%

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

As of 31 December 2023, there were ₩582 million loans outstanding made by us to our key management members. There are no guarantees provided by us and our consolidated subsidiaries for the benefit of any of our directors or executive officers. None of the directors or executive officers has or has had any interest in any transactions effected by us which are or were unusual in their nature or conditional or significant to our business and which were effected during the current or immediately preceding year or were effected during an earlier year and remain in any respect outstanding or unperformed.

As a subsidiary of Hana Financial Group, we engage from time to time in ordinary course of business activities with other subsidiaries of Hana Financial Group, including cross-selling activities. See Note 51 of the notes to our consolidated financial statements included in this Offering Circular.

HANA FINANCIAL GROUP

Hana Financial Group was established on 1 December 2005 through a share transfer in accordance with the Commercial Act of Korea and the Financial Holding Companies Act. After obtaining the necessary approvals from the FSC, the shareholders of Original Hana Bank, Hana Securities Co., Ltd. ("**Hana Securities**"), Hana Information & System Co., Ltd. and Hana Institute of Finance (together, the "**Original HFG Subsidiaries**") transferred all of their common shares in the Original HFG Subsidiaries to the newly formed Hana Financial Group in exchange for common shares of Hana Financial Group in proportion to their respective shareholdings in the relevant Original HFG Subsidiaries. On 12 December 2005, the common shares of Hana Financial Group were listed on the Korea Exchange.

The Bank and Hana Securities serve as the main distribution channels for Hana Financial Group. Through the network of 597 domestic branches and sub-branches of the Bank, 19 overseas branches of the Bank and 49 domestic branches of Hana Securities, each as of 31 December 2023, Hana Financial Group delivers a wide range of financial products and services to customers, while Hana Card, Hana Capital, Hana Life, Hana Asset Trust and Finnq (all as defined below) focus their efforts on developing innovative financial products. The following is the organisational chart of Hana Financial Group as of the date of this Offering Circular:

Hana Financial Group

Hana Bank	Hana Securities	Hana Card	Hana Capital	Hana Life	Hana Insurance	Hana Savings Bank	Hana Asset Trust	Hana Alternative Asset Management	Hana F&I	Hana Ventures	Hana Investors Services	HanaTI	Finnq
100%	100%	100%	100%	100%	89.59%	100%	100%	100%	99.86%	100%	100%	100%	100%

Hana Securities

Hana Securities Co., Ltd. (renamed in 2022 from Hana Financial Investment Co., Ltd.; "**Hana Securities**") is a wholly owned subsidiary of Hana Financial Group, engaged in the asset management and investment banking business. On 31 May 2005, Original Hana Bank acquired 100% of the outstanding common shares of Hana Securities from the Korea Deposit Insurance Corporation for ₩475 billion. Hana Securities was incorporated in January 1977 as an asset management company. In connection with the establishment of Hana Financial Group, Original Hana Bank transferred all of the outstanding common shares of Hana Securities to Hana Financial Group on 1 December 2005, for 16,278,619 common shares of Hana Financial Group. On 1 December 2008, Hana Securities expanded its business into investment banking by merging with Hana Investment Bank. Hana Futures Co., Ltd. (previously a wholly-owned subsidiary of Hana Financial Group), which provides domestic and overseas trading and brokerage services, merged with and into Hana Securities in August 2016.

Hana Card

Hana Card Co., Ltd. ("**Hana Card**") provides credit cards and other related services as permitted under the Specialized Credit Financial Business Act. It was incorporated in October 2009 as a result of a spin-off of Original Hana Bank's credit card business. Pursuant to the spin-off plan, Original Hana Bank transferred to Hana Card Co., Ltd., a newly formed company, the assets and liabilities related to Original Hana Bank's credit card business (other than those relating to corporate purchase cards, which were retained by Original Hana Bank), and all common stock of Hana Card Co., Ltd. was distributed to Hana Financial Group. On 11 December 2009, Hana Financial Group entered into a joint investment agreement with SK Telecom, a Korean telecommunications services company, pursuant to which SK Telecom acquired a 49% equity interest in Hana Card Co., Ltd. for ₩400 billion on 25 February 2010, and Hana Card Co., Ltd. was renamed Hana SK Card Co., Ltd. On 1 December 2014, Hana SK Card Co., Ltd. merged with and into the credit card business spun off from Korea Exchange Bank, and the surviving entity from the merger was renamed Hana Card. As of 31 December 2023, Hana Financial Group owned 100% of Hana Card.

Hana Capital

Established in February 1987, Hana Capital Co., Ltd. ("**Hana Capital**") provides facility leasing, instalments, and personal loans to consumers. Originally a member company of the Kolon Group, Hana Capital became a subsidiary of Original Hana Bank in 2004. Following the formation of the Hana Financial Group, Original Hana

Bank transferred all of its common shares of Hana Capital to Hana Financial Group. In February 2018, Hana Financial Group acquired the remaining 49.87% stake in Hana Capital from Kolon Industries Inc. and other small shareholders, and Hana Capital became a wholly-owned subsidiary of Hana Financial Group.

Hana Life

Hana Life Insurance Co., Ltd. ("**Hana Life**") engages in the life insurance business and sells life insurance products through the Bank's branch network. Hana Life was incorporated in November 1991 under the name of France Life Insurance Company and was acquired by Allianz AG in 1998. On 21 February 2003, Original Hana Bank acquired 50.0% of the issued share capital of France Life Insurance Company and changed its name to Hana Life Insurance Co., Ltd. In 2007, Original Hana Bank acquired the remaining 50.0% stake in Hana Life from Allianz AG and subsequently contributed all of its shares of Hana Life to Hana Financial Group. In March 2008, Hana Financial Group formed a strategic alliance with HSBC Insurance (Asia-Pacific) Holdings Limited ("**HSBC Insurance**") and sold a 50.0% minus one share stake in Hana Life to HSBC Insurance. In May 2013, following HSBC Insurance's decision to exit the Korean market, Hana Financial Group reacquired the 50.0% minus one share stake in Hana Life from HSBC Insurance, and Hana Life again became a wholly-owned subsidiary of Hana Financial Group.

Hana Insurance

In May 2020, Hana Financial Group acquired a 70% interest in The-K Non-Life Insurance from the Korea Teachers' Credit Union, which retained the remaining 30% In June 2020, the subsidiary was renamed as Hana Insurance Co., Ltd., and in July 2020, Hana Financial Group increased its equity interest to 85% through a capital contribution. Hana Insurance is the second insurance arm of Hana Financial Group offering comprehensive non-life insurance products, such as auto, health, travel and leisure insurance.

Hana Savings Bank

Hana Savings Bank was incorporated on 8 February 2012 upon Hana Financial Group's acquisition of certain assets and liabilities of Jeil II Savings Bank and Ace Mutual Savings Bank. In September 2012, Hana Savings Bank acquired Korea Savings Bank. Hana Savings Bank provides a range of deposit products and small-loan finance services and operates eight branches located in Korea.

Hana Asset Trust

Established in 2004, Hana Asset Trust Co., Ltd. ("**Hana Asset Trust**") provides real estate trust products and related services.

Hana Alternative Asset Management

Established in 2006, Hana Alternative Asset Management Co., Ltd. (renamed in 2017 from Hana Asset Management Co., Ltd.; "**Hana Alternative Asset Management**") provides asset management and investment consulting services. Hana Alternative Asset Management became a wholly-owned subsidiary of Hana Financial Group in 2016.

Hana F&I

Hana F&I was established in 1989 as a specialized finance institution. In December 2013, it was changed to a non-performing loan ("**NPL**") investment management company and has been active in NPL markets since 2014. Hana F&I provides investment management services in connection with corporate restructuring, provision of credit services to loss-making businesses, and NPL investment and management.

Hana Ventures

Hana Ventures Inc. ("**Hana Ventures**") was established on 4 October 2018 as a wholly-owned subsidiary of Hana Financial Group. As of 31 December 2023, Hana Ventures invested over Won 85.9 billion in various start-up companies in sectors ranging from fintech and information and communications technology (ICT) to healthcare and Internet-based content.

Hana Investors Services

Established in 2003, Hana Investors Services Co., Ltd. ("**Hana Investors Services**") provides financial trust management and accounting services for corporations, banks or institutional investors. Hana Investors Services became a wholly-owned subsidiary of Hana Financial Group in 2015.

Hana TI

Hana Financial TI Co., Ltd. (renamed in 2017 from Hana Information & System Co., Ltd.; "**Hana TI**") was established in August 1990 as a subsidiary of Original Hana Bank. Hana TI develops and maintains the IT systems of the member companies of Hana Financial Group as well as other third party clients. In connection with the establishment of Hana Financial Group, Original Hana Bank transferred all of the outstanding common shares of Hana TI to Hana Financial Group on 1 December 2005, for 178,442 common shares of Hana Financial Group. In November 2019, Hana Financial Group acquired the remaining 10.02% stake in Hana TI from DPR International Investments LLC, and Hana TI became a wholly-owned subsidiary of Hana Financial Group.

Finnq

Finnq Inc. ("**Finnq**") was incorporated on 24 August 2016 as a joint venture with SK Telecom, a mobile service provider, with Hana Financial Group holding a 100% stake. Finnq provides fintech-based services such as mobile-oriented asset management, simplified payment and facilitation of overseas transactions through a mobile application launched in 2017.

Principal Shareholders of Hana Financial Group

The following table sets out certain information regarding the ownership of Hana Financial Group's common shares. Each entity known to the Bank to beneficially own more than 5.0% of the outstanding common shares of Hana Financial Group as of 31 December 2023 is listed below.

Beneficial Owner	Number of Common Shares Owned	% of Ownership
Korea National Pension Fund	22,784,957	7.79%
BlackRock Fund Advisors	18,317,138	6.27%

REGULATION AND SUPERVISION

Principal Regulations Applicable to Banks

Capital Adequacy and Allowances

The Bank Act requires national banks, such as the Issuer, to maintain a minimum paid-in capital of ₩100 billion and regional banks to maintain a minimum paid-in capital of ₩25 billion. All banks, including foreign bank branches in Korea, are also required to maintain a prescribed solvency position. A bank must also 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 net profits earned until its legal reserve reaches at least the aggregate amount of its paid-in capital.

Under the Bank Act, the capital of a bank is divided into two categories, Tier I and Tier II capital. Tier I capital (core capital) consists of shareholders' equity, capital surplus, retained earnings, the comprehensive aggregate of other profit/loss amounts and hybrid Tier I capital instruments. Tier II capital (supplementary capital) includes capital and capital surplus arisen from the issuance of supplementary capital, allowance for loan losses set aside for loans classified as normal or precautionary (up to certain limits) and certain other subordinated debt.

All banks must meet minimum ratios of Tier I and Tier II capital (less any capital deductions) to risk-weighted assets, determined in accordance with FSC requirements that have been formulated based on BIS standards. These standards were adopted and became effective in 1996. All domestic banks and foreign bank branches must meet a minimum ratio of Tier I and Tier II capital (less any capital deductions) to risk-weighted assets of 8%.

The FSS amended the Detailed Rules on the Supervision of the Banking Business and, as a result, the following risk-weight ratios must be applied by Korean banks in respect of home mortgage loans:

(1) for banks which adopted a standardised approach for calculating credit risk capital requirements, to the extent that a mortgage obtained in relation to a home mortgage loan is a first priority mortgage, a risk-weight ratio of 35% shall apply, provided that a higher risk-weight ratio may be applied to home mortgage loans subject to certain exceptions; and.

(2) for banks which adopted an internal ratings-based approach for calculating credit risk capital requirements, a risk-weight ratio calculated with reference to the probability of default, loss given default and exposure at default (each term as defined under the Detailed Rules on the Supervision of the Banking Business).

Under the Regulation on the Supervision of the Banking Business, banks must generally maintain allowances for credit losses in respect of their outstanding loans and other credits (including trust account loans) in an aggregate amount covering not less than:

- 0.85% in the case of normal credits comprising loans to corporate borrowers (0.9% in the case of normal credits comprising loans to borrowers in the "construction," "wholesale and retail," "accommodation and restaurant" and "real estate and rent" industries (as classified under the Korean Industry Classification Standard)), 1.0% in the case of normal credits comprising loans to individuals and households, 1.1% in the case of normal credits comprising outstanding credit card receivables and 2.5% in the case of normal credits comprising outstanding card loans and revolving loans;
- 7.0% of precautionary credits, 10% in the case of precautionary credits comprising loans to individuals and households, 40% in the case of precautionary credits comprising outstanding credit card receivables and 50% in the case of precautionary credits comprising outstanding card loans and revolving loans;
- 20% of substandard credits, 60% in the case of substandard credits comprising outstanding credit card receivables and 65% in the case of substandard credits comprising outstanding card loans and revolving loans;
- 50% of doubtful credits, 55% in the case of doubtful credits comprising loans to individuals and households and 75% in the case of doubtful credits comprising outstanding credit card receivables, card loans and revolving loans; and
- 100% of estimated loss credits.

Furthermore, under the Regulation on the Supervision of the Banking Business, Korean banks must establish allowances in respect of any confirmed guarantees (including confirmed acceptances) and outstanding unused credit lines as of the date of settlement in an aggregate amount calculated at the same rates applicable to normal, precautionary, substandard and doubtful credits comprising their outstanding loans and other credits as set out above. See "— *Regulations Relating to Retail Household Loans*."

FSC amended the Regulations concerning the Supervision of the Banking Business as of 28 June 2007 in order to reflect the Basel II (or the new BIS standard) to the Regulations. The amendment became effective as of 1 January 2008. Under the amended Regulations, with respect to the evaluation of the credit risk for the calculation of the required capital ratio, banks may select either the Internal Rating-Based Approach ("**IRB**") established by themselves or the Standard Approach provided by FSC. To select the IRB, a bank has to obtain the approval of the FSS. Under the new BIS standard, there is no change to the market risk, and the evaluation of the operating risk is required in addition to the credit risk and the market risk when calculating the required capital ratio. For the evaluation of the operating risk, banks may select either the Standard Approach, for which no Governmental approval is required, or Advanced Measurement Approaches, for which the FSS approval is required.

In May 2013, the FSC announced its decision, in conjunction with the Ministry of Economy and Finance, FSS and the Bank of Korea, to gradually implement Basel III by 1 December 2013. Under the regulations, which came into effect as of 1 December 2013, Korean banks were required to maintain a minimum ratio of Tier I common capital (which principally includes equity capital, capital surplus and retained earnings less reserve for credit losses) to risk weighted assets of 3.5% and Tier I capital to risk weighted assets of 4.5% from 2013. Such minimum ratios of Tier I common capital to risk weighted assets and Tier I capital to risk weighted assets were increased to 4.0% and 5.5%, respectively, from 2014 and 4.5% and 6.0%, respectively, from 2015. These requirements would be in addition to the existing requirement for a total minimum ratio of Tier I and Tier II capital (less any capital deductions) to risk weighted assets of 8.0%, which remains unchanged. The regulations also contemplate an additional capital conservation buffer of 2.5%, as well as a potential counter-cyclical capital buffer of up to 2.5%, which is determined on a quarterly basis by the FSC (currently, zero).

In December 2015, the FSC approved the implementation of countercyclical capital buffer requirement (to range from 0% to 2.5%) to be determined by the FSC under Basel III, effective as of January 2016. The countercyclical capital buffer requirement was initially set at 0% subject to the FSC's further announcement. The regulation allows the FSC to require such financial institutions to maintain an additional capital buffer of 0.25% starting on 1 January 2016, with such buffer to increase by 0.25% annually to 1.00% by 1 January 2019. The FSC has not implemented the measure since then, and the level of countercyclical capital buffer required under the regulation remained at 0.00%. In May 2023, the FSC decided to implement the capital buffer of 1.00% after a year of preparation period. From May 2024, the financial institutions will be required to maintain countercyclical capital buffer of 1.00%.

In December 2015, the FSC designated Hana Financial Group, Shinhan Financial Group, KB Financial Group and NongHyup Financial Group as domestic systemically important bank holding companies and Woori Bank as a domestic systemically important bank and introduced more stringent capital requirements for these financial institutions. In July 2021, Hana Financial Group, Shinhan Financial Group, KB Financial Group, NongHyup Financial Group and Woori Financial Group were designated by the FSC as domestic systemically important bank holding companies, and Hana Bank, Shinhan Bank, Kookmin Bank, NongHyup Bank and Woori Bank were designated by FSC as domestic systemically important banks. In addition, in July 2021, the FSC 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 FSS within three months from the date of notification of designation pursuant to the Act on the Structural Improvement of the Financial Industry.

Liquidity

All banks are required to ensure adequate liquidity by matching the maturities of their assets and liabilities in accordance with the Bank Act. Banks may not invest an amount exceeding 100% of their Tier I and Tier II capital (less any capital deductions) in stocks, derivatives linked securities and other securities with a maturity of over three years. This stipulation does not apply to Korean government bonds, to bond principal and interest payments guaranteed by the Korean government or to Monetary Stabilisation Bonds issued by the Bank of Korea. The FSC also requires each Korean bank to:

(i) maintain a liquidity coverage ratio (defined as high liquidity assets divided by net cash outflow of the next thirty days) of not less than 100% (which was adjusted to 85% by virtue of FSC's temporary measure for the COVID-19 pandemic. The FSS had subsequently decided to gradually restore the ratio on a quarterly basis from the third quarter of 2022 with 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 FSS 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. In October 2023, the FSS decided again to temporarily delay the restoration process and to retain the 92.5% ratio until the end of June 2024, in order to contain the possibility of a credit crunch and to continue pre-emptive responses. The FSS plans to decide whether to resume the gradual normalization plan based on market conditions in the second quarter of 2024) and to make monthly reports to the FSS;

(ii) maintain minimum foreign currency liquidity coverage ratio (defined as high liquidity assets divided by net cash outflow of the next 30 days with respect to foreign currency assets and liabilities) of 60% for 2017, 70% for 2018 and 80% for 2019 and thereafter, respectively (which was adjusted to 70% by virtue of FSC's temporary measure for the COVID-19 pandemic but restored to 80% from July 2022); and

(iii) submit monthly reports with respect to the maintenance of these ratios.

The Monetary Policy Committee of the Bank of Korea is empowered 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 currency demand deposits outstanding;
- 0% of average balances for Won currency long-term house purchase savings deposits and asset establishment savings deposits; and
- 2.0% of average balances for Won currency time deposits, mutual instalments, housing instalments and certificates of deposit outstanding.

Additionally, the FSC is separately empowered to establish minimum reserve ratio requirements that must be accumulated and maintained for certain types of obligations designated by the FSC from time to time.

For foreign currency deposit liabilities, a 2.0% minimum reserve ratio is applied to foreign currency time deposits which reach maturity no earlier than 1 month, foreign currency certificate of deposits which reach maturity no earlier than 30 days, foreign currency instalments savings deposits which reach maturity no earlier than 6 months and a 7.0% minimum reserve ratio is applied to other deposits. A 1.0% minimum reserve ratio applies to offshore accounts, immigrant accounts and resident accounts opened by financial institutions (other than 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.

Financial Exposure to Any Individual Customer and Major Shareholder

Under the Bank Act, the sum of large exposures by a bank — in other words, the total sum of its credits to single individuals, juridical persons or business groups that exceed 10% of the sum of Tier I and Tier II capital (less any capital deductions) — generally must not exceed five times the sum of Tier I and Tier II capital (less any capital deductions). In addition, banks generally may not extend credit (including loans, guarantees, purchases of securities (only in the nature of a credit) and any other transactions that 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 a single individual or juridical person, or grant credit in excess of 25% of the sum of Tier I and Tier II capital (less any capital deductions) to a single group of companies as defined in the Monopoly Regulations and Fair Trade Act.

The Bank Act also provides for certain restrictions on extending credits to a major shareholder. A "**major shareholder**" is defined as:

- a shareholder holding (together with persons who have a special relationship with that shareholder) in excess of 10% (or 15% in the case of regional banks) in the aggregate of the bank's total issued voting shares; or
- a shareholder holding (together with persons who have a special relationship with that shareholder) in excess of 4% in the aggregate of the bank's (excluding regional banks) total issued voting shares (excluding shares subject to the shareholding restrictions on "non- financial business group companies" as described below), where the shareholder is the largest shareholder or has actual control over the major business affairs of the bank through, for example, appointment and dismissal of the officers pursuant to the Enforcement Decree of the Bank Act. Non-financial business group companies primarily consist of: (i) any single shareholding group whose total amount of gross capital for non-financial company comprise no less than 25% of its total amount of gross capital; (ii) any single shareholding group whose non-financial company assets comprise no less than ₩2 trillion in aggregate; (iii) any investment company under the

FSCMA of which any single shareholding group identified in (i) or (ii) above, owns more than 4% of the total issued and outstanding shares; or (iv) a private equity fund under the FSCMA which meets certain requirements as prescribed in the Bank Act.

In addition to the existing restrictions which prohibit banks from extending credits to a major shareholder (together with persons who have a special relationship with that shareholder) in an amount greater than the lesser of (x) 25% of the sum of the bank's Tier I and Tier II capital (less any capital deductions) and (y) the relevant major shareholders' shareholding ratio multiplied by the sum of the bank's Tier I and Tier II capital (less any capital deductions) and require that the total sum of credits granted to all major shareholders must not exceed 25% of the bank's Tier I and Tier II capital (less any capital deductions), under these amendments, banks may not extend credit to a major shareholder for the purpose of financing such shareholder's investment in other companies or on terms more advantageous to such shareholder. Furthermore, banks may not transfer their assets and/or properties to a major shareholder without being paid a consideration.

The Financial Holding Company Act imposes limits on extending credit to single borrowers and to major capital contributors similar to the limits imposed by the Bank Act with regard to extending credit to single borrowers and major shareholders. The definition of a "**major capital contributor**" under the Financial Holding Company Act, which is similar to the definition used in the Bank Act, is as follows:

- a shareholder holding (together with persons who have a special relationship with that shareholder) in excess of 10% (or 15% in the case of regional bank holding companies) in the aggregate of a bank holding company's total issued voting shares; or
- a shareholder holding (together with persons who have a special relationship with that shareholder) in excess of 4% in the aggregate of a bank holding company's (excluding regional bank holding companies) total issued voting shares (excluding shares subject to the shareholding restrictions on "non-financial business group companies" under the Financial Holding Company Act), where the shareholder is the largest shareholder or has actual control over the major business affairs of a bank holding company and its subsidiaries, sub-subsidiaries and any subsidiaries thereof (and under the Financial Holding Company Act, this includes any foreign subsidiaries of sub-subsidiaries (as brought into the holding structure of the financial holding company) and companies controlled by them through, for example, appointment and dismissal of the officers, as determined pursuant to the provisions of an applicable Presidential Decree, and includes non-financial business group companies that participate in the business management of a relevant financial institution through, for example, appointment and dismissal of the officers, as determined pursuant to the provisions of an applicable Presidential Decree.

According to the Financial Holding Company Act, the total amount of credit that may be extended by a financial holding company and its subsidiaries, etc. ("**financial holding company, etc.**") to any single individual, juridical person or business group is not permitted to exceed an amount equal to 25% of the total net capital of the financial holding company, etc.

Additionally, the total amount of credit that may be extended by a bank holding company and its subsidiaries ("**bank holding company, etc.**") to a major capital contributor (including specially related persons thereof) is not permitted to exceed the lesser of (x) the amount equal to 25% of the total net capital of the bank holding company, etc. and (y) the relevant major capital contributors' shareholding ratio in the bank holding company. The total amount of credit that may be extended by a bank holding company, etc. to all of major capital contributors (including specially related persons thereof) is not permitted to exceed an amount equal to 25% of the total net capital of the bank holding company, etc.

A bank holding company, etc. is not permitted to extend credit to major capital contributors (including specially related persons thereof) in support of such major capital contributors' investments in other companies, and is not permitted to transfer assets to major capital contributors without consideration.

The above provisions will be applicable with regard to Hana Bank extending credit to any major capital contributors of Hana Financial Group, since Hana Financial Group is a bank holding company and Hana Bank is a subsidiary of Hana Financial Group.

Interest Rates

Korean banks generally depend on deposits as their primary funding source. There are no legal controls on interest rates on loans extended by the financial institutions in Korea. Historically, interest rates on deposits and lending rates were regulated by the Monetary Policy Committee of the Bank of Korea. Controls on deposit interest rates in Korea have been gradually reduced and, in February 2004, the Korean government removed restrictions on all interest rates, except for the prohibition on interest payments on current account deposits. This deregulation process has increased competition for deposits based on interest rates offered and, therefore, may increase a bank's interest expense.

Lending to Small- and Medium-Sized Enterprises

In order to obtain funding from the Bank of Korea at concessionary rates for their SME loans, banks are required to allocate a certain minimum percentage of any monthly increase in their Won currency lending to SMEs. Currently, this minimum percentage is 45% in the case of national banks and 60% in the case of regional banks. If a bank does not comply with this requirement, the Bank of Korea may:

- require the bank to prepay all or a portion of funds provided to that bank in support of loans to SMEs; or
- lower the bank's credit limit.

Disclosure of Management Performance

In order to assist the general public, especially depositors and shareholders, in monitoring bank management performance, the FSS requires commercial banks to make mandatory public disclosures of the following (except as may otherwise have been disclosed by a bank or its financial holding company listed on the Korea Exchange in accordance with the FSCMA):

- 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 that borrower is calculated pursuant to the criteria under the Detailed Regulation on Supervision of the Banking Business), unless the loan exposure to that group is not more than ₩4 billion; and
- any loss due to court judgements 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, unless the loss is not more than ₩1 billion.

Restrictions on Lending

Pursuant to the Bank Act, commercial banks may not provide:

- loans directly or indirectly secured by a pledge of a bank's own shares;
- loans directly or indirectly to enable a natural or juridical person to buy the bank's own shares;
- loans to any of the bank's officers or employees, other than petty loans of up to ₩20 million in the case of a general loan, ₩50 million in the case of a general loan plus a housing loan or ₩60 million in the aggregate for general loans, housing loans and loans to pay damages arising from wrongful acts of employees in financial transactions; or
- 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.

Regulations Relating to Retail Household Loans

The FSC has implemented a number of changes to the mechanisms by which a bank evaluates and reports its retail household loan balances and has proposed implementing further changes. As a result of the rapid increase in retail household loans and related credit risks, in 2007, the FSC and the FSS increased the minimum provisioning requirements for retail household loans. These minimum requirements are set forth in the following table:

	Provisioning Ratio on Retail Household Loans	
Asset Quality Classification	**Before 2007**	**Current**
Normal	0.75% or above	1.0% or above
Precautionary	8.0% or above	10.0% or above
Substandard	20.0% or above	20.0% or above
Doubtful	55.0% or above	55.0% or above
Estimated loss	100.0%	100.0%

In addition, due to a rapid increase in loans secured by homes and other forms of housing, the FSC and the FSS implemented regulations designed to reduce the rate of increase in these loans. Effective from the third quarter of 2002, the FSC and the FSS raised minimum provisioning requirements for new loans secured by housing located in the areas of wide-spread real property speculation, with respect to the portion of the new loan that exceeds the loan-to-value ratio of 60.0%, to 1.0% from 0.75% for normal loans and to 10.0% from 5.0% for precautionary loans. They also raised the minimum provisioning requirements for household loans classified as precautionary from 2.0% to 8.0% with effect from the fourth quarter of 2002.

In a further effort to curtail extension of new or refinanced loans secured by housing, the FSC and the FSS subsequently:

- reduced the average loan-to-value ratio (the aggregate principal amount of credit over the approval value of collateral) that Korean commercial banks must maintain for new loans secured by housing located in Korea to below 60%; and
- increased risk-weights for loans secured by housing meeting certain criteria in connection with the capital adequacy calculation for commercial banks.

On 8 November 2002, the FSC and the FSS issued guidelines that:

- require Korean commercial banks to implement stronger internal control systems and stricter credit review and approval policies with respect to loans secured by housing;
- introduce sharing of information on multiple housing loans to a single borrower within the financial industry;
- require Korean commercial banks to appoint two to three qualified market value appraisal institutions and to use the lowest of the appraisal valuations; and
- discourage the use of incentive-based compensation systems by Korean commercial banks.

Furthermore, on 29 October 2003, the FSC announced more stringent guidelines that require Korean commercial banks to maintain loan-to-value ratios equal to or less than 40% for new loans secured by real estate located in the areas of wide-spread real property speculation. On 30 August 2005, the FSC further announced another set of guidelines under which the Korean commercial banks are required to maintain the debt-to-income ratio of 40% or less for each new loan in addition to the loan-to-value ratio requirement in case such loan is borrowed for the purpose of financing each additional home exceeding the one home per household and secured by a home located in the wide-spread real property speculation areas.

Again on 30 March 2006, the FSC announced stronger guidelines that require Korean commercial banks to maintain debt-to-income ratio equal to 40% or less for any new loans secured by real estate of which value is ₩600 million or more in the areas of wide-spread real property speculation.

In addition, due to a rapid increase in the number of loans secured by homes and other forms of housing, the FSC and the FSS amended the Regulation on the Supervision of the Banking Business in July 2007, November 2008, November 2010 and May 2013 to implement measures designed to reduce the rate of increase in these loans secured by housing, including the following:

- in respect of loans secured by collateral consisting of housing located in Korea, the loan-to-value ratio (the aggregate principal amount of loans secured by such collateral over the appraised value of the collateral) should not exceed 70%;
- in respect of loans secured by collateral consisting of housing (including apartments) located in areas of excessive investment as designated by the Government, (i) the loan- to-value ratio for loans with a maturity of not more than three years should not exceed 50%, (ii) the loan-to-value ratio for loans with a maturity of more than three years should not exceed 60% and (iii) the loan-to-value ratio for loans to be amortised over the period of ten years should not exceed 70%;
- in respect of loans secured by collateral consisting of housing (excluding apartments) located in areas of high speculation as designated by the Government, (i) the loan to value ratio for loans with a maturity of not more than three years should not exceed 50%, (ii) the loan to value ratio for loans with a maturity of more than three years should not exceed 60% and (iii) the loan-to-value ratio for loans to be amortised over the period of ten years should not exceed 70%;
- in respect of loans secured by collateral consisting of apartments located in areas of high speculation as designated by the Government, (i) the loan-to-value ratio for loans with a maturity of not more than ten

years should not exceed 40%; and (ii) the loan-to- value ratio for loans with a maturity of more than ten years should not exceed (a) 40%, if the price of such apartment is over ₩600 million, and (b) 60%, if the price of such apartment is ₩600 million or lower;

- in respect of loans extended for the acquisition of a new apartment and secured by such apartment with an appraisal value of more than ₩600 million in areas of high speculation as designated by the Government or in certain metropolitan areas designated as areas of excessive investment by the Government, the borrower's debt-to-income ratio (calculated as (i) the aggregate annual total payment amount of (x) the principal of and interest on loans secured by such apartment(s) and (y) the interest on other debts of the borrower over (ii) the borrower's annual income) should not exceed 40%;
- in respect of a borrower (i) whose spouse already has a loan secured by housing or (ii) who is single and under the age of 30, the debt-to-income ratio of the borrower in respect of loans secured by apartment(s) located in areas of high speculation as designated by the Government should not exceed 40%;
- in respect of apartments located in areas of high speculation as designated by the Government, a borrower is permitted to have only one new loan secured by such apartment; and
- where a borrower has two or more loans secured by apartments located in areas of high speculation as designated by the Government, the loan with the earliest maturity date must be repaid first and the number of loans must eventually be reduced to one.

Moreover, from 2017 to 2022, the Government led by President Moon Jae-in announced and implemented a series of robust policies aimed at taming speculation and deterring the rise of housing prices. under the Regulation on the Supervision of the Banking Business which has been revised from time to time during the above period, a bank is (i) subject to certain loan-to-value ratio and debt-to-income ratio limits of 40% each when extending home mortgage loans for the purchase of homes located in areas designated as "speculative" or "overheated speculative" (**provided that**, (1) if a borrower has no pre-existing housing, and his/her annual income combined with his/her spouse is equal to ₩80 million or less, and housing is appraised at a market value of less than ₩600 million, the loan-to-value ratio and debt-to-income ratio limits will be increased by 10% each; (2) the loan-to-value ratio and debt-to-income ratio limits will be decreased by 10% each when the purpose of extending the home mortgage (on the housing being purchased) loan is to fund the borrower's purchase of additional housings in unregulated areas irrespective of the location of the borrower's pre-existing housing; (3) the loan-to-value ratio and debt-to-income ratio limits will be decreased by 10% each when the purpose of extending the home mortgage (on the pre-existing housing) loan is to fund the borrower's purchase of additional housings in unregulated areas who has pre-existing housing in unregulated areas; (4) the loan-to-value ratio of a home mortgage loan for a residential property located in speculative or overheated speculative areas which is appraised at a market value exceeding ₩900 million shall have limits of (x) 40% for a portion of such value not exceeding ₩900 million and (y) 20% for the rest of such value exceeding ₩900 million), (ii) subject to a restriction that a home mortgage loan is not permitted in areas designated as "regulated" for any borrowers who have pre-existing housing without regard to its location, **provided that**, the borrower who owns only one housing can obtain a new home mortgage loan on the condition that the borrower sells its pre-existing housing within certain periods determined by the FSC from the drawdown date of such home mortgage loan, (iii) subject to a restriction that if a borrower has no pre-existing housing, no home mortgage loan shall be made available for such borrower for housing with a market value exceeding ₩900 million, **provided that** the borrower can obtain a new home mortgage loan on the condition that the borrower will move into a newly purchased housing within certain periods determined by the FSC from the drawdown date of such home mortgage loan and (iv) subject to a restriction that if an apartment located in speculative or expressively speculative areas has a market value exceeding ₩1.5 billion, no mortgage loan shall be made available (with a few exceptions).

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 the 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**"), and as a result, only Gangnam-Gu, Seocho-Gu, Songpa-Gu and Yongsan-Gu in the greater Seoul metropolitan area are currently left as the regulated areas. The Government also increased the loan to value ratio applicable to the regulated areas from 40% to 50%, removed the application of stricter loan to value ratio to new loans secured by high-priced houses located in the regulated areas (such as items (i)(4) and (iv) in the preceding paragraph) and allowed the extension of new loans secured by houses located in the regulated areas to a household that already owns one or more house from March 2023 with the maximum loan-to-value ratio of 30%.

On the other hand, in order to modernize credit review methods and stabilize the management of household debt, the FSC introduced a debt service ratio and a modified debt-to-income ratio. 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 loans. The current debt-to-income ratio applicable to apartment units located in the greater Seoul metropolitan area which are not “speculative areas”, “overheated speculative areas” or “adjustment targeted areas” is 60%, whereas homes located in “speculative areas” or “overheated speculative areas” are subject to a debt-to-income ratio of 40% and homes located in “adjustment targeted areas” are subject to a debt-to-income ratio of 50%. The 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, and debt service ratios are generally used as a supplementary reference index providing additional limits on mortgage and home equity loans. The debt service ratios applicable to the loan applicant with the total aggregate loan amount exceeding ₩ 100 million (including the applied but not yet extended loan amount) should not exceed 40% unless otherwise specified by the applicable regulations.

In December 2023, the Korean government decided to introduce stress debt service ratio system for household loans starting from February 2024 in order to strengthen household debt management. The FSC announced plans to implement the stress debt service ratio for variable-rate, mixed-rate and periodic loans in order to impose surplus interest to reflect potential future rate hikes. The stress interest is based on the gap between the highest household loan rate in the last five years and the current benchmark rate, ranging from 1.5% to 3%. To mitigate market impact, the rate will be phased in starting from 25% of the lower limit in the first half year to gradually increase to 50% later in the year and to 100% starting from 2025. Until June 30, 2024, the stress interest rate will be 0.38%.

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 FSS 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.

Restrictions on Investments in Property

A bank may possess real estate property only to the extent necessary for the conduct of its business, unless the aggregate value of that property does not exceed 60% of the sum of the bank’s Tier I and Tier II capital (less any capital deductions). Any property that a bank acquires by exercising its rights as a secured party, or which a bank is prohibited from acquiring under the Bank Act, must be disposed of within three years.

Restrictions on Shareholdings in Other Companies

Under the Bank Act, a bank may not own more than 15% of shares outstanding with voting rights of another corporation, except where, among other reasons:

- that corporation engages in a category of financial businesses set forth by the FSC; or
- the acquisition is necessary for the corporate restructuring of the corporation and is approved by the FSC.

In the above exceptional cases, a bank must satisfy either of the following requirements:

- the total investment in corporations 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
- if the application requirements set by the FSC are met, voting shares shall not exceed 30% of the sum of Tier I and Tier II capital.

The Bank Act provides that a bank may not acquire the shares of another corporation that is a major shareholder of the bank in excess of an amount equal to 1% of the sum of Tier I and Tier II capital (less any capital deductions).

The Financial Holding Company Act provides that a bank holding company, etc. may not acquire the shares issued by its major capital contributors in an amount greater than 1% of the total net capital of the bank holding company, etc.

Restrictions on Bank Ownership

Under the Bank Act, a single shareholder, together with any persons who have a special relationship with that shareholder may acquire generally beneficial ownership of no more than 10% of a national bank's total issued and outstanding shares with voting rights and no more than 15% of a regional bank's total issued and outstanding shares with voting rights. The Government, KDIC and bank holding companies qualified under the Financial Holding Company Act are not subject to this limit. However, by obtaining an approval from the FSC, a person (whether a Korean national or a foreign investor), with the exception of non-financial business group company as described below, may acquire more than 10% of a national bank's total voting shares issued and outstanding (or 15% in the case of regional banks) and such approval from the FSC is required in each instance where the total holding of such person will exceed 10% (or 15% in the case of regional banks), 25% or 33% of the bank's total voting shares issued. In addition, if (i) a person's shareholding in a national bank exceeds 4% of that bank's outstanding voting shares, (ii) such person becomes the largest shareholder of the bank, (iii) there is a change in the shareholding of such person by 1% or more or (iv) where a private equity fund or investment purpose company under the FSCMA holds in excess of 4% of that bank's outstanding voting shares and there is a change in the members and/or shareholder of the private equity fund or investment purpose company, such person or the private equity fund or the investment purpose company shall file a report to the FSC. Furthermore, according to the Financial Holding Company Act, a single shareholder is not permitted to hold more than 10% of the total issued and outstanding voting shares of a bank holding company (or 15% in the case of a regional bank holding company's shares). The Government and the KDIC are not subject to this limit. Such limit also does not apply to a financial holding company's holding of shares of a bank holding company under its control. The FSC may grant approval for exceptions to the above-referenced 10% holding limit (or 15% in the case of regional bank holding companies).

Meanwhile, a non-financial business group company is not allowed to own more than 4% (or 15% in the case of regional bank holding companies) of the total issued and outstanding shares with voting rights of a national bank or a regional bank. However, the non-financial business group company may be permitted to own up to 10% of the total issued and outstanding shares of a national bank by obtaining an approval from the FSC on condition that such non-financial business group company will not exercise voting rights in excess of the 4% threshold.

Deposit Insurance System

The Depositor Protection Act provides insurance for certain deposits of banks in Korea through a deposit insurance system. Under the Depositor Protection Act, all banks governed by the Bank Act are required to pay an insurance premium to the KDIC on a quarterly basis. The rate is determined under the Enforcement Decree to the Depositor Protection Act, and may 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 KDIC makes a payment on an insured amount, it will acquire the depositors' claims with respect to that payment amount. The KDIC insures a maximum of ₩50 million for deposits and interest, 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 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 FSC. 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 FSC determines that there is a clear risk that a financial product may cause significant damage to the properties of customers, the FSC may prohibit or restrict the solicitation of, and execution of a contract for, such financial product.

Restrictions on Foreign Exchange Position

Under the Korean Foreign Exchange Transaction Regulation, each of a bank's net overpurchased and oversold positions may not exceed 50% of its shareholders' equity as of the end of the prior month.

Laws and Regulations Governing Other Business Activities

A bank must register with the Ministry of Economy and Finance to enter the foreign exchange business, which is governed by the Foreign Exchange Transaction Law. Under the FSCMA, which became effective as of 4 February 2009 (replacing the Securities and Exchange Act), a bank wishing to engage in (i) the purchase, sale or underwriting of financial investment products for its own account is required to obtain a licence for dealing business from the FSC and (ii) the purchase and sale of financial investment products for the account of another person is required to obtain a licence for brokerage business. Financial investment products are classified into two categories (securities products and derivatives products) depending on the nature of the risk involved. Securities products refer to any investment product (e.g., a stock or bond) which has a possibility of loss up to the amount of the principal invested. Derivatives products refer to any investment product which has a possibility of loss over and above the amount of the principal invested. If a bank previously had a licence to engage in the securities business from the FSC under the Securities Exchange Act, such licence will remain effective so long as the bank satisfied its reporting requirements to the FSC in accordance with the FSCMA for a certain period of time prior to the FSCMA becoming effective.

Trust Business

A bank must obtain a licence for trust business from the FSC to engage in trust business pursuant to the FSCMA (which replaced the Trust Business Act and Indirect Investment Asset Management Business Act). A licence for trust business obtained by a bank under the Trust Business Act remains effective so long as the bank satisfied its reporting requirements to the FSC in accordance with the FSCMA for a certain period of time prior to the FSCMA becoming effective.

Under the Bank Act, assets accepted in trust by a bank in Korea must be segregated from the other assets in the accounts of such bank. This requires banks engaged in both banking and trust businesses to maintain two separate sets of accounts and two separate sets of records. The depositors and other general creditors of a bank cannot obtain or assert claims against the assets comprising the trust accounts in the event such bank is liquidated or wound up.

Since January 1999, the Government has prohibited Korean banks from offering new guaranteed fixed rate trust account products that guarantee the principal invested and interest payments. In the event that a bank qualifies and operates as a collective investment business servicer, a trustee or a custodian under the FSCMA, it is required to establish relevant operation and management systems to prevent potential conflicts of interest among the banking business, the collective investment business and the trustee or custodian business. 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;

- 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.

Financial Investment Services and Capital Markets Act ("FSCMA")

On 3 July 2007, the National Assembly of Korea passed the FSCMA. This new legislation consolidated six Acts regulating capital markets and financial investment business and products in Korea into one Act. The FSCMA became effective as of 4 February 2009. The following is a summary of the major changes introduced by the FSCMA.

Consolidation of Capital Markets-Related Laws

Prior to the effective date of the FSCMA, there were separate laws regulating each type of financial organisation (e.g., the Securities and Exchange Act for securities companies, the Futures Business Act for companies dealing in futures, the Trust Business Act for trust business companies and the Indirect Investment Asset Management Business Act for asset management companies) and subjecting financial organisations to different licencing and on-going regulatory requirements. By applying one uniform set of rules to financial businesses carrying out the same economic function, the FSCMA intends to improve the capital markets system and address issues caused by the previous regulatory system under which the same economic function relating to capital markets-related businesses was governed by several different sets of rules. To this end, the FSCMA categorises capital markets-related businesses into six different functions (collectively, the "**Financial Investment Businesses**" and each a "**Financial Investment Business**"), as follows:

- dealing (trading and underwriting of financial investment products);
- brokerage (brokerage of financial investment products);
- collective investment (establishment of collective investment schemes and the management thereof);
- investment advice;
- discretionary investment management; and
- trusts.

Therefore, all previous financial businesses relating to financial investment products have been reclassified as one or more of the Financial Investment Businesses described above and financial organisations are now subject to the regulations applicable to their relevant Financial Investment Business(es), irrespective of the type of financial organisation.

Banking and insurance are not subject to the FSCMA and continue to be regulated under separate laws. However, Korean banks and insurance companies are subject to the FSCMA if they intend to engage in Financial Investment Businesses and may need to obtain appropriate licences under the FSCMA.

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 FSCMA sets forth a comprehensive term "financial investment products," defined to mean all financial products with a risk of loss in respect of the amount invested (in contrast to deposits where the principal is protected). Under the FSCMA, financial investment products are classified into two major categories: (i) securities" (meaning financial investment products in respect of which the risk of loss is limited to the amount invested) and (ii) "derivatives" (meaning financial investment products of which the risk of loss may exceed the amount invested).

As a result of the general and open-ended manner in which financial investment products are defined, any future financial product could potentially fall within the scope of the definition of financial investment products, thereby enabling the financial organisation licenced under the FSCMA ("**Financial Investment Business Entity**") to handle a broader range of financial products. Under the FSCMA, securities companies, asset management companies, companies dealing in futures and other entities engaging in any Financial Investment Business are classified as Financial Investment Business Entities.

New Licence System and the Conversion of Existing Licences

Under the FSCMA, the financial investment business units (each being a unit of business pursuant to which financial organisations shall be licenced) are classified into numerous categories depending on the type of (i) financial investment service, (ii) financial investment product, and (iii) target customers to which financial investment products may be sold or dealt (i.e., general investors or professional investors). Financial Investment Business Entities are able to choose which Financial Investment Business(es) to engage in (via a "check the box" method set forth in the relevant licence application) by specifying the desired financial investment business unit or units. Under the FSCMA, Financial Investment Business Entities are permitted to engage in multiple types of Financial Investment Businesses, subject to satisfying relevant regulations (such as minimum capital requirements and maintaining an adequate "**Chinese Wall**").

Financial organisations previously engaging in business activities constituting a Financial Investment Business were required to take certain steps, such as renewal of their licence or registration, in order to continue engaging in such business activities. Banks and insurance companies are permitted to engage in certain categories of Financial Investment Business upon obtaining the appropriate licence(s) under the FSCMA, to the extent permitted under the Bank Act or the Insurance Business Act, as the case may be.

Expanded Business Scope of Financial Investment Business Entities

Under the FSCMA, by integrating businesses involving financial investment products into a single Financial Investment Business and allowing Financial Investment Business Entities to choose multiple Financial Investment Businesses to engage in, the business scope and opportunities of the licenced Financial Investment Business Entities are expanded.

Under the FSCMA, Financial Investment Business Entities may engage in business(es) incidental to the Financial Investment Business ("**incidental businesses**"), including settlement and remittance services. Furthermore, under the Enforcement Decree of FSCMA, a dealer of securities investments (including underwriting services) may conduct corporate finance business; and a dealer of securities and over-the-counter derivatives (including underwriting services) may conduct payment guarantees business. Therefore, corporate finance business and payment guarantees business can be carried out by both banks and financial organisations which have received licences on respect of the relevant business units. In addition, a Financial Investment Business Entity is permitted to outsource marketing activities by contracting "introducing brokers" that are individuals but not employees of the Financial Investment Business Entity.

Improvement in Investor Protection Mechanism

While the FSCMA widens the scope of Financial Investment Businesses, a more rigorous investor protection mechanism is imposed upon Financial Investment Business Entities dealing in financial investment products. The FSCMA distinguishes general investors from professional investors and provides the former with new or enhanced protections. The FSCMA expressly provides for a strict know-your-customer rule for general investors and imposes an obligation on Financial Investment Business Entities to market financial investment products that are suitable for each general investor, using written explanatory materials. Under the FSCMA, a Financial Investment Business Entity could be liable if a general investor proves (i) the absence of the requisite written explanatory materials and (ii) damage or loss resulting from the general investor's investment in financial investment products solicited by such Financial Investment Business Entity (without having to prove fault or causation). With respect to conflicts of interest between Financial Investment Business Entities and investors, the FSCMA expressly requires (i) disclosure of any conflict of interest to investors and (ii) mitigation of conflicts of interest to an acceptable level or abstaining from the relevant transaction.

Regulations on the Class Actions Regarding Securities

The Law on Class Actions Regarding Securities was enacted as of 20 January 2004 and an amendment to such law was enacted as of 10 March 2005, 3 August 2007, 31 March 2010 and 28 May 2013. The Law on Class Actions Regarding Securities governs class action 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, or material fact omitted from, a registration statement or investment prospectus;

- claims for damages caused by the filing of a misleading business report, semi-annual report, quarterly report or a document attached thereto or by an omission of a description or representation of a material fact therein;
- claims for damages caused by insider trading, market manipulation or unfair trading; 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.

TAXATION

Korea

The Information provided below does not purport to be a complete summary of Korean tax law and practice currently applicable. Prospective investors who are in any doubt as to their tax position should consult with their own professional advisers.

The taxation of non-resident individuals and non-Korean corporations ("**Non-Residents**") generally depends on whether they have a "permanent establishment" (as defined under Korean law and applicable tax treaty) in Korea to which the relevant Korean source income is attributable or with which such income is effectively connected. Non-Residents without a permanent establishment in Korea are taxed in the manner described below. Non-Residents with permanent establishments in Korea are taxed in accordance with different rules.

Tax on Interest

Interest payable to Non-Residents in respect of the Notes, if qualified as certain foreign currency-denominated bonds issued outside of Korea pursuant to the Special Tax Treatment Control Law ("**STTCL**"), is exempt from income tax and corporate tax (whether payable by withholding or otherwise) pursuant to the STTCL.

The rate of income tax or corporate tax applicable to interest on the Notes without the tax exemption under the STTCL, for a Non-Resident without a permanent establishment in Korea, is currently 14% of income. In addition, a tax called a local income tax would be imposed at the rate of 10% of the income or corporate tax (raising the total tax rate to 15.4%).

The tax is withheld by the payer of the interest.

The tax rates may be reduced or exempted by applicable tax treaty, convention or agreement between Korea and the country of the recipient of the income. The relevant tax treaties are discussed below.

Tax on Capital Gains

Korean tax laws currently exclude from Korean taxation gains made by a Non-Resident without a permanent establishment in Korea from the sale of Notes to Non-Residents (other than to their permanent establishments in Korea). In addition, capital gains earned by Non-Residents with or without permanent establishment in Korea from the transfer taking place outside Korea of Notes are currently exempt from taxation by virtue of the STTCL, provided that the issuance of the Notes is deemed to be an overseas issuance under the STTCL.

If the exclusion or exemption from Korean taxation referred to above were to cease to be in effect, in the absence of an applicable treaty or any other special tax laws reducing or eliminating tax on capital gains, the applicable rate of tax is the lower of 11% (including local income tax) of the gross realisation proceeds or (subject to the production of satisfactory evidence of the acquisition cost and certain direct transaction costs of the relevant Note) 22% (including local income tax) of the realised gain (i.e., the excess of the gross realisation proceeds over the acquisition cost and certain direct transaction costs) made. If such evidence shows that no gain (or a loss) was made on the sale, no Korean tax is payable. There is no provision under relevant Korean law for offsetting gains and losses or otherwise aggregating transactions for the purpose of computing the net gain attributable to sales of instruments issued by Korean companies.

The purchaser or any other designated withholding agent of Notes is obliged under Korean law to withhold the applicable amount of Korean tax and make payment thereof to the relevant Korean tax authority. Unless the seller can claim the benefit of an exemption from tax under an applicable tax treaty or on the failure of the seller to produce satisfactory evidence of his acquisition cost and certain direct transaction costs in relation to the Notes being sold, the purchaser or such withholding agent must withhold an amount equal to 11% of the gross realisation proceeds. Any amounts withheld by the purchaser or withholding agent must be paid to the relevant Korean tax authority. The purchaser or withholding agent must pay any withholding tax no later than the tenth day of the month following the month in which the payment for the purchase of the relevant Notes occurred. Failure to transmit the withheld tax to the Korean tax authorities in time subjects the purchaser or withholding agent to penalties under Korean tax laws. The Korean tax authorities may attempt to collect such tax from a Non-Resident who is liable for payment of any Korean tax, either as a seller of Notes or as a purchaser or withholding agent who is obliged to withhold such tax through proceedings against payments due to the

Non-Resident from its Korean investments and the assets or revenues of any of the Non-Resident's branch or representative offices in Korea.

Inheritance Tax and Gift Tax

Korean inheritance tax is imposed upon (a) all assets (wherever located) of the deceased if at the time of his death he was domiciled in Korea or had resided in Korea continuously for at least 183 days immediately prior to his death and (b) all property located in Korea which passes on death (irrespective of the domicile of the deceased). Gift tax is imposed in similar circumstances to the above. The taxes are imposed if the value of the relevant property is above a certain limit and the rate varies from 10% to 50% depending on the price of the assets and the nature of the relationship between the parties. At present, Korea has not entered into any tax treaties regarding its inheritance or gift taxes.

Under Korean inheritance and gift tax laws, bonds issued by Korean corporations are deemed located in Korea irrespective of where they are physically located or by whom they are owned, and consequently, the Korean inheritance and gift taxes will be imposed on transfers of the Notes by inheritance or gift. Prospective purchasers should consult their personal tax advisors regarding the consequences of the imposition of the Korean inheritance or gift tax.

Stamp Duty and Securities Transaction Tax

No stamp, issue or registration duties will be payable in Korea by the holders in connection with the issue of the Notes except for nominal amount of stamp duty on certain documents executed in Korea. No securities transaction tax will be imposed on the transfer of Notes.

Tax Treaties

At the date of this Offering Circular, Korea has tax treaties with, *inter alia*, Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Luxembourg, Malaysia, the Netherlands, New Zealand, Norway, Singapore, Sweden, Switzerland, the United Kingdom and the United States under which the rate of withholding tax on interest (including local income tax) is reduced, generally to between 5% and 16.5% and the tax on capital gains is often eliminated.

The special withholding tax system took effect 1 July 2006. Under the system, residents of Labuan, Malaysia are presumed to be tax treaty shopping, and are denied tax treaty benefits. Instead, payments made to the residents of Labuan, Malaysia will be subject to the default Korean withholding tax rates (generally 15.4% for interest and the lower of 11% of the gross realisation proceeds or 22% for capital gain (including local income tax)) rather than the reduced or exempted rate available under the Korea-Malaysia tax treaty. A Labuan taxpayer, however, will be given an opportunity to get refund by proving that it is entitled to the tax treaty benefits as a substantive owner of the income and a real resident of Labuan, Malaysia. A Labuan taxpayer may also file an application with the National Tax Service (the "**NTS**") for confirmation that it is entitled to the tax treaty benefits and obtain an advance confirmation from the NTS prior to receiving Korean source income.

Each holder should enquire for himself whether he is entitled to the benefit of a tax treaty with respect to any transaction involving Notes. It is the responsibility of the party claiming the benefits of a tax treaty in respect of interest payments to file with the payer or the Issuer a certificate as to his residence. In the absence of sufficient proof, the payer or the Issuer must withhold taxes in accordance with the above discussion.

In order to claim the benefit of a tax rate reduction or tax exemption available under the applicable tax treaties, a Non-Residents holder must submit to the payer of such Korean source income an application (for reduced withholding tax rate, "application for entitlement to reduced tax rate" and in the case of exemption from withholding tax, "application for exemption" under a tax treaty along with the documents proving the beneficial owner of such Korean source income including a certificate of the Non-Residents holder's tax residence issued by a competent authority of the Non-Residents holder's residence country) as the beneficial owner ("**BO Application**"). Such application should be submitted to the withholding agent prior to the payment date of the relevant income. Subject to certain exceptions, where the relevant income is paid to an overseas investment vehicle (which is not the beneficial owner of such income) ("**OIV**"), 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 must submit an OIV report and a schedule of beneficial owners (together with the applicable BO Application), to the withholding agent prior to the payment date of such income. Effective from 1 January 2022, an OIV is deemed to be a beneficial owner of Korean source income for income tax purposes, if (i) under the applicable tax treaty, the OIV bears tax liabilities in the country in which it is established or the OIV is deemed to be the owner of the Korean source income; 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 and a schedule of beneficial owners in the case of income 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.

An application for entitlement to reduced tax rate and tax exemption submitted by a Non-Resident remains effective for three years from submission, and if any material changes occur with respect to information provided in the application, an application reflecting such change must be newly submitted.

However, this requirement does not apply to tax exemptions under Korean tax laws.

Withholding and Gross Up

As mentioned above, interest under the Notes could be exempt from any withholding or deduction on account of income tax or corporate tax pursuant to the STTCL. However, in the event that the payer or the Issuer is required by law to make any withholding or deduction for or on account of any Korean taxes (as more fully described in Condition 9), the Issuer has agreed to pay (subject to the customary exceptions as set out in such Condition 9) such additional amounts as may be necessary in order that the net amounts receivable by the holder of any Note or Coupon after such withholding or deduction shall equal the respective amounts which would have been receivable by such holder in the absence of such withholding or deduction.

United States

Except where otherwise stated, the following is a summary of certain U.S. federal income tax consequences of the acquisition, ownership and disposition of Registered Notes by a U.S. Holder that acquired such Registered Notes at initial issuance, that will hold the Registered Notes as capital assets, and whose functional currency is the U.S. dollar. The discussion does not cover all aspects of U.S. federal income taxation that may be relevant to the acquisition, ownership or disposition of Registered Notes by particular investors. In particular, this summary does not discuss all of the tax considerations that may be relevant to certain types of investors subject to special treatment under the U.S. federal income tax laws (such as banks and other financial institutions, tax-exempt organisations, partnerships or other pass-through entities for U.S. federal income tax purposes and any beneficial owners of such entities, dealers in securities or currencies, traders in securities that elect to use a mark-to-market method of accounting, persons subject to special tax accounting rules as a result of gross income with respect to any Registered Note being taken into account in an applicable financial statement, corporations that accumulate earnings to avoid U.S. federal income tax, persons who have ceased to be U.S. citizens or to be taxed as U.S. lawful permanent residents, an "expatriated entity" subject to Section 7874 of the Code, and investors that will hold the Registered Notes as part of straddles, hedging or conversion transactions, or as part of a synthetic security for U.S. federal income tax purposes).

This summary is based on the Code, administrative pronouncements, judicial decisions and final, temporary and proposed Treasury regulations as of the date hereof, all of which are subject to change, possibly on a retroactive basis, and changes to any of which subsequent to the date of this Offering Circular may affect the tax consequences described herein. This discussion does not address the alternative minimum tax or the Medicare tax on certain investment income, nor does it address any aspect of state, local or non-U.S. taxation, or any U.S. federal taxes other than income taxes (such as gift and estate taxes). We have not sought, and will not seek, a ruling from the Internal Revenue Service ("**IRS**") as to any U.S. federal income tax consequence described herein. The IRS may disagree with the discussion herein, and its determination may be upheld by a court.

As used herein, the term "**U.S. Holder**" means a beneficial owner of Registered Notes that is, for U.S. federal income tax purposes: (i) a citizen or individual resident of the United States; (ii) a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created or organised in or under the laws of the United States, the District of Columbia, or any State thereof; (iii) an estate, the income of which is subject to U.S. federal income tax without regard to its source; or (iv) a trust if a court within the United States is able to exercise primary supervision over the administration of the trust and one or more U.S. persons have the authority to control all substantial decisions of the trust.

If a partnership (or any other entity treated as fiscally transparent for U.S. federal income tax purposes) holds the Registered Notes, the tax treatment of a partner in such partnership generally will depend upon the status of the partner and the activities of the partnership. Any such partner or partnership should consult their tax advisers as to the U.S. federal income tax consequences to them of the acquisition, ownership and disposition of the Registered Notes.

Bearer Notes are not being offered to U.S. Holders. A U.S. Holder who owns a Bearer Note may be subject to limitations under United States income tax laws, including the limitations provided in Sections 165(j) and 1287(a) of the Code.

INVESTORS SHOULD CONSULT THEIR OWN TAX ADVISERS TO DETERMINE THE TAX CONSEQUENCES TO THEM OF ACQUIRING, OWNING AND DISPOSING OF REGISTERED NOTES, INCLUDING THE APPLICATION TO THEIR PARTICULAR SITUATION OF THE U.S. FEDERAL INCOME TAX CONSIDERATIONS DISCUSSED BELOW, AS WELL AS THE APPLICATION OF THE MEDICARE CONTRIBUTION TAX ON INVESTMENT INCOME, ALTERNATIVE MINIMUM TAX AND ANY STATE, LOCAL, NON-U.S. OR OTHER TAX LAWS.

The Issuer generally intends to treat Notes issued under the Programme as debt. Certain Notes, however, may be treated as equity or some other type of instrument or interest for U.S. federal income tax purposes. The tax treatment of Notes to which a treatment other than debt may apply may be discussed in a supplement to the Offering Circular. This summary does not discuss Notes with a maturity of greater than 30 years, the impact of redenomination of a Note, Notes that by their terms may be retired for an amount less than their principal amount and Notes subject to special rules. The terms and U.S. federal income tax treatment of certain Notes that the Issuer and the relevant Dealers may agree to issue under the Programme may be set out in a Pricing Supplement (if applicable).

Payment of Interest

Interest paid on a Note, whether payable in U.S. dollars or a currency other than U.S. dollars ("**foreign currency**" interest on a "**Foreign Currency Note**"), other than interest on a Discount Note that is not "qualified stated interest" (each as defined below under "*Original Issue Discount — General*"), will be taxable to a U.S. Holder as ordinary income at the time it is received or accrued, in accordance with the U.S. Holder's method of accounting for tax purposes. Interest paid by the Issuer on the Notes and original issue discount ("**OID**"), if any, accrued with respect to the Notes (as described below under "*Original Issue Discount — General*") generally will constitute income from sources outside the United States for the purposes of the rules regarding the foreign tax credit allowable to a U.S. Holder (and the limitations imposed thereon). Prospective purchasers should consult their tax advisers concerning the foreign tax credit implications of the payment of any foreign taxes with respect to the Notes (if applicable).

Original Issue Discount

General

A Note that only provides for the payment of amounts that are qualified stated interest before maturity, other than a Note with a term of one year or less (a "**Short-Term Note**"), will be treated as issued with OID (a "**Discount Note**") if the excess of the Note's stated redemption price at maturity over its issue price is equal to or more than a *de minimis* amount (0.25% of the Note's stated redemption price at maturity multiplied by the number of complete years to its maturity). An obligation that provides for the payment of amounts other than qualified stated interest before maturity (an "**instalment obligation**") will be treated as a Discount Note if the excess of the Note's stated redemption price at maturity over its issue price is greater than 0.25% of the Note's stated redemption price at maturity multiplied by the weighted average maturity of the Note. A Note's weighted average maturity is the sum of the following amounts determined for each payment on a Note (other than a payment of qualified stated interest): (i) the number of complete years from the issue date until the payment is made multiplied by (ii) a fraction, the numerator of which is the amount of the payment and the denominator of which is the Note's stated redemption price at maturity. Generally, the issue price of a Note will be the first price at which a substantial amount of Notes included in the issue of which the Note is a part is sold to persons other than bond houses, brokers or similar persons or organisations acting in the capacity of underwriters, placement agents or wholesalers. The stated redemption price at maturity of a Note is the total of all payments provided by the Note that are not payments of qualified stated interest. A qualified stated interest payment generally is any one of a series of stated interest payments on a Note that are unconditionally payable at least annually at a single fixed rate (with certain exceptions for lower rates paid during some periods), or a variable rate (in the circumstances described under "— *Variable Interest Rate Notes*"), applied to the outstanding principal amount of the Note. Solely for the purposes of determining whether a Note has OID, the Issuer will be deemed to exercise any call option that has the effect of decreasing the yield on the Note, and the U.S. Holder will be deemed to exercise any put option that has the effect of increasing the yield on the Note. If a Note has *de minimis* OID, a U.S. Holder must include the *de minimis* amount in income as stated principal payments are made on the Note, unless the U.S. Holder makes the election described under "— *Election to Treat All Interest as Original Issue Discount*". A U.S. Holder can determine the includible amount with respect to each such payment by multiplying the total amount of the Note's *de minimis* OID by a fraction equal to the amount of the principal payment made divided by the stated principal amount of the Note.

U.S. Holders of Discount Notes must include OID in income calculated on a constant yield method before the receipt of cash attributable to the income, and generally will have to include in income increasingly greater amounts of OID over the life of the Discount Notes. The amount of OID includible in income by a U.S. Holder of a Discount Note is the sum of the daily portions of OID with respect to the Discount Note for each day during the taxable year or the portion of the taxable year in which the U.S. Holder holds the Discount Note ("**accrued OID**"). The daily portion is determined by allocating to each day in any accrual period a *pro rata* portion of the OID allocable to that accrual period. Accrual periods with respect to a Note may be of any length selected by the U.S. Holder and may vary in length over the term of the Notes as long as: (i) no accrual period is longer than one year; and (ii) each scheduled payment of interest or principal on the Note occurs on either the final or first day of an accrual period. The amount of OID allocable to an accrual period equals the excess of: (a) the product of the Discount Note's adjusted issue price at the beginning of the accrual period and the Discount Note's yield to maturity (determined on the basis of compounding at the close of each accrual period and properly adjusted for the length of the accrual period) over (b) the sum of the payments of qualified stated interest on the Note allocable to the accrual period. The adjusted issue price of a Discount Note at the beginning of any accrual period is the issue price of the Note increased by: (x) the amount of accrued OID for each prior accrual period and decreased by (y) the amount of any payments previously made on the Note that were not qualified stated interest payments.

Acquisition Premium

A U.S. Holder that purchases a Discount Note for an amount less than or equal to the sum of all amounts payable on the Note after the purchase date, other than payments of qualified stated interest, but in excess of its adjusted issue price (any such excess being "**acquisition premium**") and that does not make the election described under "— *Election to Treat All Interest as Original Issue Discount*", is permitted to reduce the daily portions of OID by a fraction, the numerator of which is the excess of the U.S. Holder's adjusted basis in the Note immediately after its purchase over the Note's adjusted issue price, and the denominator of which is the excess of the sum of all amounts payable on the Note after the purchase date, other than payments of qualified stated interest, over the Note's adjusted issue price.

Election to Treat All Interest as Original Issue Discount

A U.S. Holder may elect to include in gross income all interest that accrues on a Note using the constant yield method described under "— *General*", with certain modifications. For the purposes of this election, interest includes stated interest, OID, *de minimis* OID, market discount, *de minimis* market discount and unstated interest, as adjusted by any amortisable bond premium (described under "— *Notes Purchased at a Premium*") or acquisition premium. If a U.S. Holder makes this election for the Note, then, when the constant yield method is applied, the issue price of the Note will equal its cost, the issue date of the Note will be the date of acquisition, and no payments on the Note will be treated as payments of qualified stated interest. This election generally will apply only to the Note with respect to which it is made and may not be revoked without the consent of the IRS. However, if the Note has amortisable bond premium, the U.S. Holder will be deemed to have made an election to apply amortisable bond premium against interest for all debt instruments with amortisable bond premium (other than debt instruments, the interest on which is excludible from gross income) held as of the beginning of the taxable year to which the election applies or any taxable year thereafter. If the election to apply the constant yield method to all interest on a Note is made with respect to a Market Discount Note (as defined below under "— *Market Discount*"), the electing U.S. Holder will be treated as having made the election discussed under "— *Market Discount*" to include market discount in income currently over the life of all debt instruments with market discount held or thereafter acquired by the U.S. Holder. U.S. Holders should consult their tax advisers concerning the advisability and consequences of making this election.

Short-Term Notes

A Short-Term Note will be treated as being issued at a discount, and none of the interest paid on the Note will be treated as qualified stated interest regardless of issue price. In general, an individual or other cash basis U.S. Holder of a Short-Term Note is not required to accrue OID (calculated as set forth below for the purposes of this paragraph) for U.S. federal income tax purposes unless it elects to do so (but may be required to include any stated interest in income as the interest is received). Cash basis U.S. Holders who do not elect to accrue OID should include stated interest payments on Short-Term Notes as ordinary income upon receipt. Cash basis U.S. Holders who do elect to accrue OID, accrual basis U.S. Holders and certain other U.S. Holders are required to accrue OID on Short-Term Notes on a straight line basis or, if the U.S. Holder so elects, under the constant yield method (based on daily compounding). In the case of a U.S. Holder not required and not electing to include OID in income currently, any gain realised on the sale or retirement of the Short-Term Note will be ordinary income to the extent of the OID accrued on a straight line basis (unless an election is made to accrue the OID under the constant yield method) through the date of sale or retirement. U.S. Holders who are not required and do not elect to accrue OID on Short-Term Notes will be required to defer deductions for interest on borrowings allocable to Short-Term Notes in an amount not exceeding the deferred income until the deferred income is realised.

For the purposes of determining the amount of OID subject to these rules, all interest payments on a Short-Term Note are included in the Short-Term Note's stated redemption price at maturity. A U.S. Holder may elect to determine OID on a Short-Term Note as if the Short-Term Note had been originally issued to the U.S. Holder at the U.S. Holder's purchase price for the Short-Term Note. This election shall apply to all obligations with a maturity of one year or less acquired by the U.S. Holder on or after the first day of the first taxable year to which the election applies, and may not be revoked without the consent of the IRS.

Market Discount

A Note, other than a Short-Term Note, that is not acquired at its original issue generally will be treated as purchased at a market discount (a "**Market Discount Note**") if the Note's stated redemption price at maturity or, in the case of a Discount Note, the Note's revised issue price, exceeds the amount for which the U.S. Holder purchased the Note by at least 0.25% of the Note's stated redemption price at maturity or revised issue price, respectively, multiplied by the number of complete years to the Note's maturity (or, in the case of a Note that is an instalment obligation, the Note's weighted average maturity). If this excess is not sufficient to cause the Note to be a Market Discount Note, then the excess constitutes *de minimis* market discount. For this purpose, the revised issue price of a Note generally equals its issue price, increased by the amount of any OID that has accrued on the Note and decreased by the amount of any payments previously made on the Note that were not qualified stated interest payments.

Any gain recognised on the maturity or disposition of a Market Discount Note (including any payment on a Note that is not qualified stated interest) will be treated as ordinary income to the extent that the gain does not exceed the accrued market discount on the Note. Alternatively, a U.S. Holder of a Market Discount Note may elect to include market discount in income currently over the life of the Note. This election will apply to all debt instruments with market discount acquired by the electing U.S. Holder on or after the first day of the first taxable year to which the election applies. This election may not be revoked without the consent of the IRS. A U.S. Holder of a Market Discount Note that does not elect to include market discount in income currently generally will be required to defer deductions for interest on borrowings incurred to purchase or carry a Market Discount Note that is in excess of the interest and OID on the Note includible in the U.S. Holder's income, to the extent that this excess interest expense does not exceed the portion of the market discount allocable to the days on which the Market Discount Note was held by the U.S. Holder.

Market discount will accrue on a straight line basis unless the U.S. Holder elects to accrue the market discount on a constant yield method. This constant yield election applies only to the Market Discount Note with respect to which it is made and is irrevocable.

Notes Purchased at a Premium

A U.S. Holder that purchases a Note for an amount in excess of its principal amount (or, for a Discount Note, the sum of all amounts payable on the Note after the purchase date, other than payments of qualified stated interest) may elect to treat the excess as amortisable bond premium, in which case the amount required to be included in the U.S. Holder's income each year with respect to interest on the Note will be reduced by the amount of amortisable bond premium allocable (based on the Note's yield to maturity) to that year. Any election to amortise bond premium shall apply to all bonds (other than bonds, the interest on which is excludable from gross income for U.S. federal income tax purposes) held by the U.S. Holder at the beginning of the first taxable year to which the election applies or thereafter acquired by the U.S. Holder, and is irrevocable without the consent of the IRS. Please see also "— *Election to Treat All Interest as Original Issue Discount*". A U.S. Holder that does not elect to take bond premium (other than acquisition premium) into account currently will generally recognise a capital loss when the Note matures.

Purchase, Sale and Retirement of Notes

A U.S. Holder's tax basis in a Note generally will be its cost, increased by the amount of any OID or market discount included in the U.S. Holder's income with respect to the Note and the amount, if any, of income attributable to *de minimis* OID and *de minimis* market discount included in the U.S. Holder's income with respect to the Note, and reduced by: (i) the amount of any payments that are not qualified stated interest payments; and (ii) the amount of any amortisable bond premium applied to reduce interest on the Note.

A U.S. Holder generally will recognise gain or loss on the sale or retirement of a Note equal to the difference between (i) the amount realised on the sale or retirement (less any amount attributable to accrued qualified stated interest, which will be taxable as such) and (ii) the U.S. Holder's tax basis of the Note. Amounts realised on the sale or retirement of a Note are taxable as interest income to the extent of accrued but unpaid interest not previously included in income. Except to the extent described under "*Original Issue Discount — Market Discount*", "*Original Issue Discount — Short-Term Notes*" or "*Contingent Payment Notes*" or attributable to accrued but unpaid interest or changes in exchange rates (as discussed below), gain or loss recognised on the sale or retirement of a Note will be capital gain or loss and generally will be treated as from U.S. sources for purposes of the U.S. foreign tax credit limitation. In the case of a U.S. Holder that is an individual, estate or trust, the maximum marginal federal income tax rate applicable to capital gains is currently lower than the maximum marginal rate applicable to ordinary income if the Notes are held for more than one year. The deductibility of capital losses is subject to significant limitations.

Contingent Payment Notes

If the terms of the Notes provide for certain contingencies that affect the timing and amount of payments (including Notes with a variable rate or Notes that do not qualify as "variable rate debt instruments" for purposes of the original issue discount rules) they generally will be "contingent payment debt instruments" for U.S. federal income tax purposes. Under the rules that govern the treatment of contingent payment debt instruments, no payment on such Notes qualifies as qualified stated interest. Rather, a U.S. Holder must account for interest for U.S. federal income tax purposes based on a "comparable yield" and the differences between actual payments on the Note and the Note's "projected payment schedule" as described below. The comparable yield is determined by the Issuer at the time of issuance of the Notes. The comparable yield may be greater than or less than the stated interest, if any, with respect to the Notes. Solely for the purpose of determining the amount of interest income that a U.S. Holder will be required to accrue on a contingent payment debt instrument, the Issuer will be required to construct a "projected payment schedule" that represents a series of payments the amount and timing of which would produce a yield to maturity on the contingent payment debt instrument equal to the comparable yield.

Neither the comparable yield nor the projected payment schedule constitutes a representation by the Issuer regarding the actual amount, if any, that the contingent payment debt instrument will pay.

For U.S. federal income tax purposes, a U.S. Holder will be required to use the comparable yield and the projected payment schedule established by the Issuer in determining interest accruals and adjustments, unless the Holder timely discloses and justifies the use of a different comparable yield and projected payment schedule to the IRS.

A U.S. Holder, regardless of the U.S. Holder's method of accounting for U.S. federal income tax purposes, will be required to accrue interest income on a contingent payment debt instrument at the comparable yield, adjusted upward or downward to reflect the difference, if any, between the actual and the projected amount of any contingent payments on the contingent payment instrument (as set forth below).

A U.S. Holder will be required to recognise interest income equal to the amount of any net positive adjustment, i.e., the excess of actual payments over projected payments, in respect of a contingent payment debt instrument for a taxable year. A net negative adjustment, i.e., the excess of projected payments over actual payments, in respect of a contingent payment debt instrument for a taxable year:

- will first reduce the amount of interest in respect of the contingent payment debt instrument that such U.S. Holder would otherwise be required to include in income in the taxable year; and
- to the extent of any excess, will give rise to an ordinary loss equal to so much of this excess as does not exceed the excess of:
  - the amount of all previous interest inclusions under the contingent payment debt instrument over
  - the total amount of the U.S. Holder's net negative adjustments treated as ordinary loss on the contingent payment debt instrument in prior taxable years.

A net negative adjustment is not subject to the limitations imposed on miscellaneous itemised deductions (which generally cannot be deducted in taxable years beginning prior to 1 January 2026 and are subject to a 2% floor limitation for subsequent taxable years). Any net negative adjustment in excess of the amounts described above will be carried forward to offset future interest income in respect of the contingent payment debt instrument or to reduce the amount realised on a sale, exchange or retirement of the contingent payment debt instrument. Where a U.S. Holder purchases a contingent payment debt instrument for a price other than its adjusted issue price, the difference between the purchase price and the adjusted issue price must be reasonably allocated to the daily portions of interest or projected payments with respect to the contingent payment debt instrument over its remaining term and treated as a positive or negative adjustment, as the case may be, with respect to each period to which it is allocated.

Upon a sale, exchange or retirement of a contingent payment debt instrument, a U.S. Holder generally will recognise taxable gain or loss equal to the difference between the amount realised on the sale, exchange or retirement and the Holder's adjusted basis in the contingent payment debt instrument. A U.S. Holder's adjusted basis in a Note that is a contingent payment debt instrument generally will be the acquisition cost of the Note, increased by the interest previously accrued by the U.S. Holder on the Note under these rules, disregarding any net positive and net negative adjustments, and decreased by the amount of any noncontingent payments and the projected amount of any contingent payments previously made on the Note. A U.S. Holder generally will treat any gain as interest income, and any loss as ordinary loss to the extent of the excess of previous interest inclusions in excess of the total net negative adjustments previously taken into account as ordinary losses, and the balance as capital loss. The deductibility of capital losses is subject to limitations. In addition, if a Holder recognises loss above certain thresholds, the Holder may be required to file a disclosure statement with the IRS (as described below under "*—Reportable Transactions*").

Special rules apply to contingent payment debt instruments that are denominated, or provide for payments, in a currency other than the U.S. dollar ("**Foreign Currency Contingent Payment Notes**"). Very generally, these Notes are accounted for like a contingent payment debt instrument, as described above, but in the currency of the Foreign Currency Contingent Payment Notes. The relevant amounts must then be translated into U.S. dollars. The rules applicable to Foreign Currency Contingent Payment Notes are complex and U.S. Holders are urged to consult their own tax advisors regarding the U.S. federal income tax consequences of the acquisition, ownership and disposition of such Notes.

Foreign Currency Notes

Interest

If an interest payment is denominated in, or determined by reference to, a foreign currency, the amount of income recognised by a cash basis U.S. Holder will be the U.S. dollar value of the interest payment, based on the exchange rate in effect on the date of receipt, regardless of whether the payment is in fact converted into U.S. dollars. An accrual basis U.S. Holder may determine the amount of income recognised with respect to an interest payment denominated in, or determined by reference to, a foreign currency in accordance with either of two methods.

Under the first method, the amount of income accrued will be based on the average exchange rate in effect during the interest accrual period (or, in the case of an accrual period that spans two taxable years of a U.S. Holder, the part of the period within the taxable year). Under the second method, the U.S. Holder may elect to determine the amount of income accrued on the basis of the exchange rate in effect on the last day of the accrual period (or, in the case of an accrual period that spans two taxable years, the exchange rate in effect on the last day of the part of the period within the taxable year). Additionally, if a payment of interest is actually received within five business days of the last day of the accrual period, an electing accrual basis U.S. Holder may instead translate the accrued interest into U.S. dollars at the exchange rate in effect on the day of actual receipt. Any such election will apply to all debt instruments held by the U.S. Holder at the beginning of the first taxable year to which the election applies or thereafter acquired by the U.S. Holder, and will be irrevocable without the consent of the IRS.

Upon receipt of an interest payment (including a payment attributable to accrued but unpaid interest upon the sale or retirement of a Note) denominated in, or determined by reference to, a foreign currency, the U.S. Holder may recognise U.S. source exchange gain or loss (taxable as ordinary income or loss) equal to the difference between the amount received (translated into U.S. dollars at the spot rate on the date of receipt) and the amount previously accrued, regardless of whether the payment is in fact converted into U.S. dollars.

OID

OID for each accrual period on a Discount Note that is denominated in, or determined by reference to, a foreign currency, will be determined in the foreign currency and then translated into U.S. dollars in the same manner as stated interest accrued by an accrual basis U.S. Holder, as described above under "— *Interest*". Upon receipt of an amount attributable to OID (whether in connection with a payment on the Note or a sale of the Note), a U.S. Holder may recognise U.S. source exchange gain or loss (taxable as ordinary income or loss) equal to the difference between the amount received (translated into U.S. dollars at the spot rate on the date of receipt) and the amount previously accrued, regardless of whether the payment is in fact converted into U.S. dollars.

Market Discount

Market Discount on a Note that is denominated in, or determined by reference to, a foreign currency, will be accrued in the foreign currency. If the U.S. Holder elects to include market discount in income currently, the accrued market discount will be translated into U.S. dollars at the average exchange rate for the accrual period (or portion thereof within the U.S. Holder's taxable year). Upon the receipt of an amount attributable to accrued market discount, the U.S. Holder may recognise U.S. source exchange gain or loss (which will be taxable as ordinary income or loss) determined in the same manner as for accrued interest or OID. A U.S. Holder that does not elect to include market discount in income currently will recognise, upon the disposition or maturity of the Note, the U.S. dollar value of the amount accrued, calculated at the spot rate on that date, and no part of this accrued market discount will be treated as exchange gain or loss.

Bond Premium

Bond premium (including acquisition premium) on a Note that is denominated in, or determined by reference to, a foreign currency, will be computed in units of the foreign currency, and any such bond premium that is taken into account currently will reduce interest income in units of the foreign currency.

On the date bond premium offsets interest income, a U.S. Holder may recognise U.S. source exchange gain or loss (taxable as ordinary income or loss) measured by the difference between the spot rate in effect on that date, and on the date the Notes were acquired by the U.S. Holder.

Purchase, Sale and Retirement of Notes

A U.S. Holder generally will recognise gain or loss on the sale or retirement of a Note equal to the difference between (i) the amount realised on the sale or retirement (less any amount attributable to accrued qualified stated interest, which will be taxable as such) and (ii) its tax basis in the Note. A U.S. Holder's tax basis in a Foreign Currency Note will be its U.S. dollar cost increased by the amount of any OID or market discount included in the U.S. Holder's income with respect to the Note and the amount, if any, of income attributable to de minimis OID and de minimis market discount included in the U.S. Holder's income with respect to the Note, and reduced by (i) the amount of any principal paid on the Note, and (ii) the amount of any amortizable bond premium applied to reduce interest on the Note. The U.S. dollar cost of a Note purchased with foreign currency generally will be the U.S. dollar value of the purchase price on the date of purchase or, in the case of Notes traded on an established securities market, as defined in the applicable U.S. Treasury regulations, that are purchased by a cash basis U.S. Holder (or an accrual basis U.S. Holder that so elects), on the settlement date for the purchase.

The amount realised on a sale or retirement for an amount in foreign currency will be the U.S. dollar value of this amount on the date of sale or retirement or, in the case of Notes traded on an established securities market, as defined in the applicable U.S. Treasury regulations, sold by a cash basis U.S. Holder (or an accrual basis U.S. Holder that so elects), on the settlement date for the sale. Such an election by an accrual basis U.S. Holder must be applied consistently from year to year and cannot be revoked without the consent of the IRS.

A U.S. Holder will recognise U.S. source exchange rate gain or loss (taxable as ordinary income or loss) on the sale or retirement of a Note equal to the difference, if any, between the U.S. dollar values of the U.S. Holder's purchase price for the Note: (i) on the date of sale or retirement; and (ii) on the date on which the U.S. Holder acquired the Note. Any exchange rate gain or loss recognised on the sale or retirement of a Note (including any exchange rate gain or loss with respect to the receipt of accrued but unpaid interest and OID in the transaction) shall be realised only to the extent of the total gain or loss realised on the transaction. Except to the extent described above under "*Foreign Currency Notes — Market Discount*" above or changes in exchange rates, gain or loss recognized by a U.S. Holder on the sale or retirement of a Note will be capital gain or loss and will be long-term capital gain or loss if the Note was held by the U.S. Holder for more than one year. Gain or loss realized by a U.S. Holder on the sale or retirement of a Note generally will be U.S. source. A U.S. Holder might be required to file a disclosure statement with the IRS if the U.S. Holder recognizes foreign currency loss above certain thresholds (as described below under "*—Reportable Transactions*").

Disposition of Foreign Currency

Foreign currency received as interest on a Note or on the sale or retirement of a Note will have a tax basis equal to its U.S. dollar value at the time the interest is received or at the time of the sale or retirement. Foreign currency that is purchased generally will have a tax basis equal to the U.S. dollar value of the foreign currency on the date of purchase. Any gain or loss recognised on a sale or other disposition of a foreign currency (including its use to purchase Notes or upon exchange for U.S. dollars) will be U.S. source ordinary income or loss.

Reportable Transactions

A U.S. Holder that participates in a "reportable transaction" will be required to disclose its participation to the IRS. The scope and application of these rules are not entirely clear. A U.S. Holder may be required to treat a foreign currency exchange loss from a Note as a reportable transaction if the loss exceeds US$50,000 in a single taxable year if the U.S. Holder is an individual or trust, or higher amounts for other non-individual U.S. Holders. In the event the acquisition, ownership or disposition of a Note constitutes participation in a "reportable transaction" for purposes of these rules, a U.S. Holder will be required to disclose its investment to the IRS, currently on Form 8886. A U.S. Holder that fails to timely file an information return with the IRS with respect to a transaction resulting in a loss that is treated as a reportable transaction may be subject to penalties. The Issuer might also be required to report information regarding the transaction to the IRS. Prospective purchasers should consult with their tax advisers regarding the application of these rules to the acquisition, ownership or disposition of a Note.

Backup Withholding and Information Reporting

Payments of principal, interest and accruals of OID on, and the proceeds of a sale, exchange, redemption or other disposition of, Notes, payable to a U.S. Holder by a paying agent or other intermediary, may be subject to information reporting to the IRS. In addition, certain U.S. Holders may be subject to backup withholding tax in respect of such payments if they do not provide an accurate taxpayer identification number or certification of exempt status to a paying agent or other intermediary or otherwise comply with the applicable backup withholding requirements.

Backup withholding is not an additional tax. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle the U.S. Holder to a refund, provided that the required information is timely furnished to the IRS in the manner required. Certain U.S. Holders (including, among others, corporations) are not subject to information reporting or backup withholding. U.S. Holders should consult their tax advisers as to their qualification for exemption from information reporting and/or backup withholding.

Certain U.S. Holders may be required to report to the IRS certain information with respect to their beneficial ownership of certain foreign financial assets, such as the Notes, if the aggregate value of such assets exceeds certain U.S. dollar value thresholds and the Notes are not held in an account at certain financial institutions (in which case the account maintained by the financial institution may be reportable). U.S. Holders who fail to report required information could be subject to substantial penalties.

U.S. Holders should consult their own tax advisers regarding any filing or reporting requirements that may apply to their purchase, ownership and disposition of Notes. Failure to comply with certain reporting obligations could result in the imposition of substantial penalties.

Proposed Financial Transactions Tax ("FTT")

On 14 February 2013, the European Commission published a proposal (the "**Commission's proposal**") for a Directive for a common FTT in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (the "**participating Member States**"). However, Estonia has since stated that it will not participate.

The Commission's proposal has a very broad scope and could, if introduced, apply to certain dealings in the Notes (including secondary market transactions) in certain circumstances. Under the Commission's proposal, FTT could apply in certain circumstances to persons both within and outside of the participating Member States. Generally, it would apply to certain dealings in the Notes where at least one party is a financial institution, and at least one party is established in a participating Member State. A financial institution may be, or be deemed to be, "established" in a participating Member State in a broad range of circumstances, including (a) by transacting with a person established in a participating Member State or (b) where the financial instrument which is subject to the dealings is issued in a participating Member State.

However, the FTT proposal remains subject to negotiation between participating Member States. It may therefore be altered prior to any implementation, the timing of which remains unclear. Additional EU Member States may decide to participate.

Prospective holders of the Notes are advised to seek their own professional advice in relation to the FTT.

BOOK-ENTRY CLEARANCE SYSTEMS

*The information set out below is subject to any change in or reinterpretation of the rules, regulations and procedures of DTC, Euroclear or Clearstream, Luxembourg (together, the "**Clearing System**") currently in effect. The information in this section concerning the Clearing System has been obtained from sources that the Issuer believes to be reliable, but none of the Issuer nor any Dealer takes any responsibility for the accuracy thereof. Investors wishing to use the facilities of any of the Clearing Systems are advised to confirm the continued applicability of the rules, regulations and procedures of the relevant Clearing System. None of the Issuer nor any other party to the Agency Agreement will have any responsibility or liability for any aspect of the records relating to, or payments made on account of, beneficial ownership interests in the Notes held through the facilities of any Clearing System or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.*

Book-entry Systems

Depositary Trust Company

DTC has advised the Issuer that it is a limited purpose trust company organised under the New York Banking Law, a "banking organisation" within the meaning of the New York Banking Law, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to Section 17A of the Exchange Act. DTC holds securities that its participants ("**Participants**") deposit with DTC. DTC also facilitates the settlement among Participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerised book-entry changes in Participants' accounts, thereby eliminating the need for physical movement of securities certificates. Direct Participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organisations. Access to the DTC System is also available to others such as securities brokers and dealers, banks and trust companies that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("**Indirect Participants**").

Under the rules, regulations and procedures creating and affecting DTC and its operations (the "**Rules**"), DTC makes book-entry transfers of Registered Notes among Direct Participants on whose behalf it acts with respect to Notes accepted into DTC's book-entry settlement system ("**DTC Notes**") as described below and receives and transmits distributions of principal and interest on DTC Notes. The Rules are on file with the Securities and Exchange Commission. Direct Participants and Indirect Participants with which beneficial owners of DTC Notes ("**Owners**") have accounts with respect to the DTC Notes similarly are required to make book-entry transfers and receive and transmit such payments on behalf of their respective Owners. Accordingly, although Owners who hold DTC Notes through Direct Participants or Indirect Participants will not possess Registered Notes, the Rules, by virtue of the requirements described above, provide a mechanism by which Direct Participants will receive payments and will be able to transfer their interest in respect of the DTC Notes.

Purchases of DTC Notes under the DTC system must be made by or through Direct Participants, which will receive a credit for the DTC Notes on DTC's records. The ownership interest of each actual purchaser of each DTC Note ("**Beneficial Owner**") is in turn to be recorded on the Direct and Indirect Participant's records. Beneficial Owners will not receive written confirmation from DTC of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the DTC Notes are to be accomplished by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in DTC Notes, except in the event that use of the book-entry system for the DTC Notes is discontinued.

To facilitate subsequent transfers, all DTC Notes deposited by participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co. The deposit of DTC Notes with DTC and their registration in the name of Cede & Co. effect no change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the DTC Notes; DTC's records reflect only the identity of the Direct Participants to whose accounts such DTC Notes are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices shall be sent to Cede & Co. If less than all of the DTC Notes within an issue are being redeemed, selection of Notes for such partial redemption will be made in accordance of rules and procedures of DTC.

Neither DTC nor Cede & Co. will consent or vote with respect to DTC Notes. Under its usual procedures, DTC mails an Omnibus Proxy to the Issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the DTC Notes are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payment on the DTC Notes will be made to DTC. DTC's practice is to credit Direct Participants' accounts on the due date for payment in accordance with their respective holdings shown on DTC's records unless DTC has reason to believe that it will not receive payment on the due date. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name", and will be the responsibility of such Participant and not of DTC or the Issuer, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to DTC is the responsibility of the Issuer, disbursement of such payments to Direct Participants is the responsibility of DTC, and disbursement of such payments to the Beneficial Owners is the responsibility of Direct and Indirect Participants.

Under certain circumstances, including if there is an Event of Default under the Notes, DTC will exchange the DTC Notes for definitive Registered Notes, which it will distribute to its Participants in accordance with their proportionate entitlements and which, if representing interests in a Rule 144A Global Note, will be legended as set forth under "*Subscription and Sale and Transfer and Selling Restrictions*".

Since DTC may only act on behalf of Direct Participants, who in turn act on behalf of Indirect Participants, any Owner desiring to pledge DTC Notes to persons or entities that do not participate in DTC, or otherwise take actions with respect to such DTC Notes, will be required to withdraw its Registered Notes from DTC as described below.

Euroclear and Clearstream, Luxembourg

Euroclear and Clearstream, Luxembourg each holds securities for its customers and facilitates the clearance and settlement of securities transactions by electronic book-entry transfer between their respective account holders. Euroclear and Clearstream, Luxembourg provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream, Luxembourg also deal with domestic securities markets in several countries through established depository and custodial relationships. Euroclear and Clearstream, Luxembourg have established an electronic bridge between their two systems across which their respective participants may settle trades with each other.

Euroclear and Clearstream, Luxembourg customers are world-wide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Indirect access to Euroclear and Clearstream, Luxembourg is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system.

Book-entry Ownership of and Payments in respect of DTC Notes

The Issuer may apply to DTC in order to have any Tranche of Notes represented by a Registered Global Note accepted in its book-entry settlement system. Upon the issue of any such Registered Global Note, DTC or its custodian will credit, on its internal book-entry system, the respective nominal amounts of the individual beneficial interests represented by such Registered Global Note to the accounts of persons who have accounts with DTC. Such accounts initially will be designated by or on behalf of the relevant Dealer. Ownership of beneficial interests in such Registered Global Note will be limited to Direct Participants or Indirect Participants, including, in the case of any Regulation S Global Note, the respective depositaries of Euroclear and Clearstream, Luxembourg. Ownership of beneficial interests in a Registered Global Note accepted by DTC will be shown on, and the transfer of such ownership will be effected only through, records maintained by DTC or its nominee (with respect to the interests of Direct Participants) and the records of Direct Participants (with respect to interests of Indirect Participants).

Payments in U.S. dollars of principal and interest in respect of a Registered Global Note accepted by DTC will be made to the order of DTC or its nominee as the registered holder of such Note. In the case of any payment in a currency other than U.S. dollars, payment will be made to the Exchange Agent on behalf of DTC or its nominee and the Exchange Agent will (in accordance with instructions received by it) remit all or a portion of such payment for credit directly to the beneficial holders of interests in the Registered Global Note in the currency in which such payment was made and/or cause all or a portion of such payment to be converted into U.S. dollars and credited to the applicable Participants' account.

The Issuer expects DTC to credit accounts of Direct Participants on the applicable payment date in accordance with their respective holdings as shown in the records of DTC unless DTC has reason to believe that it will not receive payment on such payment date. The Issuer also expects that payments by Participants to beneficial owners of Notes will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers, and will be the responsibility of such Participant and not the responsibility of DTC, the Principal Paying Agent, the Registrar or the Issuer. Payment of principal, premium, if any, and interest, if any, on Notes to DTC is the responsibility of the Issuer.

Transfers of Notes Represented by Registered Global Notes

Transfers of any interests in Notes represented by a Registered Global Note within DTC, Euroclear and Clearstream, Luxembourg will be effected in accordance with the customary rules and operating procedures of the relevant clearing system. The laws in some States within the United States require that certain persons take physical delivery of securities in definitive form. Consequently, the ability to transfer Notes represented by a Registered Global Note to such persons may depend upon the ability to exchange such Notes for Notes in definitive form.

Similarly, because DTC can only act on behalf of Direct Participants in the DTC system who in turn act on behalf of Indirect Participants, the ability of a person having an interest in Notes represented by a Registered Global Note accepted by DTC to pledge such Notes to persons or entities that do not participate in the DTC system or otherwise to take action in respect of such Notes may depend upon the ability to exchange such Notes for Notes in definitive form. The ability of any holder of Notes represented by a Registered Global Note accepted by DTC to resell, pledge or otherwise transfer such Notes may be impaired if the proposed transferee of such Notes is not eligible to hold such Notes through a direct or indirect participant in the DTC system.

Subject to compliance with the transfer restrictions applicable to the Registered Notes described under "*Subscription and Sale and Transfer and Selling Restrictions*", cross-market transfers between DTC, on the one hand, and directly or indirectly through Clearstream, Luxembourg or Euroclear accountholders, on the other will be effected by the relevant clearing system in accordance with its rules and through action taken by the Registrar, the Principal Paying Agent and any custodian ("**Custodian**") with whom the relevant Registered Global Notes have been deposited.

On or after the Issue Date for any Series, transfers of Notes of such Series between accountholders in Clearstream, Luxembourg and Euroclear and transfers of Notes of such Series between participants in DTC will generally have a settlement date three business days after the trade date (T+3). The customary arrangements for delivery versus payment will apply to such transfers.

Cross-market transfers between accountholders in Clearstream, Luxembourg or Euroclear and DTC participants will need to have an agreed settlement date between the parties to such transfer. Because there is no direct link between DTC, on the one hand, and Clearstream, Luxembourg and Euroclear, on the other, transfers of interests in the relevant Registered Global Notes will be effected through the Registrar, the Principal Paying Agent and the Custodian receiving instructions (and, where appropriate, certification) from the transferor and arranging for delivery of the interests being transferred to the credit of the designated account for the transferee. In the case of cross-market transfers, settlement between Euroclear or Clearstream, Luxembourg accountholders and DTC participants cannot be made on a delivery versus payment basis. The securities will be delivered on a free delivery basis and arrangements for payment must be made separately.

DTC, Clearstream, Luxembourg and Euroclear have each published rules and operating procedures designed to facilitate transfers of beneficial interests in Registered Global Notes among participants and accountholders of DTC, Clearstream, Luxembourg and Euroclear. However, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued or changed at any time. None of the Issuer, the Agents or any Dealer will be responsible for any performance by DTC, Clearstream, Luxembourg or Euroclear or their respective direct or indirect participants or accountholders of their respective obligations under the rules and procedures governing their operations and none of them will have any liability for any aspect of the records relating to or payments made on account of beneficial interests in the Notes represented by Registered Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial interests.

CMU Notes

Unless otherwise specified in the applicable Pricing Supplement, CMU Notes will initially be issued in registered form and represented by a global certificate (the "**CMU Global Note**") registered in the name of HKMA, in its capacity as operator of the CMU Service and shall be delivered to and held by a sub-custodian nominated by the HKMA as operator of the CMU Service, or the CMU operator. The CMU Global Note will be held for the account of CMU members who have accounts with the CMU operator, or the CMU participants. For persons seeking to hold a beneficial interest in the Notes through Euroclear or Clearstream, Luxembourg, such persons will hold their interests through an account opened and held by Euroclear or Clearstream, Luxembourg with the CMU operator. Interests in the CMU Global Note will only be shown on, and transfers of interests will be effected through, records maintained by the CMU operator.

Because the CMU operator can act only on behalf of the CMU participants, who in turn may act on behalf of persons who hold interests through them, or indirect participants, the ability of persons having interests in the CMU Global Note to pledge such interests to persons or entities that are not CMU participants, or otherwise take action in respect of such interests, may be affected by the lack of definitive notes.

While the CMU Global Note representing the Notes is held by or on behalf of the CMU operator, payments of interest or principal will be made to the persons for whose account a relevant interest in the CMU Global Note is credited as being held by the CMU operator at the relevant time, as notified to the Principal Paying Agent by the CMU operator in a relevant CMU instrument position report (as defined in the rules of the CMU) or in any other relevant notification by the CMU operator. So long as the Notes are represented by the CMU Global Note that is held by or on behalf of the CMU operator, such payment by the Issuer will discharge the Issuer's obligations in respect of that payment. Any payments by the CMU participants to indirect participants will be governed by arrangements agreed between the CMU participants and the indirect participants and will continue to depend on the inter- bank clearing system and traditional payment methods. Such payments will be the sole responsibility of such CMU participants.

Payments, transfers, exchanges and other matters relating to interests in the CMU Global Note may be subject to various policies and procedures adopted by the CMU operator from time to time. None of the Issuer, the Principal Paying Agent, the Registrar, the Paying Agents, the CMU Lodging Agent or any other Agent will have any responsibility or liability for any aspect of the CMU operator's records relating to, or for payments made on account of, interests in the CMU Global Note, or for maintaining, supervising or reviewing any records relating to such interests.

For so long as all of the Notes are represented by the CMU Global Note and such CMU Global Note is held on behalf of the CMU operator, notices to Noteholders may be given by delivery of the relevant notice to the persons shown in a CMU instrument position report issued by the CMU operator on the business day preceding the date of dispatch of such notice as holding interests in the CMU Global Note for communication to the CMU participants. Any such notice shall be deemed to have been given to the Noteholders on the second business day on which such notice is delivered to the persons shown in the relevant CMU instrument position report as aforesaid. Indirect participants will have to rely on the CMU participants (through whom they hold the Notes, in the form of interests in the global certificate) to deliver the notices to them, subject to the arrangements agreed between the indirect participants and the CMU participants.

The CMU operator is under no obligation to maintain or continue to operate the CMU Service and the CMU operator is under no obligation to perform or continue to perform the procedures described above. Accordingly, the CMU and such procedures may be discontinued or modified at any time. None of the Issuer, the Principal Paying Agent, the Registrar, the Paying Agents, the CMU Lodging Agent or any other Agent will have any responsibility for the performance by the CMU operator or the CMU participants of their respective obligations under the rules and procedures governing their operations.

SUBSCRIPTION AND SALE AND TRANSFER AND SELLING RESTRICTIONS

The Dealers have, in an amended and restated programme agreement dated 8 January 2016, as amended and supplemented by the First Supplemental Programme Agreement dated 5 October 2016, the Second Supplemental Programme Agreement dated 21 March 2017, the Third Supplemental Programme Agreement dated 11 January 2019, the Fourth Supplemental Programme Agreement dated 31 May 2021, the Fifth Supplemental Programme Agreement dated 16 March 2022, the Sixth Supplemental Programme Agreement dated 7 April 2023 and the Seventh Supplemental Programme Agreement dated 5 April 2024 (as further amended, restated or supplemented from time to time, the "**Programme Agreement**"), agreed with the Issuer a basis upon which they or any of them may from time to time agree to purchase Notes. Any such agreement will extend to those matters stated under "*Form of the Notes*" and "*Terms and Conditions of the Notes*" above. In the Programme Agreement, the Issuer has agreed to reimburse the Dealers for certain of their expenses in connection with the establishment of the Programme and the issue of Notes under the Programme and to indemnify the Dealers against certain liabilities incurred by them in connection therewith.

In order to facilitate the offering of any Tranche of the Notes, certain persons participating in the offering of the Tranche may, to the extent permitted by applicable laws and regulations, engage in transactions that stabilise, maintain or otherwise affect the market price of the relevant Notes during and after the offering of the Tranche. Specifically, such persons may over-allot or create a short position in the Notes for their own account by selling more Notes than have been sold to them by the Issuer. Such persons may also elect to cover any such short position by purchasing Notes in the open market. In addition, such persons may stabilise or maintain the price of the Notes by bidding for or purchasing Notes in the open market and may impose penalty bids, under which selling concessions allowed to syndicate members or other broker-dealers participating in the offering of the Notes are reclaimed if Notes previously distributed in the offering are repurchased in connection with stabilisation transactions or otherwise. The effect of these transactions may be to stabilise or maintain the market price of the Notes at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also affect the price of the Notes to the extent that it discourages resales thereof. No representation is made as to the magnitude or effect of any such stabilising or other transactions. Such transactions, if commenced, may be discontinued at any time. Stabilisation activities are subject to certain prescribed time limits in certain jurisdictions.

Notice to capital market intermediaries and prospective investors pursuant to paragraph 21 of the Hong Kong SFC Code — Important Notice to CMIs (including private banks)

This notice to CMIs (including private banks) is a summary of certain obligations the SFC Code imposes on CMIs, which require the attention and cooperation of other CMIs (including private banks). Certain CMIs may also be acting as OCs for the relevant offering and are subject to additional requirements under the SFC Code. The application of these obligations will depend on the role(s) undertaken by the relevant Dealers in respect of each offering of Notes under the Programme.

Prospective investors who are the directors, employees or major shareholders of the Issuer, a CMI or its group companies would be considered under the SFC Code as having an Association with the Issuer, the CMI or the relevant group company. CMIs should specifically disclose whether their investor clients have any Association when submitting orders for the relevant Notes. In addition, private banks should take all reasonable steps to identify whether their investor clients may have any Associations with the Issuer or any CMI (including its group companies) and inform the relevant Dealers accordingly.

CMIs are informed that, unless otherwise specified in the applicable Pricing Supplement, the marketing and investor targeting strategy for such offering may include institutional investors, sovereign wealth funds, pension funds, hedge funds, family offices and high net worth individuals, in each case, subject to the selling restrictions and any MiFID II product governance language or any UK MiFIR product governance language set out elsewhere in this Offering Circular and/or the applicable Pricing Supplement.

CMIs should ensure that orders placed are bona fide, are not inflated and do not constitute duplicated orders (i.e. two or more corresponding or identical orders placed via two or more CMIs). CMIs should enquire with their investor clients regarding any orders which appear unusual or irregular. CMIs should disclose the identities of all investors when submitting orders for the relevant Notes (except for omnibus orders where underlying investor information should be provided to the OCs when submitting orders). Failure to provide underlying investor information for omnibus orders, where required to do so, may result in that order being rejected. CMIs should not place "X-orders" into the order book.

CMIs should segregate and clearly identify their own proprietary orders (and those of their group companies, including private banks as the case may be) in the order book and book messages.

CMIs (including private banks) should not offer any rebates to prospective investors or pass on any rebates provided by the Issuer. In addition, CMIs (including private banks) should not enter into arrangements which may result in prospective investors paying different prices for the relevant Notes. CMIs are informed that a private bank rebate may be payable as stated above and in the applicable Pricing Supplement, or as otherwise notified to prospective investors on or prior to the launch of an offering of Notes under the Programme.

The SFC Code requires that a CMI disclose complete and accurate information in a timely manner on the status of the order book and other relevant information it receives to targeted investors for them to make an informed decision. In order to do this, those Dealers in control of the order book should consider disclosing order book updates to all CMIs.

When placing an order for the relevant Notes, private banks should disclose, at the same time, if such order is placed other than on a "principal" basis (whereby it is deploying its own balance sheet for onward selling to investors). Private banks who do not provide such disclosure are hereby deemed to be placing their order on such a "principal" basis. Otherwise, such order may be considered to be an omnibus order pursuant to the SFC Code. Private banks should be aware that placing an order on a "principal" basis may require the relevant affiliated Dealer(s) to categorise it as a proprietary order and apply the "proprietary orders" of the SFC Code to such order and will result in that private bank not being entitled to, and not being paid, any rebate.

In relation to omnibus orders, when submitting such orders, CMIs (including private banks) are requested to provide the following underlying investor information, preferably in Excel Workbook format, in respect of each order constituting the relevant omnibus order (failure to provide such information may result in that order being rejected). Underlying investor information in relation to omnibus orders should consist of:

- the name of each underlying investor;
- the unique identification number of each investor;
- whether an underlying investor has any "associations" (as used in the SFC Code);
- whether any underlying investor order is a "proprietary order" (as used in the SFC Code); and
- whether any underlying investor order is a duplicate order.

Underlying investor information in relation to omnibus order should be sent to the Managers named in the relevant Pricing Supplement.

To the extent information being disclosed by CMIs and investors is personal and/or confidential in nature, CMIs (including private banks) agree and warrant: (A) to take appropriate steps to safeguard the transmission of such information to the OCs; (B) that they have obtained the necessary consents from the underlying investors to disclose such information to the OCs. By submitting an order and providing such information to the OCs, each CMI (including private banks) further warrants that they and the underlying investors have understood and consented to the collection, disclosure, use and transfer of such information by the OCs and/or any other third parties as may be required by the SFC Code, including to the Issuers, relevant regulators and/or any other third parties as may be required by the SFC Code, for the purpose of complying with the SFC Code, during the bookbuilding process for such offering. CMIs that receive such underlying investor information are reminded that such information should be used only for submitting orders in such offering. The Dealers may be asked to demonstrate compliance with their obligations under the SFC Code, and may request other CMIs (including private banks) to provide evidence showing compliance with the obligations above (in particular, that the necessary consents have been obtained). In such event, other CMIs (including private banks) are required to provide the relevant Dealer with such evidence within the timeline requested.

Transfer Restrictions

As a result of the following restrictions, purchasers of Notes in the United States are advised to consult legal counsel prior to making any purchase, offer, sale, resale or other transfer of such Notes.

Each purchaser of Registered Notes (other than a person purchasing an interest in a Registered Global Note with a view to holding it in the form of an interest in the same Global Note) or person wishing to transfer an interest from one Registered Global Note to another or from global to definitive form or *vice versa*, will be required to acknowledge, represent and agree as follows (terms used in this paragraph that are defined in Rule 144A or in Regulation S are used herein as defined therein):

(i) that either (a) it is a QIB, purchasing (or holding) the Notes for its own account or for the account of one or more QIBs and it is aware that any sale to it is being made in reliance on Rule 144A or (b) it is an Institutional Accredited Investor which has delivered an IAI Investment Letter or (c) it is outside the United States and is not a U.S. person;

(ii) that the Notes are being offered and sold in a transaction not involving a public offering in the United States within the meaning of the Securities Act, and that the Notes have not been and will not be registered under the Securities Act or any other applicable U.S. State securities laws and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except as set forth below;

(iii) that, unless it holds an interest in a Regulation S Global Note and is either a person located outside the United States or not a U.S. person, if in the future it decides to resell, pledge or otherwise transfer the Notes or any beneficial interests in the Notes, it will do so, prior to the date which is one year after the later of the last Issue Date for the Series and the last date on which the Issuer or an affiliate of the Issuer was the owner of such Notes, only (a) to the Issuer or any affiliate thereof, (b) inside the United States to a person whom the seller reasonably believes is a QIB purchasing for its own account or for the account of a QIB in a transaction meeting the requirements of Rule 144A, (c) outside the United States in compliance with Rule 903 or Rule 904 under the Securities Act, (d) pursuant to the exemption from registration provided by Rule 144 under the Securities Act (if available) or (e) pursuant to an effective registration statement under the Securities Act, in each case in accordance with all applicable U.S. State securities laws;

(iv) it will, and will require each subsequent holder to, notify any purchaser of the Notes from it of the resale restrictions referred to in paragraph (iii) above, if then applicable;

(v) that Notes initially offered in the United States to QIBs will be represented by one or more Rule 144A Global Notes, that Notes offered to Institutional Accredited Investors will be in the form of Definitive IAI Registered Notes and that Notes offered outside the United States in reliance on Regulation S will be represented by one or more Regulation S Global Notes;

(vi) that the Notes, other than the Regulation S Global Notes, will bear a legend to the following effect unless otherwise agreed to by the Issuer:

"THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR ANY OTHER APPLICABLE U.S. STATE SECURITIES LAWS AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS EXCEPT AS SET FORTH IN THE FOLLOWING SENTENCE. BY ITS ACQUISITION HEREOF, THE HOLDER (A) REPRESENTS THAT (1) IT IS A "**QUALIFIED INSTITUTIONAL BUYER**" (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) PURCHASING THE SECURITIES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF ONE OR MORE QUALIFIED INSTITUTIONAL BUYERS OR (2) IT IS AN INSTITUTIONAL "**ACCREDITED INVESTOR**" (AS DEFINED IN RULE 501(A)(1), (2), (3) OR (7) UNDER THE SECURITIES ACT) (AN "**INSTITUTIONAL ACCREDITED INVESTOR**"); (B) AGREES THAT IT WILL NOT RESELL OR OTHERWISE TRANSFER THE SECURITIES EXCEPT IN ACCORDANCE WITH THE AGENCY AGREEMENT AND, PRIOR TO THE DATE WHICH IS ONE YEAR AFTER THE LATER OF THE LAST ISSUE DATE FOR THE SERIES AND THE LAST DATE ON WHICH THE ISSUER OR AN AFFILIATE OF THE ISSUER WAS THE OWNER OF SUCH SECURITIES OTHER THAN (1) TO THE ISSUER OR ANY AFFILIATE THEREOF, (2) INSIDE THE UNITED STATES TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A, (3) OUTSIDE THE UNITED STATES IN COMPLIANCE WITH RULE 903 OR RULE 904 UNDER THE SECURITIES ACT, (4) PURSUANT TO THE EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE) OR (5) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, IN EACH CASE IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS OF THE STATES OF THE UNITED

STATES AND ANY OTHER JURISDICTION; AND (C) IT AGREES THAT IT WILL DELIVER TO EACH PERSON TO WHOM THIS SECURITY IS TRANSFERRED A NOTICE SUBSTANTIALLY TO THE EFFECT OF THIS LEGEND.

THIS SECURITY AND RELATED DOCUMENTATION (INCLUDING WITHOUT LIMITATION, THE AGENCY AGREEMENT REFERRED TO HEREIN) MAY BE AMENDED OR SUPPLEMENTED FROM TIME TO TIME, WITHOUT THE CONSENT OF, BUT UPON NOTICE TO, THE HOLDERS OF SUCH SECURITIES SENT TO THEIR REGISTERED ADDRESSES, TO MODIFY THE RESTRICTIONS ON AND PROCEDURES FOR RESALES AND OTHER TRANSFERS OF THIS SECURITY TO REFLECT ANY CHANGE IN APPLICABLE LAW OR REGULATION (OR THE INTERPRETATION THEREOF) OR IN PRACTICES RELATING TO RESALES OR OTHER TRANSFERS OF RESTRICTED SECURITIES GENERALLY. THE HOLDER OF THIS SECURITY SHALL BE DEEMED, BY ITS ACCEPTANCE OR PURCHASE HEREOF, TO HAVE AGREED TO ANY SUCH AMENDMENT OR SUPPLEMENT (EACH OF WHICH SHALL BE CONCLUSIVE AND BINDING ON THE HOLDER HEREOF AND ALL FUTURE HOLDERS OF THIS SECURITY AND ANY SECURITIES ISSUED IN EXCHANGE OR SUBSTITUTION THEREFOR, WHETHER OR NOT ANY NOTATION THEREOF IS MADE HEREON).";

(vii) if it is outside the United States and is not a U.S. person, that if it should resell or otherwise transfer the Notes prior to the expiration of the distribution compliance period (defined as 40 days after the later of the commencement of the offering and the closing date with respect to the original issuance of the Notes), it will do so only (a)(i) outside the United States in compliance with Rule 903 or Rule 904 under the Securities Act or (ii) to a QIB in compliance with Rule 144A and (b) in accordance with all applicable U.S. State securities laws; and it acknowledges that the Regulation S Global Notes will bear a legend to the following effect unless otherwise agreed to by the Issuer:

"THIS SECURITY HAS NOT BEEN AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "**SECURITIES ACT**"), OR ANY OTHER APPLICABLE U.S. STATE SECURITIES LAWS AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS EXCEPT IN ACCORDANCE WITH THE AGENCY AGREEMENT AND PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OR PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT. THIS LEGEND SHALL CEASE TO APPLY UPON THE EXPIRY OF THE PERIOD OF 40 DAYS AFTER THE COMPLETION OF THE DISTRIBUTION OF ALL THE NOTES OF THE TRANCHE OF WHICH THIS NOTE FORMS PART."; and

(viii) that the Issuer and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements and agrees that if any of such acknowledgements, representations or agreements made by it are no longer accurate, it shall promptly notify the Issuer; and if it is acquiring any Notes as a fiduciary or agent for one or more accounts it represents that it has sole investment discretion with respect to each such account and that it has full power to make the foregoing acknowledgements, representations and agreements on behalf of each such account.

Institutional Accredited Investors who purchase Registered Notes in definitive form offered and sold in the United States in reliance upon the exemption from registration provided by Regulation D of the Securities Act are required to execute and deliver to the Registrar an IAI Investment Letter. Upon execution and delivery of an IAI Investment Letter by an Institutional Accredited Investor, Notes will be issued in definitive registered form, see "*Form of the Notes*".

The IAI Investment Letter will state, among other things, the following:

(i) that the Institutional Accredited Investor has received a copy of the Offering Circular and such other information as it deems necessary in order to make its investment decision;

(ii) that the Institutional Accredited Investor understands that any subsequent transfer of the Notes is subject to certain restrictions and conditions set forth in the Offering Circular and the Notes (including those set out above) and that it agrees to be bound by, and not to resell, pledge or otherwise transfer the Notes except in compliance with, such restrictions and conditions and the Securities Act;

(iii) that, in the normal course of its business, the Institutional Accredited Investor invests in or purchases securities similar to the Notes;

(iv) that the Institutional Accredited Investor is an Institutional Accredited Investor within the meaning of Rule 501(a)(1), (2), (3) or (7) of Regulation D under the Securities Act and has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment in the Notes, and it and any accounts for which it is acting are each able to bear the economic risk of its or any such accounts' investment for an indefinite period of time;

(v) that the Institutional Accredited Investor is acquiring the Notes purchased by it for its own account or for one or more accounts (each of which is an Institutional Accredited Investor) as to each of which it exercises sole investment discretion and not with a view to any distribution of the Notes, subject, nevertheless, to the understanding that the disposition of its property shall at all times be and remain within its control; and

(vi) that, in the event that the Institutional Accredited Investor purchases Notes, it will acquire Notes having a minimum purchase price of at least U.S.$500,000 (or the approximate equivalent in another Specified Currency) and higher integral multiples of U.S.$1,000 (or its equivalent as aforesaid).

No sale of Legended Notes in the United States to any one purchaser will be for less than U.S.$100,000 (or its foreign currency equivalent) and higher integral multiples of U.S.$10,000 (or its equivalent as aforesaid) principal amount or, in the case of sales to Institutional Accredited Investors, U.S.$500,000 (or its foreign currency equivalent) and higher integral multiples of U.S.$1,000 (or its equivalent as aforesaid) principal amount and no Legended Note will be issued in connection with such a sale in a smaller principal amount. If the purchaser is a non-bank fiduciary acting on behalf of others, each person for whom it is acting must purchase at least U.S.$100,000 (or its foreign currency equivalent) and higher integral multiples of U.S.$1,000 (or its equivalent as aforesaid) or, in the case of sales to Institutional Accredited Investors, U.S.$500,000 (or its foreign currency equivalent) and higher integral multiples of U.S.$1,000 (or its equivalent as aforesaid) principal amount of Registered Notes.

Selling Restrictions

United States of America

The Notes have not been and will not be registered under the Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except in certain transactions exempt from the registration requirements of the Securities Act.

The Notes in bearer form are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to a United States person, except in certain transactions permitted by U.S. tax regulations. Terms used in this paragraph have the meanings given to them by the Code and regulations thereunder.

In connection with any Notes which are offered or sold outside the United States in reliance on an exemption from the registration requirements of the Securities Act provided under Regulation S ("**Regulation S Notes**") each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it will not offer, sell or deliver such Regulation S Notes (i) as part of their distribution at any time or (ii) otherwise until 40 days after the completion of the distribution, as determined and certified by the relevant Dealer or, in the case of an issue of Notes on a syndicated basis, the relevant lead manager, of all Notes of the Tranche of which such Regulation S Notes are a part, within the United States or to, or for the account or benefit of, U.S. persons. Each Dealer has further agreed, and each further Dealer appointed under the Programme will be required to agree, that it will send to each dealer to which it sells any Regulation S Notes during the distribution compliance period a confirmation or other notice setting forth the restrictions on offers and sales of the Regulation S Notes within the United States or to, or for the account or benefit of, U.S. persons.

Until 40 days after the commencement of the offering of any Series of Notes, an offer or sale of such Notes within the United States by any dealer (whether or not participating in the offering) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with an applicable exemption from registration under the Securities Act.

Dealers may (either directly or through selling agents, which may include their respective U.S. broker-dealer affiliates) arrange for the resale of Notes to QIBs pursuant to Rule 144A and each such purchaser of Notes is hereby notified that the Dealers may be relying on the exemption from the registration requirements of the Securities Act provided by Rule 144A. The minimum aggregate principal amount of Notes which may be purchased by a QIB pursuant to Rule 144A is U.S.$100,000 (or the approximate equivalent thereof in any other currency) and higher integral multiples of U.S.$1,000 (or its equivalent as aforesaid). To the extent that the Issuer is not subject to or does not comply with the reporting requirements of Section 13 or 15(d) of the Exchange Act or the information furnishing requirements of Rule 12g3-2(b) thereunder, the Issuer has agreed to furnish to holders of Notes and to prospective purchasers designated by such holders, upon request, such information as may be required by Rule 144A(d)(4).

Each issuance of Index Linked Notes or Dual Currency Notes shall be subject to such additional selling restrictions as the Issuer and the relevant Dealer may agree as a term of the issuance and purchase of such Notes, which additional selling restrictions shall be set out in the applicable Pricing Supplement.

European Economic Area

Unless the Pricing Supplement in respect of any Notes specifies the "Prohibition of Sales to EEA Retail Investors" as "Not Applicable", each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Offering Circular as completed by the Pricing Supplement in relation thereto to any retail investor in the European Economic Area ("**EEA**"). For the purposes of this provision,

(a) the expression "retail investor" means a person who is one (or more) of the following:

    i. a retail client as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "**MiFID II**"); or

    ii. a customer within the meaning of Directive (EU) 2016/97 (as amended, the "**Insurance Distribution Directive**"), where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or

    iii. not a qualified investor as defined in Regulation (EU) 2017/1129 (as amended, the "**Prospectus Regulation**"); and

(b) the expression "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes.

Consequently no key information document required by Regulation (EU) No 1286/2014 (as amended, the "**PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

If the Pricing Supplement in respect of any Notes specifies "Prohibition of Sales to EEA Retail Investors" as "Not Applicable", each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this Offering Circular as completed by the Pricing Supplement in relation thereto to the public in that Member State except that it may make an offer of such Notes to the public in that Member State:

(i) at any time to any legal entity which is a qualified investor as defined in the Prospectus Regulation;

(ii) at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Regulation), subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the Issuer for any such offer; or

(iii) at any time in any other circumstances falling within Article 1(4) of the Prospectus Regulation,

provided that no such offer of Notes referred to in paragraphs (i) to (iii) above shall require the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Regulation, or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an "**offer of Notes to the public**" in relation to any Notes in any EEA Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes and the expression "**Prospectus Regulation**" means Regulation (EU) 2017/1129.

United Kingdom

Unless the Pricing Supplement in respect of any Notes specifies the "Prohibition of Sales to UK Retail Investors" as "Not Applicable", each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered, sold or otherwise made available and will not offer, sell or otherwise make available any Notes which are the subject of the offering contemplated by this Offering Circular as completed by the Pricing Supplement in relation thereto to any retail investor in the United Kingdom. For the purposes of this provision,

(a) the expression "retail investor" means a person who is one (or more) of the following:

  i. a retail client, as defined in point (8) of Article 2 of Regulation (EU) No 2017/565 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018 (the "**EUWA**");

  ii. a customer within the meaning of the provisions of the Financial Services and Markets Act 2000 (the "**FSMA**") and any rules or regulations made under the FSMA to implement the Insurance Distribution Directive, where that customer would not qualify as a professional client, as defined in point (8) of Article 2(1) of Regulation (EU) No 600/2014 as it forms part of domestic law by virtue of the EUWA; or

  iii. not a qualified investor as defined in Article 2 of the Prospectus Regulation as it forms part of domestic law by virtue of the EUWA (the "**UK Prospectus Regulation**"); and

(b) the expression "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes.

Consequently no key information document required by the Regulation (EU) No 1286/2014 as it forms part of domestic law by virtue of the EUWA (the "**UK PRIIPs Regulation**") for offering or selling the Notes or otherwise making them available to retail investors in the UK has been prepared and therefore offering or selling the Notes or otherwise making them available to any retail investor in the UK may be unlawful under the UK PRIIPs Regulation.

If the applicable Pricing Supplement in respect of any Notes specifies "Prohibition of Sales to UK Retail Investors" as "Not Applicable", each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this Offering Circular as completed by the applicable Pricing Supplement in relation thereto to the public in the UK except that it may make an offer of such Notes to the public in the UK:

(i) at any time to any legal entity which is a qualified investor as defined in Article 2 of the UK Prospectus Regulation;

(ii) at any time to fewer than 150 natural or legal persons (other than qualified investors as defined in Article 2 of the UK Prospectus Regulation) in the United Kingdom subject to obtaining the prior consent of the relevant Dealer or Dealers nominated by the Issuer for any such offer; or

(iii) at any time in any other circumstances falling within section 86 of the FSMA,

provided that no such offer of Notes referred to in (i) to (iii) above shall require the Issuer or any Dealer to publish a prospectus pursuant to section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation.

For the purposes of this provision, the expression an "**offer of Notes to the public**" in relation to any Notes means the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe for the Notes and the expression "**UK Prospectus Regulation**" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the EUWA.

In addition, each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Programme will be required to represent, warrant and agree, that:

(i) in relation to any Notes which have a maturity of less than one year, (i) it is a person whose ordinary activities involve it in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of its business and (ii) it has not offered or sold and will not offer or sell any Notes other than to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or as agent) for the purposes of their businesses or who it is reasonable to expect will acquire, hold, manage or dispose of investments (as principal or agent) for the purposes of their businesses where the issue of the Notes would otherwise constitute a contravention of Section 19 of the FSMA by the Issuer;

(ii) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of any Notes in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer; and

(iii) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Notes in, from or otherwise involving the United Kingdom.

Japan

Each Dealer has acknowledged, and each further Dealer appointed under the Programme will be required to acknowledge, that the Notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Law No. 25 of 1948, as amended) (the "**FIEA**"). Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered or sold and will not offer or sell any Notes, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (as defined under Item 5, Paragraph 1, Article 6 of the Foreign Exchange and Foreign Trade Control Law (Law No. 228 of 1949, as amended)) or to others for re-offering or resale, directly or indirectly, in Japan or to, or for the benefit of, a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and other applicable laws, regulations and ministerial guidelines of Japan.

Hong Kong

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that:

(a) it has not offered or sold, and will not offer or sell, in Hong Kong Special Administrative Region of the PRC ("**Hong Kong**"), by means of any document, any Notes (except for Notes which are a "structured product" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the "**SFO**")) other than (i) to "professional investors" as defined in the SFO and any rules made under the SFO; or (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong (the "**C(WUMP)O**") or which do not constitute an offer to the public within the meaning of the C(WUMP)O; and

(b) it has not issued, or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to the Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made under the SFO.

Singapore

Each Dealer has acknowledged, and each further Dealer appointed under the Program will be required to acknowledge, that this Offering Circular has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Program will be required to represent, warrant and agree, that it has not offered or sold any Notes or caused the Notes to be made the subject of an invitation for subscription or purchase and will not offer or sell any Notes or cause the Notes to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this Offering Circular or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes, whether directly or indirectly, to any person in Singapore other than (i) to an institutional investor (as defined in Section 4A of the Securities and Futures Act 2001 of Singapore, as modified or amended from time to time (the "**SFA**")) pursuant to Section 274 of the SFA or (ii) to an accredited investor (as defined in Section 4A of the SFA) pursuant to and in accordance with the conditions specified in Section 275 of the SFA.

Canada

The Notes may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the Notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this Offering Circular (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

If applicable, pursuant to section 3A.3 (or, in the case of securities issued or guaranteed by the government of a non-Canadian jurisdiction, section 3A.4) of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the Dealers are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

United Arab Emirates (excluding the Dubai International Finance Centre)

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that the Notes to be issued under the Programme have not been and will not be offered, sold or publicly promoted or advertised by it in the United Arab Emirates other than in compliance with any laws applicable in the United Arab Emirates governing the issue, offering and sale of securities.

Dubai International Financial Centre

Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree, that it has not offered and will not offer the Notes to any person in the Dubai International Financial Centre unless such offer is:

(i) an "Exempt Offer" in accordance with the Markets Rules Module of the Dubai Financial Services Authority Rulebook; and

(ii) made only to persons who meet the Professional Client criteria set out in Rule 2.3.3 of the Conduct of Business Module of the Dubai Financial Services Authority Rulebook.

Switzerland

This Offering Circular is not intended to constitute an offer or solicitation to purchase or invest in the Notes described herein. The Notes may not be publicly offered, sold or advertised, directly or indirectly, in, into or from Switzerland and will not be listed on the SIX Swiss Exchange or on any other exchange or regulated trading facility in Switzerland. Neither this Offering Circular nor any other offering or marketing material relating to the Notes constitutes a prospectus as such term is understood pursuant to article 652a or article 1156 of the Swiss Code of Obligations or a listing prospectus within the meaning of the listing rules of the SIX Swiss Exchange or any other regulated trading facility in Switzerland or a simplified prospectus or a prospectus as such term is defined in the Swiss Collective Investment Scheme Act, and neither this Offering Circular nor any other offering or marketing material relating to the Notes may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this Offering Circular nor any other offering or marketing material relating to the offering, nor the Issuer nor the Notes have been or will be filed with or approved by any Swiss regulatory authority. The Notes are not subject to supervision by any Swiss regulatory authority (e.g. the Swiss Financial Markets Supervisory Authority ("**FINMA**")), and investors in the Notes will not benefit from protection or supervision by such authority.

Korea

The Notes have not been and will not be registered with the Financial Services Commission of Korea under the FSCMA. Each Dealer has represented and agreed, and each further Dealer appointed under the Programme will be required to represent and agree that:

(a) in respect of the Notes issued as straight bonds other than equity-linked bonds, such as convertible bonds, bonds with warrants and exchangeable bonds relying on the exemption as set out in Article 2-2-2, Paragraph 2, Item 3 of the Securities Issuance and Disclosure Regulations promulgated by the Financial Services Commission of Korea, the Notes may not be offered, sold or delivered, directly or indirectly, in Korea or to, or for the account or benefit of, any resident of Korea (as defined under the Foreign Exchange Transactions Act of Korea and the rules and regulations promulgated thereunder) or to others for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except as otherwise permitted under applicable Korean laws and regulations. In addition, during the first year after the issuance of the Notes, the Notes may not be transferred to any resident of Korea other than a "qualified institutional buyer" (a "Korean QIB," as defined in the Securities Issuance and Disclosure Regulations) who is registered with the Korea Financial Investment Association as a Korean QIB, provided that (i) the Notes are denominated, and the principal and interest payments thereunder are made, in a currency other than Korean won, (ii) the amount of the Notes acquired by the Korean QIBs in the primary market is limited to not more than 20% of the aggregate principal amount of the Notes, (iii) the Notes are listed on one of the major overseas securities markets designated by the Financial Supervisory Service of Korea, or certain procedures, such as registration or report with a foreign financial investment regulator of the country in which any major overseas securities market is established, have been completed for offering of the Notes, (iv) the one-year restriction on transfer of the Notes to any resident of Korea other than the Korean QIBs is expressly stated in the Notes, the relevant purchase agreement and offering circular and (v) the Issuer and the Dealers shall individually or collectively keep the evidence of fulfilment of conditions (i) through (iv) above after having taken necessary actions therefor; and

(b) in respect of the Notes relying on the exemption as set out in Article 2-2-2, Paragraph 2 (other than Item 3) of the Securities Issuance and Disclosure Regulations promulgated by the Financial Services Commission of Korea, the Notes may not be offered, sold or delivered, directly or indirectly, in Korea or to, or for the account or benefit of, any resident of Korea (as defined under the Foreign Exchange Transactions Act of Korea and the rules and regulations promulgated thereunder) or to others for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except as otherwise permitted under applicable Korean laws and regulations. In addition, during the first year after the issuance of the Notes, the Notes may not be transferred to any resident of Korea except as otherwise permitted under applicable Korean laws and regulations.

Each Dealer has undertaken, and each further Dealer appointed under the Programme will be required to undertake, to ensure that any securities dealer to which it sells Notes confirms that it is purchasing such Notes as principal and agrees with such Dealer that it will comply with the restrictions described above.

General

Each Dealer has agreed, and each further Dealer appointed under the Programme will be required to agree, that it will (to the best of its knowledge and belief) comply with all applicable securities laws and regulations in force in any jurisdiction in which it purchases, offers, sells or delivers Notes or possesses or distributes this Offering Circular and will obtain any consent, approval or permission required by it for the purchase, offer, sale or delivery by it of Notes under the laws and regulations in force in any jurisdiction to which it is subject or in which it makes such purchases, offers, sales or deliveries and neither the Issuer nor any other Dealer shall have any responsibility therefor.

If a jurisdiction requires that any offering of Notes under the Programme be made by a licenced broker or dealer and any Dealer or any affiliate of a Dealer is a licenced broker or dealer in that jurisdiction, the offering shall be deemed to be made by such Dealer or such affiliate on behalf of the Issuer in such jurisdiction.

Neither the Issuer nor any of the Dealers represents that Notes may at any time lawfully be sold in compliance with any applicable registration or other requirements in any jurisdiction, or pursuant to any exemption available thereunder, or assumes any responsibility for facilitating such sale.

With regard to each Tranche, the relevant Dealer will be required to comply with such other additional restrictions as the Issuer and the relevant Dealer shall agree and as shall be set out in the applicable Pricing Supplement.

The Dealers and certain of their affiliates may have performed certain investment banking and advisory services for the Bank and/or its affiliates from time to time for which they have received customary fees and expenses and may, from time to time, engage in transactions with and perform services for the Bank and/or its affiliates in the ordinary course of their business.

The Dealers or certain of their affiliates may purchase the Notes and be allocated Notes for asset management and/or proprietary purposes and not with a view to distribution.

The Dealers or their respective affiliates may purchase the Notes for its or their own account and enter into transactions, including credit derivatives, such as asset swaps, repackaging and credit default swaps relating to the Notes and/or other securities of the Bank or its subsidiaries or associates at the same time as the offer and sale of the Notes or in secondary market transactions. Such transactions would be carried out as bilateral trades with selected counterparties and separately from any existing sale or resale of the Notes to which this Offering Circular relates (notwithstanding that such selected counterparties may also be purchasers of the Notes).

GENERAL INFORMATION

Authorisation

The establishment of the Programme and the issue of Notes under the Programme have been duly authorised by a resolution of the Board of the Issuer dated 12 May 1995.

Listing of Notes on the Singapore Stock Exchange

Approval in-principle has been received from the Singapore Stock Exchange in connection with the Programme and application will be made for the listing and quotation of Notes that may be issued pursuant to the Programme and which are agreed at or prior to the time of issue thereof to be so listed on the Singapore Stock Exchange. Such permission will be granted when such Notes have been admitted for listing and quotation on the Singapore Stock Exchange. The Singapore Stock Exchange assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained herein. Approval in-principle from, admission to the Official List of, and listing and quotation of any Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Programme or the Notes.

Documents Available

From the date hereof and so long as Notes are capable of being issued under the Programme, copies of the following documents will, when published, be available for inspection at the registered office of the Issuer (in the case of clause (iv) below, those documents will also be available at the specified office of the Principal Paying Agent):

(i) the constitutional documents (together with English translations) of the Issuer;

(ii) the audited consolidated and separate financial statements of the Issuer as of and for the years ended 31 December 2022 and 2021 and audited consolidated and separate financial statements of the Issuer as of and for the years ended 31 December 2023 and 2022 (together with English translations);

(iii) the most recently published (if available) audited consolidated and separate financial statements of the Issuer and the most recently published (if available) reviewed consolidated and separate interim financial statements of the Issuer (together with English translations);

(iv) the Programme Agreement, the Agency Agreement, the forms of the Temporary Global Notes, the Permanent Global Notes, the definitive Bearer Notes, the Receipts, the Coupons, the Talons, the Regulation S Global Notes, the Restricted Global Notes and the Definitive IAI Registered Notes, the Deed Poll and the Deed of Covenant;

(v) a copy of this Offering Circular;

(vi) any future offering circulars, information memoranda and supplements, including Pricing Supplements (save that a Pricing Supplement relating to an unlisted Note will only be available for inspection by a holder of such Note and such holder must produce evidence satisfactory to the Issuer or the relevant Paying Agent, as the case may be, as to its holding and identity), to this Offering Circular and any other documents incorporated herein or therein by reference; and

(vii) in the case of each issue of listed Notes subscribed pursuant to a subscription agreement, the subscription agreement (or equivalent document).

Clearing Systems

The Notes have been accepted for clearance through Euroclear and Clearstream, Luxembourg. The appropriate Common Code and ISIN for each Tranche of Notes allocated by Euroclear and Clearstream, Luxembourg will be specified in the applicable Pricing Supplement. The Issuer may also apply to have the Notes accepted for clearance through the CMU Service. The relevant CMU instrument number will be specified in the applicable Pricing Supplement. For persons seeking to hold a beneficial interest in the CMU Notes held in a global certificate through Euroclear or Clearstream, such persons will hold their interests through an account opened and held by Euroclear or Clearstream with HKMA as the CMU operator. In addition, the Issuer will make an application for any Registered Notes to be accepted for trading in book-entry form by DTC. The CUSIP and/or CINS numbers for each Tranche of Registered Notes, together with the relevant ISIN and Common Code, will be specified in the applicable Pricing Supplement. If the Notes are to clear through an additional or alternative clearing system, the appropriate information will be specified in the applicable Pricing Supplement.

Significant or Material Change

Save as disclosed in this Offering Circular, there has been no significant change in the financial or trading position of the Issuer and its subsidiaries since 31 December 2023 and there has been no material adverse change in the financial position or prospects of the Issuer and its subsidiaries since 31 December 2023.

Litigation

Other than as described in "*Hana Bank — Legal and Regulatory Proceedings*", neither the Issuer nor any of its subsidiaries (whether as defendant or otherwise) is engaged in any legal, arbitration, administrative or other proceedings, the results of which might have or have had in the recent past (covering at least the previous 12 months) a significant effect on the financial position or the operations of the Issuer and its subsidiaries nor is the Issuer aware of any such proceedings pending or being threatened.

Independent Auditors

The audited consolidated financial statements of the Bank as of and for the years ended 31 December 2023 and 2022 have been audited by Deloitte Anjin LLC, independent auditors, as stated in their independent auditor's report appearing herein.

The audited consolidated financial statements of the Bank as of and for the year ended 31 December 2021 have been audited by Ernst & Young Han Young, independent auditors, as stated in their independent auditor's report appearing herein.

INDEX TO FINANCIAL STATEMENTS

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Independent Auditor's Report

(English Translation of Independent Auditor's Report
Originally Issued in Korean on February 29, 2024)

To the Shareholders and Board of Directors of
Hana Bank Co., Ltd. and its Subsidiaries:

Report on the Audited Consolidated Financial Statements

Audit Opinion

We have reviewed the accompanying consolidated financial statements of Hana Bank Co., Ltd. (the "Bank") and its subsidiaries (collectively, the "Group"), which comprise the consolidated statements of financial position as of December 31, 2023 and 2022, respectively, and the related consolidated statements of profit or loss and comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years ended December 31, 2023 and 2022, respectively, and notes to the consolidated financial statements including a summary of material accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of the Group as of December 31, 2023 and 2022, respectively, and its financial performance and its cash flows for the years ended December 31, 2023 and 2022, respectively, in accordance with Korean International Financial Reporting Standards ("K-IFRSs").

Deloitte.

Basis for Audit opinion

We conducted our audits in accordance with Korean Standards on Auditing ("KSA"). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audits of the consolidated financial statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Republic of Korea, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and presentation of these consolidated financial statements in accordance with K-IFRSs, and for such internal control as management determines is necessary to enable the preparation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern; disclosing, as applicable, matters related to going concern and using the going concern; basis of accounting, unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative, but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Deloitte.

Auditor's responsibility for the Audit of Consolidated Financial Stateme nts

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with KSA will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with KSAs we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error; design and perform audit procedures responsive to those risks; and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Bank to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Deloitte Anjin LLC

February 29, 2024

This audit report is effective as of February 29, 2024, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the date of the independent auditor's report to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

Consolidated Statements of Financial Position

As of December 31, 2023 and 2022

Hana Bank Co., Ltd. and its subsidiaries (Korean won in millions)

Accounts	December 31, 2023		December 31, 2022	
Assets				
1. Cash and due from banks (Notes 4, 5, 6, 8, 10 and 50)	30,564,279		41,087,857	
2. Financial assets at FVTPL (Notes 4, 5, 6, 7, 8, 11, 14 and 16)	17,514,876		18,455,415	
3. Derivative assets used for hedging (Notes 4 ,5 ,6, 7, 8 and 16)	1,723		8,062	
4. Financial assets at FVOCI (Notes 4, 5, 6, 7, 8, 12 and 14)	36,894,111		32,960,581	
5. Securities at amortized cost (Notes 4, 5, 6, 7, 8, 13 and 14)	36,337,949		37,583,487	
6. Loans (Notes 4, 5, 6, 7, 8 and 15)	347,246,910		330,186,341	
7. Investments in associates and a joint venture (Note 17)	3,280,152		2,958,288	
8. Property, plant and equipment (Notes 9 and 18)	2,415,210		2,426,014	
9. Investment properties (Notes 9 and 19)	675,523		664,942	
10. Intangible assets (Notes 9 and 20)	428,880		386,107	
11. Net defined benefit assets (Note 27)	-		77,160	
12. Current tax assets	37,770		24,733	
13. Deferred tax assets (Note 47)	133,742		316,018	
14. Other assets (Notes 4, 5, 6, 7, 8 and 22)	18,634,009		13,505,955	
15. Merchant banking account assets (Notes 4, 5, 6, 8 and 22)	4,637,824		4,631,361	
16. Non-current assets held for sale (Note 21)	40,478		36,423	
Total assets		498,843,436		485,308,744
Liabilities				
1. Deposits (Notes 4, 5, 6, 8 and 23)	369,749,453		359,858,481	
2. Financial liabilities at FVTPL (Notes 4, 5, 6, 7, 8, 16 and 24)	6,729,210		11,228,307	
3. Derivative liabilities used for hedging (Notes 4, 5, 6, 7, 8 and 16)	390,979		516,418	
4. Borrowings (Notes 4, 5, 6, 7, 8, 25 and 50)	22,033,914		22,256,597	
5. Debentures (Notes 4, 5, 6, 8, 26 and 50)	26,542,179		26,233,339	
6. Net defined benefit liabilities (Note 27)	173,575		9,106	
7. Provisions (Note 28)	760,573		564,978	
8. Current tax liabilities	165,398		726,579	
9. Deferred tax liabilities (Note 47)	253,200		2,259	
10. Other liabilities (Notes 4, 5, 6, 7, 8, 29 and 50)	35,805,942		30,280,039	
11. Merchant banking account liabilities (Notes 4, 5, 6, 8 and 29)	4,154,697		3,667,273	
Total liabilities		466,759,120		455,343,376
Equity				
Equity attributable to owners of the parent		31,782,740		29,685,969
1. Capital stock (Note 30)	5,359,578		5,359,578	
2. Capital surplus (Note 30)	6,161,303		6,159,820	
3. Hybrid equity securities (Note 30)	353,738		533,475	

Accounts	December 31, 2023		December 31, 2022	
4. Capital adjustments (Note 30)	(37,921)		(37,686)	
5. Retained earnings (Note 32) (Regulatory reserve for credit loss : December 31, 2023: ₩2,690,108 million December 31, 2022: ₩2,714,034 million Regulatory reserve for credit loss to reversed : December 31, 2023: ₩112,706 million December 31, 2022: ₩23,926 million Planned reversal of regulatory reserve for credit loss : December 31, 2023: ₩112,706 million December 31, 2022: ₩23,926 million) (Note 33)	21,050,087		19,236,315	
6. Accumulated other comprehensive loss (Note 31)	(1,104,045)		(1,565,533)	
Non-controlling interests		301,576		279,399
Total equity		32,084,316		29,965,368
Total liabilities and equity		498,843,436		485,308,744

See notes to consolidated financial statements.

Consolidated Statements of Profit or Loss and Other Comprehensive Income

For the years ended December 31, 2023 and 2022

Hana Bank Co., Ltd. and its subsidiaries (Korean won in millions)

Accounts	2023		2022	
I. Net interest income (Notes 9, 34 and 35)		7,917,411		7,608,677
1. Interest income	19,793,063		13,347,231	
Interest income on financial instruments at FVOCI and AC	19,617,392		13,282,377	
Interest income on financial instruments at FVTPL	175,671		64,854	
2. Interest expenses	(11,875,652)		(5,738,554)	
II. Net fee and commission income (Notes 9, 34 and 36)		661,464		593,612
1. Fee and commission income	931,532		874,721	
2. Fee and commission expenses	(270,068)		(281,109)	
III. Net gain on financial instruments at FVTPL (Notes 16, 34 and 37)		491,748		124,701
IV. Net gain (loss) on derivative financial instruments used for hedging (Notes 34 and 38)		26,336		(63,551)
V. Net gain on financial instruments at FVOCI (Notes 34 and 39)		84,433		2,162
VI. Net gain on financial instruments at AC (Notes 13, 34 and 40)		232		4
VII. Provision for allowance for credit loss (Notes 34 and 41)		(658,307)		(657,649)
VIII. General and administrative expenses (Notes 9, 34 and 42)		(3,448,610)		(3,318,831)
IX. Other operating income (Notes 34 and 43)		7,934,269		7,615,689
X. Other operating expenses (Notes 34 and 44)		(8,403,458)		(7,838,212)
XI. Operating income		4,605,518		4,066,602
XII. Net non-operating income		7,565		104,884
1. Non-operating income (Notes 9, 17 and 45)	222,566		267,293	
Gain from using equity method	179,345		221,832	
Other income	43,221		45,461	
2. Non-operating expenses (Notes 9, 17 and 46)	(215,001)		(162,409)	
Loss from using equity method	(11,232)		(32,819)	
Other expenses	(203,769)		(129,590)	
XIII. Income before income tax expenses		4,613,083		4,171,486
XIV. Income tax expenses (Notes 9 and 47)		(1,125,650)		(1,059,787)
XV. Net income for the year		3,487,433		3,111,699
1. Owners of the parent (Adjusted income after regulatory reserve for credit loss in the amount of 2023: ₩3,589,342 million 2022: ₩3,119,771 million) (Note 33)		3,476,636		3,095,845
2. Non-controlling interests		10,797		15,854
XVI. Other comprehensive income (loss) (Note 31)		521,365		(663,519)
Items that may be reclassified subsequently to profit or loss:	610,797		(600,406)	
1. Gain (loss) on valuation of debt securities at FVOCI (Note 50)	570,926		(578,842)	

Accounts	2023		2022	
2. Gain (loss) on translation of foreign operations (Note 50)	70,733		(2,710)	
3. Changes in equity on investments in associates (Note 50)	(8,766)		1,675	
4. Loss on valuation of net investment hedges of foreign operations (Note 16)	(22,096)		(20,529)	
Items that will not be reclassified subsequently to profit or loss:	(89,432)		(63,113)	
1. Remeasurement of defined benefit plans	(148,717)		6,395	
2. Gain (loss) on valuation of equity securities at FVOCI (Note 50)	59,086		(57,920)	
3. Changes in equity on investments in associates (Note 50)	199		273	
4. Loss on valuation of fair value hedges	–		(11,861)	
XVII. Total comprehensive income for the year		4,008,798		2,448,180
1. Owners of the parent	3,989,094		2,443,568	
2. Non-controlling interests	19,704		4,612	
XVIII. Earnings per share (Note 48) (Korean won)				
1. Basic earnings per share		3,221		2,866
2. Diluted earnings per share		3,221		2,866

See notes to consolidated financial statements.

Consolidated Statements of Changes in Equity

For the years ended December 31, 2023 and 2022

Hana Bank Co., Ltd. and its subsidiaries (Korean won in millions)

Accounts	Capital stock	Capital surplus	Hybrid equity securities	Capital adjustments	Retained earnings	Accumulated other comprehensive gain (loss)	Equity attributable to equity holder of the parent	Non-controlling interests	Total
I. As of January 1, 2022	5,359,578	9,653,868	533,475	(38,279)	13,897,317	(915,977)	28,489,982	266,489	28,756,471
Dividends	–	–	–	–	(660,400)	–	(660,400)	–	(660,400)
Interim dividends	–	–	–	–	(570,000)	–	(570,000)		(570,000)
Dividends on hybrid equity securities	–	–	–	–	(23,770)	–	(23,770)	–	(23,770)
Stock option	–	–	–	15	–	–	15	–	15
Reduction in capital surplus	–	(3,500,000)	–	–	3,500,000	–	–	–	–
Paid-in capital increases of subsidiaries	–	5,952	–	–	–	44	5,996	8,298	14,294
Reclassification of valuation gain or loss on equity securities at FVOCI upon derecognition	–	–	–	–	(2,677)	2,677	–	–	–
Others	–	–	–	578	–	–	578	–	578
Subtotal	5,359,578	6,159,820	533,475	(37,686)	16,140,470	(913,256)	27,242,401	274,787	27,517,188
Net income for the year	–	–	–	–	3,095,845	–	3,095,845	15,854	3,111,699
Loss on valuation of debt securities at FVOCI	–	–	–	–	–	(575,486)	(575,486)	(3,356)	(578,842)
Loss on valuation of equity securities at FVOCI	–	–	–	–	–	(57,920)	(57,920)	–	(57,920)
Gain (loss) on translation of foreign operations	–	–	–	–	–	5,158	5,158	(7,868)	(2,710)
Loss on valuation of net investment hedges of foreign operations	–	–	–	–	–	(20,529)	(20,529)	–	(20,529)
Loss on valuation of fair value hedges	–	–	–	–	–	(11,861)	(11,861)	–	(11,861)
Remeasurement of defined benefit plans	–	–	–	–	–	6,413	6,413	(18)	6,395
Changes in equity on investments in associates	–	–	–	–	–	1,948	1,948	–	1,948
Total comprehensive income for the year	–	–	–	–	3,095,845	(652,277)	2,443,568	4,612	2,448,180
II. As of December 31, 2022	5,359,578	6,159,820	533,475	(37,686)	19,236,315	(1,565,533)	29,685,969	279,399	29,965,368

Accounts	Capital stock	Capital surplus	Hybrid equity securities	Capital adjustments	Retained earnings	Accumulated other comprehensive gain (loss)	Equity attributable to equity holder of the parent	Non-controlling interests	Total
I. As of January 1, 2023	5,359,578	6,159,820	533,475	(37,686)	19,236,315	(1,565,533)	29,685,969	279,399	29,965,368
Dividends	–	–	–	–	(880,000)	–	(880,000)	–	(880,000)
Interim dividends	–	–	–	–	(810,000)	–	(810,000)	–	(810,000)
Dividends on hybrid equity securities	–	–	–	–	(23,834)	–	(23,834)	–	(23,834)
Redemption of hybrid equity securities	–	–	(179,737)	(263)	–	–	(180,000)	–	(180,000)
Stock option	–	–	–	(14)	–	–	(14)	(3)	(17)
Paid-in capital increases of subsidiaries	–	1,483	–	–	–	–	1,483	2,476	3,959
Reclassification of valuation gain or loss on equity securities at FVOCI upon derecognition	–	–	–	–	50,970	(50,970)	–	–	–
Other capital adjustment	–	–	–	42	–	–	42	–	42
Subtotal	5,359,578	6,161,303	353,738	(37,921)	17,573,451	(1,616,503)	27,793,646	281,872	28,075,518
Net income for the year	–	–	–	–	3,476,636	–	3,476,636	10,797	3,487,433
Gain on valuation of debt securities at FVOCI	–	–	–	–	–	570,812	570,812	114	570,926
Gain on valuation of equity securities at FVOCI	–	–	–	–	–	59,086	59,086	–	59,086
Gain on translation of foreign operations	–	–	–	–	–	62,053	62,053	8,680	70,733
Loss on valuation of net investment hedges of foreign operations	–	–	–	–	–	(22,096)	(22,096)	–	(22,096)
Remeasurement of defined benefit plans	–	–	–	–	–	(148,830)	(148,830)	113	(148,717)
Changes in equity on investments in associates	–	–	–	–	–	(8,567)	(8,567)	–	(8,567)
Total comprehensive income for the year	–	–	–	–	3,476,636	512,458	3,989,094	19,704	4,008,798
II. As of December 31, 2023	5,359,578	6,161,303	353,738	(37,921)	21,050,087	(1,104,045)	31,782,740	301,576	32,084,316

See notes to consolidated financial statements.

Consolidated Statements of Cash Flows

For the years ended December 31, 2023 and 2022

Hana Bank Co., Ltd. and its subsidiaries (Korean won in millions)

Accounts	2023		2022	
I. Net cash provided by (used in) operating activities		(4,228,757)		27,162,831
1. Net income for the year	3,487,433		3,111,699	
2. Adjustments to income and expenses:	(6,803,290)		(6,559,688)	
Income tax expenses	1,125,650		1,059,787	
Interest expenses	11,875,652		5,738,554	
Interest income	(19,793,063)		(13,347,231)	
Dividend income	(11,529)		(10,798)	
3. Adjustments to non-cash items:	194,060		2,142,309	
Loss (gain) on valuation of financial instruments at FVTPL	(1,024,232)		957,084	
Loss (gain) on disposal of financial instruments at FVTPL	(49,134)		17,774	
Loss (gain) on valuation of derivative instruments used for hedging	(19,051)		77,479	
Gain on disposal of financial instruments at FVOCI	(84,433)		(2,162)	
Provison for (reversal of) credit loss allowance on financial assets measured at FVOCI	867		(603)	
Gain on disposal of financial instruments at amortized cost	(232)		(4)	
Provison for (reversal of) allowance for financial instruments at amortized cost	(36,277)		66,966	
Net allowance for loans and other assets	693,717		591,286	
Gain on disposal of investments in associates and a joint venture	(652)		(2,315)	
Impairment loss on investments in associates and a joint venture	1,395		520	
Gain on equity method	(168,113)		(189,013)	
Depreciation and amortization	531,763		465,049	
Gain on disposal of property and equipment and intangible assets	(1,095)		(11,923)	
Impairment loss on property and equipment and intangible assets	10		232	
Loss on termination of right-of-use assets	230		360	
Loss on disposal of right-of-use assets	-		670	
Retirement benefits	126,643		144,346	
Share-based payment expenses	7,287		10,797	
Net provisions transferred in	250,501		85,264	
Gain on foreign currency translation	(19,046)		(68,484)	
Others	(16,088)		(1,014)	
4. Changes in operating assets and liabilities:	(9,141,180)		20,866,397	
Financial assets at FVTPL (items held for trading)	1,956,560		(7,437,089)	
Loans	(11,036,429)		(15,917,597)	
Net defined benefit assets	-		(77,160)	
Other assets	(3,540,411)		1,152,513	
Merchant banking account assets	(6,695)		111,591	
Deposits	4,662,660		34,242,815	
Financial liabilities at FVTPL	(4,318,787)		6,588,007	
Net defined benefit liabilities	(87,455)		(303,480)	
Provisions	(55,179)		(39,253)	
Other liabilities	2,804,295		1,786,326	

Accounts	2023		2022	
Merchant banking account liabilities	487,424		758,993	
Derivative assets used for hedging	(7,163)		731	
5. Cash provided by operating activities:	19,595,603		12,958,964	
Interest received	19,559,546		12,935,766	
Dividend received	36,057		23,198	
6. Cash used in operating activities:	(11,561,383)		(5,356,850)	
Interest paid	(10,135,618)		(4,391,698)	
Income tax paid	(1,425,765)		(965,152)	
II. Net cash used in investing activities		(2,506,107)		(14,765,081)
1. Increase in financial assets at FVTPL (other than items held for trading)	(7,339,054)		(6,985,446)	
2. Decrease in financial assets at FVTPL (other than items held for trading)	7,207,280		6,213,194	
3. Increase in financial assets at FVOCI	(19,188,176)		(10,734,129)	
4. Decrease in financial assets at FVOCI	15,885,655		12,359,959	
5. Increase in securities at amortized cost	(1,208,227)		(16,705,097)	
6. Decrease in securities at amortized cost	2,719,852		1,664,805	
7. Increase in investments in associates and a joint venture	(203,174)		(159,719)	
8. Decrease in investments in associates and a joint venture	17,535		11,664	
9. Acquisition of property and equipment	(241,763)		(375,988)	
10. Disposal of property and equipment	2,643		25,559	
11. Disposal of investment properties	2,550		19,997	
12. Acquisition of intangible assets	(174,549)		(151,556)	
13. Disposal of intangible assets	686		15	
14. Receipt of government grants	–		1,536	
15. Disposal of non-current assets held for sale	16,552		9,275	
16. Others	(3,917)		40,850	
III. Net cash provided by (used in) financing activities		(3,266,493)		1,022,872
1. Net cash flows of derivative instruments used for hedging	13,433		–	
2. Net increase (decrease) in borrowings	(1,339,106)		3,926,509	
3. Issuance of debentures	14,722,290		10,945,334	
4. Redemption of debentures	(14,572,250)		(12,410,394)	
5. Dividends paid	(1,690,000)		(1,230,400)	
6. Redemption of hybrid equity securities	(180,000)		–	
7. Dividends on hybrid equity securities	(23,834)		(23,770)	
8. Redemption of lease liabilities	(201,285)		(199,280)	
9. Change in equity ownership of subsidiaries	4,259		14,873	
IV. Net increase (decrease) in cash and cash equivalents (I+ II+ III)		(10,001,357)		13,420,622
V. Cash and cash equivalents at the beginning of the year		38,500,426		25,478,635
VI. Effect of changes in exchange rate on cash and cash equivalents		(216,766)		(398,831)
VII. Cash and cash equivalents at the end of the year (Note 50)		28,282,303		38,500,426

See notes to consolidated financial statements.

1. General information

General information on Hana Bank Co., Ltd., previously Korea Exchange Bank (the "Bank" or the "Parent company") and its subsidiaries (collectively, the "Group") in accordance with Korean International Financial Reporting Standard ("K-IFRS") 1110, *Consolidated Financial Statements*, is as follows:

1-1 Summary of the Parent company (The Bank)

The Bank was established on January 30, 1967, as a government-controlled bank, to engage in foreign exchange and trade finance business under the *Korea Exchange Bank Act* enacted on July 28, 1966.

On December 30, 1989, the *Korea Exchange Bank Act* was repealed, and the Bank was reorganized as a stock company under the Commercial Act of the Republic of Korea. On April 4, 1994, the Bank was listed on the Korea Exchange (previously, Korea Stock Exchange). On February 28, 2004, the Bank merged its subsidiary, Korea Exchange Bank Credit Service Co., Ltd. On August 31, 2014, the Bank spun off its credit card division.

On February 9, 2012, Hana Financial Group Inc. ("HFG") had control over the Bank by acquiring 52.27% equity interest in the Bank and later on April 5, 2013, the Bank became a wholly owned subsidiary of HFG after HFG acquired the remaining interest in the Bank through an all-inclusive exchange of the shares.

The Bank changed to its current name on September 1, 2015, following the merger of Korea Exchange Bank and Hana Bank.

The Bank provides commercial banking service under the Banking Act of the Republic of Korea, trust banking service under the Financial Investment Services And Capital Markets Act, merchant banking service due to the merger with the Korea International Merchant Bank, foreign exchange business and other related businesses. As of December 31, 2023, the Bank's headquarters is located at Seoul, with 597 domestic branches (including 64 satellite offices) and 24 overseas branches (including one satellite office and four offices).

The Bank is authorized to issue 2,000 million shares (par value amount : ₩5,000) of common stock, and as of December 31, 2023, after a number of capital increases and decreases, stock splits and conversion of preferred shares to common shares, the Bank has 1,071,915,717 shares of common stock issued and outstanding with the total capital stock amounting to ₩5,359,578 million.

The consolidated financial statements of the Group as of and for the year ended December 31, 2023, were approved by the Board of Directors on January 30, 2024, and will be approved finally at the shareholders' meeting to be held on March 20, 2024.

1-2 Scope and overview of consolidation

The Group's ownership percentages in its consolidated subsidiaries as of December 31, 2023, are summarized as follows (ownership in %):

Investee	Country	Major business	Share ratio (%)	Reporting date
Subsidiaries of Hana Bank				
Hana Bank (China) Co., Ltd.	China	Financial business	100.00	2023.12.31
KEB Hana Bank Canada	Canada	Financial business	100.00	2023.12.31
KEB Hana Bank (Deutschland) A.G. (KEBDAG)	Germany	Financial business	100.00	2023.12.31
PT Bank KEB Hana (KEBI)	Indonesia	Financial business	69.01	2023.12.31
Banco KEB Hana Do Brasil S.A. (KEBB)	Brazil	Financial business	100.00	2023.12.31
KEB Hana NY Financial Corp. (NYFinCo)	USA	Financial business	100.00	2023.12.31
KEB Hana LA Financial Corp. (LAFinCo)	USA	Financial business	100.00	2023.12.31
KEB Hana Global Finance Limited (KHGF)	Hong Kong	Financial business	100.00	2023.12.31
KEB Hana Bank Russia	Russia	Financial business	99.99	2023.12.31

Investee	Country	Major business	Share ratio (%)	Reporting date
Hana Bancorp, Inc.	USA	Financial business	96.77	2023.12.31
KEB Hana Bank Mexico	Mexico	Financial business	99.99	2023.12.31
GLN international Co., Ltd.	Korea	Other financial business	82.24	2023.12.31
Hana Tech Value-Up Investment Fund (*)	Korea	Other financial business	98.04	2023.12.31
Hana 1Q Startup Investment Fund (*)	Korea	Other financial business	90.91	2023.12.31
Hana UBS Power PEF Invest Trust 21 [Bond] (*)	Korea	Asset management company	100.00	2023.12.31
Hyundai Trust PEF Invest 16 [Bond] (*)	Korea	Asset management company	100.00	2023.12.31
Kyobo AXA Tomorrow PEF Invest Trust KH-1 [Bond] (*)	Korea	Asset management company	100.00	2023.12.31
Sevenstar Co., Ltd. (*)	Korea	Other financial business	-	2023.12.31
Marine Solution Co., Ltd. (*)	Korea	Other financial business	-	2023.12.31
Joong-ang star Co., Ltd. (*)	Korea	Other financial business	-	2023.12.31
Ocean Betts The First Co., Ltd. (*)	Korea	Other financial business	-	2023.12.31
Hana H in the holdings 1st LLC (*)	Korea	Other financial business	-	2023.12.31
H-Plus 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
Hana CK 1st Co., Ltd. (*)	Korea	Other financial business	-	2023.12.31
Hana H in the holdings 2nd LLC (*)	Korea	Other financial business	-	2023.12.31
HEONEQ1st, LLC (*)	Korea	Other financial business	-	2023.12.31
H-Hotel1Q 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
BBQ 1Q 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
SK Office 1Q 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
Cleanenergy 1Q 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
HANA DL First Co., Ltd. (*)	Korea	Other financial business	-	2023.12.31
HANA TERMINUS First Co., Ltd. (*)	Korea	Other financial business	-	2023.12.31
HANA I.S 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
HANA I.G 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
GRAND ONEQ 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
DONG DAEGU TERMINAL 2nd, LLC (*)	Korea	Other financial business	-	2023.12.31
KENDALL NO.9 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
BYK 3rd Co., Ltd. (*)	Korea	Other financial business	-	2023.12.31
Mini Hana 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
Jinwoori 1Q 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
H-ECHO 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
HANA STARLORD 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
CLEAN WORLD 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
H-HANA 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
HANA ANANTI 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
One Q B777F 66872 Co., Ltd. (*)	Cayman Islands	Other financial business	-	2023.12.31
NAE CHON HANA 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
DRAGON HANA 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
HANA BAEKSA LOGISTICS 1st, LLC (*)	Korea	Other financial business	-	2023.12.31

Investee	Country	Major business	Share ratio (%)	Reporting date
HANA S ONE Q 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
HOME PLUS HANA CONNECT, LLC (*)	Korea	Other financial business	-	2023.12.31
Antarctica 1st, Ltd. (*)	Korea	Other financial business	-	2023.12.31
Enerbility Hana 1st, Ltd. (*)	Korea	Other financial business	-	2023.12.31
Hana Plant 1st, Ltd. (*)	Korea	Other financial business	-	2023.12.31
GS Hana 1st, Ltd. (*)	Korea	Other financial business	-	2023.12.31
Cha Cha Hana 1st, Ltd. (*)	Korea	Other financial business	-	2023.12.31
T A 1st, Ltd. (*)	Korea	Other financial business	-	2023.12.31
Neostar 6th, Ltd. (*)	Korea	Other financial business	-	2023.12.31
Galaxia 1Q 1st, Ltd. (*)	Korea	Other financial business	-	2023.12.31
Antarctica 2nd, Ltd. (*)	Korea	Other financial business	-	2023.12.31
HCONEQ 2nd, LLC (*)	Korea	Other financial business	-	2023.12.31
H Advanced 1st, Ltd. (*)	Korea	Other financial business	-	2023.12.31
Hana Display 2nd, LLC (*)	Korea	Other financial business	-	2023.12.31
Doosan Hana 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
H Seven 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
Hana Privia 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
Hana Plant 2nd, Ltd. (*)	Korea	Other financial business	-	2023.12.31
Hana Plant 3rd, Ltd. (*)	Korea	Other financial business	-	2023.12.31
Hana Supreme 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
Hana H in the holdings 3rd LLC (*)	Korea	Other financial business	-	2023.12.31
Netoneq 2nd, LLC (*)	Korea	Other financial business	-	2023.12.31
Exteer Hana 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
Hana Spark 1st, LLC (*)	Korea	Other financial business	-	2023.12.31
H Seven 2nd, LLC (*)	Korea	Other financial business	-	2023.12.31
Antarctica 3rd, Ltd. (*)	Korea	Other financial business	-	2023.12.31
Daehan Hana 1st, Ltd. (*)	Korea	Other financial business	-	2023.12.31
GS Hana 2nd, Ltd. (*)	Korea	Other financial business	-	2023.12.31
Happy World Hana 1st, Ltd. (*)	Korea	Other financial business	-	2023.12.31
Trust accounts guaranteeing the repayment of principal (*)	Korea	Trust account	-	2023.12.31
Subsidiaries of Hana Bancorp, Inc.				
KEB Hana Bank USA	USA	Bank	100.00	2023.12.31

(*) Although the entity is a structured special-purpose-company (SPC), the Group recognized the entity as a subsidiary considering its exposure to variable returns and ability to direct its activities.

Condensed financial statements as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)
Hana Bank (China) Co., Ltd.	10,150,671	9,030,295	1,120,376	531,511	4,893	7,677
KEB Hana Bank Canada	1,804,745	1,533,228	271,517	113,485	15,766	26,177
KEB Hana Bank (Deutschland) A.G.	1,212,141	995,228	216,913	83,193	9,904	20,112
PT Bank KEB Hana	3,977,538	3,048,892	928,646	335,991	38,099	66,626
Banco KEB Hana Do Brasil S.A.	285,110	236,975	48,135	38,601	3,355	7,786
KEB Hana NY Financial Corp.	474,249	398,377	75,872	25,382	2,296	3,529
KEB Hana LA Financial Corp.	808,015	706,431	101,584	50,314	8,798	10,278
KEB Hana Global Finance Limited	251,134	148,513	102,621	19,636	6,279	8,071
KEB Hana Bank Russia	837,148	741,873	95,275	63,203	15,476	(2,039)
Hana Bancorp, Inc.(*)	554,578	425,162	129,416	26,967	4,561	6,772
KEB Hana Bank Mexico	365,050	238,516	126,534	29,448	3,429	21,054
GLN International Co., Ltd.	60,616	7,163	53,453	964	(6,661)	(6,661)
Trust accounts guaranteeing the repayment of principal	1,564,740	1,528,439	36,301	107,112	14,925	14,925

(*) The amounts are consolidated amounts of the intermediate parent.

<December 31, 2022>

Classification	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)
Hana Bank (China) Co., Ltd.	10,666,735	9,554,035	1,112,700	526,554	(97,191)	(124,308)
KEB Hana Bank Canada	1,788,935	1,543,596	245,339	76,573	16,039	16,303
KEB Hana Bank (Deutschland) A.G.	1,157,221	1,028,804	128,417	44,421	8,627	9,374
PT Bank KEB Hana	3,841,423	2,979,403	862,020	316,465	51,563	15,327
Banco KEB Hana Do Brasil S.A.	208,558	168,209	40,349	25,795	2,791	6,908
KEB Hana NY Financial Corp.	368,894	296,550	72,344	10,870	980	5,569
KEB Hana LA Financial Corp.	682,091	590,785	91,306	24,511	6,441	11,807
KEB Hana Global Finance Limited	215,235	120,686	94,549	12,119	4,574	10,023
KEB Hana Bank Russia	1,208,118	1,110,804	97,314	67,425	13,862	20,559
Hana Bancorp, Inc.(*)	488,768	366,125	122,643	15,125	(940)	151
KEB Hana Bank Mexico	356,088	250,609	105,479	16,271	346	12,139
GLN International Co., Ltd.	57,439	1,267	56,172	257	(6,132)	(6,132)
Trust accounts guaranteeing the repayment of principal	1,579,252	1,557,875	21,377	39,811	(24,356)	(24,356)

(*) The amounts are consolidated amounts of the intermediate parent.

The following entities are excluded from the Group's scope of consolidation as of December 31, 2023 and 2022, since the Group aimed at investing in majority-owned companies or securities and has no control over the power of investee-related activities, exposure to variable profits and the ability to use power to influence the Group's variable profits.

<December 31, 2023>

Company name	Country	Major business	Share ratio (%)
Hana – KVIC Unicorn Fund of Funds	Korea	Investment	90.91
All Together Korea Fund 5	Korea	Investment	100.00
Hana-New Deal K-Growth fund	Korea	Investment	90.00
Defense Technology Innovation Private Investment Trust	Korea	Investment	98.33
Hana Prop-Tech Fund No.1	Korea	Investment	88.24

<December 31, 2022>

Company name	Country	Major business	Share ratio (%)
Hana – KVIC Unicorn Fund of Funds	Korea	Investment	90.91
All Together Korea Fund 5	Korea	Investment	100.00
Hana-New Deal K-Growth fund	Korea	Investment	90.00
Defense Technology Innovation Private Investment Trust	Korea	Investment	98.33

Subsidiaries included in and excluded from the consolidation scope for the year ended December 31, 2023, are as follows:

Company	Reasons
Included in scope of consolidation:	
Subsidiaries of Hana Bank	
Antarctica 2nd, Ltd.	Newly invested
HCONEQ 2nd, LLC	Newly invested
H Advanced 1st, LLC	Newly invested
Hana Display 2nd, LLC	Newly invested
Doosan Hana 1st, LLC	Newly invested
H Seven 1st, LLC	Newly invested
Hana Privia 1st, LLC	Newly invested
Hana Plant 2nd, Ltd.	Newly invested
Hana Plant 3rd, Ltd.	Newly invested
Hana Supreme 1st, LLC	Newly invested
Hana H in the holdings 3rd LLC	Newly invested
Netoneq 2nd, LLC	Newly invested
Exteer Hana 1st, LLC	Newly invested
Hana Spark 1st, LLC	Newly invested
H Seven 2nd, LLC	Newly invested
Antarctica 3rd, Ltd.	Newly invested
Daehan Hana 1st, Ltd.	Newly invested
GS Hana 2nd, Ltd.	Newly invested
Happy World Hana 1st, Ltd.	Newly invested
Excluded from the scope of consolidation:	
Subsidiaries of Hana Bank	
Hana Display 1st Co., Ltd.	Excluded due to the disposal (end of credit offering)
HCONEQ 1st, LLC	Excluded due to the disposal (end of credit offering)
PIOTOWER 1st, LLC	Excluded due to the disposal (end of credit offering)
THE HAM ONEQ 1st, LLC	Excluded due to the disposal (end of credit offering)
Hana Double H 1Q 4th Co., Ltd.	Excluded due to the disposal (end of credit offering)
Hana Double H 1Q 5th Co., Ltd.	Excluded due to the disposal (end of credit offering)
DPS 2nd, LLC	Excluded due to the disposal (end of credit offering)
HANA BAY 1st, LLC	Excluded due to the disposal (end of credit offering)
THE MIRAE ONEQ 1st, LLC	Excluded due to the disposal (end of credit offering)

1-2-1 Hana Bank (China) Co., Ltd. (Hana Bank China)

Hana Bank (China) Co., Ltd. (Hana Bank China) was incorporated in Beijing to engage in commercial banking, foreign currency exchanges and other related operations in China on December 14, 2007. The Bank contributed the assets and liabilities of the branches in Shanghai and Shenyang, and its interests in the International Bank of Qingdao, which is the subsidiary of the Bank, to the Hana Bank China in the form of equity contributions on December 24, 2007. Hana Bank China, one of subsidiaries in China, acquired and merged with KEB China, one of affiliates in the HFG, on December 15, 2014. (Before the merger, equity interests in Hana Bank China were 59.7% for Hana Bank and 40.3% for Korea Exchange Bank). Its paid-in capital is 3.35 billion yuan as of December 31, 2023 (Share ratio : 100%).

1-2-2 KEB Hana Bank Canada

KEB Hana Bank Canada was established in Toronto, Canada, on October 6, 1981, to provide financial services to Korean companies and residents in Toronto and the surrounding area. Its paid-in capital is 83,400 thousand Canadian dollars as of December 31, 2023 (Share ratio : 100%).

1-2-3 KEB Hana Bank (Deutschland) A.G. (KEBDAG)

KEBDAG was established in Frankfurt, Germany, on December 29, 1992, to provide financial services to Korean companies and residents in Frankfurt and the surrounding area. Paid-in capital is increased by issuing new shares by KEBDAG in 2023. Its paid-in capital is 73,008 thousand euro as of December 31, 2023 (Share ratio : 100%).

1-2-4 PT Bank KEB Hana

PT Bank KEB Hana was established in Jakarta, Indonesia, on November 5, 1990, to provide financial services to Korean companies and residents in Jakarta.
In accordance with the regulations of the Bank Indonesia, two or more local banks with the same ultimate parent company are prohibited to operate as an independent entity in Indonesia. Accordingly, PT Bank KEB Indonesia, a subsidiary of the Bank, and PT Bank Hana, a subsidiary of Hana Bank, have completed a merger process on February 20, 2014, and changed the name to PT Bank KEB Hana. PT Bank KEB Hana was incorporated into a subsidiary of KEB on February 28, 2014, since KEB owned the major shares of PT Bank KEB Hana after the acquisition. Its paid-in capital is 3,160,093 million rupiah as of December 31, 2023 (Share ratio : 69.01%).

1-2-5 Banco KEB Hana Do Brasil S.A. (KEBB)

KEBB was incorporated on May 21, 1999, to provide investment finance services for foreign clients, advisory services for domestic companies that seek to invest overseas, finance arrangement and security investment trust services. Its paid-in capital is 126,351 thousand reals as of December 31, 2023 (Share ratio : 100%).

1-2-6 KEB Hana NY Financial Corp. (NYFinCo)

NYFinCo was established in New York, USA, on April 8, 2004, to provide financial services to Korean companies and residents in New York and the surrounding area. Its paid-in capital is 1 dollar as of December 31, 2023 (Share ratio : 100%).

1-2-7 KEB Hana LA Financial Corp. (LAFinCo)

LAFinCo was established in Los Angeles, USA, on April 8, 2004, to provide financial services to Korean companies and residents in Los Angeles and the surrounding area. Its paid-in capital is 2 dollars as of December 31, 2023 (Share ratio :100%).

1-2-8 KEB Hana Global Finance Limited (KHGF)

KHGF was established on July 2, 2009, in Hong Kong to provide investment finance services for foreign clients, advisory services for domestic companies that seek to invest overseas, finance arrangement and security investment trust services. Its paid-in capital is 50,000 thousand dollars as of December 31, 2023 (Share ratio : 100%).

1-2-9 KEB Hana Bank Russia

KEB launched a Moscow representative office in 2008 to provide financial information and consulting services for Korean and local companies in Russia. KEB Hana Bank Russia was established on August 15, 2014, after obtaining permission to operate corporation from Russian supervisory authorities in order to expand the business area. Its paid-in capital is 4.78 billion RUB as of December 31, 2023 (Share ratio : 99.99%).

1-2-10 Hana Bancorp, Inc.

Hana Bancorp, Inc. (previously, BNB Financial Services Corporation) was incorporated on April 8, 1988, to engage in the bank and related businesses. HFG acquired ownership of BNB Financial Services Corporation and incorporated Hana Bancorp, Inc. as its subsidiary on August 30, 2013, and changed the name to Hana Bancorp, Inc.. The Bank purchased the securities from HFG on March 28, 2016. Its paid-in capital is 48,596 thousand dollars as of December 31, 2023 (Share ratio : 96.77%).

1-2-11 KEB Hana Bank Mexico

KEB Hana Bank Mexico was established in Mexico City on November 3, 2017, to engage in provision of financial services to Korean companies and local corporations and obtained approval for the commencement of business from the local supervisory agency on January 31, 2019. Its paid-in capital is 1,666,828 thousand Mexican pesos as of December 31, 2023 (Share ratio : 99.99%).

1-2-12 GLN International Co., Ltd.
GLN International Co., Ltd. was established in Korea on July 7, 2021, and primarily engages in the electronic finance business (global payment brokerage, etc.). Paid-in capital is increased by issuing new shares by GLN International Co., Ltd. in 2023. Its paid-in capital is 60.8 billion Korean won as of December 31, 2023 (Share ratio : 82.24%).

1-3 Structured entities

1-3-1 Consolidated structured entities

1-3-1-1 Hana UBS Power PEF Invest Trust 21 and a set of two other private equity investment vehicles
In accordance with K-IFRS 1110, two other private equity investment vehicles and Hana UBS Power PEF Invest Trust 21 were included in consolidation scope because the Group has existing rights that give it the current ability to direct the relevant activities, and is not only exposed, or has rights, to variable returns, but also has the ability to use its power to affect the Group's returns from its involvement with the investee.

1-3-1-2 Sevenstar Co., Ltd. and 60 other special-purpose entities
In accordance with K-IFRS 1110, 60 SPCs and Sevenstar Co., Ltd. were included in consolidation scope because the Group has existing rights that give it the current ability to direct the relevant activities, and is not only exposed, or has rights, to variable returns, but also has the ability to use its power to affect the Group's returns from its involvement with the investee.

1-3-1-3 Trust accounts

In accordance with K-IFRS 1110, trust accounts are included in consolidation scope because the Group has existing rights that give it the current ability to direct the relevant activities, and is not only exposed, or has rights, to variable returns, but also has the ability to use its power to affect the Group's returns from its involvement with the investee.

1-3-1-4 Hana Tech Value-Up Investment Fund and one other fund

In accordance with K-IFRS 1110, Hana Tech Value-Up Investment Fund and one other fund are included in consolidation scope because the Group has existing rights that give it the current ability to direct the relevant activities, and is not only exposed, or has rights, to variable returns, but also has the ability to use its power to affect the Group's returns from its involvement with the investee.

1-3-1-5 Contractual commitments to consolidated structured entities

The consolidated structured company for the securitization of assets is established for the securitization of loans. The Group is involved in the acquisition of subordinated bonds issued by the consolidated structured company or provide credit for the asset-backed commercial paper ("ABCP") and others, and is exposed to the risk of not being able to recover the acquisition amounts based on the investment performance. Characteristics and intentions of contractual commitments offered by the Group to the consolidated structured entities are as follows:

Company name	The characteristics and purposes	Intention
Development trust and other trusts	The Group offers principal conservation commitment to trust accounts. The Group is required to conserve the deficit amount in case the trust account stands below the principal as a result of the operation.	Credit risk mitigation on financial management of trust account
Ocean Betts The First Co., Ltd.	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from Ocean Betts The First Co., Ltd..	Operating activities
Hana H in the holdings 1st LLC	The Group partially purchased ABCP (purchase commitment of ₩150,000 million) from Hana H in the holdings 1st LLC.	Operating activities
H-Plus 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩100,000 million) from H-Plus 1st, LLC.	Operating activities
Hana CK 1st Co., Ltd.	The Group partially purchased ABCP (purchase commitment of ₩56,400 million) from Hana CK 1st Co., Ltd..	Operating activities
Hana H in the holdings 2nd LLC	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from Hana H in the holdings 2nd LLC.	Operating activities

Company name	The characteristics and purposes	Intention
HEONEQ1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from HEONEQ 1st, LLC.	Operating activities
H-Hotel1Q 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩48,000 million) from H-Hotel1Q 1st, LLC.	Operating activities
BBQ 1Q 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩12,000 million) from BBQ 1Q 1st, LLC.	Operating activities
SK Office 1q 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩60,000 million) from SK Office 1q 1st, LLC.	Operating activities
Cleanenergy 1Q 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩58,200 million) from Cleanenergy 1Q 1st, LLC.	Operating activities
HANA DL First Co., Ltd.	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from HANA DL First Co., Ltd..	Operating activities
HANA TERMINUS First Co., Ltd.	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from HANA TERMINUS First Co., Ltd..	Operating activities
HANA I.G 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩20,000 million) from HANA I.G 1st, LLC.	Operating activities
GRAND ONEQ 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩40,000 million) from GRAND ONEQ 1st, LLC.	Operating activities
DONG DAEGU TERMINAL 2nd, LLC	The Group partially purchased ABCP (purchase commitment of ₩20,000 million) from DONG DAEGU TERMINAL 2nd, LLC.	Operating activities
KENDALL NO.9 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,300 million) from KENDALL NO.9 1st, LLC.	Operating activities
BYK 3rd Co., Ltd.	The Group partially purchased ABCP (purchase commitment of ₩11,000 million) from BYK 3rd Co., Ltd..	Operating activities
Mini Hana 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from Mini Hana 1st, LLC.	Operating activities
Jinwoori 1Q 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from Jinwoori 1Q 1st, LLC.	Operating activities
H-ECHO 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩80,000 million) from H-ECHO 1st, LLC.	Operating activities
HANA STARLORD 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from HANA STARLORD 1st, LLC.	Operating activities
CLEAN WORLD 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩17,500 million) from CLEAN WORLD 1st, LLC.	Operating activities
H-HANA 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩90,000 million) from H-HANA 1st, LLC.	Operating activities
HANA ANANTI 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from HANA ANANTI 1st, LLC.	Operating activities
NAE CHON HANA 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩49,600 million) from NAE CHON HANA 1st, LLC.	Operating activities
DRAGON HANA 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from DRAGON HANA 1st, LLC.	Operating activities
HANA BAEKSA LOGISTICS 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩34,600 million) from HANA BAEKSA LOGISTICS 1st, LLC.	Operating activities
HANA S ONE Q 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from HANA S ONE Q 1st, LLC.	Operating activities
HOME PLUS HANA CONNECT, LLC	The Group partially purchased ABCP (purchase commitment of ₩60,000 million) from HOME PLUS HANA CONNECT, LLC.	Operating activities
Antarctica 1st, Ltd.	The Group partially purchased ABCP (purchase commitment of ₩60,000 million) from Antarctica 1st, Ltd..	Operating activities
Enerbility Hana 1st, Ltd.	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from Enerbility Hana 1st, Ltd..	Operating activities
Hana Plant 1st, Ltd.	The Group partially purchased ABCP (purchase commitment of ₩100,000 million) from Hana Plant 1st, Ltd..	Operating activities
	The Group partially purchased ABCP (purchase commitment of ₩60,000 million)	

Company name	The characteristics and purposes	Intention
GS Hana 1st, Ltd.	from Gs Hana 1st, Ltd..	Operating activities
Cha Cha Hana 1st, Ltd.	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from Cha Cha Hana 1st, Ltd..	Operating activities
T A 1st, Ltd.	The Group partially purchased ABCP (purchase commitment of ₩10,000 million) from T A 1st, Ltd..	Operating activities
Neostar 6th, Ltd.	The Group partially purchased ABCP (purchase commitment of ₩16,400 million) from Neostar 6th, Ltd..	Operating activities
Galaxia 1Q 1st, Ltd.	The Group partially purchased ABCP (purchase commitment of ₩11,300 million) from Galaxia 1Q 1st, Ltd..	Operating activities
Antarctica 2nd, Ltd.	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from Antarctica 2nd, Ltd..	Operating activities
HCONEQ 2nd, LLC	The Group partially purchased ABCP (purchase commitment of ₩100,000 million) from HCONEQ 2nd, LLC.	Operating activities
H Advanced 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from H Advanced 1st, LLC.	Operating activities
Hana Display 2nd, LLC	The Group partially purchased ABCP (purchase commitment of ₩200,000 million) from Hana Display 2nd, LLC.	Operating activities
Doosan Hana 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from Doosan Hana 1st, LLC.	Operating activities
H Seven 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from H Seven 1st, LLC.	Operating activities
Hana Privia 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩10,000 million) from Hana Privia 1st, LLC.	Operating activities
Hana Plant 2nd, Ltd.	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from Hana Plant 2nd, Ltd..	Operating activities
Hana Supreme 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩20,000 million) from Hana Supreme 1st, Ltd..	Operating activities
Hana H in the holdings 3rd LLC	The Group partially purchased ABCP (purchase commitment of ₩100,000 million) from Hana H in the holdings 3rd LLC.	Operating activities
Exteer Hana 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from Exteer Hana 1st, LLC	Operating activities
Hana Spark 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩100,000 million) from Hana Spark 1st, LLC	Operating activities
H Seven 2nd, LLC	The Group partially purchased ABCP (purchase commitment of ₩20,000 million) from H Seven 2nd, LLC	Operating activities
Antarctica 3rd, Ltd.	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from Antarctica 3rd, Ltd.	Operating activities
GS Hana 2nd, Ltd.	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from GS Hana 2nd, Ltd.	Operating activities
Happy World Hana 1st, Ltd.	The Group partially purchased ABCP (purchase commitment of ₩120,000 million) from Happy World Hana 1st, Ltd.	Operating activities

1-3-2 Unconsolidated structured entities

1-3-2-1 The nature of the Group's interests in unconsolidated structured entities

Details of the nature of the Group's interests in unconsolidated structured entities as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Type	Characteristics and purposes	Major method of financing arrangement	Total assets	
			December 31, 2023	December 31, 2022
SPC securitization	Securitization of backed asset	Issuing asset-backed loan/ABCP and others	6,173,286	7,029,016
Real estate finance	Operation for real estate (including social overhead capital) development	Investment and borrowing	130,483,848	114,016,572
Shipping finance and primary market finance	Building or purchasing ships and non-performing loan purchase, and mergers and acquisitions	Investment and borrowing	165,015,514	40,597,660
Investment fund and trust	Managing investment property	Issuing beneficiary certificates	207,687,103	135,837,775

1-3-2-2 Maximum exposure to loss from interests in unconsolidated structured entities (Korean won in millions):

<December 31, 2023>

Classification	SPC	Real estate finance	Shipping finance and primary market finance	Investment fund and trust
Assets				
Loans (A)	455,569	4,819,535	2,345,541	1,234,369
Securities (B)	1	81,125	-	13,285,051
Derivatives (C)	7,437	919	20,717	-
Others (D)	1,503	44,227	21,479	-
Liabilities				
Derivative liabilities	20,451	92,227	5,921	-
Provisions	2,516	3,789	1,346	214
Others	46	3	94	-
Carrying amount of net asset	441,497	4,849,787	2,380,376	14,519,206
Maximum exposure to loss	967,920	5,771,137	2,843,725	16,888,885
Financial assets (A+B+C+D)	464,510	4,945,806	2,387,737	14,519,420
Credit and other commitment	503,410	825,331	455,988	2,369,465

<December 31, 2022>

Classification	SPC	Real estate finance	Shipping finance and primary market finance	Investment fund and trust
Assets				
Loans (A)	772,224	3,594,661	1,523,953	1,022,347
Securities (B)	1	65,156	-	11,640,474
Derivatives (C)	8,778	6,104	19,536	-
Others (D)	1,430	16,301	8,883	-
Liabilities				
Derivative liabilities	41,255	90,348	6,460	-
Provisions	206	2,365	490	63
Others	17	61	45	-
Carrying amount of net asset	740,955	3,589,448	1,545,377	12,662,758
Maximum exposure to loss	1,077,495	4,508,450	1,906,570	15,013,673
Financial assets (A+B+C+D)	782,433	3,682,222	1,552,372	12,662,821
Credit and other commitment	295,062	826,228	354,198	2,350,852

2. Basis of preparation and material accounting policies

2-1 Basis of preparation

The Group prepares statutory consolidated financial statements in accordance with K-IFRS enacted by the *Act on External Audit of Stock Companies.*.

The accompanying consolidated financial statements have been translated into English from Korean consolidated financial statements prepared in Korean. In the event of any differences in interpreting the consolidated financial statements or the independent auditor's report thereon, the Korean version, which is used for regulatory reporting purposes, shall prevail.

The directors have, at the time of approving the consolidated financial statements a reasonable expectation that the Group has adequate resources to continue in operational existence for the foreseeable future. Thus they continue to adopt the going-concern basis of accounting in preparing the consolidated financial statements.

2-2 Changes in material accounting policies

The material accounting policies used for the preparation of the consolidated financial statements are the same as those adopted in preparing annual financial statements as of and for the year ended December 31, 2022, except for the adoption of new standards and interpretations effective as of January 1, 2023.

Changes in accounting policies in accordance with the adoption of new standards and interpretations for the current reporting period are as follows:

2-2-1 K-IFRS 1001*, Presentation of Financial Statements and IFRS Practice Statement 2 Making Materiality Judgments – Disclosure of Accounting Policies (Amendments)*

The amendments change the requirements in K-IFRS 1001 with regard to disclosure of accounting policies. The amendments replace all instances of the term 'significant accounting policies' with 'material accounting policy information.' Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements.

The supporting paragraphs in K-IFRS 1001 are also amended to clarify that accounting policy information that relates to immaterial transactions, other events or conditions is immaterial and need not be disclosed. Accounting policy information may be material because of the nature of the related transactions, other events or conditions, even if the amounts are immaterial. However, not all accounting policy information relating to material transactions, other events or conditions is itself material.

The International Accounting Standards Board has also developed guidance and examples to explain and demonstrate the application of the 'four-step materiality process' described in International Financial Reporting Standard Practice Statement 2.

There is no material impact of this amendment on the Group's consolidated financial statements.

2-2-2 K-IFRS 1001, *Presentation of Financial Statements- Disclosure of financial liabilities with condition to adjust exercise price (Amendments)*
The amendments require disclosure of valuation gains or losses (limited to those recognized in the profit or loss) of the conversion options or warrants (or financial liabilities including them), if all or part of the financial instrument with exercise price that is adjusted depending on the issuer's share price change is classified as financial liability as defined in paragraph 11 (2) of K-IFRS 1032.

There is no material impact of this amendment on the Group's consolidated financial statements.

2-2-3 K-IFRS 1008, *Accounting Polices, Changes in Accounting Estimates and Errors - Definition of Accounting Estimates (Amendments)*
The amendments replace the definition of a change in accounting estimates with a definition of accounting estimates. Under the new definition, accounting estimates are "monetary amounts in financial statements that are subject to measurement uncertainty" and the definition of a change in accounting estimates was deleted.

There is no material impact of this amendment on the Group's consolidated financial statements.

2-2-4 K-IFRS 1012, *Income Taxes - Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments)*
The amendments reduce the scope of the initial recognition exemption. Depending on the applicable tax law, equal taxable and deductible temporary differences may arise on initial recognition of an asset and liability in a transaction that is not a business combination and affects neither accounting profit nor taxable profit.

Under the amendments, an entity does not apply the initial recognition exemption for transactions that give rise to equal taxable and deductible temporary differences and is required to recognize the related deferred tax asset and liability with the recognition of any deferred tax asset being subject to the recoverability criteria in K-IFRS 1012.

There is no material impact of this amendment on the Group's consolidated financial statements.

2-2-5 K-IFRS 1012, *Income Taxes - International Tax Reform - Pillar Two Model Rules (Amendments)*

The amendments clarify that the standard applies to income taxes arising from tax law enacted or substantively enacted to implement the Pillar Two Model Rules published by the Organisation for Economic Co-operation and Development including tax law that implements qualified domestic minimum top-up taxes described in those rules. The amendments introduce a temporary exception to the accounting requirements for deferred taxes in K-IFRS 1012, so that an entity would neither recognize nor disclose information about deferred tax assets and liabilities related to Pillar Two income taxes. Following the amendments, the Group is required to disclose that it has applied the exception and to disclose separately its current tax expense (income) related to Pillar Two income taxes.

The Group applies a temporary exception to the accounting requirements for defered taxes related to Pillar Two Model Rules, and as the law will be enforced from January 1, 2024, the current corporate tax expense related to Pillar Two income taxes is not recognized. The potential tax impact from the law enforcement is under consideration.

2-2-6 K-IFRS 1117, *Insurance Contracts (New standard)*

K-IFRS 1117 establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts and supersedes K-IFRS 1104, *Insurance Contracts*. The standard mainly features measuring the current value of insurance liabilities, recognizing insurance income on accrual basis and indicating the distinction between insurance gains and investment gains.

The Group does not have any contracts that meet the definition of an insurance contract under K-IFRS 1117, and there is no material impact of this amendment on the Group's consolidated financial statements.

The new and amended standards and interpretations that are issued, but not yet effective up to the date of issuance of the Group's consolidated financial statements are disclosed below.

2-2-7 K-IFRS 1001, *Presentation of Financial Statements - Classification of Liabilities as Current or Non-current (Amendments of 2020)*

The amendments clarify that the classification of liabilities as current or non-current is based on the entity's right to defer settlement of liabilities at the end of the reporting period, not by the likelihood that the entity will exercise the right or not. The amendments highlight that the right exists if the entity complies with the borrowing agreement at the end of the reporting period and the definition of settlement is transferring cash, equity instruments, other assets or services to the counterparty.

The amendments are effective for annual reporting periods beginning on or after January 1, 2024, must be applied retrospectively and early adoption is permitted. If an entity applies this amendments for an earlier period, it is also required to apply the 2023 amendments early.

2-2-8 K-IFRS 1001, *Presentation of Financial Statements - Non-current Liabilities with Covenants (Amendments of 2023)*
Only the borrowing agreement to be complied within the end of the reporting period ("Agreement"), affects the entity's right to defer settlement of liabilities at least 12 months after the reporting period.

Even if compliance of Agreement is assessed only after the reporting period, Agreement defines the existence of rights at the end of the reporting period. Agreement to be complied with only after the reporting period does not affect the right to defer settlement. However, if the deferral right depends on Agreement complied within 12 months after the reporting period, the entity should disclose information about the risk that the liability may be settled within 12 months. Disclosure includes information about Agreement (including the nature and the time for the entity to comply with Agreement), the carrying amount of the liability and the facts and circumstances indicating that the arrangement may be difficult to comply with.

The amendments are effective for annual reporting periods beginning on or after January 1, 2024, must be applied retrospectively, and early adoption is permitted. If an entity applies the amendments for an earlier period, it is also required to apply the 2020 amendments early.

2-2-9 K-IFRS 1007, *Statement of Cash Flows* and K-IFRS 1107, *Financial Instruments: Disclosures- Supplier Finance Arrangements (Amendments)*
These amendments add a requirement to disclose information about financing arrangements to enable financial statement users of K-IFRS 1007 to assess the impact of financing arrangements on the entity's liabilities and cash flows. Additionally, K-IFRS 1107 has been amended to include financing arrangements as an example of requirements to disclose information related to exposure to liquidity concentration. This aims to ensure that users can evaluate the impact of financing arrangements on the entity's financial position accurately.

The term 'supplier finance arrangements' is not defined. Instead, the amendments describe the characteristics of an arrangement for which an entity would be required to provide the information.

To meet the disclosure objective, an entity will be required to disclose in aggregate for its supplier finance arrangements:

- The terms and conditions of the arrangements
- The carrying amount and associated line items presented in the entity's statement of financial position of the liabilities that are part of the arrangements
- The carrying amount and associated line items for which the suppliers have already received payment from the finance providers
- Ranges of payment due dates for both those financial liabilities that are part of a supplier finance arrangement and comparable trade payables that are not part of a supplier finance arrangement
- Types and effects of non-cash changes in the carrying amount of financial liabilities that are part of a supplier finance arrangement
- Liquidity risk information

The amendments, which contain specific transition reliefs for the first annual reporting period in which an entity applies the amendments, are applicable for annual reporting periods beginning on or after January 1, 2024. Earlier application is permitted.

2-2-10 K-IFRS 1116 *Leases- Lease Liability in a Sale and Leaseback (Amendments)*

The amendments add subsequent measurement requirements for sale and leaseback transactions that satisfy the requirements in K-IFRS 1115 to be accounted for as a sale. The amendments require the seller-lessee to determine 'lease payments' or 'revised lease payments' such that the seller-lessee does not recognize a gain or loss that relates to the right of use retained by the seller-lessee, after the commencement date.

The amendments are effective for annual reporting periods beginning on or after January 1, 2024. Earlier application is permitted.

2-2-11 K-IFRS 1001 *Presentation of Financial Statements- Disclosure of Virtual Assets (Amendments)*

The amendments add additional disclosure requirements required by other standards for transactions related to virtual assets, setting out disclosure requirement for each case of 1) holding virtual assets, 2) holding virtual assets on behalf of customer and 3) issuing virtual assets.

When holding a virtual asset, disclosure on the general information about virtual assets, the accounting policy applied and each virtual asset's acquisition method, cost and the fair value at the end of the reporting period are required. Also, when issuing a virtual asset, the entity's obligations and status of fulfilment of the obligation related to the issued virtual asset, the timing and amount of the recognized revenue of the sold virtual asset, the number of virtual assets held a fter issuance and important contract details shall be disclosed.

The amendments are effective for annual reporting periods beginning on or after January 1, 2024. Earlier application is permitted.

2-3 Scope and principles of consolidation

Significant methods of accounting for consolidation when preparing consolidated financial statements are as follows:

2-3-1 Subsidiaries

The Bank has the ability to determine the financial and operating policies of subsidiaries. Generally, the Bank classified the entity as subsidiary in case the Bank has existing rights that give it the current ability to direct the relevant activities, and is not only exposed, or has rights, to variable returns, but also has the ability to use its power to affect the Group's returns from its involvement with the investee. Subsidiaries are fully consolidated from the date on which the control is transferred to the Group and excluded from the subsidiaries at the point when the Group loses the control.

2-3-2 Offset of the investment accounts of the Group and the corresponding equity accounts
The investment accounts of the Group and the corresponding equity accounts of the subsidiaries are eliminated in consolidation.

2-3-3 Process of difference between the costs of investment
The consolidated financial statements reflect on only the share of the consolidated subsidiaries post application of purchase accounting method. When applying the acquisition method, if the transfer consideration, the amount of non-controlling interest in the acquiree and the total fair value of the parent's previous holdings exceed the fair value of the subsidiary's asset liabilities, the difference is recognized as goodwill and is considered for impairment at the end of each reporting period.

Changes in the parent's ownership interest in a subsidiary that does not lose control after the date of acquisition of control are treated as capital transactions. When the group loses control of a subsidiary, a gain or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), less liabilities of the subsidiary and any non-controlling interests.

2-3-4 Elimination of intercompany transactions and the unrealized gain or loss, etc.
All significant intercompany transactions and the account balances among the consolidated companies are eliminated on consolidation. Unrealized gains or losses included in loans and borrowings arising from transactions between consolidated companies are eliminated on consolidation. The related accounts receivable and payable are also eliminated on consolidation.

2-3-5 Investments in associates and a joint venture

Investments in entities over which the Group has control or significant influence are accounted for using the equity method. Under the equity method of accounting, the Group's initial investment in an investee is recorded at acquisition cost. Subsequently, a share of changes in equity (the Group's share of amount of the changes in associates' net assets) is adjusted to reflect in the carrying value. The share of changes in equity is accounted differently per sources. If the change in net asset has occurred due to net income or loss, it is accounted for as gain or loss on equity method. If it has occurred due to unappropriated retained earnings carried over from prior years, it is accounted for as changes in retained earnings under equity method. The change in net assets due to changes in equity, except those mentioned above, is accounted for as equity adjustments in equity method or negative equity changes in equity method.

If the carrying amount of investments in associates is equal to or under '0,' it suspends equity method and carries the investments value at '0.' If the Group has investment assets, such as preferred shares and long-term bonds of associates, it continues recognizing its share of further losses to the extent of the carrying amount of such asset's value '0.' The Group resumes the application of the equity method if the Group's share of income or change in equity of an investee exceeds the Group's share of losses accumulated during the period of suspension of the equity method of accounting. When the Group retains an interest in the former associate or a joint venture and the retained interest is a financial asset, the Group measures the retained interest at fair value at that date and the difference between the carrying amount of the associate or a joint venture at the date the equity method was discontinued, and the fair value of any retained interest and any proceeds from disposing of a part interest in the associate or a joint venture is included in the determination of the gain or loss on disposal of the associate or joint venture.

At the date of acquisition, the excess of the cost of the investment over the Group's share of the net fair value of the investee's identifiable assets and liabilities is accounted for as goodwill or negative goodwill. The goodwill is not amortized, and if there is any indication that investment shares in associates and joint ventures, including those, have been impaired, it is being considered against the recoverable value (greater of net fair value and value in use). In addition, the difference between the fair value and the carrying amount of the identifiable assets and liabilities of the investee at the time of stock acquisition is amortized or reversed according to the equity method of the investee.

The Group's share in the investee's unrealized profits and losses resulting from transactions between the Group and its investee is eliminated to the extent of the interest in the investee.

2-3-6 Special reserve on trust accounts

A special reserve provided under the arrangement of guaranteed fixed rate of return and guaranteed repayment of the principal is included under the retained earnings in the consolidated financial statements.

2-3-7 Non-controlling interests

Subsidiaries' equity that is not included in the Group's share is accounted as non-controlling interests. In case, subsidiaries' non-controlling interests are below '0,' negative non-controlling interests are presented as deduction of equity.

2-4 Foreign currency transaction

2-4-1 Functional currency

When preparing for the consolidated financial statements, the Group measures and recognizes all items and transactions according to the functional currency. The term functional currency is defined as the monetary unit of account of the principal economic environment in which the entity operates and trades between entities using its own functional currency and other currencies that are converted to the Group's functional currency to be measured and recognized.

2-4-2 Transactions and balances at the end of the reporting period

Transactions in foreign currencies are initially recognized as functional currency, applying spot or average exchange rates. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency spot rate of exchange at the reporting date and differences arising on settlement or translation of monetary items are recognized in profit or loss. Non-monetary assets and liabilities at fair value in a foreign currency are translated at the exchange rates at the end of the reporting date. When a gain or loss on a non-monetary item is recognized in profit or loss, any exchange differences of that gain or loss are recognized in profit or loss and when a gain or loss on a non-monetary item is recognized in other comprehensive income, any exchange differences of that gain or loss are recognized in other comprehensive income. Non-monetary items not measured at fair value in a foreign currency are translated using the exchange rates as at the dates of the initial transactions and thus, there are no exchange differences.

However, an item for which settlement is neither planned nor likely to occur in the foreseeable future is, in substance, a part of the entity's net investment in that foreign operation. Exchange differences arising on a monetary item that forms a part of a reporting entity's net investment in a foreign operation are recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal of the net investment.

2-4-3 Translation of the presentation currency
As of the reporting date, the assets and liabilities of overseas branches are translated into the Group's presentation currency, Korean won ("KRW").
The Group's assets and liabilities are translated at the rate of exchange prevailing at the reporting date and the Group's consolidated statements of profit or loss and other comprehensive income and changes in equity are translated using the exchange rates at the transaction date or the average exchange rates for the period. The exchange differences arising on translation are recognized in other comprehensive income.

2-5 Cash and cash equivalents
Cash and cash equivalents in the consolidated statements of financial position are composed of cash at bank and on hand, etc. The purpose of cash and cash equivalents is not to make short-term investments, but to meet short-term cash demands. Cash and cash equivalents are highly liquid, easily convertible and subject to an insignificant risk of changes in value.

Deposits restricted from use by the Group under contracts with third parties are included as part of cash, unless such restrictions prevent deposits from meeting the definition of cash any longer. Contractual restrictions affecting the use of cash and deposits are described in Note 10-2.

2-6 Financial asset classification and subsequent measurement
At initial recognition, financial assets are classified as measured at fair value through profit or loss ("FVTPL"), fair value through other comprehensive income ("FVOCI") and amortized cost, and financial liabilities are classified as measured at FVTPL and amortized cost and in accordance with the business model and characteristics of the contractual cash flows.

Regular-way purchase or sale of financial assets is recognized at the trade date that an entity commits itself to purchase or sell an asset. Regular-way purchase or sale of financial assets means purchase or sale of financial assets under a contract whose terms require delivery of the asset within the time frame established generally by regulation or convention in the marketplace concerned.

Financial assets and liabilities are initially measured at fair value and the transaction costs directly attributable to the acquisition (issuance) of financial assets (liabilities) are added to (deducted from) the fair value at initial recognition if they are not measured at FVTPL. The fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value of financial instruments is generally measured at the transaction price (the fair value of the consideration received or transferred) at initial recognition.

2-6-1 Financial assets at FVTPL

Financial assets held for trading or designated as at FVTPL and financial assets that are not classified as at FVOCI or amortized cost are classified as FVTPL.

Also, the Group may designate a financial asset as measured at FVTPL if doing so eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on a different base.

Financial assets at FVTPL are measured at fair value and the gain or loss on valuation is recognized as profit or loss. Dividends and interest income from the financial assets are also recognized as profit or loss.

2-6-2 Financial assets at FVOCI

The Group classifies debt securities, which are held within a business model, whose objective is achieved by both collecting contractual cash flows and selling financial assets and meet the assessment of contractual cash flow characteristics and equity securities designated as measured at FVOCI, which are held not with intention to sell, but for strategic purpose, as financial assets at FVOCI. Financial assets at FVOCI are measured at fair value after initial recognition. Gain or loss arising from changes in the fair value is recognized as other comprehensive income, except for interest income under the effective interest method, dividends and foreign exchange differences on monetary assets that are directly recognized in profit or loss.

When financial assets at FVOCI are disposed of, the cumulative income recognized in other comprehensive income is transferred to the current profit or loss. However, the cumulative income recognized for equity securities designated as financial assets at FVOCI is not transferred to the current profit or loss.

The fair value of financial assets at FVOCI presented in foreign currencies is translated using the exchange rate at the end of the reporting period. Changes in the fair value from exchange differences due to changes in amortized cost are recognized in the current profit or loss, while other changes are recognized directly in equity.

2-6-3 Financial assets at amortized cost

Financial assets within a business model whose objective is achieved by collecting contractual cash flows, which meet the contractual cash flow characteristics are classified as financial assets at amortized cost. After initial recognition, the financial assets are measured at amortized cost using the effective interest rate ("EIR") method and presented by deducting from the amortized cost the allowance for loan losses. Interest income is recognized using the effective interest method.

The Group defers loan origination fees ("LOF")/ loan origination costs ("LOC") associated with originating loans and LOCs that have future economic benefits. Loan balances are reported net of these LOF/LOCs. The deferred LOF/LOCs are amortized based on the effective interest method, with the amortization recognized as adjustments to interest income.

2-7 Derivative financial instruments and hedge accounting

Derivative instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are classified as trading derivatives or hedging derivatives depending on whether hedge accounting is applied. After initial recognition, derivative instruments are subsequently remeasured at fair value. Any gains or losses arising from changes in fair value on derivatives are taken directly to the consolidated financial statements, except for the effective portion of cash flow hedges or hedges of net investment in a foreign operation, which is recognized in other comprehensive income.

The Group applies fair value hedge accounting to hedge the changes in fair value, as a whole or some parts, of recognized assets or liabilities from particular risks or an unrecognized firm commitment. Cash flow hedge is accounted to hedge the changes in cash flows of recognized assets or liabilities from particular risks or a highly probable forecast transaction.

The Group documents the hedge relationship, risk management objective, strategy, the nature of the risk being hedged and method to assess the effectiveness of hedge to apply hedge accounting. The effectiveness of hedge means the effect of offsetting the exposure to changes in fair value or cash flow of hedged items by changes in fair value or cash flow of derivatives attributed by the hedged risk. The Group assesses and documents whether such hedges are expected to be highly effective at the end of the reporting period.

An ineffective part of the hedge may be due to differences between underlying variables, such as acquisition date, credit risk or liquidity and the hedging instruments that the entity accepts to achieve an effective cost-to-cost hedging relationship with.

2-7-1 Fair value hedges

When fair value hedge accounting is applied, the unrealized gain or loss on hedged items that are attributable to a hedged risk and hedging instruments is symmetrically recognized in the consolidated financial statements as current income for the same reporting period to ensure that changes in the fair value of the hedged items are offset by changes in the fair value of the hedging instruments. When the hedged item is an equity instrument designated at FVOCI, the hedging gain or loss remains in other comprehensive income. If an application of hedge accounting is no longer valid, the Group discontinues the hedge accounting prospectively. Any adjustment to the carrying amount of hedged items is amortized to profit or loss in the consolidated statements of profit or loss and other comprehensive income over the remaining maturity using the effective interest method.

2-7-2 Cash flow hedges

When cash flow hedge accounting is applied, the effective portion of the unrealized gain or loss on the hedging instrument is directly recognized in other comprehensive income (loss) in the consolidated statements of financial position to ensure that changes in the cash flows of the hedged items are offset by changes in the cash flows of the hedging instruments while any ineffective portion is recognized immediately in the consolidated statements of profit or loss and other comprehensive income. Amounts recognized as other comprehensive income are transferred to the consolidated statement of comprehensive income when the hedged transaction affects profit or loss. If an application of hedge accounting no longer meets the criteria, the Group discontinues the hedge accounting prospectively and the cumulative gain or loss on the hedging instrument previously recognized in other comprehensive income is transferred to profit or loss in the consolidated statements of profit or loss and other comprehensive income.

2-7-3 Hedge accounting of net investment in a foreign operation

When applying hedge accounting of net investment in a foreign operation, the effective portion of changes in fair value of the hedging instrument is recognized in other comprehensive income and the ineffective portion of the hedge is recognized as current profit or loss in order to offset changes in the fair value of the hedged item caused by the hedging with changes in the fair value of the hedging instrument. The effective portion of hedge recognized in other comprehensive income will be reclassified from other comprehensive income to current profit or loss in accordance with K-IFRS 1021, *The Effects of Changes in Foreign Exchange Rates*, at the time of disposal of a foreign operation or disposal of a portion of its foreign operations in the future.

2-7-4 Embedded derivatives

An embedded derivative is a component of a hybrid contract that also includes a non-derivative host with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. Derivatives embedded in other financial instruments or other host contracts are accounted for as separate derivatives when their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at FVTPL.

2-7-5 'Day 1' profit or loss

In case of derivatives in Level 3, fair value is determined using data that is not observable from markets. The difference between the transaction price and fair value at initial recognition (a 'Day 1' profit or loss) is deferred and amortized up to its maturity using the straight-line method.

2-7-6 Credit risk valuation adjustment

When assessing derivatives at fair value, expected loss from credit risk is measured and deducted from derivative assets to reflect credit risk of counterparties.

2-8 Expected credit loss ("ECL") for financial assets

Loss allowance is recognized for financial assets at FVOCI and amortized cost using the ECL model.

ECL is the weighted-average amount of possible outcomes within a certain range, reflecting the time value of money; estimates on the past; current and future situations; and information accessible without excessive cost or effort.

The ECL can be measured in following three ways:

- General approach: when financial assets do not fall into below two categories and are off-balance-sheet undrawn commitments
- Simplified approach: when financial assets are trade receivables, contract assets or lease receivables
- Credit-impaired approach: when financial assets are credit impaired at initial recognition

The general approach is applied differently depending on the significance of the increase of the credit risk. If, at the reporting date, the credit risk on a financial instrument has not increased significantly since initial recognition, the Group shall measure the loss allowance for that financial instrument at an amount equal to 12-month ECL. If the credit risk on that financial instrument has increased significantly since initial recognition, the Group shall measure the loss allowance for a financial instrument at an amount equal to the lifetime ECL at each reporting date.

The loss allowance is measured at an amount equal to lifetime ECL for the simplified approach and the Group shall only recognize the cumulative changes in lifetime ECL since initial recognition as a loss allowance for purchased or originated credit-impaired financial assets at each reporting date for the credit-impaired approach.

The following non-exhaustive list of information may be relevant in assessing changes in credit risk:

- Significant changes in internal price indicators of credit risk as a result of a change in credit risk since inception
- Other changes in the rates or terms of an existing financial instrument that would be significantly different
- An actual or expected significant change in the financial instrument's external credit rating
- An actual or expected internal credit rating downgrade for the borrower or decrease in behavioral scoring used to assess credit risk internally
- An actual or expected significant change in the operating results of the borrower
- Past-due information, etc.

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

Despite the foregoing, the Group assumes that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial instrument is determined to have low credit risk at the reporting date.

2-8-1 Reflecting forward-looking information
The Group measures the significance of the increase of the credit risk and the ECL using forward-looking information.

The Group assumes that the risk component is correlated with changes in market conditions and calculates the ECL using the forward-looking information by modeling macroeconomic variables and risk components.

The forward-looking information used to measure the ECL is derived from 'stress-case' or 'worst-case' scenarios.

2-8-2 Measurement of ECL for financial assets at amortized cost

ECL for financial assets at amortized cost is measured as the present value of the difference between the contractual cash flows that are due to the Group under the contract and the cash flows that the Group expects to receive. For this purpose, the Group calculates expected contractual cash flows for individually significant financial assets (allowance for loan losses on an individual assessment). Financial assets insignificant in value individually are measured on a collective basis with financial assets with similar credit risks (allowance for loan losses on a collective assessment).

2-8-2-1 Allowance for loan losses on an individual assessment basis

Allowance for loan losses on an individual assessment basis is based on the best estimates of management with regard to the present value of cash flows expected to be recovered from receivables. In estimating the cash flows, the Group uses all available information, including the financial conditions, such as the operating cash flows of counterparties and the net realizable value of collateral provided.

2-8-2-2 Allowance for loan losses on a collective assessment basis

Allowance for loan losses on a collective assessment basis uses the estimation model that accounts for the forward-looking information based on the past loss rate to measure the ECL. The model considers the probability of default and the loss given default ("LGD") reflecting the type of instruments and borrowers, credit rating, portfolio size and collection period. Also, certain assumptions are applied to model the ECL measurement and to determine input variables based on past experiences and forward-looking information. Methodologies and assumptions for this model are regularly reviewed to minimize the difference between the allowance for loan losses and the actual loss.

The ECL for financial assets at amortized cost is recognized as the allowance for loan losses, and when the financial asset is determined to be irrecoverable, the carrying amount and allowance for loan losses are decreased. If financial assets previously written off are recovered, the allowance for loan losses is increased and the difference is recognized in the current profit or loss.

2-8-3 ECL measurement for financial assets at FVOCI

The measurement method is the same as the one for financial assets at amortized cost, but the change in the allowance is recognized as other comprehensive income. The allowance for financial assets at FVOCI is reclassified from other comprehensive income to current profit or loss when the assets are disposed of or repaid.

2-9 Derecognition of financial assets

A financial asset is derecognized when the contractual rights to the cash flows from the financial asset expire, or the Group transfers substantially all the risks and rewards of ownership of the financial asset. If the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, but has retained control, the Group recognizes the asset and the associated liability to the extent of the Group's continuing involvement in the financial asset. If most of the risks and rewards of owning a financial asset are controlled without holding or transferring it, the Group recognizes them in its consolidated statements of financial position as the Group continues to be involved in the financial asset and related liabilities to be paid.

On derecognition of a financial asset measured at amortized cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. In addition, on derecognition of an investment in a debt instrument classified as at FVOCI, the cumulative gain or loss previously accumulated in the investments revaluation reserve is reclassified to profit or loss. In contrast, on derecognition of an investment in equity instrument that the Group has elected on initial recognition to measure at FVOCI, the cumulative gain or loss previously accumulated in the investments revaluation reserve is not reclassified to profit or loss, but is transferred to retained earnings.

2-10 Classification and measurement of financial liabilities

All financial liabilities that are classified as financial liabilities at FVTPL, borrowings or others are measured initially at their fair value, minus transaction costs, except in the case of financial liabilities recorded at FVTPL.

2-10-1 Financial liabilities at FVTPL

Financial liabilities at FVTPL include financial liabilities held for trading and financial liabilities designated upon initial recognition as at FVTPL. Financial liabilities are classified as held for trading if they are acquired for the purpose of selling in the near term. All derivatives, including an embedded derivative separated from the host contract, are reclassified as financial liabilities at FVTPL, except for financial liabilities designated as effective hedging instruments or financial guarantee contracts. After initial recognition, the changes in the fair value of the financial liabilities at FVTPL and the related interest expenses are recognized as profit or loss. However, for financial liabilities that are designated as at FVTPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability is recognized in other comprehensive income, unless the recognition of the effects of changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss.

The Group performs securities lending and borrowing classified as held-for-trading financial liabilities. When the Group borrows securities from Korea Securities Depository, securities borrowed are managed as memorandum value and when selling them, they are recorded as securities sold. At closing, the difference between the price securities are sold and the market price prevailing on the closing date is taken into account as valuation gain or loss on securities sold, and at the time of selling the securities, the difference in book value and the price at which securities are purchased is recorded as trading gain or loss on securities sold.

2-10-2 Deposits, borrowings and debentures

Interest-bearing deposits, borrowings and debentures are subsequently measured at amortized cost using the effective interest method. The difference between the consideration received after deducting transaction costs and the amount repayable on maturity is amortized by the effective interest method and recognized in profit or loss for the relevant period.

2-11 Derecognition of financial liabilities

A financial liability is derecognized when the obligation under the liability is discharged, canceled or expired. When an existing financial liability is replaced by another from the same lender on substantially different terms or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the consolidated statements of profit or loss and other comprehensive income. It is assumed that the terms are substantially different if the discounted present value of the cash flows under the new terms, discounted using the original EIR is at least 10% different from the discounted present value of the remaining cash flows of the original financial liability.

2-12 Offsetting of financial assets and liabilities

Financial assets and financial liabilities are offset, and the net amount reported in the consolidated statements of financial position if, and only if, there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis or to realize the asset and settle the liability simultaneously.

2-13 Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) 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. If the obligation is expected, it is unlikely or the amount of the loss cannot be estimated reliably, the amount is disclosed. If the effect of the time value of money is material, provisions are stated at present value. At the end of each reporting period, the remaining provision balance is reviewed and assessed to determine if the current best estimate is being recognized. If the existence of an obligation to transfer economic benefit is no longer probable, the related provision is reversed during the period.

The Group accounts for the payment guarantee provision in the same way in accounting allowance for loan losses on a collective assessment basis by applying the Cash Conversion Factor to the confirmed/unconfirmed payment guarantees and bills endorsed. The Group provides an allowance for loan losses on a certain portion of unused credit line. The Group records the provision for such unused balances as an allowance for loan losses on unused commitments, which are calculated by applying a credit conversion factor and provision rates.

2-14 Financial guarantee contract

A financial guarantee contract is a contract that requires the issuer 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 and is measured at fair value on the date of initial recognition. After initial recognition, the Group, as an issuer of such a contract, measures it at the higher of (i) the amount determined in accordance with K-IFRS 1109, *Financial Instruments*, or (ii) the amount initially recognized less, when appropriate, cumulative amortization recognized in accordance with K-IFRS 1115, *Revenue from Contract with Customer.*

2-15 Bonds purchased under resale agreements and bonds sold under repurchase agreements

Bonds purchased under resale agreements and bonds sold under repurchase agreements are included in loans and borrowings, respectively, in the accompanying consolidated statements of financial position. Interest income and expenses from purchase or sale are recognized as interest income on loans and interest expenses on borrowings, respectively.

2-16 Property, plant and equipment

Property, plant and equipment are measured at cost, and the carrying amount after initial recognition is expressed as the amount of the acquisition cost minus the accumulated depreciation and the accumulated impairment loss. The cost of property, plant and equipment is an expenditure directly related to the purchase or construction of the asset, including the cost directly related to the location and condition required to operate the asset in the manner intended by management and the cost initially estimated to be required to dismantle, remove or restore the site.

The subsequent costs are recognized as an asset when it is probable that future economic benefits associated with the asset will flow to the Group and the costs of the asset can be measured reliably. The other maintenances and repairs are expensed in the year in which they are incurred, and the carrying amount of certain parts that are replaced is derecognized.

Land is not depreciated. For depreciation of other assets, amount of acquisition cost, less residual value is calculated on a straight-line basis and declining-balance basis over the following estimated useful life of the asset:

Classification	Depreciation method	Years
Buildings, building components and structures	Straight-line method	5 to 55
Leasehold improvements	Straight-line method	3 to 10
Equipment and vehicles	Declining-balance method	3 to 20

If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is immediately reduced to its recoverable amount.

The residual value and economic useful life are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for, if necessary. Any gain or loss arising on the derecognition of the asset is recognized in 'Non-operating income' or 'Non-operating expenses' in the consolidated statements of profit or loss and other comprehensive income in the year the asset is derecognized.

2-17 Investment properties

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated using the cost model.

Investment properties are derecognized either when they have been disposed of or the investment property is permanently withdrawn from use and no future economic benefit is expected from its disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognized in the consolidated statements of profit or loss and other comprehensive income in the period of derecognition, and transfers are made to or from investment property only when there is a change in use. Land is not depreciated among investment properties, and the depreciation method of the buildings is a straight-line method, and their useful life is 5 to 55 years. The depreciation method, residual value and useful life of investment property are reviewed at the end of each reporting period, and if it is deemed appropriate to change it, it is accounted for as a change in accounting estimates.

2-18 Intangible assets

An intangible asset, which comprises industrial property rights, software, development costs and others, is recognized as an asset only if it is probable that future economic benefits associated with the asset will flow to the Group and the costs of the asset can be measured reliably. Intangible assets acquired individually are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value as of the date of acquisition in accordance with K-IFRS 1103, *Business Combination.*
Amortization of intangible assets with definite useful lives is calculated on the following amortization method over the estimated useful life of the assets:

Classification	Depreciation method	Years
Industrial property rights, software and system development costs	Straight-line method	5
Core deposits	Straight-line method	14
Other intangible assets	Straight-line method	1 to 12

Intangible assets with indefinite useful lives are not amortized, but are annually tested for impairment or whenever there is an indication that the intangible asset may be impaired. The assessment of indefinite useful life is reviewed annually to determine whether the indefinite useful life continues to be supportable.

2-19 Impairment of non-financial assets

The Group tests the depreciable asset for impairment whenever there is a change of environment or an event that the carrying amount may not be recoverable. The Group recognizes an excess of the carrying amount over the recoverable amount as an impairment loss. The Group defines recoverable amount as the higher of an asset's or cash-generating unit ("CGU")'s fair value, less costs to sell, or its value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels (CGUs) for which there are separate and identifiable cash flows. The Group assesses the reversal of an impairment loss recognized for the non-financial assets other than goodwill at the end of the reporting period.

2-20 Net defined benefit liabilities (assets)

The Group calculates defined benefit liabilities and pension benefit expenses based on a defined benefit plan and defined contribution plan when an employee retires in accordance with pension-related regulations. For defined benefit plans, the cost of retirement benefits is measured by an actuary services company, using the projected unit credit method. The present value of a defined benefit obligation is computed by discounting expected future cash outflows with market rate of return measured against the yield of high-graded corporate bond, whose date of payment and maturity is similar to that of a defined benefit obligation. Actuarial gains and losses, incurred from the change in actuarial assumptions and the difference between the assumptions and the actual results, are recognized in other comprehensive income for the period. Past service cost is recognized immediately to the extent that the benefits are already vested and otherwise is amortized on a straight-line basis over the period until the benefits become vested.

The Group has entered into retirement trust fund and retirement pension plan agreements to pay retirement benefits to its employees. The retirement benefit obligation represents the present value of the defined benefit obligation as adjusted for unrecognized past service costs and as reduced by the fair value of plan assets. Any asset resulting from this calculation is limited to unrecognized actuarial losses and past service costs, plus the present value of available refunds and reductions in future contributions to the plan.

Discretionary contributions made by employees or third parties reduce service cost upon payment of these contributions to the plan. When the formal terms of the plans specify that there will be contributions from employees or third parties, the accounting treatment depends on whether the contributions are linked to service, as follows:

- If the contributions are not linked to services (e.g. contributions are required to reduce a deficit arising from losses on plan assets or from actuarial losses), they are reflected in the remeasurement of the net defined benefit liability (asset).
- If contributions are linked to services, they reduce service costs. For the amount of contribution that is dependent on the number of years of service, the entity reduces service cost by attributing the contributions to periods of service using the attribution method required by K-KFRS 1019 paragraph 70 for the gross benefits. For the amount of contribution that is i ndependent of the number of years of service, the entity reduces service cost in the period in which the related service is rendered.

2-21 Share-based payment

In the case of equity-settled share-based payment, the goods or services received and the corresponding increase in equity are measured directly at the fair value of the goods or services and accounted for as compensation costs and equity. If the goods or services provided cannot be reliably measured, the endowed equity is indirectly estimated at fair value and the Group accounts for compensation costs and equity (capital adjustment). The cost of cash-settled transactions is measured initially at fair value at the grant date, taking into account the terms and conditions upon which the instruments were granted. This fair value is expensed over the period until vesting with recognition of a corresponding liability. The liability is remeasured to fair value at each reporting date including the settlement date, with changes in fair value recognized in the consolidated statements of profit or loss and other comprehensive income. Also, in the case of a selectable share-based payment transaction in which the employees have a choice between a cash-settled transaction and an equity-settled transaction, the Group records the amount depending on its substance.

2-22 Employee benefits

2-22-1 Short-term employee benefits

When employees have rendered services to the Group during an accounting period, the Group recognizes the undiscounted amount of short-term employee benefits. This amount is expected to be settled in whole before 12 months after the end of the reporting period, in exchange for those services.

2-22-2 Termination benefits

The Group recognizes an expense for termination benefits when an employee accepts the offer or when a restriction on the Group's ability to withdraw the offer takes effect.

2-23 Recognition of income tax expenses and deferred tax assets and liabilities
Income taxes are composed of current and deferred taxes. All items related to taxes, other than those recognized directly in equity, are accounted for in the consolidated statements of profit or loss and other comprehensive income. Accordingly, items recognized directly in equity and the related taxes are accounted for as other comprehensive income in the consolidated statements of profit or loss and other comprehensive income.

The tax rates and tax laws used to compute the amount are those that are enacted, or substantively enacted, by the reporting date, in the countries where the Group operates and generates taxable income. If the applied tax laws require an interpretation, the Group calculates income tax payable expected to be paid to the taxation authorities based on the opinion made when the taxes were reported.

Deferred tax is provided on the temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

The Group measures deferred tax assets and liabilities 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 Group recognizes a deferred tax asset for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which the deductible temporary differences can be utilized.

The Group recognizes a deferred tax liability for all taxable temporary differences with investments in subsidiaries and associates, except to the extent that both of the following conditions are satisfied: (a) the Group is able to control the timing of the reversal of the temporary difference and (b) it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

The Group offsets deferred tax assets and liabilities if, and only if, the Group has a legally enforceable right to set off current tax assets against current tax liabilities, and the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either on the same taxable entity or different taxable entities, which intend either to settle current tax liabilities and assets on a net basis or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

2-24 Equity

2-24-1 Classification of equity

The Group classifies financial instruments at initial recognition as either financial liabilities or financial equity depending on the contractual materiality. In the case where it is possible to avoid the related contractual obligations, the financial item is classified as a financial equity. An equity is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities.

2-24-2 Stock issuance costs

New stock issuance costs or incremental costs related to the stock issuance for business combinations are recorded as a deduction from paid-in capital, net of tax effects.

2-25 Earnings per share

Basic and diluted earnings per share ("EPS") are computed by dividing net income by the weighted-average number of shares of common stock outstanding during the year.

2-26 Accounting basis for trust accounts

The Group accounts for trust operations (the "trust accounts") separately from the Group's accounts in accordance with the *Financial Investment Services and Capital Markets Act*. In this regard, the funds lent by the Group to the trust account are accounted for as due to trust accounts of the Group's accounts, and the funds borrowed by the Group from the trust account are accounted as due from trust accounts of the Group's accounts. Trust compensation paid to the trustee (the Group) in connection with the operation, management and disposal of trust property is accounted as trust operation profits. The Group recognizes trust commissions earned from trust accounts as income from trust operations in connection with the operation, management and disposal of trust property. In addition, in the case of a joint operation money trust with a "guarantee contract of the principal or profits" of the trust account, if the operating profit falls short of the "principals to be preserved or profits to be guaranteed" and this shortage is more than covered by the trust compensation and special reserves, the Group accounts the amount paid to the trust account as the trust account's operating losses.

2-27 Lease accounting

Under K-IFRS 1116, *Leases*, the Group applies a single recognition and measurement method for all leases, except for leases of low-value assets. This standard provides guidance on specific requirements and simplified methods applied by an entity.

The Group recognized the right-of-use assets and the lease liabilities that were previously classified as operating leases, except for leases of low-value assets. Right-of-use assets for most leases were recognized as carrying amounts measured as if they had been applying the standards from the inception of the lease, except that they were discounted at the lessee's incremental borrowing rate as of the date of initial application. In some leases, the right-of-use asset was recognized based on the amount equal to the lease liabilities, adjusted for any related prepaid and accrued lease payments previously recognized. The lease liability was measured at the present value of the remaining lease payments, discounted at the incremental borrowing rate as of the date of the initial application.

The practical expedients that the Group applied are as follows:

- Application of a single discount rate to a portfolio of leases with significantly similar characteristics
- Replacement of impairment review by determining whether leases are onerous before the initial application date
- Exclusion of initial direct costs from the measurement of the right-of-use asset at the initial application date
- Using hindsight for lessee

Leases for which the Group is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases.

Amounts due from lessees under finance leases are recognized as receivables at the amount of the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Group's net investment outstanding in respect of the leases.

2-28 Merchant banking account

As permitted by the Restructuring of Financial Institutions Act, the Group may continue its merchant banking operations, including leasing business, until the existing contracts acquired from the Korea International Merchant Bank upon merger are terminated.

Material accounting policies applied to the Group's merchant banking operations are summarized as follows:

2-28-1 Revenue recognition on discounted notes

Interest income on discounted notes is accrued over the term of the notes. Income from the sale of discounted notes is recognized at the date of transaction based on the difference between the purchase prices and sales prices of the notes, adjusted for interest earned during the holding period.

2-28-2 Cash Management Accounts ("CMA")

The Group recognizes interest income from CMA investments and interest expenses from CMA deposits as operating income and operating expenses, respectively.

2-29 Interest income and interest expenses

Interest income and interest expenses are recognized over time using the effective interest method.

The effective interest method is a method of calculating the amortized cost of a financial asset or a financial liability and allocating the interest income or interest expenses over the relevant period. The EIR is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial liability. When calculating the EIR, the Group estimates cash flows considering all contractual terms of the financial instrument, but does not consider future credit losses. Cash flows at the time of the calculation include all the fees and points paid to, or received, from parties to the contract that are an integral part of the EIR, including transaction costs, and all other premiums or discounts.

2-30 Fees and commission income

The Group's revenue recognition standard varies depending on the type of service provided to customers. Fee income, which is an integral part of the EIR of financial instruments, is adjusted using the EIR and recognized as interest income.

Fee income is recognized using the five-stage revenue recognition model (Identification of a contract with a customer → Identification of performance obligations in the contract → Determination of the transaction price → Allocation of the transaction price to the separate performance obligations in the contract → Recognition of revenue upon satisfying the performance obligations) in accordance with K-IFRS 1115.

2-31 Dividend income

Dividend income is recognized when the Group's right to receive the payment is established.

2-32 Government grants

Government grants are recognized at fair value when there is a reasonable assurance that the entity will comply with the conditions attached to it and that the grant will be received. Grants related to income are recognized as revenue on a systematic basis over the period necessary to match the related costs that the grant is intended to cover. On the other hand, grants related to an asset are presented by subtracting the carrying amount of the asset and accounting for by deducting depreciation expenses over the useful life of the asset.

3. Material judgments and accounting estimates

In the application of the Group's accounting policies, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily observable from objective sources. The estimation and assumption are based on other factors that are related to historical experience. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future period if the revision affects both current period and future period.

In the process of applying the Group's accounting policies, management has made the following judgments that have a material effect on the amounts recognized in the consolidated financial statements:

3-1 Fair value of financial instruments
The fair value of financial instruments is determined by referencing quoted market prices in active markets in the first place. For financial instruments not traded in an active market, the fair value is determined using appropriate valuation techniques, including (i) between knowledgeable and willing parties in a recent arm's-length transaction, (ii) reference to the current fair value of another instrument that is substantially the same, (iii) discounted cash flow ("DCF") analysis and (iv) option-pricing models.

3-2 ECL of financial assets

The Group recognizes impairment losses on debt instruments, lease receivables, loan commitment and financial guarantee contracts that were accounted for at amortized cost, or at FVOCI, based on the ECL impairment model using a three-stage model for 12-month ECL, or lifetime ECL, based on changes in credit risk since initial recognition of financial assets.

Classification		Loss allowance
STAGE 1	Credit risk on a financial instrument has not increased significantly since initial recognition.	12-month ECL: Expected credit losses that result from default events on a financial instrument that are possible within the 12 months after the reporting date.
STAGE 2	Credit risk on a financial instrument has increased significantly since initial recognition.	Lifetime ECL: Expected credit losses that result from all possible default events over the expected life of a financial instrument.
STAGE 3	Credit-impaired.	

The cumulative changes in lifetime ECL since initial recognition are recognized as loss allowance for a financial asset that is considered credit impaired at initial recognition.

3-3 Retirement benefit

The cost of providing benefits under the defined benefit plans is determined using the actuarial valuation. Actuarial assumptions were made for the discount rate and an increase in the future pay rate. Retirement benefits include significant uncertainties in the estimates due to the longer duration of the period.

3-4 Impairment of non-financial assets

The Group assesses at the end of each reporting period, whether there is an indication that non-financial assets may be impaired. An intangible asset with an indefinite useful life is tested for impairment annually or tested whenever there is an indication that the intangible asset may be impaired. Other non-financial assets are tested for impairment whenever there is an indication that the book value cannot be recovered. For the calculation of value in use, management estimates an expected future cash flow incurred from the asset or CGU. For the calculation of present value of the expected future cash flow, appropriate discount rate is selected.

3-5 Income tax

There have been various transactions and tax accounting methods, which have made computing the final tax expenses for the period uncertain. The contingent liability from any future tax assessments is based on the estimates of the likelihood of additional taxes imposed and has been included in the Group's consolidated financial statements for the current period. When the finalized tax expense assessments are different from the appropriated amounts, the differences, if any, are recognized in current deferred tax assets, liabilities and expenses for the period.

4. Fair value measurement of financial assets and liabilities

The standards the Group applies when measuring fair values of financial assets and liabilities are described below:

a. Quoted market prices at the settlement date in an active market are the best evidence of fair value and should be used when available.
b. If a market for a financial instrument is not active, the Group establishes fair value using a valuation technique that makes maximum use of market inputs and includes (i) between knowledgeable and willing parties in a recent arm's-length transaction, (ii) reference to the current fair value of another instrument that is substantially the same, (iii) DCF analysis and (iv) option-pricing models. An acceptable valuation technique incorporates all factors that market participants would consider in setting a price and is consistent with accepted economic methodologies for pricing financial instruments.
c. When determining fair value using the valuation techniques, comparison with the current market transaction of another instrument that is substantially the same as the financial instrument needed to be objectively substantiated or inclusion of variables in the marketable data must be performed.
   Not all significant market variables are observable and in relevant cases, reasonable estimates or assumptions are required to determine the fair value.

4-1 Fair value hierarchy of financial instruments

Fair value hierarchy of financial instruments as of December 31, 2023 and 2022, is as follows (Korean won in millions):

<December 31, 2023>

Classification	Levels of the fair value hierarchy (*1)			Total
	Level 1	Level 2	Level 3	
Financial assets				
Financial assets at FVTPL				
Equity securities	74,230	-	24,995	99,225
Debt securities	4,997,752	5,139,180	1,305,400	11,442,332
Derivative assets held for trading	-	5,929,311	36,561	5,965,872
Private convertible bonds	-	-	7,447	7,447
Subtotal	5,071,982	11,068,491	1,374,403	17,514,876
Financial assets at FVOCI				
Equity securities	159,851	37	490,578	650,466
Debt securities	13,499,102	22,744,543	-	36,243,645
Subtotal	13,658,953	22,744,580	490,578	36,894,111
Derivative assets used for hedging	-	1,723	-	1,723
Merchant banking account assets	-	4,637,824	-	4,637,824
Total	18,730,935	38,452,618	1,864,981	59,048,534
Financial liabilities				
Financial liabilities at FVTPL				
Derivative liabilities held for trading	979	6,002,522	38,565	6,042,066
Securities borrowed	452,426	-	-	452,426
Financial liabilities designated at FVTPL	-	234,718	-	234,718
Subtotal	453,405	6,237,240	38,565	6,729,210
Derivative liabilities used for hedging	-	363,174	27,805	390,979
Total	453,405	6,600,414	66,370	7,120,189

(*1) The Group recognizes transfers between levels at the beginning of reporting period when events or changes in circumstances causing the transfers between levels have occurred.

<December 31, 2022>

Classification	Levels of the fair value hierarchy (*1)			Total
	Level 1	Level 2	Level 3	
Financial assets				
Financial assets at FVTPL				
Equity securities	17,943	–	24,945	42,888
Debt securities	2,148,533	5,459,986	944,860	8,553,379
Derivative assets held for trading	213	9,814,434	37,107	9,851,754
Private convertible bonds	–	–	7,394	7,394
Subtotal	2,166,689	15,274,420	1,014,306	18,455,415
Financial assets at FVOCI				
Equity securities	252,039	34	558,432	810,505
Debt securities	10,351,695	21,798,381	–	32,150,076
Subtotal	10,603,734	21,798,415	558,432	32,960,581
Derivative assets used for hedging	–	8,062	–	8,062
Merchant banking account assets	–	4,631,361	–	4,631,361
Total	12,770,423	41,712,258	1,572,738	56,055,419
Financial liabilities				
Financial liabilities at FVTPL				
Derivative liabilities held for trading	1,176	10,681,705	59,696	10,742,577
Securities borrowed	323,661	–	–	323,661
Financial liabilities designated at FVTPL	–	162,069	–	162,069
Subtotal	324,837	10,843,774	59,696	11,228,307
Derivative liabilities used for hedging	–	485,580	30,838	516,418
Total	324,837	11,329,354	90,534	11,744,725

(*1) The Group recognizes transfers between levels at the beginning of each reporting period when events or changes in circumstances causing the transfers between levels have occurred.

The Group classifies and discloses the fair value of the financial instruments into the following three hierarchies:

a. Level 1: The fair values are based on quoted prices (unadjusted) in active markets.

b. Level 2: The fair values are based on techniques using observable market data.

c. Level 3: The fair values are based on techniques using unobservable inputs.

Details of fair value, valuation technique and inputs used to develop those measurements classified into Level 2 assets and liabilities that are measured at fair value as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Fair value	Valuation techniques	Inputs
Financial assets			
Financial assets at FVTPL			
Debt securities	5,139,180	Net asset value and DCF model	Underlying asset prices, such as bonds, stock, etc., and Discount rate
Derivative assets held for trading	5,929,311	Black-Scholes model, Black model, DCF model and Hull-White 1 factor model	Exchange rate, Stock Index, Volatility, Swap yield curve, Swaption volatility and Yield curve of each currency
Subtotal	11,068,491		
Financial assets at FVOCI			
Equity securities	37	Market value	Stock price
Debt securities	22,744,543	DCF model	Discount rate
Subtotal	22,744,580		
Derivative assets used for hedging	1,723	Hull-White 1 factor model and DCF model	Exchange rate, Swap yield curve, Swaption volatility and Yield curve of each currency
Merchant banking account assets	4,637,824	DCF model	Discount rate
Total	38,452,618		
Financial liabilities			
Financial liabilities at FVTPL			
Derivative liabilities held for trading	6,002,522	Black-Scholes model, Black model, DCF model and Hull-White 1 factor model	Exchange rate, Stock Index, Volatility, Swap yield curve, Swaption volatility and Yield curve of each currency
Financial liabilities designated at FVTPL	234,718	Hull-White 1 factor model	Swap yield curve and Swaption volatility
Subtotal	6,237,240		
Derivative liabilities used for hedging	363,174	Hull-White 1 factor model and DCF model	Exchange rate, Swap yield curve, Swaption volatility and Yield curve of each currency
Total	6,600,414		

<December 31, 2022>

Classification	Fair value	Valuation techniques	Inputs
Financial assets			
Financial assets at FVTPL			
Debt securities	5,459,986	Net asset value and DCF model	Underlying asset prices, such as bonds, stock, etc., and Discount rate
Derivative assets held for trading	9,814,434	Black-Scholes model, Black model, DCF model and Hull-White 1 factor model	Exchange rate, Stock Index, Volatility, Swap yield curve, Swaption volatility and Yield curve of each currency
Subtotal	15,274,420		
Financial assets at FVOCI			
Equity securities	34	Market value	Stock price
Debt securities	21,798,381	DCF model	Discount rate
Subtotal	21,798,415		
Derivative assets used for hedging	8,062	Hull-White 1 factor model	Exchange rate, Swap yield curve, Swaption volatility and Yield curve of each currency
Merchant banking account assets	4,631,361	DCF model	Discount rate
Total	41,712,258		
Financial liabilities			
Financial liabilities at FVTPL			
Derivative liabilities held for trading	10,681,705	Black-Scholes model, Black model, DCF model and Hull-White 1 factor model	Exchange rate, Stock Index, Volatility, Swap yield curve, Swaption volatility and Yield curve of each currency
Financial liabilities designated at FVTPL	162,069	Hull-White 1 factor model	Swap yield curve and Swaption volatility
Subtotal	10,843,774		
Derivative liabilities used for hedging	485,580	Hull-White 1 factor model and DCF model	Exchange rate, Swap yield curve, Swaption volatility and Yield curve of each currency
Total	11,329,354		

Details of fair value, valuation techniques, inputs used to develop those measurements and quantitative information about the significant unobservable inputs classified into Level 3 assets and liabilities that are measured at fair value as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Fair value	Valuation techniques	Inputs	Significant unobservable inputs	Range (%)	The effect of changes in unobservable inputs on fair value
Financial assets						
Financial assets at FVTPL						
Equity securities	24,995	Third-party transaction	-	-	-	-
Debt securities	1,305,400	Dividend discount model, Binomial model and Net asset value	Discount rate, Liquidating value, Underlying asset price and Volatility of underlying assets	Discount rate	5.15	Negative
				Liquidating value		Positive
				Volatility of underlying assets	26.03~29.98	Positive
Derivative assets held for trading	36,561	Hull-White 2 factor model and Monte-Carlo Method	Discount rate, Stock index, Swap yield curve, Volatility of underlying assets, and Correlation within evaluation model and Exchange rate	Discount rate	23.68	Negative
				Correlation between Interest rate swap rates, Correlation between Exchange rate and Stock index and Correlation between Stock index and Stock index	-24.00~78.00	Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
				Volatility of underlying assets	-	Positive
Private convertible bonds	7,447	Acquisition cost	-	-	-	-
Subtotal	1,374,403					
Financial assets at FVOCI						
Equity securities	490,578	Free cash flow to equity model, DCF model, Comparable Company Analysis and Net asset value	Growth rate, Discount rate, Liquidating value and Underlying asset price	Growth rate	-	Positive
				Discount rate	9.25~19.90	Negative
				Liquidating value	-	Positive
Total	1,864,981					
Financial liabilities						
Financial liabilities at FVTPL						
Derivative liabilities held for trading	38,565	Hull-White 2 factor model and Monte-Carlo Method	Stock index, Swap yield curve, Volatility of underlying assets and Correlation within evaluation model and Exchange rate	Correlation between Interest rate swap rates, Correlation between Exchange rate and Stock index, Correlation between Stock index and Stock index	-24.00~78.00	Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
				Volatility of underlying assets	-	Positive
Derivative liabilities used for hedging	27,805	Hull-White 2 factor model	Swap yield curve, Swaption volatility and Correlation within evaluation model and Exchange rate	Correlation between Interest rate swap rates	60.00~97.00	Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
Total	66,370					

<December 31, 2022>

Classification	Fair value	Valuation techniques	Inputs	Significant unobservable inputs	Range (%)	The effect of changes in unobservable inputs on fair value
Financial assets						
Financial assets at FVTPL						
Equity securities	24,945	Dividend discount model and DCF model	Growth rate, Discount rate and Liquidating value	Growth rate	-	Positive
				Discount rate	5.19~ 11.95	Negative
				Liquidating value	-	Positive
Debt securities	944,860	Dividend discount model, Binomial model and Net asset value	Discount rate, Liquidating value, Underlying asset price and Volatility of underlying assets	Discount rate	5.68~ 6.88	Negative
				Liquidating value	-	Positive
				Volatility of underlying assets	23.56~ 35.06	Positive
Derivative assets held for trading	37,107	Binomial model and Hull-White 2 factor model	Stock index, Swap yield curve, Volatility of underlying assets and Correlation within evaluation model and Exchange rate	Correlation between Interest rate swap rates, Correlation between Exchange rate and Stock index, Correlation between Stock index and Stock index	-25.30~ 74.90	Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
				Volatility of underlying assets	21.83~ 31.73	Positive
Private convertible bonds	7,394	Acquisition cost	-	-	-	-
Subtotal	1,014,306					
Financial assets at FVOCI						
Equity securities	558,432	Binomial model, Free cash flow to equity model, DCF model, Comparable Company Analysis and Net asset value	Growth rate, Discount rate, Liquidating value, Underlying asset price and Volatility of underlying assets	Growth rate	-	Positive
				Discount rate	9.08~ 19.14	Negative
				Liquidating value	-	Positive
				Volatility of underlying assets	21.98~ 46.53	Positive
Total	1,572,738					
Financial liabilities						
Financial liabilities at FVTPL						
Derivative liabilities held for trading	59,695	Binomial model and Hull-White 2 factor model	Stock index, Swap yield curve, Volatility of underlying assets and Correlation within evaluation model and Exchange rate	Correlation between Interest rate swap rates, Correlation between Exchange rate and Stock index, Correlation between Stock index and Stock index	-5.90~ 73.00	Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
				Volatility of underlying assets	21.83~ 46.53	Positive
Derivative liabilities used for hedging	30,838	Hull-White 2 factor model	Swap yield curve, Swaption volatility and Correlation within evaluation model and Exchange rate	Correlation between KRW Interest rate swap rates and Correlation between USD Interest rate swap rates,	39.00~ 96.00	Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
Total	90,533					

4-2 Changes in the fair value hierarchy of financial instruments categorized as Level 3

Changes in the fair value of financial assets and liabilities categorized as Level 3 that are measured at fair value in the consolidated financial statements for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification		Financial assets at FVTPL			Financial assets at FVOCI		Net derivative instruments	
		Equity securities	Debt securities	Private convertible bonds	Equity securities	Debt securities	Held for trading	Designated as hedging
Beginning balance		24,945	944,860	7,394	558,432	–	(22,588)	(30,838)
Transfers between fair value hierarchies (*)		(1,000)	–	–	–	–	–	–
Total profit or loss	Profit or loss	808	17,740	135	–	–	(7,867)	3,033
	Other comprehensive income	–	–	–	(22,509)	–	–	–
Purchases and issues		1,648	459,585	1,000	238	–	491	–
Sales and settlements		(1,406)	(116,785)	(1,082)	(45,583)	–	27,960	–
Ending balance		24,995	1,305,400	7,447	490,578	–	(2,004)	(27,805)

(*) Changes in the availability of observable market data for the financial instrument have resulted in a transfer between fair value hierarchies.

<2022>

Classification		Financial assets at FVTPL			Financial assets at FVOCI		Net derivative instruments	
		Equity securities	Debt securities	Private convertible bonds	Equity securities	Debt securities	Held for trading	Designated as hedging
Beginning balance		14,900	611,871	170,873	584,998	–	(695)	(9,124)
Total profit or loss	Profit or loss	608	(11,451)	1,550	–	–	(22,790)	(21,714)
	Other comprehensive income	–	–	–	(26,024)	–	–	–
Purchases and issues		10,027	453,969	7,337	–	–	897	–
Sales and settlements		(590)	(109,529)	(172,366)	(542)	–	–	–
Ending balance		24,945	944,860	7,394	558,432	–	(22,588)	(30,838)

4-3 Amount recognized in profit or loss from changes in the fair value hierarchy of financial instruments categorized as Level 3

The amount recognized in profit or loss from changes in the fair value hierarchy of financial instruments categorized as Level 3 for the years ended December 31, 2023 and 2022, is recorded in the consolidated financial statements as follows (Korean won in millions):

<2023>

Classification	Total gains or losses recognized in profit or loss	Profit or loss recognized related to financial instruments held at the end of reporting period
Gain on financial instruments at FVTPL	10,816	7,276
Gain related to derivative instruments used for hedging	3,033	3,033
Total	13,849	10,309

<2022>

Classification	Total gains or losses recognized in profit or loss	Profit or loss recognized related to financial instruments held at the end of reporting period
Loss on financial instruments at FVTPL	(32,083)	(25,872)
Loss related to derivative instruments used for hedging	(21,714)	(21,714)
Total	(53,797)	(47,586)

4-4 Transfers between fair value hierarchies

There is a transfer out of Level 3 of the fair value hierarchy for the years ended December 31, 2023 and 2022.

Classification	2023	2022
Transfer out of Level 3 to Level 1	(1,000)	-

4-5 Sensitivity analysis

Sensitivity analysis of the financial instruments classified as Level 3 from the changes in significant unobservable inputs as of December 31, 2023 and 2022, is as follows. The impact of fair value fluctuations on profit or loss or other comprehensive income is divided into favorable and unfavorable changes. The financial instruments classified as Level 3 which were excluded from the sensitivity analysis as it is practically impossible, amount to ₩1,343,558 million and ₩1,046,318 million as of December 31, 2023 and 2022, respectively.

(Korean won in millions):

<December 31, 2023>

Classification	Favorable changes	Unfavorable changes
Financial assets		
Financial assets at FVTPL		
Debt securities (*3)	1,419	(1,331)
Derivative assets held for trading (*1)	118	(164)
Subtotal	1,537	(1,495)
Financial assets at FVOCI		
Equity securities (*2)	19,012	(10,743)
Total	20,549	(12,238)
Financial liabilities		
Derivative liabilities held for trading (*1)	122	(98)
Derivative liabilities used for hedging (*1)	9	(23)
Total	131	(121)

(*1) Unfavorable and favorable changes in fair value are calculated by increasing/decreasing 10% of 1) correlation between rates of Interest Rate Swap (IRS) of KRW, 2) correlation between rates of IRS of KRW and USD, 3) correlation between stock index and individual stock and 4) correlation between exchange rates of KRW/USD and stock index.

(*2) Changes in fair value of equity securities are calculated by increasing/decreasing growth rate (0.0%~1.0%) and discount rate, which are main unobservable inputs.

(*3) Changes in fair value of debt securities are calculated by increasing/decreasing discount rate (-1.0%~1.0%), which is the main unobservable input. It is impossible in practice to assess sensitivity based on the changes in input variables of beneficiary securities, but favorable or unfavorable changes in fair value, only limited to real estate, are calculated by changing discount rate of lease cash flow (−1.0%~1.0%) and growth rate of selling price of real estate (−1.0%~1.0%).

<December 31, 2022>

Classification	Favorable changes	Unfavorable changes
Financial assets		
Financial assets at FVTPL		
Equity securities (*2)	21	(11)
Debt securities (*3)	1,093	(1,047)
Derivative assets held for trading (*1)	86	(72)
Subtotal	1,200	(1,130)
Financial assets at FVOCI		
Equity securities (*2)	18,160	(10,963)
Total	19,360	(12,093)
Financial liabilities		
Derivative liabilities held for trading (*1)	152	(169)
Derivative liabilities used for hedging (*1)	6	(1)
Total	158	(170)

(*1) Unfavorable and favorable changes in fair value are calculated by increasing/decreasing 10% of 1) correlation between rates of Interest Rate Swap (IRS) of KRW, 2) correlation between rates of IRS of KRW and USD, 3) correlation between stock index and individual stock and 4) correlation between exchange rates of KRW/USD and stock index.

(*2) Changes in fair value of equity securities are calculated by increasing/decreasing growth rate (0.0%~1.0%) and discount rate, which are main unobservable inputs.

(*3) Changes in fair value of debt securities are calculated by increasing/decreasing discount rate (−1.0%~1.0%), which is the main unobservable input. It is impossible in practice to assess sensitivity based on the changes in input variables of beneficiary securities, but favorable or unfavorable changes in fair value, only limited to real estate, are calculated by changing discount rate of lease cash flow (−1.0%~1.0%) and growth rate of selling price of real estate (−1.0%~1.0%).

4-6 Financial assets and liabilities which are not measured at fair value
Fair value hierarchy of financial assets and liabilities at amortized cost as of December 31, 2023 and 2022, is as follows (Korean won in millions):

<December 31, 2023>

Classification	Levels of the fair value hierarchy			Total
	Level 1	Level 2	Level 3	
Financial assets				
Cash and due from banks	1,742,359	28,821,920	-	30,564,279
Securities at amortized cost	3,196,264	32,286,860	-	35,483,124
Loans	-	-	347,002,271	347,002,271
Other financial assets	-	-	18,078,504	18,078,504
Total	4,938,623	61,108,780	365,080,775	431,128,178
Financial liabilities				
Deposits	-	47,761,947	321,968,921	369,730,868
Borrowings	-	934,111	21,031,181	21,965,292
Debentures	-	26,379,079	-	26,379,079
Other financial liabilities (*)	-	-	35,200,562	35,200,562
Merchant banking account liabilities	-	-	4,154,697	4,154,697
Total	-	75,075,137	382,355,361	457,430,498

(*) Lease liabilities are included in Other financial liabilities.

<December 31, 2022>

Classification	Levels of the fair value hierarchy			Total
	Level 1	Level 2	Level 3	
Financial assets				
Cash and due from banks	1,903,972	39,183,885	-	41,087,857
Securities at amortized cost	3,579,863	32,007,819	-	35,587,682
Loans	-	-	327,015,538	327,015,538
Other financial assets	-	-	13,107,936	13,107,936
Total	5,483,835	71,191,704	340,123,474	416,799,013
Financial liabilities				
Deposits	-	55,603,695	303,901,950	359,505,645
Borrowings	-	970,661	21,135,577	22,106,238
Debentures	-	25,675,257	-	25,675,257
Other financial liabilities (*)	-	-	29,939,149	29,939,149
Merchant banking account liabilities	-	-	3,667,273	3,667,273
Total	-	82,249,613	358,643,949	440,893,562

(*) Lease liabilities are included in Other financial liabilities.

Details of fair value, valuation technique and inputs used to develop those measurements classified into Level 2 financial assets and liabilities disclosed, but not measured at fair value as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Fair value	Valuation technique	Inputs
Financial assets			
Cash and due from banks	28,821,920	DCF model	Discount rate
Securities at amortized cost	32,286,860	DCF model	Discount rate
Total	61,108,780		
Financial liabilities			
Deposits	47,761,947	DCF model	Discount rate
Borrowings	934,111	DCF model	Discount rate
Debentures	26,379,079	DCF model	Discount rate
Total	75,075,137		

<December 31, 2022>

Classification	Fair value	Valuation technique	Inputs
Financial assets			
Cash and due from banks	39,183,885	DCF model	Discount rate
Securities at amortized cost	32,007,819	DCF model	Discount rate
Total	71,191,704		
Financial liabilities			
Deposits	55,603,695	DCF model	Discount rate
Borrowings	970,661	DCF model	Discount rate
Debentures	25,675,257	DCF model	Discount rate
Total	82,249,613		

Details of fair value, valuation technique and inputs used to develop those measurements classified into Level 3 financial assets and liabilities disclosed, but not measured at fair value as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Fair value	Valuation technique	Inputs
Financial assets			
Loans	347,002,271	DCF model	Credit spread, other spread and early redemption rate
Other financial assets	18,078,504	DCF model	Discount rate
Total	365,080,775		
Financial liabilities			
Deposits	321,968,921	DCF model	Other spread and early redemption rate
Borrowings	21,031,181	DCF model	Other spread
Other financial liabilities (*1)	35,200,562	DCF model	Discount rate
Merchant banking account liabilities	4,154,697	(*2)	
Total	382,355,361		

(*1) Lease liabilities are included in Other financial liabilities.

(*2) The carrying amount is considered fair value without applying the DCF model because it is derived from various transactions and has relatively short or indefinite maturities.

<December 31, 2022>

Classification	Fair value	Valuation technique	Inputs
Financial assets			
Loans	327,015,538	DCF model	Credit spread, other spread and early redemption rate
Other financial assets	13,107,936	DCF model	Discount rate
Total	340,123,474		
Financial liabilities			
Deposits	303,901,950	DCF model	Other spread and early redemption rate
Borrowings	21,135,577	DCF model	Other spread
Other financial liabilities (*1)	29,939,149	DCF model	Discount rate
Merchant banking account liabilities	3,667,273	(*2)	
Total	358,643,949		

(*1) Lease liabilities are included in Other financial liabilities.

(*2) The carrying amount is considered fair value without applying the DCF model because it is derived from various transactions and has relatively short or indefinite maturities.

4-7 Gain and loss on deferred Day 1

Changes in gain (loss) on deferred Day 1 for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Beginning balance	(2,130)	(548)
Amount of new accrual	(3,080)	(1,734)
Amounts recognized as current profit or loss	3,749	152
Ending balance	(1,461)	(2,130)

4-8 Financial instruments transfer transaction

4-8-1 Bonds sold under repurchase agreements

As of December 31, 2023 and 2022, details of financial instruments that did not meet the derecognition requirements due to the sale of securities held by the Group on condition of repurchase at a fixed price during the bonds sold under repurchase agreements are as follows (Korean won in millions):

Classification	December 31, 2023		December 31, 2022	
	Book value	Fair value	Book value	Fair value
Transferred asset sets				
Financial assets at FVOCI	532,760	532,760	46	46
Financial assets at amortized cost	801,692	770,167	484,066	443,630
Total	1,334,452	1,302,927	484,112	443,676
Related liabilities				
Bonds sold under repurchase agreements	1,140,937	1,119,671	487,732	436,183

4-8-2 Loaned securities

When lending securities held by the Group, ownership of the securities is transferred; however, the securities would be returned at the end of the rental period. Therefore, the Group continues to recognize the entire loaned securities as it retains most of the risks and rewards of the securities. Details of loaned securities as of the end of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023		December 31, 2022	
	Book value(*)	Fair value	Book value(*)	Fair value
Financial assets at FVTPL	9,936	9,936	412,492	412,492
Financial assets at FVOCI	1,051,270	1,051,270	1,925,345	1,925,345
Financial assets at amortized cost	194,312	188,457	416,386	395,502
Total	1,255,518	1,249,663	2,754,223	2,733,339

(*) Carrying amount is before allowances for doubtful debts.

4-8-3 Asset-backed securitization

The Group's consolidated structured companies issued asset-backed securities by securitizing their securities and loans. The Group retains the contractual right to receive cash flows from the financial assets, but the received cash flows are effectively transferred to the holder of asset-backed securities. In addition, the Group bears related risks through purchase agreements or credit exposures.

As of the end of December 31, 2023 and 2022, details of financial instruments that were transferred, but not derecognized in relation to asset-backed securitization transactions by the Group, are as follows (Korean won in millions):

Classification		December 31, 2023	December 31, 2022
		Book value(*)	Book value(*)
Transferred asset sets	Financial assets at FVTPL	40,000	20,000
	Loans at amortized cost	2,482,508	1,291,332
	Total	2,522,508	1,311,332
Related liabilities	Asset-backed securitization borrowing	2,537,828	1,321,944

(*) Carrying amount is before allowances for doubtful debts.

5. Fair value of financial assets and liabilities

Book values and fair values of financial assets and liabilities as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023		December 31, 2022	
	Book value	Fair value	Book value	Fair value
Financial assets				
Cash and due from banks	30,564,279	30,564,279	41,087,857	41,087,857
Financial assets at FVTPL	17,514,876	17,514,876	18,455,415	18,455,415
Financial assets at FVOCI	36,894,111	36,894,111	32,960,581	32,960,581
Securities at amortized cost	36,337,949	35,483,124	37,583,487	35,587,682
Loans	347,246,910	347,002,271	330,186,341	327,015,538
Derivative assets used for hedging	1,723	1,723	8,062	8,062
Other financial assets	18,078,742	18,078,504	13,108,142	13,107,936
Merchant banking account assets	4,637,824	4,637,824	4,631,361	4,631,361
Total	491,276,414	490,176,712	478,021,246	472,854,432
Financial liabilities				
Financial liabilities at FVTPL	6,729,210	6,729,210	11,228,307	11,228,307
Deposits	369,749,453	369,730,868	359,858,481	359,505,645
Borrowings	22,033,914	21,965,292	22,256,597	22,106,238
Debentures	26,542,179	26,379,079	26,233,339	25,675,257
Derivative liabilities used for hedging	390,979	390,979	516,418	516,418
Other financial liabilities (*)	35,200,562	35,200,562	29,939,149	29,939,149
Merchant banking account liabilities	4,154,697	4,154,697	3,667,273	3,667,273
Total	464,800,994	464,550,687	453,699,564	452,638,287

(*) Lease liabilities are included in Other financial liabilities.

The following standards are applied in measuring the fair value of financial instruments:

a. Loans: Expected cash flows, current market interest rates and discount rates, including borrowers' credit risks are factors to calculate the fair value of loans. For lines of credit available for deposit and withdrawal from time to time and loans with a short-term maturity (less than three months), it is assumed that the carrying amounts approximate their fair value.

b. Securities at amortized cost: The fair value of securities at amortized cost is as stated by the market, broker or by credible sources. If none of the information from these entities is usable, quoted market price of financial instruments with similar credit rating, maturity and return on investment is used to estimate the fair value.

c. Deposits: For deposits without an explicit maturity period, including deposits with no interests, deposits that have a short-term maturity (less than three months) and deposits with a floating-rate readjustment period of less than three months, it is assumed that the carrying amounts approximate their fair value. The estimated fair value of fixed interest-bearing deposits is based on discounted future cash flows using interest rates for new financial liability with similar time to maturity.

d. Borrowings: For borrowings that have a short-term maturity (less than three months) and borrowings with floating-rate readjustment period of less than three months, it is assumed that the carrying amounts approximate their fair value. The estimated fair value of fixed interest-bearing borrowings is based on discounted future cash flows using interest rates for new financial liability with similar time to maturity.

e. Debentures: For debentures issued, the fair values are determined based on quoted market prices in active market. For those issued where quoted market prices in active market are not available, a DCF model is used based on a curre nt interest rate yield curve appropriate for the remaining term to maturity and credit spreads.

6. Categories of financial assets and financial liabilities

6-1 The Group categorizes its financial assets as of December 31, 2023 and 2022, as follows (Korean won in millions):

<December 31, 2023>

Classification	Financial assets at FVTPL	Financial assets at FVOCI	Financial assets at amortized cost	Derivatives used for hedging	Total
Cash and due from banks	-	-	30,564,279	-	30,564,279
Financial assets at FVTPL	17,514,876	-	-	-	17,514,876
Financial assets at FVOCI	-	36,894,111	-	-	36,894,111
Securities at amortized cost	-	-	36,337,949	-	36,337,949
Loans	-	-	347,246,910	-	347,246,910
Derivative assets used for hedging	-	-	-	1,723	1,723
Other financial assets	-	-	18,078,742	-	18,078,742
Merchant banking account assets	4,637,824	-	-	-	4,637,824
Total	22,152,700	36,894,111	432,227,880	1,723	491,276,414

<December 31, 2022>

Classification	Financial assets at FVTPL	Financial assets at FVOCI	Financial assets at amortized cost	Derivatives used for hedging	Total
Cash and due from banks	-	-	41,087,857	-	41,087,857
Financial assets at FVTPL	18,455,415	-	-	-	18,455,415
Financial assets at FVOCI	-	32,960,581	-	-	32,960,581
Securities at amortized cost	-	-	37,583,487	-	37,583,487
Loans	-	-	330,186,341	-	330,186,341
Derivative assets used for hedging	-	-	-	8,062	8,062
Other financial assets	-	-	13,108,142	-	13,108,142
Merchant banking account assets	4,631,361	-	-	-	4,631,361
Total	23,086,776	32,960,581	421,965,827	8,062	478,021,246

6-2 The Group categorizes its financial liabilities as of December 31, 2023 and 2022, as follows (Korean won in millions):

<December 31, 2023>

Classification	Financial liabilities at FVTPL	Financial liabilities designated as measured at FVTPL	Financial liabilities at amortized cost	Derivatives used for hedging	Total
Financial liabilities at FVTPL	6,494,492	234,718	-	-	6,729,210
Deposits	-	-	369,749,453	-	369,749,453
Borrowings	-	-	22,033,914	-	22,033,914
Debentures	-	-	26,542,179	-	26,542,179
Derivative liabilities used for hedging	-	-	-	390,979	390,979
Other financial liabilities (*)	-	-	35,200,562	-	35,200,562
Merchant banking account liabilities	-	-	4,154,697	-	4,154,697
Total	6,494,492	234,718	457,680,805	390,979	464,800,994

(*) Lease liabilities are included in Other financial liabilities.

<December 31, 2022>

Classification	Financial liabilities at FVTPL	Financial liabilities designated as measured at FVTPL	Financial liabilities at amortized cost	Derivatives used for hedging	Total
Financial liabilities at FVTPL	11,066,238	162,069	-	-	11,228,307
Deposits	-	-	359,858,481	-	359,858,481
Borrowings	-	-	22,256,597	-	22,256,597
Debentures	-	-	26,233,339	-	26,233,339
Derivative liabilities used for hedging	-	-	-	516,418	516,418
Other financial liabilities (*)	-	-	29,939,149	-	29,939,149
Merchant banking account liabilities	-	-	3,667,273	-	3,667,273
Total	11,066,238	162,069	441,954,839	516,418	453,699,564

(*) Lease liabilities are included in Other financial liabilities.

7. Offsetting financial assets and liabilities

The Group engages in master netting agreements with counterparties through International Swaps and Derivatives Association or similar agreements in relation to over-the-counter derivatives and spot exchange transactions. Under this agreement, in the event of the counterparty's bankruptcy etc., the transaction with the counterparty will be terminated. Upon termination, the amounts to be paid or received by each party are offset and paid or received. Repurchase agreements of trade and securities lending and borrowing of securities have been made by offsetting arrangement, which is similar to the arrangement for derivatives.

In the case of uncollected domestic exchange bonds and unpaid domestic exchange obligations between banks, as the Group holds the rights of setoff and settles in net amounts, the net amounts are presented in the consolidated statements of financial position. Other financial instruments include bonds and debts related to securities traded in the market, which are presented in net amounts in the consolidated statements of financial position as there is a legally enforceable right of setoff and intention to settle on a net basis.

7-1 Financial assets offset, the executable master netting agreement and financial assets subject to a similar arrangement as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Gross amounts of recognized financial assets	Gross amounts of financial liabilities offset	Net amounts of financial assets presented in the consolidated financial statements	Related amounts not offset (*)		Net amount
				Financial instruments	Cash collateral	
Derivatives	5,980,051	-	5,980,051	(4,635,080)	(361,195)	983,776
Loaned securities	1,255,518	-	1,255,518	(1,249,663)	-	5,855
Bonds purchased under repurchase agreements	13,754,130	-	13,754,130	(13,752,531)	-	1,599
Spot exchange that has not been received or settled	10,461,073	-	10,461,073	(10,455,094)	-	5,979
Uncollected domestic exchange bonds	40,928,696	36,735,331	4,193,365	-	-	4,193,365
Other accounts receivable	18,529	16,279	2,250	-	-	2,250
Total	72,397,997	36,751,610	35,646,387	(30,092,368)	(361,195)	5,192,824

(*) The rights to offset exist only in case of default, insolvency or bankruptcy. Accordingly, the amounts are not offset in the consolidated statements of financial position as they do not meet the criteria for offsetting.

<December 31, 2022>

Classification	Gross amounts of recognized financial assets	Gross amounts of financial liabilities offset	Net amounts of financial assets presented in the consolidated financial statements	Related amounts not offset (*)		Net amount
				Financial instruments	Cash collateral	
Derivatives	9,874,147	-	9,874,147	(7,438,461)	(1,480,302)	955,384
Loaned securities	2,754,223	-	2,754,223	(2,754,223)	-	-
Bonds purchased under repurchase agreements	11,776,664	-	11,776,664	(11,776,664)	-	-
Spot exchange that has not been received or settled	5,961,620	-	5,961,620	(5,960,185)	-	1,435
Uncollected domestic exchange bonds	40,665,026	36,441,676	4,223,350	-	-	4,223,350
Other accounts receivable	4,419	4,419	-	-	-	-
Total	71,036,099	36,446,095	34,590,004	(27,929,533)	(1,480,302)	5,180,169

(*) The rights to offset exist only in case of default, insolvency or bankruptcy. Accordingly, the amounts are not offset in the consolidated statements of financial position as they do not meet the criteria for offsetting.

7-2 Financial liabilities offset, the executable master netting agreement and financial liabilities subject to a similar arrangement as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Gross amounts of recognized financial liabilities	Gross amounts of financial assets offset	Net amounts of financial liabilities presented in the consolidated financial statements	Related amounts not offset (*)		Net amount
				Financial instruments	Cash collateral	
Derivatives	6,433,045	-	6,433,045	(5,044,895)	(251,013)	1,137,137
Borrowed securities	452,426	-	452,426	(452,426)	-	-
Bonds sold under repurchase agreements	1,140,937	-	1,140,937	(1,140,937)	-	-
Spot exchange that has not been received or settled	10,463,019	-	10,463,019	(10,455,077)	-	7,942
Unpaid domestic exchange obligations	43,807,222	36,735,331	7,071,891	-	-	7,071,891
Other accounts payable	17,993	16,279	1,714	-	-	1,714
Total	62,314,642	36,751,610	25,563,032	(17,093,335)	(251,013)	8,218,684

(*) The rights to offset exist only in case of default, insolvency or bankruptcy. Accordingly, the amounts are not offset in the consolidated statements of financial position as they do not meet the criteria for offsetting.

<December 31, 2022>

Classification	Gross amounts of recognized financial liabilities	Gross amounts of financial assets offset	Net amounts of financial liabilities presented in the consolidated financial statements	Related amounts not offset (*)		Net amount
				Financial instruments	Cash collateral	
Derivatives	11,258,995	-	11,258,995	(9,022,247)	(59,116)	2,177,632
Borrowed securities	323,661	-	323,661	(323,661)	-	-
Bonds sold under repurchase agreements	487,732	-	487,732	(487,732)	-	-
Spot exchange that has not been received or settled	5,961,729	-	5,961,729	(5,960,245)	-	1,484
Unpaid domestic exchange obligations	41,945,503	36,441,676	5,503,827	-	-	5,503,827
Other accounts payable	9,592	4,419	5,173	-	-	5,173
Total	59,987,212	36,446,095	23,541,117	(15,793,885)	(59,116)	7,688,116

(*) The rights to offset exist only in case of default, insolvency or bankruptcy. Accordingly, the amounts are not offset in the consolidated statements of financial position as they do not meet the criteria for offsetting.

8. Risk management

The Group is exposed to credit risk, liquidity risk, market risk and various operating risks. The objectives of risk management are to pursue economic benefits by managing the associated risk in the changing financial environment and to utilize capital efficiently.

The basic principles of risk management are as follows:

a. Minimize the rapid fluctuation in profit by balancing the risks and the income.

b. Maximize long-term shareholder value.

c. Comply with procedures to ensure operating activities are confined to allowable risk limits.

d. Examine the type and size of risk along with the changes in potential economic value of portfolios and establish risk management strategy in order to utilize assets and distribute capital efficiently.

The basic policies in order to realize the basic principles of risk management are as follows:

a. Set and comply with allowable limits for each risk type.

b. Establish an appropriate balance between income and associated risk.

c. When a conflict between income and associated risk exists, the Group pursues income while complying with the allowable risk limits.

d. Prioritize the distribution of risk in order to avoid risk concentration in certain areas.

e. Analyze the effect of various market fluctuations on parts or the entire portfolio on a regular basis.

f. Separate risk management segments, operational segments and other segments, which deal with trade confirmations and payments in order to maintain independence.

8-1 Strategy and procedure of risk management

8-1-1 Operation of and setting risk limits

The Group established and operates a limit management system to maintain the appropriate level of risk relative to the equity capital held. The Risk Management Committee approves total risk limits and limits by types of risks, taking into account of capital, business plans, risk management regulations and institutional changes within the risk level that the Group can manage. The Risk Management Operation Committee sets up and allocates other operational limits (e.g., by organization, product, investment and loss) to comply with allowable limits for each type of risk, approved by the Risk Management Committee, and periodically checks the status of limit management.

8-1-2 Risk measurement and management

The Group prepares the appropriate risk measurement methods considering the nature of risks and measures them by the types of risks. Risk measurement and evaluation results are regularly reviewed and reported to the Risk Management Committee, Risk Management Operation Committee and management. Risk measurement and evaluation results are also used for daily business management activities, such as establishment of business plan and management strategy.

8-1-3 Operation of risk management information system

In order to provide advanced risk management in a rapidly changing financial environment that meets the new Bank for International Settlements ("BIS") standards, the Group has established and adopted a credit risk-weighted assets ("RWA") calculation system based on Basel 3 regulation since March 2021. The market/operational RWA is calculated based on Basel 3 standard model since January 2023.

8-1-4 Operation of crisis management system

The Group operates a crisis management system that can respond effectively to the crisis caused by drastic changes in the internal and external management environment. The Group operates an early warning system in order to respond to the drastic changes in the financial market in a consistent and systematic manner. In the event of an anomaly, the holding company declares the level of crisis at the group level and the Group analyzes the impact on the portfolio in accordance with the step-by-step response plan and carries out the specific countermeasures.

8-2 Organization and structure of risk management

The risk management organization consists of the Risk Management Committee, the Risk Management Operation Committee under the Risk Management Committee within the board of directors, the risk management officer and the organization in charge of risk management, which are the top decision-making bodies for the risk management. The organization in charge of risk management, independent from operating segment, manages risk limits and risk management policies.

8-2-1 Risk Management Committee

The Risk Management Committee regularly holds meeting once every quarter and resolves the establishment and management of allowable limits for risks, establishment and changes in risk management policies and reviews the results of the management of allowable risk limits and suitability tests of risk management system.

8-2-2 Risk Management Operation Committee

The Risk Management Operation Committee is responsible for setting and allocating specific operational limits for compliance with the allowable limits for each type of risk as resolved by the Risk Management Committee, adjusting the internal capital limit between business units within the same risk type and carrying out risk management policies and strategies set by the Risk

Management Committee, including preliminary deliberations on the agenda items.

8-2-3 Organization in charge of risk management

The Risk Management Group is composed of Comprehensive Risk Management team, Credit Risk Management team and Credit Supervision team. The Risk Management Group is independent of operating and investment segments and manages the execution of risk management policies. The Comprehensive Risk Management team oversees the market, interest rate, liquidity, operational risk and middle office and supports the Risk Management Committee and the Risk Management Operation Committee. The Credit Risk Management team oversees credit risk and credit concentration risk. The Credit Supervision team oversees the loans and early warning system.

8-3 Credit risk

Credit risk is a risk incurred when the Group faces a loss because its customers or counterparties fail to discharge their contractual obligations. Credit risk arises from on-balance and off-balance accounts, including loans, derivatives, securities, financial guarantee agreements and other guarantees.

8-3-1 Management of credit risk

8-3-1-1 Loans

8-3-1-1-1 Measurement of credit risk

To determine the possibility of bankruptcy for its customers or counterparties, the Group uses various methods comprehensively. Risks pertaining to the retail sector compared to those pertaining to the corporate sector are relatively easy to predict, but cyclical and seasonal factors may influence the outcomes.

The frequency of impairment loss in the overall retail sector is relatively high, but in terms of individual cases, the loss rate is lower than in the corporate sector. Based on these differences, the Group manages each sector differently in terms of credit rating, pricing and subsequent management.

As for the business customers, the branch managers and credit rating team carry out the credit risk assessment by using a detailed valuation model depending on the size and the nature of the industry. The corporate financial valuation model is further subdivided based on the characteristics of the loans and is a combination of statistical and expert valuation models. Also, the Loan Review team of the credit risk management regularly performs the subsequent reviews in order to establish adequacy of the credit grading. As for the retail sector, a credit scoring system is used to compute the credit scores of the borrower. The system includes an application scoring model, which is used for the application of loans and a behavioral scoring model, which has been used after handling of the loans.

Expected loss is calculated using the expected default rate based upon the historical default rate and the estimated loss rate gives a rise to the default rate from a collection of historical information. A measured expected loss is reflected on the client's interest rate and allowances when applying for or renewing a loan. Unexpected loss, which takes into account the allowance for potential volatility in the actual loss compared to the expected loss, is measured using K-function of the Basel 3 internal rating method. The value measured is used as a credit risk reference value in capital allocation and is reflected as a part of the unexpected loss when calculating interest rates.

8-3-1-1-2 Management of credit risk

8-3-1-1-2-1 Management process
Both retail and corporate sectors are developing and operating a credit risk management system appropriately designed for each sector. The Credit Risk Management Committee and the Credit Rating team measure and manage credit risks for the corporate sector; Credit Risk Management Committee and Personal Loans Committee measure and manage credit risks for the retail sector.
The Group manages as well as controls the credit risk by setting the limits on the amount of risk willing to accept for individual counterparties and for geographical and industry concentration, and by monitoring exposures relating to such limits. The Group reviews on a monthly basis in accordance with the economic conditions and industry characteristics and examines the adequacy of the limits on a quarterly basis. The Group continuously examines the adequacy of credit rating models for retail and corporate sectors, Probability of Default (PD), Loss Given Default (LGD) and Exposure At Default (EAD) and manages data related to the estimation of the credit rating models, PD, LGD and EAD.

8-3-1-1-2-2 Credit limits management and capital allocation
The Group annually performs a comprehensive analysis on economic conditions and changes in the economic environment in order to appropriately assess the credit quality of financial assets by setting credit limits on same entities, industries, countries and financial instruments. In addition, for the unexpected loss management, the Group regularly sets, distributes and checks for the compliance maintenance of internal capital limits according to the corporate and household sectors and the size of clients through the risk management system.

8-3-1-1-2-3 Risk monitoring and early warning system
The Group measures and manages the risk indicators, such as delinquency rate, roll-rate and vintage. Also, in order to assess the credit quality of the assets, the Group operates an early warning system and regularly examines companies whose credit rating is likely to degrade.

8-3-1-1-2-4 Credit rating system

In order to separately evaluate the characteristics of clients in the corporate sector, the Group operates a detailed valuation model based on the external and non-external audit and is in the process of continuing the stability of the corporate credit rating system through the subsequent examinations and performance improvements. The Group operates a detailed valuation model based on the credit rating model and the activity rating model for the household sector in accordance with the client's characteristics. The Group improves the efficiency of the model through the subsequent examinations and performance improvements. Credit rating on new clients as well as an automatic renewal and adjustments to the credit limits are managed by the household and Small Office and Home Office ("SOHO") credit extension system.

8-3-1-1-2-5 Examination of credit

For a large amount of credit line, after the approval of credit extension, the Group regularly examines the borrower's credit status and the adequacy of the borrower's credit rating as in part of the subsequent management process. In addition, the Group significantly focuses on industries by increasing credit risks based on the analysis of the risk indicators and examines the sample for smaller credit extensions.

8-3-1-1-2-6 Risk mitigation policy

The Group obtains the collateral for the granted loans in order to reduce risks. Guidelines are implemented regarding the acceptability of types of collateral and valuation parameters. The main types of the collateral obtained are as follows:

a. Residential properties in relation to mortgage loans
b. Business assets, such as equipments, plants and real estate properties
c. Financial instruments, such as deposits, debt and equity securities

8-3-1-2 Debt securities

The Group trades the debt securities above the investment-grade status level in order to manage the credit risks and manage the exposure of credit ratings to maintain credit quality of the assets.

8-3-1-3 Derivative instruments

The credit risk arising from the derivative instruments is managed based on the net position and maintained under a strict control limit. The degree of credit risk exposure is measured based on the positive fair values of derivative instruments. The Group manages the exposure as a part of the unused commitment of loans.

8-3-2 Significant increase in credit risk

The Group measures the ECL for debt instruments at amortized cost or FVOCI in three stages as described below:

8-3-2-1 Stage 1: 12-month ECL

For financial assets whose credit risk has not increased significantly since initial recognition, ECLs that result from default events that are possible within 12 months after the reporting date are recognized.

8-3-2-2 Stage 2: Lifetime ECL

For financial assets whose credit risk has increased significantly, but not impaired, since initial recognition, ECLs that result from all possible default events over the expected life of the financial instrument are recognized.

8-3-2-3 Stage 3: Lifetime ECL

A financial asset is credit impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Lifetime ECL is recognized for credit-impaired financial assets and interest income is recognized using the EIR on amortized cost.

The Group assesses at each reporting date whether the credit risk increases significantly compared to that of initial recognition, using internal and external credit rating information, early warning system and number of days pastdue.

8-3-2-4 Occurrence of default

The Group considers that a default has occurred for financial assets on the following situations:

a. When receivables are sold despite an economic loss.
b. When receivables have decreased due to adjustments resulting in an exemption of principal, interest or related fees or delayed payments.
c. When the borrower has been declared bankrupt or has declared bankruptcy or has taken other similar measures to delay or avoid repayments.

8-3-2-5 Method for determining whether a financial asset is credit impaired

A financial asset is deemed impaired if, and only if, there is objective evidence of impairment as a result of one or more events, which have occurred after the initial recognition of the item (an incurred 'loss event') and that loss event (or events) has an impact on the estimated future cash flows, such as changes in arrears or economic conditions, which correlate with defaults, delinquency in interest for more than 90 days, credit information management rules and damages incurred due to poor exposure.

8-3-3 Measurement of ECL

ECL is measured at the probability-weighted amounts of the present value of all cash shortfalls over the expected life of the financial instrument. A cash shortfall is the difference between the cash flows that are due to an entity in accordance with the contract and the cash flows that the Group expects to receive.

However, the Group adjusts historical data, such as credit loss experience, on the basis of current observable data to reflect the effects of the current conditions and its forecasts of future conditions that did not affect the period on which the historical data is based and to remove the effects of the conditions in the historical period that are not relevant to the future contractual cash flows. Also, the Group measures ECL using the macroeconomic factors, such as the growth rate, interest rate and stock indices. The methodology for future economic forecasts is regularly reviewed.

If the credit risk on financial instruments, for which lifetime ECLs have been recognized, subsequently improves so that the requirement for recognizing lifetime ECL is no longer met, the loss allowance should be measured at an amount equal to 12-month ECL.

8-3-4 Write-off policy

Financial assets are written off when an entity has no reasonable expectations of recovering the contractual cash flows on a financial asset in its entirety or a portion thereof. Generally, financial assets are written off when it is determined that the Group is not able to generate sufficient cash flows to make repayments. However, financial assets written off can be recovered by the Group.

8-3-5 The maximum exposure to credit risk

The maximum exposure to credit risk as of December 31, 2023 and 2022, is as follows. The following table shows the maximum exposure to credit risk before the effect of mitigation through credit enhancement and collateral agreements a nd reflects the impairment losses and offsetting. Equity securities in financial assets at FVTPL and financial assets at FVOCI are excluded (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
On-balance-sheet items		
Due from banks	28,821,920	39,183,885
Financial assets at FVTPL		
Debt securities	11,442,332	8,553,379
Derivative assets held for trading	5,965,872	9,851,754
Private convertible bonds	7,447	7,394
Subtotal	17,415,651	18,412,527
Financial assets at FVOCI	36,243,645	32,150,076
Securities at amortized cost	36,337,949	37,583,487
Derivative assets used for hedging	1,723	8,062
Loans	347,246,910	330,186,341
Other financial assets	18,078,742	13,108,142
Merchant banking account assets	4,637,824	4,631,361
Total	488,784,364	475,263,881
Off-balance-sheet items		
Financial guarantee contracts	498,156	447,724
Payment guarantee	23,535,495	20,644,157
Commitments	109,725,839	101,383,405
Merchant banking account-commitment	770,000	620,000
Total	134,529,490	123,095,286

8-3-6 Details of effects of credit risk mitigation by collateral and other credit enhancements

The financial effects related to credit risk mitigated by collateral and other credit enhancements as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Impaired loan	
	Individual assessment	Collective assessment
Guarantees	16,627	311,605
Deposits	-	18,575
Real estates	213,417	338,703
Securities	-	1
Others	5,847	6,395
Total	235,891	675,279

<December 31, 2022>

Classification	Impaired loan	
	Individual assessment	Collective assessment
Guarantees	13,949	159,755
Deposits	92	11,930
Real estates	157,237	217,226
Others	5,694	5,283
Total	176,972	394,194

8-3-6-1 The amount of financial assets for which loss allowance is not recognized due to sufficient collaterals is ₩1,125,587 million and ₩1,288,560 million as of December 31, 2023 and 2022, respectively.

8-3-6-2 There is no change in the collateral policy of the Group.

8-3-7 Credit risk exposure

8-3-7-1 Loans

As of December 31, 2023 and 2022, gross carrying amounts of loans by internal credit rating in accordance with the loss allowance measurement method are as follows (Korean won in millions):

<December 31, 2023>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired loans	Credit-impaired loans	
Household loans				
Grade 1	94,064,000	15,117,696	-	109,181,696
Grade 2	14,459,631	7,085,140	-	21,544,771
Grade 3	196,069	550,945	452,308	1,199,322
Subtotal	108,719,700	22,753,781	452,308	131,925,789
Corporate loans				
Grade 1	124,593,684	3,608,602	-	128,202,286
Grade 2	70,465,513	13,259,903	-	83,725,416
Grade 3	580,691	3,596,942	877,162	5,054,795
Subtotal	195,639,888	20,465,447	877,162	216,982,497
Total	304,359,588	43,219,228	1,329,470	348,908,286

<December 31, 2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired loans	Credit-impaired loans	
Household loans				
Grade 1	100,581,728	18,267,978	-	118,849,706
Grade 2	6,808,923	6,154,047	-	12,962,970
Grade 3	150,384	235,570	342,308	728,262
Subtotal	107,541,035	24,657,595	342,308	132,540,938
Corporate loans				
Grade 1	122,350,304	3,063,130	-	125,413,434
Grade 2	59,477,536	10,398,130	3,258	69,878,924
Grade 3	78,389	3,031,102	553,833	3,663,324
Subtotal	181,906,229	16,492,362	557,091	198,955,682
Total	289,447,264	41,149,957	899,399	331,496,620

Net deferred origination fees and costs are not reflected in the gross carrying amounts above.

The Group categorizes loans based on the nature of the borrowers as follows:

<December 31, 2023>

Classification	Household loans	Corporate loans	SOHO
Grade 1	Less than or equal to 0.66% of PD	Less than or equal to 1.18% of PD	Less than or equal to 7.25% of PD
Grade 2	From 0.66% to 30.53% of PD	From 1.18% to 13.87% of PD	From 7.25% to 41.35% of PD
Grade 3	From 30.53% to 100% of PD	From 13.87% to 100% of PD	From 41.35% to 100% of PD

<December 31, 2022>

Classification	Household loans	Corporate loans	SOHO
Grade 1	Less than or equal to 0.49% of PD	Less than or equal to 0.58% of PD	Less than or equal to 2.85% of PD
Grade 2	From 0.49% to 24.93% of PD	From 0.58% to 12.83% of PD	From 2.85% to 27.43% of PD
Grade 3	From 24.93% to 100% of PD	From 12.83% to 100% of PD	From 27.43% to 100% of PD

8-3-7-2 Off-balance-sheet items

As of December 31, 2023 and 2022, exposures of off-balance-sheet items by internal credit rating in accordance with the loss allowance measurement method are as follows (Korean won in millions):

<December 31, 2023>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired off-balance-sheet items	Credit-impaired off-balance-sheet items	
Financial guarantee contracts				
Grade 1	345,454	63,332	-	408,786
Grade 2	61,864	25,362	-	87,226
Grade 3	1,859	285	-	2,144
Subtotal	409,177	88,979	-	498,156
Payment guarantees				
Grade 1	16,929,448	1,584,647	-	18,514,095
Grade 2	3,627,124	714,993	-	4,342,117
Grade 3	187,867	450,006	41,410	679,283
Subtotal	20,744,439	2,749,646	41,410	23,535,495
Commitments				
Grade 1	87,217,921	4,023,271	-	91,241,192
Grade 2	14,144,413	3,585,035	-	17,729,448
Grade 3	229,028	472,761	53,410	755,199
Subtotal	101,591,362	8,081,067	53,410	109,725,839
Merchant banking account-commitment				
Grade 1	770,000	-	-	770,000
Grade 2	-	-	-	-
Grade 3	-	-	-	-
Subtotal	770,000	-	-	770,000
Total	123,514,978	10,919,692	94,820	134,529,490

<December 31, 2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired off-balance-sheet items	Credit-impaired off-balance-sheet items	
Financial guarantee contracts				
Grade 1	300,233	60,616	-	360,849
Grade 2	59,553	22,248	-	81,801
Grade 3	-	5,070	4	5,074
Subtotal	359,786	87,934	4	447,724
Payment guarantees				
Grade 1	16,321,420	579,746	-	16,901,166
Grade 2	2,956,691	404,440	-	3,361,131
Grade 3	8	359,682	22,170	381,860
Subtotal	19,278,119	1,343,868	22,170	20,644,157
Commitments				
Grade 1	82,254,638	4,969,974	-	87,224,612
Grade 2	11,438,109	2,424,262	-	13,862,371
Grade 3	1,270	259,611	35,541	296,422
Subtotal	93,694,017	7,653,847	35,541	101,383,405
Merchant banking account-commitment				
Grade 1	620,000	-	-	620,000
Grade 2	-	-	-	-
Grade 3	-	-	-	-
Subtotal	620,000	-	-	620,000
Total	113,951,922	9,085,649	57,715	123,095,286

The Group categorizes off-balance-sheet items based on the nature of the borrowers as follows:

<December 31, 2023>

Classification	Household loans	Corporate loans	SOHO
Grade 1	Less than or equal to 0.66% of PD	Less than or equal to 1.18% of PD	Less than or equal to 7.25% of PD
Grade 2	From 0.66% to 30.53% of PD	From 1.18% to 13.87% of PD	From 7.25% to 41.35% of PD
Grade 3	From 30.53% to 100% of PD	From 13.87% to 100% of PD	From 41.35% to 100% of PD

<December 31, 2022>

Classification	Household loans	Corporate loans	SOHO
Grade 1	Less than or equal to 0.49% of PD	Less than or equal to 0.58% of PD	Less than or equal to 2.85% of PD
Grade 2	From 0.49% to 24.93% of PD	From 0.58% to 12.83% of PD	From 2.85% to 27.43% of PD
Grade 3	From 24.93% to 100% of PD	From 12.83% to 100% of PD	From 27.43% to 100% of PD

8-3-7-3 Debt securities

As of December 31, 2023 and 2022, gross carrying amounts of debt securities by internal credit rating in accordance with the loss allowance measurement method are as follows (Korean won in millions):

<December 31, 2023>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt	Credit-impaired debt	
Securities at amortized cost				
Grade 1	36,240,105	-	-	36,240,105
Grade 2	93,080	-	-	93,080
Grade 3	-	24,425	-	24,425
Subtotal	36,333,185	24,425	-	36,357,610
Financial assets at FVOCI				
Grade 1	36,243,645	-	-	36,243,645
Grade 2	-	-	-	-
Grade 3	-	-	-	-
Subtotal	36,243,645	-	-	36,243,645
Total	72,576,830	24,425	-	72,601,255

<December 31, 2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt	Credit-impaired debt	
Securities at amortized cost				
Grade 1	37,502,676	-	-	37,502,676
Grade 2	71,783	-	-	71,783
Grade 3	-	24,507	67,337	91,844
Subtotal	37,574,459	24,507	67,337	37,666,303
Financial assets at FVOCI				
Grade 1	32,135,336	-	-	32,135,336
Grade 2	14,740	-	-	14,740
Grade 3	-	-	-	-
Subtotal	32,150,076	-	-	32,150,076
Total	69,724,535	24,507	67,337	69,816,379

The credit ratings of debt securities based on the internal rating used by the Group and the credit ratings by external credit rating agencies are as follows:

Classification	Internal credit rating	Domestic rating agencies	Overseas rating agencies	
			Moody's	Fitch
Grade 1	A1 ~ A7	AAA ~ BBB	Aaa ~ Ba2	AAA ~ BB
Grade 2	B1 ~ B6	BBB- ~ BB-	Ba3 ~ B3	BB- ~ B-
Grade 3	C1 ~ C3	B+ ~ CCC	Caa1 ~ C	CCC+ ~ C

8-3-8 Credit risk concentration

8-3-8-1 Credit risk concentration in each major industry as of December 31, 2023 and 2022, is as follows (Korean won in millions):

<December 31, 2023>

Classification	Industry	Amounts	Ratio (%)
On-balance-sheet items			
Due from banks	Financial services	28,821,920	100.0
Financial assets at FVTPL	Financial services	11,556,003	66.4
	Manufacturing	674,647	3.9
	Public administration	4,810,962	27.6
	Construction	7,296	0.0
	Wholesale and retail	36,644	0.2
	Others	330,099	1.9
	Subtotal	17,415,651	100.0
Financial assets at FVOCI	Financial services	18,249,308	50.4
	Manufacturing	364,789	1.0
	Public administration	12,766,025	35.2
	Construction	46,547	0.1
	Wholesale and retail	49,809	0.1
	Others	4,767,167	13.2
	Subtotal	36,243,645	100.0
Securities at amortized cost	Financial services	19,145,017	52.7
	Manufacturing	202,760	0.6
	Public administration	8,882,940	24.4
	Construction	7,270	0.0
	Wholesale and retail	40,000	0.1
	Others	8,079,623	22.2
	Subtotal	36,357,610	100.0
Derivative assets used for hedging	Financial services	1,723	100.0
Loans	Household loans	131,925,789	37.8
	Corporate loans		
	Financial services	26,871,701	7.7
	Manufacturing	55,111,216	15.8
	Construction	6,372,585	1.8
	Wholesale and retail	24,890,572	7.1
	Real estate rental	49,585,167	14.2
	Others	54,151,256	15.5

Classification	Industry	Amounts	Ratio (%)
	Net deferred origination fees and costs	383,467	0.1
	Subtotal	349,291,753	100.0
Merchant banking account assets	Financial services	328,298	7.1
	Real estate rental	1,562,989	33.7
	Others	2,746,537	59.2
	Subtotal	4,637,824	100.0
Total		472,770,126	
Off-balance-sheet items			
Financial guarantee contracts	Financial services	110,699	22.2
	Manufacturing	151,852	30.5
	Construction	9,718	2.0
	Wholesale and retail	73,629	14.8
	Real estate rental	105	0.0
	Others	152,153	30.5
	Subtotal	498,156	100.0
Payment guarantees	Household	281,636	1.2
	Financial services	2,038,770	8.7
	Manufacturing	13,478,737	57.3
	Construction	1,495,516	6.3
	Wholesale and retail	3,846,168	16.3
	Real estate rental	190,164	0.8
	Others	2,204,504	9.4
	Subtotal	23,535,495	100.0
Commitments	Household commitments	30,212,375	27.5
	Corporate commitments		
	Financial services	12,719,603	11.6
	Manufacturing	32,960,995	30.1
	Construction	2,237,093	2.0
	Wholesale and retail	10,058,610	9.2
	Real estate rental	5,040,664	4.6
	Others	16,496,499	15.0
	Subtotal	109,725,839	100.0
Merchant banking account – commitment	Financial services	460,000	59.7
	Manufacturing	50,000	6.5
	Wholesale and retail	110,000	14.3
	Real estate rental	100,000	13.0
	Others	50,000	6.5
	Subtotal	770,000	100.0
Total		134,529,490	

<December 31, 2022>

Classification	Industry	Amounts	Ratio (%)
On-balance-sheet items			
Due from banks	Financial services	39,183,885	100.0
Financial assets at FVTPL	Financial services	14,814,380	80.5
	Manufacturing	1,038,021	5.6
	Public administration	2,196,846	11.9
	Construction	21,425	0.1
	Wholesale and retail	54,384	0.3
	Others	287,471	1.6
	Subtotal	18,412,527	100.0
Financial assets at FVOCI	Financial services	15,191,734	47.3
	Manufacturing	193,539	0.6
	Public administration	13,374,970	41.6
	Construction	55,070	0.2
	Wholesale and retail	117,243	0.4
	Others	3,217,520	9.9
	Subtotal	32,150,076	100.0
Securities at amortized cost	Financial services	19,193,033	51.0
	Manufacturing	234,257	0.6
	Public administration	9,639,915	25.6
	Construction	43,495	0.1
	Wholesale and retail	40,000	0.1
	Others	8,515,603	22.6
	Subtotal	37,666,303	100.0
Derivative assets used for hedging	Financial services	8,062	100.0
Loans	Household loans	132,540,938	39.9
	Corporate loans		
	Financial services	23,746,610	7.2
	Manufacturing	51,273,420	15.5
	Construction	5,381,239	1.6
	Wholesale and retail	23,518,055	7.1
	Real estate rental	44,535,435	13.4
	Others	50,500,923	15.2
	Net deferred origination fees and costs	356,338	0.1
	Subtotal	331,852,958	100.0
Merchant banking account assets	Financial services	817,368	17.6
	Real estate rental	1,007,544	21.8
	Others	2,806,449	60.6
	Subtotal	4,631,361	100.0
Total		463,905,172	

Classification	Industry	Amounts	Ratio (%)
Off-balance-sheet items			
Financial guarantee contracts	Financial services	45,120	10.1
	Manufacturing	219,522	49.0
	Construction	6,643	1.5
	Wholesale and retail	58,813	13.1
	Real estate rental	1,014	0.2
	Others	116,612	26.1
	Subtotal	447,724	100.0
Payment guarantees	Household	353,026	1.7
	Financial services	2,232,794	10.8
	Manufacturing	11,165,598	54.1
	Construction	1,600,908	7.8
	Wholesale and retail	3,664,550	17.8
	Real estate rental	168,777	0.8
	Others	1,458,504	7.0
	Subtotal	20,644,157	100.0
Commitments	Household commitments	28,780,642	28.4
	Corporate commitments		
	Financial services	10,972,913	10.8
	Manufacturing	29,530,082	29.1
	Construction	2,001,940	2.0
	Wholesale and retail	9,501,969	9.4
	Real estate rental	3,736,829	3.7
	Others	16,859,030	16.6
	Subtotal	101,383,405	100.0
Merchant banking account – commitment	Financial services	310,000	50.0
	Manufacturing	50,000	8.1
	Wholesale and retail	110,000	17.7
	Real estate rental	100,000	16.1
	Others	50,000	8.1
	Subtotal	620,000	100.0
Total		123,095,286	

8-3-8-2 Credit risk concentration in each major country as of December 31, 2023 and 2022, is as follows (Korean won in millions, ratio in %):

<December 31, 2023>

Classification	Country	Amounts	Ratio (%)
On-balance-sheet items			
Due from banks	Korea	17,784,561	61.7
	China	878,347	3.0
	United States	4,605,337	16.0
	Japan	2,142,890	7.4
	Singapore	11,882	0.1
	Hong Kong	42,823	0.1
	Others	3,356,080	11.7
	Subtotal	28,821,920	100.0
Financial assets at FVTPL	Korea	15,967,783	91.7
	China	57,206	0.3
	United States	130,627	0.8
	Japan	174	0.0
	Hong Kong	4,173	0.0
	Others	1,255,688	7.2
	Subtotal	17,415,651	100.0
Financial assets at FVOCI	Korea	30,646,121	84.6
	China	1,626,027	4.5
	United States	1,540,546	4.2
	Hong Kong	38,707	0.1
	Others	2,392,244	6.6
	Subtotal	36,243,645	100.0
Securities at amortized cost	Korea	33,992,715	93.5
	China	24,425	0.1
	United States	5,783	0.0
	Others	2,334,687	6.4
	Subtotal	36,357,610	100.0
Derivative assets used for hedging	Korea	1,723	100.0
Loans	Korea	317,736,784	91.0
	China	5,663,134	1.6
	United States	5,330,932	1.5
	Japan	1,647,939	0.5
	Hong Kong	2,122,689	0.6
	Others	16,406,808	4.7
	Net deferred origination fees and costs	383,467	0.1

Classification	Country	Amounts	Ratio (%)
	Subtotal	349,291,753	100.0
Merchant banking account assets	Korea	4,637,824	100.0
Total		472,770,126	
Off-balance-sheet items			
Financial guarantee contracts	Korea	498,156	100.0
Payment guarantees	Korea	18,300,061	77.8
	China	1,548,486	6.6
	United States	302,543	1.3
	Japan	27,751	0.1
	Others	3,356,654	14.2
	Subtotal	23,535,495	100.0
Commitments	Korea	105,143,471	95.8
	China	460,060	0.4
	United States	936,329	0.9
	Japan	145,058	0.1
	Others	3,040,921	2.8
	Subtotal	109,725,839	100.0
Merchant banking account – commitment	Korea	770,000	100.0
Total		134,529,490	

<December 31, 2022>

Classification	Country	Amounts	Ratio (%)
On-balance-sheet items			
Due from banks	Korea	25,196,900	64.3
	China	1,200,457	3.1
	United States	7,348,690	18.8
	Japan	872,357	2.2
	Singapore	27,443	0.1
	Hong Kong	87,291	0.2
	Others	4,450,747	11.3
	Subtotal	39,183,885	100.0
Financial assets at FVTPL	Korea	15,584,056	84.6
	China	666,650	3.6
	United States	70,691	0.4
	Japan	570	0.0
	Hong Kong	59,826	0.3
	Others	2,030,734	11.1
	Subtotal	18,412,527	100.0
Financial assets at FVOCI	Korea	27,628,411	85.9
	China	1,977,918	6.2
	United States	617,790	1.9
	Hong Kong	46,266	0.1
	Others	1,879,691	5.9
	Subtotal	32,150,076	100.0
Securities at amortized cost	Korea	35,125,996	93.3
	China	128,242	0.3
	United States	5,958	0.0
	Others	2,406,107	6.4
	Subtotal	37,666,303	100.0
Derivative assets used for hedging	Korea	8,062	100.0
Loans	Korea	301,245,204	90.8
	China	6,047,574	1.8
	United States	4,638,052	1.4
	Japan	1,855,875	0.6
	Hong Kong	2,536,360	0.8
	Others	15,173,555	4.5
	Net deferred origination fees and costs	356,338	0.1
	Subtotal	331,852,958	100.0
Merchant banking account assets	Korea	4,631,361	100.0
Total		463,905,172	

Classification	Country	Amounts	Ratio (%)
Off-balance-sheet items			
Financial guarantee contracts	Korea	447,724	100.0
Payment guarantees	Korea	15,270,693	74.0
	China	1,831,845	8.9
	United States	213,716	1.0
	Japan	23,331	0.1
	Others	3,304,572	16.0
	Subtotal	20,644,157	100.0
Commitments	Korea	96,532,123	95.2
	China	782,903	0.8
	United States	652,870	0.6
	Japan	199,854	0.2
	Others	3,215,655	3.2
	Subtotal	101,383,405	100.0
Merchant banking account – commitment	Korea	620,000	100.0
Total		123,095,286	

8-4 Liquidity risk

The Group defines liquidity risk as the possibility of incurring losses due to a temporary shortage in funds caused by a maturity mismatch or an unexpected capital outlay leading to rise in interest or sale of assets at a price below normal price.

8-4-1 Measurement of liquidity risk

The Group maintains a limit management indicator to measure the liquidity coverage ratio, liquidity ratio in foreign currency, net stable funding ratio, foreign currency maturity mismatch ratio and long-term access to financing ratio in foreign currency in accordance with the guidelines and standards of the Financial Supervisory Service. In addition, the Group maintains a monitoring indicator to measure unbalance of funding etc., to manage the liquidity risk and manage early warning indicators in order to identify worsening trends in the early stage to respond in a timely manner.

8-4-2 Management of liquidity risk

At an early stage, the Group identifies factors affecting liquidity in order to manage liquidity risks and has achieved an adequate level of liquidity via performing systematic management.

The Group has the following basic principles for liquidity risk management:

a. Set and comply with liquidity risk limits and coordinate and manage early warning indicators to identify liquidity risk at an early stage.
b. Regularly execute an analysis of stress tests and prepare an emergency procurement plan in case of liquidity.
c. Focus on maintaining a diversified portfolio in order to avoid excessive concentrations of risks.
d. Evaluate and manage the effect of a large amount of money, which is loaned out, invested or procured on liquidity risks.

In order to manage liquidity risk, the Group builds internal control systems for each department. In order to comply with liquidity ratios and the maturity mismatch ratio set by the Financial Supervisory Service, the Comprehensive Risk Management department conducts daily monitoring. Liquidity risk status is reported to the Risk Management Operation Committee on a monthly basis and to the Risk Management Committee on a quarterly basis.

In order to maintain the liquidity risk management indicators to stay within acceptable limits, the Treasury department recommends the necessary measures in relation to the procurement and operation of the assets and liabilities traded in the capital market. In addition, stages of emergency planning have been established in order to respond to liquidity emergencies. The Planning and Management department has established a portfolio management strategy based on the internal and external liquidity risk management requirements and the outlook of the procurement and operating markets.

8-4-3 Analysis of contract maturity

8-4-3-1 Analysis criteria

The details of the remaining contractual maturities of financial liabilities are analyzed by the earliest maturity date when the Group would be required to pay, based on the undiscounted cash outflows of the Group's financial liabilities.
In addition, financial liabilities at FVTPL and depository liabilities (payment on demand) are shown at fair value in the immediate payment column. All derivatives used for hedging are presented based on the net cash flows, as all products are paid in the net amount. A contract maturity exists in payment guarantees that correspond to financial guarantees such as bond issuance and loan security provided by the Group, loan commitment and other credit granting. However, payment must be made immediately once the counterparty requests payment. As such, they are included in the immediate payment column.

8-4-3-2 The remaining contractual maturities of financial liabilities and off-balance-sheet items

The remaining contractual maturities of financial liabilities and off-balance-sheet items as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	On demand	Less than 1 month	1 month ~3 months	3 months ~1 year	1 year ~5 years	More than 5 years	Total
On-balance-sheet items							
Financial liabilities							
Financial liabilities at FVTPL	6,494,492	-	-	-	-	422,346	6,916,838
Deposits	149,780,476	35,914,296	50,697,264	123,140,490	16,334,448	1,429,565	377,296,539
Borrowings	3,469,782	4,844,665	3,151,970	5,241,274	4,929,718	585,492	22,222,901
Debentures	126	1,121,368	1,542,286	8,509,438	13,754,227	2,207,777	27,135,222
Derivative assets used for hedging	-	7,644	3,749	18,275	51,876	(81,179)	365
Other financial liabilities	7,841,208	22,129,253	1,483	22,485	36,394	1,825	30,032,648
Merchant banking account liabilities	1,536,529	2,618,168	-	-	-	-	4,154,697
Total	169,122,613	66,635,394	55,396,752	136,931,962	35,106,663	4,565,826	467,759,210
Off-balance-sheet items							
Finance guarantee contracts	498,156	-	-	-	-	-	498,156
Payment guarantee	23,535,495	-	-	-	-	-	23,535,495
Commitment	109,725,839	-	-	-	-	-	109,725,839
Merchant banking account - commitment	770,000	-	-	-	-	-	770,000
Total	134,529,490	-	-	-	-	-	134,529,490

<December 31, 2022>

Classification	On demand	Less than 1 month	1 month ~ 3 months	3 months ~ 1 year	1 year ~ 5 years	More than 5 years	Total
On-balance-sheet items							
Financial liabilities							
Financial liabilities at FVTPL	11,059,332	-	-	-	-	272,236	11,331,568
Deposits	155,430,882	34,916,185	42,648,480	115,044,070	16,453,108	1,473,256	365,965,981
Borrowings	4,025,607	6,361,471	3,143,744	4,393,807	4,053,189	518,789	22,496,607
Debentures	139	960,000	2,835,568	10,712,756	9,535,633	2,579,021	26,623,117
Derivative assets used for hedging	-	9,543	1,709	33,127	63,048	(20,827)	86,600
Other financial liabilities	9,838,792	16,447,155	1,524	22,964	38,264	1,811	26,350,510
Merchant banking account liabilities	1,122,469	2,544,804	-	-	-	-	3,667,273
Total	181,477,221	61,239,158	48,631,025	130,206,724	30,143,242	4,824,286	456,521,656
Off-balance-sheet items							
Finance guarantee contracts	447,724	-	-	-	-	-	447,724
Payment guarantee	20,644,157	-	-	-	-	-	20,644,157
Commitment	101,383,405	-	-	-	-	-	101,383,405
Merchant banking account - commitment	620,000	-	-	-	-	-	620,000
Total	123,095,286	-	-	-	-	-	123,095,286

Assets available for use to execute unused loan commitments after redeeming all financial liabilities are cash and bank deposits, debt securities, equity securities and loans. In addition, the Group is able to cope with unexpected cash outflows through the sale of securities and additional sources of funding, such as asset-backed securitization.

8-5 Market risk

Market risk is a risk incurred in assets and liabilities subject to management based on the changes in market prices, such as interest rate, stocks, foreign exchange.

8-5-1 Market risk management

The purpose of market risk management is to manage the loss of assets and liabilities incurred due to changes in market variables, such as interest rates, foreign exchanges and equity prices to remain within the allowable limits in order to ensure profitability and stability.

8-5-2 Market risk management targets

Market risk management targets include marketable securities, foreign currency net positions, derivatives and other assets and liabilities with embedded market risks. The Group classifies exposures to market risk into either trading or non-trading positions and manages each of those portfolios separately.

8-5-3 Management of market risk related to trading position

8-5-3-1 Trading account classification

A trading account is a concept of a trading book and refers to a set of products held for short-term trading purposes etc., and there should be no legal restrictions on selling or completely hedging products that are to be classified as trading accounts. Specifically, the following financial products are classified as trading accounts, excluding products that cannot be classified as trading accounts and bank account products.

a. Financial instruments for the short-term trading
b. Financial instruments for the purpose of hedging risks
c. Financial instruments for the purpose of acquiring arbitrages
d. From A to C, hedge of other goods held for any of the purposes
e. Financial instruments included in the Correlation Trading Portfolio ("CTP")
f. Financial instruments that generate credit or stock net selling positions in bank accounts (*)

g Underwriting arrangements for securities that are actually expected to be purchased on the settlement date

(*) Credit or stock net selling positions in bank accounts: Bank account positions whose current value rises as issuer credit spreads of debt instruments expand or share prices fall

8-5-3-2 Management of the trading position limits

The Risk Management Committee divides capital, annual loss and exposure limit in relation to market risks of the trading position by business unit (division) annually. Within the given limit, the Risk Management Operation Committee further subdivides the limits by business units (divisions) and desks. The Risk Management Group provides information necessary for deliberation and review by the committee, reports trading limits and measures risks.

The middle office performs mark-to-market measures and monitors trade violations and compliance with the limits. The middle office establishes and complies with trading policy regulations, measures market risk for trading positions and checks daily compliance within the acceptable limits for each risk. The office also conducts daily inspections of changes in the management exposure, compliance with the limit, post verification and crisis analysis and reports the results to the management team every day.

8-5-3-3 Market Risk Measurement (Basel 3 Standard)

The basic calculation method for managing and measuring the exposure of trading account products to market risks is calculated by dividing them into sensitivity risk, default risk and residual risk. Sensitivity risk refers to the risk of loss due to changes in market risk factors, such as exchange rates, interest rates and stock prices. The risk of default refers to the risk of loss due to bankruptcy of bonds or stock issuers.

8-5-3-4 Amount of risk by risk type

The details of regulated capital by market risk group as of December 31, 2023, are as follows (Korean won in millions):

Classification	Risk type	Amount
Sensitivity Risk Charge	General interest rate risk	48,762
	Credit spread risk ("CSR") (non-securitizations)	31,929
	CSR (securitizations (non-CTP))	-
	CSR (securitization (CTP))	-
	Equity risk	24,666
	Foreign exchange risk	407,954
	Commodity risk	-
Default Risk Charge	Non-securitizations	36,230
	Securitizations (Non-CTP)	-
	Securitizations (CTP)	-
Residual Risk Add-On ("RRAO")	RRAO (*)	614
Total		550,155

(*) RRAO: Residual Risk Add-On

8-5-4 Management of market risk related to non-trading position

8-5-4-1 Interest rate risk

Interest rate risk of non-trading position is a risk of losses in financial assets and liabilities with interest rates due to adverse changes in interest rates and is incurred when maturity structure does not match interest rate setting cycle of the related assets and liabilities. The Group manages the interest rate risks of non-trading position in order to maintain the stability of net interest income and net asset value based on changes in interest rates. The following is subject to the Group's management of interest rate risk:

a. Financial assets with interest rates, such as bank deposits, debt securities and loans
b. Financial liabilities with interest rates, such as depository liabilities, borrowings and debentures
c. Financial derivatives, such as interest rate swaps

Interest rate risk is calculated using the gap between interest-sensitive assets and liabilities. The interest rate risks measure the interest rate gap ratio as a primary indicator, while △EVE, △NII ratio and duration are used as secondary indicators. The Risk Management Committee and the Risk Management Operation Committee establish the interest rate risk limits on an annual basis; the compliance thereof is reported to Risk Management Operation Committee as well as the Risk Management Committee on a monthly and quarterly basis, respectively.

Economic value of equity ("△EVE") refers to changes in the economic value of equity capital, indicating the effect of adverse changes in interest rates on the present value of assets, liabilities and others. As of December 31, 2023 and 2022, the Group's △EVE is as follows (Korean won in millions):

Classification	December 31, 2023	Average	Minimum	Maximal	December 31, 2022
△EVE	1,883,644	2,240,459	1,883,644	2,427,370	2,106,981

△EVE calculates the maximum value compared to the default scenario by applying six interest rates (parallel rise, parallel fall, short-term fall and long-term rise, short-term rise and long-term fall, short-term rise and short-term fall) after generating cash flows for interest-sensitive assets and liabilities under the Supervision of Banking Business Appendix 9-1.

8-5-4-2 Equity price risk

Equity price risk is a risk incurred when the fair value of equities results in changes in the level of related revenue and capital. Fluctuation in equity reflects the sensitivity of each equity. Effects on capital due to the fluctuation in equity price risk as of December 31, 2023, are as follows (Korean won in millions):

Classification	20% decline	10% decline	10% rise	20% rise
Equity price risk	(60,317)	(30,158)	30,158	60,317

8-5-5 Currency risk concentration

Currency risk is a risk incurred when the value of a financial instrument or future cash flows fluctuates due to the changes in foreign exchange rates. Currency risk arises from the financial instruments expressed in currencies other than the functional currency. Currency risk does not arise from the financial instruments expressed in the functional currency or in non-monetary items. In order to establish the stop loss and limits, the Group manages the foreign exchange net exposure amount of the trading and non-trading positions by each currency.

Significant foreign currency assets and liabilities denominated in Korean won as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	USD	JPY	EUR	CNY	IDR	Others	Total
Assets							
Cash and due from bank	13,462,151	2,852,534	640,913	849,322	188,125	1,004,784	18,997,829
Financial assets at FVTPL	139,221	316	12,535	50,749	25,804	104,702	333,327
Financial assets at FVOCI	3,698,272	-	41,406	1,651,409	300,718	1,655,728	7,347,533
Securities at amortized cost	1,752,567	-	122,681	18,496	186,307	1,591,848	3,671,899
Loans	24,136,661	1,586,366	3,920,339	7,035,033	1,557,384	5,526,201	43,761,984
Others	5,066,110	366,976	764,095	1,179,742	48,660	775,702	8,201,285
Total	48,254,982	4,806,192	5,501,969	10,784,751	2,306,998	10,658,965	82,313,857
Liabilities							
Financial liabilities at FVTPL	238,782	1,376	11,708	9,660	2,155	102,964	366,645
Deposits	31,951,381	4,021,355	4,245,043	8,147,643	1,452,292	5,478,873	55,296,587
Borrowings	9,489,215	195,713	734,199	171,672	44,060	951,799	11,586,658
Debentures	4,315,722	-	1,519,420	192,936	-	172,750	6,200,828
Derivative liabilities used for hedging	170,926	-	-	-	-	-	170,926
Others	5,631,026	525,801	492,177	1,360,759	28,598	419,314	8,457,675
Total	51,797,052	4,744,245	7,002,547	9,882,670	1,527,105	7,125,700	82,079,319

<December 31, 2022>

Classification	USD	JPY	EUR	CNY	IDR	Others	Total
Assets							
Cash and due from bank	18,976,739	1,328,010	1,088,487	1,054,512	313,483	1,027,003	23,788,234
Financial assets at FVTPL	286,849	1,088	20,155	13,530	10,254	108,052	439,928
Financial assets at FVOCI	2,098,897	–	–	1,965,233	295,867	1,292,404	5,652,401
Securities at amortized cost	1,803,278	–	150,933	58,488	160,655	1,644,945	3,818,299
Loans	25,880,111	1,751,839	4,462,084	6,870,991	1,439,045	4,834,913	45,238,983
Others	3,251,413	166,333	340,695	333,508	49,281	433,891	4,575,121
Total	52,297,287	3,247,270	6,062,354	10,296,262	2,268,585	9,341,208	83,512,966
Liabilities							
Financial liabilities at FVTPL	250,577	4,653	20,461	17,168	–	109,451	402,310
Deposits	42,320,051	2,790,262	5,075,467	8,667,227	1,390,599	4,948,110	65,191,716
Borrowings	9,020,224	136,405	923,417	381,299	43,523	993,865	11,498,733
Debentures	4,673,935	–	605,055	336,151	19,709	239,892	5,874,742
Derivative liabilities used for hedging	226,919	–	–	–	–	–	226,919
Others	5,527,525	190,884	673,383	501,354	38,205	304,711	7,236,062
Total	62,019,231	3,122,204	7,297,783	9,903,199	1,492,036	6,596,029	90,430,482

8-6 Operating risk

Operational risk is the risk of loss arising from system failure, human error, fraud or other external events. Risks related to legal or regulatory implications are identified as operational risks, but risks related to the strategy of damaging reputation are excluded from operational risks. Operational risk includes losses from internal operational problems and externalities, such as natural disasters, etc., and legal lawsuit, but excludes losses from policy decision errors or unmeasurable reputation damage, etc. Operational risk does not have a direct correlation with income and the Group needs to mitigate such risk through internal controls and insurance.

Operating risk capital is calculated by multiplying the Business Indicator Component based on consolidated financial statements and the internal loss multiplier (ILM). The business index factor is calculated based on the consolidated financial statements by multiplying the annual average of interest-lease dividend factors, service factors and financial transaction factors over the past three years by the factor of each section. The ILM is the log function value of the loss element and the business index element, and the loss element is calculated by multiplying the average annual loss amount generated internally by the bank over the past 10 years by 15.

The Risk Management Committee determines the operational risk limits. In case the excess limit is expected, the management plan for the excess of internal capital limits should be reported to the Risk Management Operation Committee and if additional limits are given, an approval from the Risk Management Committee is needed beforehand. If the limit is exceeded due to the occurrence of an exceptional situation, an ex post facto approval from the Risk Management Committee is needed for the information on exceeded amount and post hoc results, as well as the subsequent plans.

8-7 Capital management

The Group implements the BIS capital requirement system in order to secure the capital adequacy and comply with the supervisory regulations. By BIS regulation, the Group keeps its BIS capital adequacy ratio (hereinafter, "BIS ratio") above the minimum BIS ratio for "RWA". In addition, the Group performs a capital adequacy assessment in order to cope with an unexpected loss.

RWA which are calculated per each risk type when calculating BIS ratio, are as follows:

a. RWA of credit risk are calculated using the basic internal ratings-based approach. The Group uses the standardized approach for governments, banks, public institutes, overseas exposure, other assets, etc.
b. RWA of the market risk are calculated by multiplying 12.5 to the amount of capital required by adding individual risks calculated by the standard model to the general risk calculated by the internal model.
c. RWA of the operational risk are calculated by multiplying 12.5 to the amount of operational risk capital calculated by advanced measurement approach for the Group and basic indicator approach for its subsidiaries.

Regulatory capital in accordance with the Regulations on the Supervision of Banking Business for calculating BIS ratio is as follows:

a. Common equity: Capital incurred in connection with common stock issued to meet the eligible requirement, capital surplus and capital adjustments, retained earnings, accumulated other comprehensive income and other capital surplus, capital adjustments, non-controlling interest on common shares issued by banks, affiliated subsidiaries, etc.
b. Other basic capital: The capital securities to meet accreditation requirements of other basic capital, capital surplus associated with the issuance of the other basic capital, non-qualifying capital securities and the accredited amount as other basic capital of a non-controlling interest on equity securities issued by a subsidiary, etc.
c. Supplementary capital: The capital securities to meet supplementary capital accreditation requirements, capital surplus associated with the issuance of supplementary capital, the accredited amount of supplementary capital of non-qualifying capital securities, the accredited amount as supplementary capital of a non-controlling interest on equity securities issued by a subsidiary, eligible allowance for possible loan losses on "normal" or "precautionary" category assets, allowance for possible loan losses in excess of the total amount of expected losses, etc.

Regulatory capital and BIS ratios as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Common equity		
Capital stock, capital surplus and capital adjustments incurred in connection with common stock issued that meets eligible requirements	5,359,548	5,359,508
Retained earnings	21,050,087	19,236,315
Accumulated other comprehensive income and other capital surplus, capital adjustments	5,019,367	4,556,672
Non-controlling interest on common shares issued by a bank, a consolidated subsidairy	71,380	67,750
Deduction	(1,428,880)	(1,343,267)
Subtotal	30,071,502	27,876,978
Other basic capital		
Equity securities satisfying the criteria of other basic capital	355,740	355,740
Amount accredited as supplementary capital of non-qualifying capital securities	-	-
Amount accredited as other basic capital of a non-controlling interest on equity securities issued by a subsidiary	15,296	14,518
Subtotal	371,036	370,258
Supplementary capital		
Equity securities satisfying the criteria of supplementary capital	2,581,000	2,993,076
Amount accredited as supplementary capital of non-qualifying capital securities	-	-
Amount accredited as supplementary capital of a non-controlling interest on equity securities issued by a subsidiary	20,394	19,358
Allowance for possible loan losses on assets categorized as "normal" or "precautionary"	458,672	273,899
Allowance for Qualified Bad Debt Exceeding the Estimated Total Loss, etc.	82,557	136,038
Subtotal	3,142,623	3,422,371
Total	33,585,161	31,669,607
Risk-weighted assets		
Credit risk-weighted assets (*)	164,378,354	154,742,641
Operational risk-weighted assets	16,009,569	18,539,555
Market risk-weighted assets	6,876,942	17,119,721
Total	187,264,865	190,401,917
BIS capital ratio		
Total capital ratio	17.93%	16.63%
Common equity ratio	16.06%	14.64%
Basic capital ratio	16.26%	14.84%
Supplementary capital ratio	1.68%	1.80%

(*) The equity below the lowest limit is presented in credit risk-weighted assets.

8-7-1 Internal capital adequacy assessment and management

Internal capital is the amount that allows for continuous operation of business while accounting for all risks. Internal capital is defined as the size of capital needed to cope with an unexpected loss under a certain rate. The purpose of managing the internal capital is to compare the size of internal capital and available capital (Tier 1) and to serve as a measure of financial strength. Managing the internal capital also provides the amount of risk-adjusted capital and basic measurement. The indicators are composed of the risk appetite ratio, as well as exhaustion ratio of foreign holding limits. The risk appetite ratio is an internal capital ratio established after taking into consideration a capital buffer in Tier 1 capital. The exhaustion ratio of foreign holding limits is a ratio used to measure the amount of internal capital used against the internal capital limits.

Internal capital limits are established after accounting for the size of current and subsequent Tier 1 capital, as well as the components, quality, risk appetite, target credit rating, operational strategy and business plans. The Risk Management Committee determines risk types and the internal capital limits for the Group more than once a year. In the case where new operations or the expansion of operations results in the amount exceeding the internal capital limits, an approval from the Risk Management Committee is needed beforehand. If such a situation occurs in cases outlined as exceptions, an approval from the Risk Management Committee is needed for the information on exceeded amount and post hoc results, as well as the subsequent plans.

9. Operating segment information

9-1 General information

In order to set strategies to achieve goals and efficiently conduct performance assessment, the business sectors of the Group are divided by the operations as follows:

a. Operating bank segment: It consists of four banks (Center, Yeongnam, Chungcheong and Honam). It offers household loan and deposit, retirement pension, company loan, deposit, etc.

b. Capital market segment: This segmentation offers investment and operation of securities, buying and selling of public bonds and development and operation of derivatives.

c. Other segment: It consists of the overseas business segment, headquarters supporting segment, trust segment, risk segment, audit segment and after-management segment.

9-2 Profit or loss by operating segment

9-2-1 Details of net income by operating segments for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Operating group segments				Finance and other sectors	Subtotal	Adjustments	Total
	Center	Yeongnam	Chungcheong	Honam				
Net interest income	5,753,944	959,225	826,839	263,572	124,910	7,928,490	(11,079)	7,917,411
Interest income	19,373,471	3,697,223	2,611,464	1,191,775	(6,998,683)	19,875,250	(82,187)	19,793,063
Interest expenses	(13,619,527)	(2,737,998)	(1,784,625)	(928,203)	7,123,593	(11,946,760)	71,108	(11,875,652)
Net fees and commission income	675,792	96,104	54,815	27,060	168,021	1,021,792	(360,328)	661,464
Net other operating loss	(1,964,861)	(418,562)	(320,035)	(129,865)	(1,573,026)	(4,406,349)	440,557	(3,965,792)
Net segment profit (loss)	4,464,875	636,767	561,619	160,767	(1,280,095)	4,543,933	69,150	4,613,083
Income tax expenses (benefit)	1,178,727	168,106	148,267	42,443	(337,421)	1,200,122	(74,472)	1,125,650
Net segment income (loss)	3,286,148	468,661	413,352	118,324	(942,674)	3,343,811	143,622	3,487,433

<2022>

Classification	Operating group segments				Finance and other sectors	Subtotal	Adjustments	Total
	Center	Yeongnam	Chungcheong	Honam				
Net interest income	5,435,248	936,305	723,768	268,623	254,283	7,618,227	(9,550)	7,608,677
Interest income	12,812,096	2,438,435	1,666,734	748,599	(4,289,059)	13,376,805	(29,574)	13,347,231
Interest expenses	(7,376,848)	(1,502,130)	(942,966)	(479,976)	4,543,342	(5,758,578)	20,024	(5,738,554)
Net fees and commission income	592,662	91,945	56,595	27,454	149,665	918,321	(324,709)	593,612
Net other operating loss	(1,749,101)	(384,761)	(283,775)	(115,940)	(2,366,803)	(4,900,380)	869,577	(4,030,803)
Net segment profit (loss)	4,278,809	643,489	496,588	180,137	(1,962,855)	3,636,168	535,318	4,171,486
Income tax expenses (benefit)	1,176,672	176,959	136,562	49,538	(531,409)	1,008,322	51,465	1,059,787
Net segment income (loss)	3,102,137	466,530	360,026	130,599	(1,431,446)	2,627,846	483,853	3,111,699

Operating segment information was rewritten due to changes in the organizational structure for the year ended December 31, 2023.

9-2-2 Revenue from external customers in each operating sector for the years ended December 31, 2023 and 2022, is as follows (Korean won in millions):

<2023>

Classification	Operating group segments				Finance and other sectors	Subtotal	Adjustments	Total
	Center	Yeongnam	Chungcheong	Honam				
Revenue from external customers	5,819,200	928,625	759,766	246,251	1,336,015	9,089,857	(377,422)	8,712,435

<2022>

Classification	Operating group segments				Finance and other sectors	Subtotal	Adjustments	Total
	Center	Yeongnam	Chungcheong	Honam				
Revenue from external customers	5,573,804	917,177	686,539	261,486	731,808	8,170,814	(127,731)	8,043,083

Operating segment information was rewritten due to changes in the organizational structure for the year ended December 31, 2023.

9-2-3 Significant non-cash transactions included in income of operating segments for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Operating group segments				Finance and other sectors	Subtotal	Adjustments	Total
	Center	Yeongnam	Chungcheong	Honam				
Earnings from equity method investments	-	-	-	-	168,113	168,113	-	168,113
Depreciation and amortization	(138,820)	(14,469)	(10,950)	(4,026)	(334,853)	(503,118)	(959)	(504,077)
Total	(138,820)	(14,469)	(10,950)	(4,026)	(166,740)	(335,005)	(959)	(335,964)

<2022>

Classification	Operating group segments				Finance and other sectors	Subtotal	Adjustments	Total
	Center	Yeongnam	Chungcheong	Honam				
Earnings from equity method investments	-	-	-	-	189,013	189,013	-	189,013
Depreciation and amortization	(129,385)	(12,721)	(9,791)	(4,071)	(281,459)	(437,427)	(645)	(438,072)
Total	(129,385)	(12,721)	(9,791)	(4,071)	(92,446)	(248,414)	(645)	(249,059)

Operating segment information was rewritten due to changes in the organizational structure for the year ended December 31, 2023.

9-3 Information about geographic region

Gain and loss by geographic region from the external customers for the years ended December 31, 2023 and 2022, and non-current assets by the region as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	Gain and loss from external customers(*1)		Non-current assets(*2)	
	2023	2022	December 31, 2023	December 31, 2022
Domestic	8,082,666	7,160,295	3,317,272	3,278,506
Foreign				
Hong Kong	69,427	73,208	2,844	5,320
Singapore	49,517	60,878	2,526	1,943
United States	97,380	85,888	27,806	29,170
Japan	28,337	36,579	2,488	3,486
China	222,364	247,818	62,438	62,936
Indonesia	165,397	182,806	48,045	57,301
United Kingdom	8,468	6,537	2,102	2,601
Canada	57,736	49,635	22,355	11,274
Others	308,565	267,168	27,000	19,263
Subtotal	1,007,191	1,010,517	197,604	193,294
Adjustments	(377,422)	(127,729)	4,737	5,263
Total	8,712,435	8,043,083	3,519,613	3,477,063

(*1) Gain and loss from external customers are divided into categories of domestic and overseas based on the locations of operating branches.
(*2) Non-current assets consist of property and equipment, investment property, intangible assets and right-of-use assets that are divided into categories of domestic and overseas based on the location of assets.

10. Cash and due from banks

10-1 Cash and due from banks as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	Counterparty	December 31, 2023	December 31, 2022
Cash		1,742,359	1,903,972
Due from banks in Korean won			
Reserve deposits	Bank of Korea ("BOK")	10,025,623	15,928,268
Time deposits, etc.	Other banks	401,191	8,309
Other deposits	Other financial institutions	23,654	14,313
Subtotal		10,450,468	15,950,890
Due from banks in foreign currencies			
Due from other branches	BOK and other banks	8,823,939	11,590,380
Time deposits and others	QATAR National Bank and other banks	1,018,569	1,147,224
Other deposits	Other financial institutions	8,528,944	10,495,391
Subtotal		18,371,452	23,232,995
Total		30,564,279	41,087,857

10-2 Restricted balances in cash and due from banks as of December 31, 2023 and 2022, are summarized as follows (Korean won in millions):

Classification		December 31, 2023	December 31, 2022	Restriction
Due from banks in Korean won	Reserve deposits	10,025,623	15,928,268	Required under the *Banking Act* and other related regulations
	Collective fund for Korea Stock Exchange	500	500	Pledge creation, etc.
	Subtotal	10,026,123	15,928,768	
Due from banks in foreign currencies	Due from other branches	7,828,902	9,596,192	Reserve deposits required under the *Banking Act* and other related regulations
	Due from others	8,199,138	9,708,393	Deposits received for guarantees as margin for derivatives, etc.
	Subtotal	16,028,040	19,304,585	
Total		26,054,163	35,233,353	

11. Financial assets at FVTPL

11-1 Financial assets mandatorily measured at FVTPL as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Stocks	117,803	63,560
Government and public bonds	4,555,436	2,068,958
Financial bonds	397,600	563,364
Corporate bonds	1,060,500	912,624
Beneficiary certificates	3,265,402	2,733,298
Securities denominated in foreign currencies	1,507,867	1,786,106
Derivative assets held for trading	5,965,872	9,851,754
Other securities (investment, etc.)	636,949	468,357
Private convertible bonds	7,447	7,394
Total	17,514,876	18,455,415

11-2 As of December 31, 2023 and 2022, the Group does not hold any financial assets designated as at FVTPL.

12. Financial assets at FVOCI

12-1 As of December 31, 2023 and 2022, financial assets at FVOCI are as follows (Korean won in millions):

Classification	Counterparty	Fair value (book value)	
		December 31, 2023	December 31, 2022
Stocks	Hanwha Ocean Co., Ltd., etc.	610,317	714,863
Investments in partnership	Impact Finance Korea	-	105
Government and public bonds	Treasury bonds	6,432,877	7,264,139
	Housing bonds	2,614,084	2,383,681
	Other local bonds	213,751	226,842
	Subtotal	9,260,712	9,874,662
Finance bonds	Monetary stabilization securities	5,708,089	3,087,556
	Deposit bank bonds	1,269,983	1,128,701
	Small- and medium-sized business banking bonds	1,510,420	1,904,983
	Industrial financial bonds	3,713,637	3,423,699
	Export-import credit bonds	226,751	313,214
	Others	140,015	663,479
	Subtotal	12,568,895	10,521,632
Corporate bonds and others	State-owned entity bonds	6,631,316	5,618,840
	Corporate bonds	375,868	461,899
	Others	59,321	20,640
	Subtotal	7,066,505	6,101,379
Other securities	Convertible bonds (permanent)	33,153	89,131
Securities denominated in foreign currencies	Equity securities in foreign currencies	6,996	6,406
	Bonds in foreign currencies	7,347,533	5,652,403
	Subtotal	7,354,529	5,658,809
Total		36,894,111	32,960,581

12-2 As of December 31, 2023 and 2022, details of equity instruments included in financial assets at FVOCI are as follows (Korean won in millions):

Counterparty	Fair value (book value)	
	December 31, 2023	December 31, 2022
UAMCO., Ltd.	196,670	188,721
Hanwha Ocean Co., Ltd.	144,576	170,845
The Korea Securities Finance Corporation	118,002	115,513
Kookmin Cable Investment Inc.	33,153	43,924
National Happiness Fund Co., Ltd.	26,261	50,942
Korea Rating & Data	18,933	20,111
Korea Asset Management Corporation	15,737	15,737
Kumho Tire Co., Ltd.	13,084	6,748
Korea Money Brokerage Corp	11,014	9,660
BC Card Co., Ltd.	10,298	10,604
HJC Inc.	10,190	9,817
POSCO Plantec Co., Ltd.	6,463	4,676
Mirae Credit Information Co., Ltd.	6,416	7,324
DB Asset Management Co., Ltd.	5,753	5,713
Chang Myung Shipping Co., Ltd.	3,807	-
Maeil Broadcasting Network(MBN)	2,665	-
DL Construction Co., Ltd.	2,159	2,509
CLS GROUP HOLDINGS AG	5,603	5,038
Taihan Cable & Solution Co., Ltd.	-	46,131
HMM Co., Ltd.	-	17,387
KG Dongbu Steel Co., Ltd.	-	8,387
STX Engine Co., Ltd.	-	45,207
Korea Securities Depository and others	19,682	25,511
Total	650,466	810,505

Equity instruments that are held by the purpose of strategic alliances, acquisition due to conversion from debt instruments and acquisition for access rights of systems and facilities are designated as measured at FVOCI.

12-3 Details of equity instruments included in the financial assets at FVOCI derecognized for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Counterparty	Fair value	Cumulative valuation gain (loss)	Reason for disposal
STX Engine Co., Ltd.	45,207	26,606	Exercise of the right to sell
DGB Life Insurance Co., Ltd.	2	(107)	Share swap
ETAPOL Co., Ltd.	12	12	Sale of securities convertible to equity securities
Impact Finance Korea	205	15	Share swap
Hanwha Ocean Co., Ltd.	138,774	138,774	Sale of securities convertible to equity securities
KG Dongbu Steel Co., Ltd.	8,139	(25,445)	Sale of securities convertible to equity securities
HMM Co., Ltd.	12,772	2,588	Sale of securities convertible to equity securities
Sawnics Inc.	37	37	Sale of securities convertible to equity securities
LIS Co., Ltd.	6	6	Sale of securities convertible to equity securities
Taihan Cable & Solution Co., Ltd.	35,092	(73,348)	Sale of securities convertible to equity securities
Coson Co., Ltd.	91	91	Sale of securities convertible to equity securities
Taihan Industrial System	16	16	Sale of securities convertible to equity securities
Dongwoo A&E Co., Ltd.	8	8	Sale of securities convertible to equity securities
Metal Link Inc.	201	201	Sale of securities convertible to equity securities
Marizin	-	-	Free incineration of securities
Enertech Co., Ltd.	-	(202)	Free incineration of securities
Nanomicart Co., Ltd.	-	-	Free incineration of securities
Heunghwa Co., Ltd.	-	-	Free incineration of securities
Total	240,562	69,252	

<2022>

Counterparty	Fair value	Cumulative valuation gain (loss)	Reason for disposal
Sun jin Air & Tech.Co., Ltd.	-	-	Free incineration of securities
SHINDONGDIGITECHCO, LTD	-	-	Free incineration of securities
IHSUNG CNI CO., Ltd.	-	-	Sale of securities convertible to equity securities
Hansol Papertech Co., Ltd.	1	1	Sale of securities convertible to equity securities
EMnI Co., Ltd	119	119	Sale of securities convertible to equity securities
Kolmarpharma Co., Ltd.	1	1	Sale of securities convertible to equity securities
GOLDEN BRIDGE ASSET MANAGEMENT Co., Ltd.	478	78	Sale of securities convertible to equity securities due to reduced effectiveness of strategic investment
DAEIL LEATHER CO., Ltd.	40	40	Exercise of the right to claim for reimbursement recourse according to the rehabilitation plan
Olive Co., Ltd.	22	22	Exercise of call option according to the rehabilitation plan
ChinHung International, Inc.	3,280	(1,320)	Resolution of the board of directors
Taihan Cable & Solution Co., Ltd.	1,174	1,174	Resolution of the board of directors
KG Dongbu Steel Co., Ltd.	20,980	(3,806)	Resolution of the board of directors
Total	26,095	(3,691)	

12-4 Dividends recognized due to the equity instruments at FVOCI derecognized for the year ended December 31, 2023, amount to ₩1,237 million. Dividends recognized in relation to the equity instruments at FVOCI held as of December 31, 2023, amount to ₩6,804 million. There are no dividends recognized due to the equity instruments at FVOCI derecognized for the year ended December 31, 2022. Dividends recognized in relation to the equity instruments at FVOCI held as of December 31, 2022, amount to ₩8,287 million.

12-5 Changes in the loss allowance in relation to financial assets at FVOCI for the years ended December 31, 2023 and 2022, are as follows
(Korean won in millions):

<2023>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	11,150	-	-	11,150
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	-	-	-
Provision for ECL	5,912	-	-	5,912
Removed debt securities	(5,045)	-	-	(5,045)
Exchange rate fluctuation and others	1,093	-	-	1,093
Ending balance	13,110	-	-	13,110

<2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	11,298	-	-	11,298
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	-	-	-
Provision for ECL	2,516	-	-	2,516
Removed debt securities	(3,119)	-	-	(3,119)
Exchange rate fluctuation and others	455	-	-	455
Ending balance	11,150	-	-	11,150

12-6 Changes in the total book value in relation to financial assets at FVOCI for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	32,150,076	-	-	32,150,076
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	-	-	-
New financial assets executed or purchased	19,187,926	-	-	19,187,926
Removed debt securities	(15,561,487)	-	-	(15,561,487)
Exchange rate fluctuation and others	467,130	-	-	467,130
Ending balance	36,243,645	-	-	36,243,645

<2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	34,322,778	-	-	34,322,778
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	-	-	-
New financial assets executed or purchased	10,732,956	-	-	10,732,956
Removed debt securities	(12,330,139)	-	-	(12,330,139)
Exchange rate fluctuation and others	(575,519)	-	-	(575,519)
Ending balance	32,150,076	-	-	32,150,076

13. Securities at amortized cost

13-1 Details of securities at amortized cost as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	Category	December 31, 2023	December 31, 2022
Government and public bonds	Treasury bonds	3,087,295	3,177,898
	Housing bonds	2,981,531	3,585,127
	Other local government bonds	506,962	506,322
	Subtotal	6,575,788	7,269,347
Finance bonds	Monetary stabilization bond	249,998	649,822
	Deposit bank bonds	546,857	545,116
	Small- and medium-sized business banking bonds	2,299,692	2,299,454
	Industrial financial bonds	3,929,216	3,967,758
	Export-import credit bonds	349,794	429,681
	Subtotal	7,375,557	7,891,831
Corporate bonds and others	State-owned entity bonds	18,446,291	18,316,697
	Corporate bonds	279,483	298,312
	Subtotal	18,725,774	18,615,009
Securities denominated in foreign currencies	Bonds in foreign currencies	3,680,491	3,890,116
Allowances		(19,661)	(82,816)
Total		36,337,949	37,583,487

13-2 Profit or loss from disposal of securities at amortized cost for the years ended December 31, 2023 and 2022, is as follows (Korean won in millions):

<2023>

Classification	Face amount	Book value	Amount of profit from disposal
Corporate bonds and others	10,600	10,597	3
Bonds in foreign currencies	36,276	36,276	229
Total	46,876	46,873	232

<2022>

Classification	Face amount	Book value	Amount of profit from disposal
Corporate bonds and others	7,800	7,796	4

For the years ended December 31, 2023 and 2022, the Group disposed portion of securities at amortized cost for the purpose of managing the credit risk.

13-3 Changes in the loss allowance in relation to securities at amortized cost for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	13,073	5,773	63,970	82,816
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	-	-	-
Provision for ECL	5,735	179	-	5,914
Removed debt securities	(1,038)	-	(41,153)	(42,191)
Amortized debt securities	-	-	(27,108)	(27,108)
Exchange rate fluctuation and others	(4,039)	(22)	4,291	230
Ending balance	13,731	5,930	-	19,661

<2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	8,104	11,200	-	19,304
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	(8,470)	8,470	-
Provision for ECL	5,525	3,007	58,941	67,473
Removed debt securities	(507)	-	-	(507)
Exchange rate fluctuation and others	(49)	36	(3,441)	(3,454)
Ending balance	13,073	5,773	63,970	82,816

13-4 Changes in the carrying amounts of securities at amortized cost for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	37,574,459	24,508	67,336	37,666,303
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	-	-	-
New debt securities executed or purchased	1,208,227	-	-	1,208,227
Removed debt securities	(2,651,359)	-	(68,261)	(2,719,620)
Effective interest rate amortization	69,043	-	-	69,043
Exchange rate fluctuation and others	132,814	(82)	925	133,657
Ending balance	36,333,184	24,426	-	36,357,610

<2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	22,393,248	93,940	-	22,487,188
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	(68,827)	68,827	-
New debt securities executed or purchased	16,705,097	-	-	16,705,097
Removed debt securities	(1,664,801)	-	-	(1,664,801)
Effective interest rate amortization	(23,576)	-	-	(23,576)
Exchange rate fluctuation and others	164,491	(605)	(1,491)	162,395
Ending balance	37,574,459	24,508	67,336	37,666,303

14. Pledged assets and acquired collaterals

14-1 Assets pledged as collateral as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	Category	December 31, 2023	December 31, 2022
Financial assets at FVTPL	Securities lent	9,936	412,491
	BOK payment	612,117	-
	Others	926,687	390,251
	Subtotal	1,548,740	802,742
Financial assets at FVOCI	Intraday overdraft	246,979	272,486
	Securities lent	1,051,270	1,925,345
	BOK borrowings	589,932	1,240,667
	Foreign currency borrowings	532,712	-
	BOK payment	4,915,988	39,707
	Futures	220,328	374,368
	Customer repurchase agreement	48	46
	Others	2,268,279	3,057,070
	Subtotal	9,825,536	6,909,689
Securities at amortized cost	Intraday overdraft	403,880	373,511
	Securities lent	194,312	416,386
	BOK borrowings	3,317,956	4,719,163
	Foreign currency borrowings	801,692	484,066
	BOK payment	7,728,925	2,905,847
	Futures	192,445	10,000
	Others	1,427,564	1,151,860
	Subtotal	14,066,774	10,060,833
Total		25,441,050	17,773,264

14-2 The fair value of collateral that is available for sale and repledge, irrespective of default as of December 31, 2023 and 2022, is as follows (Korean won in millions):

<December 31, 2023>

Classification	Fair value of collateral	Fair value of collateral sold or repledged
Securities	13,158,028	-

<December 31, 2022>

Classification	Fair value of collateral	Fair value of collateral sold or repledged
Securities	11,589,157	3,349,854

15. Loans

15-1 Loans as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Loans		
Loans in Korean won	292,565,176	274,028,231
Loans denominated in foreign currencies	31,794,128	32,053,751
Domestic import usance	3,833,914	4,546,348
Call loans	1,387,914	1,377,862
Bills purchased in Korean won	172,864	936,548
Bills purchased denominated in foreign currencies	4,040,638	5,289,419
Advance payments on payment guarantees	10,508	5,533
Bonds purchased under resale agreement	13,754,130	11,776,664
Privately placed corporate bonds	1,080,096	1,081,238
Others	268,918	401,026
Subtotal	348,908,286	331,496,620
Addition (deduction)		
Net deferred origination fees and costs	383,467	356,338
Allowance for loan losses	(2,044,843)	(1,666,617)
Subtotal	(1,661,376)	(1,310,279)
Total	347,246,910	330,186,341

15-2 Loans by customer as of December 31, 2023 and 2022, are listed as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Corporate loans		
Large-sized businesses	52,615,031	49,305,435
Small- and medium-sized businesses	143,438,684	129,742,648
Public sector and others	20,928,782	19,907,599
Household loans	131,925,789	132,540,938
Subtotal	348,908,286	331,496,620
Addition (deduction)		
Net deferred origination fees and costs	383,467	356,338
Allowance for loan losses	(2,044,843)	(1,666,617)
Subtotal	(1,661,376)	(1,310,279)
Total	347,246,910	330,186,341

15-3 Changes in allowance for possible loan losses for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired loan	Credit-impaired loan	
Beginning balance	598,922	763,949	303,746	1,666,617
Transfer to 12-month ECL	42,435	(41,384)	(1,051)	-
Transfer to non-credit-impaired loan	(174,562)	180,294	(5,732)	-
Transfer to credit-impaired loan	(9,201)	(74,776)	83,977	-
Provisions of allowance for loan losses	316,989	(31,617)	404,228	689,600
Write-offs	-	-	(402,866)	(402,866)
Disposal of non-performing loans, etc.	-	-	(51,463)	(51,463)
Recovering of loans written off	-	-	104,403	104,403
Exchange rate fluctuation and others	12,130	8,059	18,363	38,552
Ending balance (*)	786,713	804,525	453,605	2,044,843

(*) As of December 31, 2023, in order to expand loss absorption capacity in growing economic uncertainty worldwide, the Group has accumulated an additional ₩34,462 million in allowances for financial support interest and deferred repayment loans for small- and medium-sized companies and small business owners affected by COVID-19, and ₩17,709 million for maturity-extended loans.

<2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit -impaired loan	Credit-impaired loan	
Beginning balance	405,354	668,520	359,694	1,433,568
Transfer to 12-month ECL	39,276	(37,361)	(1,915)	-
Transfer to non-credit-impaired loan	(37,102)	38,749	(1,647)	-
Transfer to credit-impaired loan	(8,994)	(28,298)	37,292	-
Provisions of allowance for loan losses	186,883	118,465	279,658	585,006
Write-offs	-	-	(428,658)	(428,658)
Disposal of non-performing loans, etc.	-	-	(31,429)	(31,429)
Recovering of loans written off	-	-	90,478	90,478
Exchange rate fluctuation and others	13,505	3,874	273	17,652
Ending balance	598,922	763,949	303,746	1,666,617

(*) As of December 31, 2022, in order to expand loss absorption capacity in growing economic uncertainty worldwide, the Group has accumulated an additional ₩50,387 million in allowances for financial support interest and deferred repayment loans for small- and medium-sized companies and small business owners affected by COVID-19. The additional allowances include ₩413 million in impact of Stage 2 classification of principal and interest deferred borrowers.

15-4 Changes in the carrying amounts of loans for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit -impaired loan	Credit-impaired loan	
Beginning balance	289,447,264	41,149,957	899,399	331,496,620
Transfer to 12-month ECL	5,884,595	(5,875,653)	(8,942)	-
Transfer to non-credit-impaired loan	(14,090,938)	14,117,340	(26,402)	-
Transfer to credit-impaired loan	(1,076,492)	(1,091,008)	2,167,500	-
Net increase (decrease)	24,195,159	(5,081,408)	(418,115)	18,695,636
Write-offs	-	-	(402,866)	(402,866)
Disposal of non-performing loans, etc.	-	-	(881,104)	(881,104)
Ending balance	304,359,588	43,219,228	1,329,470	348,908,286

Net deferred origination fees and costs are not reflected in the gross carrying amounts above.

<2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit -impaired loan	Credit-impaired loan	
Beginning balance	270,511,534	38,818,581	902,166	310,232,281
Transfer to 12-month ECL	6,182,647	(6,172,422)	(10,225)	-
Transfer to non-credit-impaired loan	(12,624,851)	12,640,990	(16,139)	-
Transfer to credit-impaired loan	(470,765)	(409,106)	879,871	-
Net increase (decrease)	25,848,699	(3,728,086)	(251,415)	21,869,198
Write-offs	-	-	(428,658)	(428,658)
Disposal of non-performing loans, etc.	-	-	(176,201)	(176,201)
Ending balance	289,447,264	41,149,957	899,399	331,496,620

Net deferred origination fees and costs are not reflected in the gross carrying amounts above.

15-5 Amortized costs before changes in contractual cash flows of loans (contractual cash flows changed for the years ended December 31, 2023 and 2022) for which allowances for loan losses have been at the lifetime ECL and net gain or loss recognized based on the changes in contractual cash flows are as follows (Korean won in millions):

Classification	2023	2022
Amortized cost before change	60,826	81,226
Allowance before change	58,669	78,847
Amount after deducting allowance	2,157	2,379
Net loss due to change	43	835

15-6 Loans whose contractual cash flows changed for which the measurement of allowance for loan losses changed from the lifetime ECL to 12-month ECL on initial recognition during the reporting period do not exist as of December 31, 2023, and are ₩1,355 million as of December 31, 2022.

15-7 The contractual non-recoverable amount of the loans that has been fully written off as of the end of the reporting period, but is still trying to recover, is ₩3,790,688 million and ₩4,090,534 million as of December 31, 2023 and 2022, respectively.

16. Derivative instruments

16-1 Details of amounts of the unsettled derivative contract and fair value of derivatives held by the Group as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	Amounts of unsettled contract		Accumulated valuation gain (loss)			
	December 31, 2023	December 31, 2022	December 31, 2023		December 31, 2022	
			Assets	Liabilities	Assets	Liabilities
Currency						
Forward	267,560,507	224,433,459	2,866,287	2,406,480	5,673,931	5,229,138
Swap	85,714,059	87,834,023	2,550,525	2,822,494	3,418,688	4,549,082
Options purchased	603,175	664,573	4,887	-	3,742	-
Options sold	448,824	635,883	-	4,878	-	3,267
Futures	1,454,147	1,411,202	-	-	-	-
Subtotal	355,780,712	314,979,140	5,421,699	5,233,852	9,096,361	9,781,487
Interest						
Forward	5,580,919	2,858,744	131,737	248,528	217,225	101,410
Swap	180,027,865	158,972,394	423,790	539,156	551,422	826,106
Options purchased	53,022	66,150	-	-	-	-
Options sold	515,000	765,000	-	5,758	-	9,458
Futures	1,244,792	857,539	-	-	-	-
Subtotal	187,421,598	163,519,827	555,527	793,442	768,647	936,974
Stock						
Forward	7,953	524	103	-	286	-
Swap	183,393	72,499	637	2,572	578	1,827
Options purchased	12,385	50,219	362	-	213	-
Options sold	358,112	263,304	-	12,200	-	22,289
Futures	27,747	21,681	-	-	-	-
Subtotal	589,590	408,227	1,102	14,772	1,077	24,116
Others						
Credit spread adjustment	-	-	(12,456)	-	(14,331)	-
Total	543,791,900	478,907,194	5,965,872	6,042,066	9,851,754	10,742,577

16-2 Details of valuation gain (loss) of the derivatives for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023		2022	
	Gain	Loss	Gain	Loss
Currency				
Forward	2,637,563	2,255,456	5,218,502	5,186,622
Swap	1,116,460	1,022,004	2,842,829	3,554,679
Options purchased	2,651	–	3,976	–
Options sold	–	2,641	–	1,377
Subtotal	3,756,674	3,280,101	8,065,307	8,742,678
Interest				
Forward	94,482	330,812	208,726	99,096
Swap	381,897	156,592	698,094	977,477
Options purchased	–	–	1,579	–
Options sold	735	206	–	4,195
Subtotal	477,114	487,610	908,399	1,080,768
Stock				
Forward	–	126	171	–
Swap	3,797	4,287	269	2,415
Options purchased	–	–	562	–
Options sold	2,151	59	2,331	20,739
Subtotal	5,948	4,472	3,333	23,154
Others				
Credit spread adjustment	1,875	–	–	3,020
Total	4,241,611	3,772,183	8,977,039	9,849,620

16-3 Fair value hedge

16-3-1 Details of items subject to fair value hedge as of December 31, 2023 and 2022, and fair value fluctuation for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Hedged items	Book value		Accumulated fair value adjustments		Fair value fluctuation (2023)
		Assets	Liabilities	Assets	Liabilities	
Application of hedge accounting						
Interest	Depository liabilities in Korean won	-	252,537	-	(47,463)	(14,831)
	Depository liabilities denominated in foreign currencies	-	118,642	-	(23,192)	(346)
	Finance debentures denominated in Korean won	-	100,450	-	(29,550)	(7,188)
	Finance debentures denominated in foreign currencies	-	2,624,293	-	(147,917)	(56,708)
	Subtotal	-	3,095,922	-	(248,122)	(79,073)
Currency and interest	Finance debentures denominated in foreign currencies	-	899,006	-	(49,053)	(21,108)
Total		-	3,994,928	-	(297,175)	(100,181)

<December 31, 2022>

Classification	Hedged items	Book value		Accumulated fair value adjustments		Fair value fluctuation (2022)
		Assets	Liabilities	Assets	Liabilities	
Application of hedge accounting						
Interest	Depository liabilities in Korean won	-	187,705	-	(62,295)	46,117
	Depository liabilities denominated in foreign currencies	-	115,865	-	(23,538)	24,898
	Finance debentures denominated in Korean won	-	93,262	-	(36,738)	26,241
	Finance debentures denominated in foreign currencies	-	2,773,530	-	(204,625)	228,870
	Subtotal	-	3,170,362	-	(327,196)	326,126
Currency and interest	Finance debentures denominated in foreign currencies	-	1,080,816	-	(70,161)	61,499
Total		-	4,251,178	-	(397,357)	387,625

As of December 31, 2023 and 2022, interest rate swaps or currency swaps are designated as hedging instrument and the fair value hedge accounting is applied in order to hedge fair value fluctuation risk incurred due to interest rate fluctuations and foreign exchange rate fluctuations in finance debentures issued and depository liabilities.

16-3-2 Details of derivative instruments designated as hedging purposes and related assets and liabilities as of December 31, 2023 and 2022, and net valuation gain (loss) for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Nominal amounts of hedging instrument	Fair value fluctuation	Accumulated valuation gain or loss	
			Assets	Liabilities
Interest rate				
Interest rate swaps	3,344,044	78,013	1,723	249,662
Currency and interest				
Currency swaps	948,059	48,504	–	137,059
Total	4,292,103	126,517	1,723	386,721

<December 31, 2022>

Classification	Nominal amounts of hedging instrument	Fair value fluctuation	Accumulated valuation gain or loss	
			Assets	Liabilities
Interest rate				
Interest rate swaps	3,497,557	(325,171)	–	325,952
Currency and interest				
Currency swaps	1,150,977	(129,660)	8,062	180,193
Total	4,648,534	(454,831)	8,062	506,145

16-3-3 Ineffective portion of gain or loss on derivatives designated as fair value hedging instrument for the years ended December 31, 2023 and 2022, is as follows (Korean won in millions):

Classification	Ineffective portion of the hedge recognized in profit or loss for the period	
	2023	2022
Currency	(7)	(19)
Interest	38	(204)
Total	31	(223)

16-4 Hedges of net investment in foreign operations

16-4-1 Details of hedges of net investment in foreign operations as of December 31, 2023 and 2022, and fair value fluctuation for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Fair value fluctuation	Other comprehensive income of hedges of net investment in foreign operations
Net investment in foreign operations	795	(71,919)

<December 31, 2022>

Classification	Fair value fluctuation	Other comprehensive income of hedges of net investment in foreign operations
Net investment in foreign operations	28,241	(49,823)

16-4-2 Details of fair values of financial instruments designated as hedging instrument of net investment in foreign operations as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Nominal amounts of hedging instrument	Book value		Fair value fluctuation
		Assets	Liabilities	
Currency forwards	142,507	-	4,258	(1,148)
Debentures denominated in foreign currencies	1,126,834	-	1,126,833	(28,701)
Borrowings denominated in foreign currencies	126,588	-	126,588	(1,919)
Total	1,395,929	-	1,257,679	(31,768)

<December 31, 2022>

Classification	Nominal amounts of hedging instrument	Book value		Fair value fluctuation
		Assets	Liabilities	
Currency forwards	233,345	-	10,273	(10,273)
Debentures denominated in foreign currencies	1,131,686	-	1,131,686	(24,527)
Borrowings denominated in foreign currencies	170,314	-	170,314	6,559
Total	1,535,345	-	1,312,273	(28,241)

16-4-3 Details of gain (loss) on hedges of net investment in foreign operations for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Gain or loss on hedges recognized in other comprehensive income	Ineffective portion of the hedge recognized as profit or loss	Accounts that include the recognized hedge ineffectiveness	Reclassification to profit and loss from other comprehensive income of hedges of net investment in foreign operations
Net investment in foreign operations	(30,022)	(1,746)	-	-

<2022>

Classification	Gain or loss on hedges recognized in other comprehensive income	Ineffective portion of the hedge recognized as profit or loss	Accounts that include the recognized hedge ineffectiveness	Reclassification to profit and loss from other comprehensive income of hedges of net investment in foreign operations
Net investment in foreign operations	(28,241)	-	-	-

16-5 Average hedging ratios of future nominal cash flows by the type of risk hedge as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	1 year	2 years	3 years	4 years	5 years	More than 5 years	Total
Fair value hedge							
Nominal amounts of hedging instrument	1,395,224	-	1,486,935	773,640	-	636,304	4,292,103
Average hedging ratio	100.38%	-	100.01%	100.42%	-	100.00%	100.20%
Hedge of net investment in foreign operations							
Nominal amounts of hedging instrument	996,265	-	399,664	-	-	-	1,395,929
Average hedging ratio	100.00%	-	100.00%	-	-	-	100.00%

<December 31, 2022>

Classification	1 year	2 years	3 years	4 years	5 years	More than 5 years	Total
Fair value hedge							
Nominal amounts of hedging instrument	494,058	1,375,348	-	1,435,980	760,380	582,768	4,648,534
Average hedging ratio	100.18%	100.36%	-	99.95%	102.32%	100.00%	100.15%
Hedge of net investment in foreign operations							
Nominal amounts of hedging instrument	734,427	576,205	-	224,713	-	-	1,535,345
Average hedging ratio	99.42%	100.00%	-	100.00%	-	-	99.72%

17. Investments in associates and a joint venture

17-1 Details of investments in associates and a joint venture as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	Type	Country	Industry	Reporting date	Ownership (%)		Book value	
					December 31, 2023	December 31, 2022	December 31, 2023	December 31, 2022
Bank of Jilin (*1)	Associate	China	Bank	2023.12.31	10.76	11.92	896,961	877,491
Hana Equity Partners I, L.P.	Associate	Korea	Other financial services	2023.12.31	29.97	29.97	95	95
Korea Credit Bureau (*1)	Associate	Korea	Credit investigation and collection agency	2023.12.31	9.00	9.00	6,162	5,503
Templeton Hana Asset Management Co., Ltd. (*1)	Associate	Korea	Asset management company	2023.12.31	9.90	9.90	1,425	1,387
CM International financing leases	Associate	China	Other financial services	2023.12.31	25.00	25.00	540	1,629
Beijing Langzi Asset Management Co., Ltd. (*1)	Associate	China	Credit financial business	2023.12.31	12.89	12.89	58,491	56,805
Somesevit Corporation (*1)(*2)	Associate	Korea	Construction	2023.12.31	1.92	1.92	-	-
Midan City Development Co., Ltd. (*1)(*2)(*3)	Associate	Korea	Construction	2018.03.31	2.17	2.17	-	-
Company K Startup Winwin Fund	Associate	Korea	Investment	2023.12.31	23.81	23.81	1,730	2,355
BSK-6 Patent Technology Investment Association	Associate	Korea	Investment	2023.12.31	20.00	20.00	2,514	2,748
Hana - KVIC Unicorn Fund of Funds (*4)	Associate	Korea	Investment	2023.12.31	90.91	90.91	94,542	98,244
Harvest Private Equity Fund Specializing in Start-Up and Venture Business	Associate	Korea	Investment	2023.12.31	27.27	27.27	1,402	2,805
Bank for Investment and Development of Vietnam ("BIDV") (*1)	Associate	Vietnam	Bank	2023.12.31	15.00	15.00	1,748,883	1,641,419
Hana Micro Finance., Ltd.	Associate	Myanmar	Other financial services	2023.12.31	25.00	25.00	16,015	18,199
HORIZON PRIVATE EQUITY FUND	Associate	Korea	Investment	2023.12.31	22.40	22.40	30,102	49,491
Hana Ventures No.7 New Technology Business Investment Association	Associate	Korea	Investment	2023.12.31	27.27	27.27	668	1,434
TossBank Corp. (*1)	Associate	Korea	Bank	2023.12.31	8.99	8.62	146,900	87,566
Sinsa Station area Complex Development PFV Co., Ltd. (*1)	Associate	Korea	Other development supply business	2023.12.31	9.00	9.00	-	365
Hana-Capstone AI Platform Fund	Associate	Korea	Other financial services	2023.12.31	36.54	36.54	29,404	29,287
Taurus Cloud Fund	Associate	Korea	Other financial services	2023.12.31	27.06	27.06	9,747	9,416
Cheongna Medipolis PFV Co., Ltd. (*1)	Associate	Korea	Real estate development and supply	2023.12.31	10.10	11.24	17,373	1,712
NPX-Welcome Metaverse Contents Fund	Associate	Korea	Other financial services	2023.12.31	25.00	25.00	956	978
Hana Beyond Finance Fund	Associate	Korea	Other financial services	2023.12.31	26.67	26.67	36,422	23,507
Hana Prop-Tech Fund No.1 (*4)	Associate	Korea	Other financial services	2023.12.31	88.24	-	2,956	-
UNION TCB FUND II	Associate	Korea	Other financial services	2023.12.31	29.63	-	1,090	-
Artificial Photosynthesis Lab Co.,Ltd.	Associate	Korea	Natural science and engineering research and development	2023.12.31	36.24	-	1,595	-
No.1 KEBHANASTAY REITS Co., Ltd (*1)(*3)	Associate	Korea	Real estate development and supply	2023.10.31	14.86	-	4,082	-
MASHUP ANGELS VENTURE INVESTMENT 2	Associate	Korea	Other financial services	2023.12.31	21.82	-	1,173	-
All Together Korea Fund 5 (*4)	Associate	Korea	Other financial services	2023.12.31	100.00	100.00	10,541	10,245
Hana-New Deal K-Growth fund (*4)	Associate	Korea	Other financial services	2023.12.31	90.00	90.00	28,430	24,029
Defense Technology Innovation Private Investment Trust (*4)	Associate	Korea	Other financial services	2023.12.31	98.33	98.33	8,664	2,948

Classification	Type	Country	Industry	Reporting date	Ownership (%)		Book value	
					December 31, 2023	December 31, 2022	December 31, 2023	December 31, 2022
KTOP Short-term Financial Bond Active ETF	Associate	Korea	Other financial services	2023.12.31	45.21	-	61,152	-
KTOP 25-08 Corp(A+) Active ETF	Associate	Korea	Other financial services	2023.12.31	49.26	-	51,232	-
SHINJIN INTERNATIONAL CORPORATION (*2)(*3)	Associate	Korea	Manufacturing	2022.12.31	24.20	24.20	-	-
KG FASHION CO., Ltd. (*2)(*3)	Associate	Korea	Wholesale and retail	2022.12.31	20.55	20.55	-	-
PT Sinarmas Hana Finance (*5)	Joint venture	Indonesia	Financial services	2023.12.31	30.00	30.00	8,905	8,630
Total							3,280,152	2,958,288

(*1) These companies were included in investment in associates because the Group has significant influence over them by participating in the board of directors' meeting, the decision-making organization.

(*2) As of December 31, 2023, the application of the equity method has been suspended because the balance of the investment account is below "0."

(*3) As the consolidated financial statements as of December 31, 2023, could not be obtained, the most recent consolidated financial statements available from the closing date were used. The effect of significant transactions or events incurred between the end of the reporting period of the associate and that of the Group was reviewed and reflected.

(*4) As of December 31, 2023, the Group classified the investee as an associate investment stock because it could not exercise control over the investee.

(*5) Since more than one investor must act together to direct-related activities, the equity method was applied because the Group could not control the investee individually.

17-2 Condensed financial statements of associates and a joint venture as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)	Dividends received
Bank of Jilin	118,285,793	110,043,991	8,241,802	4,842,002	403,240	407,432	13,864
Hana Equity Partners I, L.P.	320	5	315	4	(1)	(1)	-
Korea Credit Bureau	131,164	68,756	62,408	163,707	8,012	8,012	90
Templeton Hana Asset Management Co., Ltd.	20,261	5,862	14,399	8,068	2,556	2,556	396
CM International financing leases	1,440,757	1,407,320	33,437	14,465	16,399	15,439	-
Beijing Langzi Asset Management Co., Ltd.	487,591	26,865	460,726	33,829	23,694	23,938	1,178
Somesevit Corporation	37,277	121,113	(83,836)	7,076	(4,313)	(4,313)	-
Midan City Development Co., Ltd.	662,631	686,733	(24,102)	-	-	-	-
Company K Startup Winwin Fund	7,267	-	7,267	841	754	834	-
BSK-6 Patent Technology Investment Association	13,542	974	12,568	2,868	2,099	929	-
Hana - KVIC Unicorn Fund of Funds	104,375	379	103,996	1,933	1,554	2,527	-
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	5,142	-	5,142	45	3,580	3,580	14
BIDV (*)	123,349,695	115,974,974	7,374,721	10,117,882	818,792	846,650	-
Hana Micro Finance., Ltd.	135,926	66,598	69,328	23,102	(9,826)	(8,813)	-
HORIZON PRIVATE EQUITY FUND	137,079	2,694	134,385	88	(12,590)	(12,590)	8,777
Hana Ventures No.7 New Technology Business Investment Association	2,477	28	2,449	5	(2,808)	(2,808)	-
TossBank Corp.	25,738,679	24,230,274	1,508,405	1,260,974	(15,959)	71,837	-
Sinsa Station area Complex Development PFV Co., Ltd.	252,435	249,046	3,389	-	(723)	(723)	-
Hana-Capstone AI Platform Fund	80,910	440	80,470	4,754	321	321	-
Taurus Cloud Fund	35,751	3	35,748	-	(169)	(169)	-
Cheongna Medipolis PFV Co., Ltd.	188,434	16,682	171,752	-	(6,966)	(6,966)	-
NPX-Welcome Metaverse Contents fund	3,824	-	3,824	1	(88)	(88)	-
Hana Beyond Finance Fund	137,337	756	136,581	24,230	21,134	21,134	-
Hana Prop-Tech Fund No.1	3,350	-	3,350	1	(50)	(50)	-
UNION TCB FUND II	3,879	198	3,681	6	(369)	(369)	-
Artificial Photosynthesis Lab Co.,Ltd.	4,362	-	4,362	-	(207)	(207)	-
No.1 KEBHANASTAY REITS Co., Ltd	127,283	81,392	45,891	1,744	7,398	7,398	-
MASHUP ANGELS VENTURE INVESTMENT 2	5,378	-	5,378	-	(122)	(122)	-
All Together Korea Fund 5	10,543	1	10,542	227	222	222	210
Hana-New Deal K-Growth fund	32,049	107	31,942	148	(10)	(10)	-
Defense Technology Innovation Private Investment Trust	8,816	5	8,811	25	(186)	(186)	-
KTOP Short-term Financial Bond Active ETF	173,025	38,048	134,977	3,103	2,276	2,276	-
KTOP 25-08 Corp(A+) Active ETF	102,761	27	102,734	1,527	1,233	1,233	-
SHINJIN INTERNATIONAL CORPORATION	158	9,418	(9,260)	241	37	37	-
KG FASHION CO., Ltd.	3,042	2,936	106	3,241	(190)	(190)	-
PT Sinarmas Hana Finance	127,869	98,224	29,645	19,165	467	467	-

(*) This is financial information that reflects Purchased Price Allocation ("PPA") valuation and generally accepted accounting principles ("GAAP") adjustments in the financial information of BIDV.

<December 31, 2022>

Classification	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)	Dividends received
Bank of Jilin	99,356,297	92,088,037	7,268,260	4,248,227	409,505	362,211	–
Hana Equity Partners I, L.P.	321	5	316	2	(21)	(21)	120
Korea Credit Bureau	155,165	100,065	55,100	144,907	13,809	13,809	–
Templeton Hana Asset Management Co., Ltd.	18,839	4,824	14,015	8,129	2,483	2,483	198
CM International financing leases	1,660,081	1,638,839	21,242	27,978	(36,973)	(42,075)	–
Beijing Langzi Asset Management Co., Ltd.	481,800	34,098	447,702	47,954	23,524	23,951	1,708
Somesevit Corporation	40,850	120,360	(79,510)	6,042	(3,572)	(3,572)	–
Midan City Development Co., Ltd.	662,631	686,733	(24,102)	–	–	–	–
Company K Startup Winwin Fund	9,899	3	9,896	25,224	18,769	18,571	2,240
BSK-6 Patent Technology Investment Association	14,525	785	13,740	1,180	876	2,579	–
Hana – KVIC Unicorn Fund of Funds	108,429	361	108,068	1,440	1,077	612	–
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	10,279	–	10,279	58	(166)	(166)	27
BIDV (*)	114,300,714	108,381,237	5,919,477	8,100,357	1,071,496	1,008,754	–
Hana Micro Finance., Ltd.	200,074	121,933	78,141	36,447	5,255	(3,354)	–
HORIZON PRIVATE EQUITY FUND	226,400	5,453	220,947	37	(13,684)	(13,684)	8,045
Hana Ventures No.7 New Technology Business Investment Association	5,285	28	5,257	3	(113)	(113)	–
TossBank Corp.	23,398,698	22,432,155	966,543	755,905	(244,515)	(368,435)	–
Sinsa Station area Complex Development PFV Co., Ltd.	233,652	229,606	4,046	148	(956)	(956)	–
Hana-Capstone AI Platform Fund	80,570	420	80,150	142	(1,502)	(1,502)	–
Taurus Cloud Fund	34,675	3	34,672	–	(171)	(171)	–
Cheongna Medipolis PFV Co., Ltd.	15,373	138	15,235	–	(7,886)	(7,886)	–
NPX-Welcome Metaverse Contents fund	3,911	–	3,911	1	(89)	(89)	–
Hana Beyond Finance Fund	88,908	756	88,152	229	(1,848)	(1,848)	–
All Together Korea Fund 5	10,246	1	10,245	149	144	144	62
Hana-New Deal K-Growth fund	27,024	72	26,952	85	(21)	(21)	–
Defense Technology Innovation Private Investment Trust	3,002	5	2,997	2	(3)	(3)	–
SHINJIN INTERNATIONAL CORPORATION	138	9,436	(9,298)	221	34	34	–
KG FASHION CO., Ltd.	3,347	3,050	297	2,812	(262)	(262)	–
PT Sinarmas Hana Finance	113,883	85,812	28,071	17,664	2,496	2,496	–

(*) This is financial information that reflects PPA valuation and GAAP adjustments in the financial information of BIDV.

17-3 Changes in the investment in an associate and a joint venture for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Beginning balance	Acquisition	Dividend	Book value before valuation	Equity method valuation			Others	Disposal	Ending balance
					Share of profit (loss)	Impairment of equity method	Changes in equity			
Bank of Jilin	877,491	-	(13,864)	863,627	40,931	-	(5,416)	(2,181)	-	896,961
Hana Equity Partners I, L.P.	95	-	-	95	-	-	-	-	-	95
Korea Credit Bureau	5,503	-	(90)	5,413	749	-	-	-	-	6,162
Templeton Hana Asset Management Co., Ltd.	1,387	-	(396)	991	434	-	-	-	-	1,425
CM International financing leases	1,629	-	-	1,629	-	(1,089)	-	-	-	540
Beijing Langzi Asset Management Co., Ltd.	56,805	-	(1,178)	55,627	3,043	-	(179)	-	-	58,491
Somesevit Corporation	-	-	-	-	-	-	-	-	-	-
Midan City Development Co., Ltd.	-	-	-	-	-	-	-	-	-	-
Company K Startup Winwin Fund	2,355	-	-	2,355	(95)	-	20	-	(550)	1,730
BSK-6 Patent Technology Investment Association	2,748	-	-	2,748	409	-	(234)	-	(409)	2,514
Hana - KVIC Unicorn Fund of Funds	98,244	-	-	98,244	1,413	-	885	-	(6,000)	94,542
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	2,805	-	(14)	2,791	975	-	-	-	(2,364)	1,402
BIDV	1,641,419	-	-	1,641,419	122,820	-	(15,356)	-	-	1,748,883
Hana Micro Finance., Ltd.	18,199	-	-	18,199	(2,436)	-	252	-	-	16,015
HORIZON PRIVATE EQUITY FUND	49,491	-	(8,777)	40,714	(2,820)	-	(301)	-	(7,491)	30,102
Hana Ventures No.7 New Technology Business Investment Association	1,434	-	-	1,434	(766)	-	-	-	-	668
TossBank Corp.	87,566	50,677	-	138,243	(3,047)	-	8,762	2,942	-	146,900
Sinsa Station area Complex Development PFV Co., Ltd.	365	-	-	365	(59)	(306)	-	-	-	-
Hana-Capstone AI Platform Fund	29,287	-	-	29,287	117	-	-	-	-	29,404
Taurus Cloud Fund	9,416	91	-	9,507	240	-	-	-	-	9,747
Cheongna Medipolis PFV Co., Ltd.	1,712	16,628	-	18,340	(796)	-	(64)	(107)	-	17,373
NPX-Welcome Metaverse Contents fund	978	-	-	978	(22)	-	-	-	-	956
Hana Beyond Finance Fund	23,507	8,000	-	31,507	5,636	-	-	-	(721)	36,422
Hana Prop-Tech Fund No.1	-	3,000	-	3,000	(44)	-	-	-	-	2,956
UNION TCB FUND II	-	1,200	-	1,200	(110)	-	-	-	-	1,090
Artificial Photosynthesis Lab Co.,Ltd.	-	1,666	-	1,666	(62)	-	(9)	-	-	1,595
No.1 KEBHANASTAY REITS Co., Ltd	-	4,734	-	4,734	(652)	-	-	-	-	4,082
MASHUP ANGELS VENTURE INVESTMENT 2	-	1,200	-	1,200	(27)	-	-	-	-	1,173
All Together Korea Fund 5	10,245	210	(210)	10,245	296	-	-	-	-	10,541
Hana-New Deal K-Growth fund	24,029	4,500	-	28,529	(99)	-	-	-	-	28,430
Defense Technology Innovation Private Invest ment Trust	2,948	5,900	-	8,848	(184)	-	-	-	-	8,664
KTOP Short-term Financial Bond Active ETF	-	60,107	-	60,107	1,045	-	-	-	-	61,152
KTOP 25-08 Corp(A+) Active ETF	-	49,995	-	49,995	1,237	-	-	-	-	51,232
SHINJIN INTERNATIONAL CORPORATION	-	-	-	-	-	-	-	-	-	-
KG FASHION CO., Ltd.	-	-	-	-	-	-	-	-	-	-
PT Sinarmas Hana Finance	8,630	-	-	8,630	(13)	-	-	288	-	8,905
Total	2,958,288	207,908	(24,529)	3,141,667	168,113	(1,395)	(11,640)	942	(17,535)	3,280,152

<2022>

Classification	Beginning balance	Acquisition	Dividend	Book value before valuation	Equity method valuation			Others	Disposal	Ending balance
					Share of profit (loss)	Impairment of equity method	Changes in equity			
Bank of Jilin	853,878	–	–	853,878	49,900	–	(26,287)	–	–	877,491
Hana Equity Partners I, L.P.	221	–	(120)	101	(6)	–	–	–	–	95
Korea Credit Bureau	8,876	–	–	8,876	(3,373)	–	–	–	–	5,503
Templeton Hana Asset Management Co., Ltd.	1,271	–	(198)	1,073	314	–	–	–	–	1,387
CM International financing leases	2,149	–	–	2,149	–	(520)	–	–	–	1,629
Beijing Langzi Asset Management Co., Ltd.	56,830	–	(1,708)	55,122	2,957	–	(1,274)	–	–	56,805
Somesevit Corporation	–	–	–	–	–	–	–	–	–	–
Midan City Development Co., Ltd.	–	–	–	–	–	–	–	–	–	–
Company K Startup Winwin Fund	5,214	–	(2,240)	2,974	4,278	–	(47)	–	(4,850)	2,355
BSK-6 Patent Technology Investment Association	2,559	–	–	2,559	175	–	341	–	(327)	2,748
Hana – KVIC Unicorn Fund of Funds	72,529	25,130	–	97,659	1,008	–	(423)	–	–	98,244
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	2,877	–	(27)	2,850	(45)	–	–	–	–	2,805
BIDV	1,441,797	–	–	1,441,797	160,724	–	38,898	–	–	1,641,419
Hana Micro Finance., Ltd.	19,056	–	–	19,056	1,293	–	(2,150)	–	–	18,199
HORIZON PRIVATE EQUITY FUND	65,098	–	(8,045)	57,053	(3,217)	–	3,047	–	(7,392)	49,491
Hana Ventures No.7 New Technology Business Investment Association	1,465	–	–	1,465	(31)	–	–	–	–	1,434
TossBank Corp.	49,125	70,000	–	119,125	(23,808)	–	(10,973)	3,222	–	87,566
Sinsa Station area Complex Development PFV Co., Ltd.	451	–	–	451	(86)	–	–	–	–	365
Hana-Capstone AI Platform Fund	14,836	15,000	–	29,836	(549)	–	–	–	–	29,287
Taurus Cloud Fund	9,391	77	–	9,468	(52)	–	–	–	–	9,416
Cheongna Medipolis PFV Co., Ltd	2,598	–	–	2,598	(886)	–	–	–	–	1,712
NPX-Welcome Metaverse Contents fund	1,000	–	–	1,000	(22)	–	–	–	–	978
Hana Beyond Finance Fund	–	24,000	–	24,000	(493)	–	–	–	–	23,507
All Together Korea Fund 5	10,070	62	(62)	10,070	175	–	–	–	–	10,245
Hana-New Deal K-Growth fund	1,778	22,500	–	24,278	(249)	–	–	–	–	24,029
Defense Technology Innovation Private InvestmentTrust	–	2,950	–	2,950	(2)	–	–	–	–	2,948
SHINJIN INTERNATIONAL CORPORATION	–	–	–	–	–	–	–	–	–	–
KG FASHION CO., Ltd.	–	–	–	–	–	–	–	–	–	–
PT Sinarmas Hana Finance	7,900	–	–	7,900	1,008	–	–	(278)	–	8,630
Total	2,630,969	159,719	(12,400)	2,778,288	189,013	(520)	1,132	2,944	(12,569)	2,958,288

17-4 The Group discontinued recognizing its losses in shares since the balance of investments in associates was "0" and the losses that are accumulated as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Company	Unrecognized amount of changes in equity	Accumulated unrecognized amount of changes in equity
Somesevit Corporation	(83)	(1,610)
Midan City Development Co., Ltd.	–	(523)
SHINJIN INTERNATIONAL COPORATION	9	17
KG Fashion Co.,Ltd.	(39)	(93)
Total	(113)	(2,209)

<December 31, 2022>

Company	Unrecognized amount of changes in equity	Accumulated unrecognized amount of changes in equity
Somesevit Corporation	(69)	(1,527)
Midan City Development Co., Ltd.	–	(523)
SHINJIN INTERNATIONAL COPORATION	8	8
KG Fashion Co.,Ltd.	(54)	(54)
Total	(115)	(2,096)

17-5 Details of adjustments from net assets of associates and a joint venture to carrying values of shares as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Net assets	Ownership (%)	Share of net assets	Goodwill, etc.	Carrying value
Bank of Jilin	8,241,802	10.76	886,818	10,143	896,961
Hana Equity Partners I, L.P	315	29.97	95	-	95
Korea Credit Bureau	62,408	9.00	5,618	544	6,162
Templeton Hana Asset Management Co., Ltd.	14,399	9.90	1,425	-	1,425
CM International financing leases	33,437	25.00	8,359	(7,819)	540
Beijing Langzi Asset Management Co., Ltd.	460,726	12.89	59,388	(897)	58,491
Somesevit Corporation	(83,836)	1.92	(1,610)	1,610	-
Midan City Development Co., Ltd.	(24,102)	2.17	(523)	523	-
Company K Startup Winwin Fund	7,267	23.81	1,730	-	1,730
BSK-6 Patent Technology Investment Association	12,568	20.00	2,514	-	2,514
Hana - KVIC Unicorn Fund of Funds	103,996	90.91	94,542	-	94,542
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	5,142	27.27	1,402	-	1,402
BIDV	7,374,721	15.00	1,106,209	642,674	1,748,883
Hana Micro Finance., Ltd.	69,328	25.00	17,333	(1,318)	16,015
HORIZON PRIVATE EQUITY FUND	134,385	22.40	30,102	-	30,102
Hana Ventures No.7 New Technology Business Investment Association	2,449	27.27	668	-	668
TossBank Corp.	1,508,405	8.99	135,606	11,294	146,900
Sinsa Station area Complex Development PFV Co., Ltd.	3,389	9.00	305	(305)	-
Hana-Capstone AI Platform Fund	80,470	36.54	29,404	-	29,404
Taurus Cloud Fund	35,748	27.06	9,673	74	9,747
Cheongna Medipolis PFV Co., Ltd	171,752	10.10	17,347	26	17,373
NPX-Welcome Metaverse Contents fund	3,824	25.00	956	-	956
Hana Beyond Finance Fund	136,581	26.67	36,422	-	36,422
Hana Prop-Tech Fund No.1	3,350	88.24	2,956	-	2,956
UNION TCB FUND II	3,681	29.63	1,090	-	1,090
Artificial Photosynthesis Lab Co.,Ltd.	4,362	36.24	1,581	14	1,595
No.1 KEBHANASTAY REITS Co., Ltd	45,891	14.86	6,819	(2,737)	4,082
MASHUP ANGELS VENTURE INVESTMENT 2	5,378	21.82	1,173	-	1,173
All Together Korea Fund 5	10,542	100.00	10,541	-	10,541
Hana-New Deal K-Growth fund	31,942	90.00	28,748	(318)	28,430
Defense Technology Innovation Private Investment Trust	8,811	98.33	8,664	-	8,664
KTOP Short-term Financial Bond Active ETF	134,977	45.21	61,023	129	61,152
KTOP 25-08 Corp(A+) Active ETF	102,734	49.26	50,607	625	51,232
SHINJIN INTERNATIONAL CORPORATION	(9,260)	24.20	(2,241)	2,241	-
KG FASHION CO., Ltd.	106	20.55	22	(22)	-
PT Sinarmas Hana Finance	29,645	30.00	8,894	11	8,905

<December 31, 2022>

Classification	Net assets	Ownership (%)	Share of net assets	Goodwill, etc.	Carrying value
Bank of Jilin	7,268,260	11.92	866,377	11,114	877,491
Hana Equity Partners I, L.P	316	29.97	95	-	95
Korea Credit Bureau	55,100	9.00	4,959	544	5,503
Templeton Hana Asset Management Co., Ltd.	14,015	9.90	1,387	-	1,387
CM International financing leases	21,242	25.00	5,311	(3,682)	1,629
Beijing Langzi Asset Management Co., Ltd.	447,702	12.89	57,709	(904)	56,805
Somesevit Corporation	(79,510)	1.92	(1,527)	1,527	-
Midan City Development Co., Ltd.	(24,102)	2.17	(523)	523	-
Company K Startup Winwin Fund	9,896	23.81	2,355	-	2,355
BSK-6 Patent Technology Investment Association	13,740	20.00	2,748	-	2,748
Hana - KVIC Unicorn Fund of Funds	108,068	90.91	98,244	-	98,244
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	10,279	27.27	2,805	-	2,805
BIDV	5,919,477	15.00	887,922	753,497	1,641,419
Hana Micro Finance., Ltd.	78,141	25.00	19,535	(1,336)	18,199
HORIZON PRIVATE EQUITY FUND	220,947	22.40	49,491	-	49,491
Hana Ventures No.7 New Technology Business Investment Association	5,257	27.27	1,434	-	1,434
TossBank Corp.	966,543	8.62	83,316	4,250	87,566
Sinsa Station area Complex Development PFV Co., Ltd.	4,046	9.00	365	-	365
Hana-Capstone AI Platform Fund	80,150	36.54	29,287	-	29,287
Taurus Cloud Fund	34,672	27.06	9,382	34	9,416
Cheongna Medipolis PFV Co., Ltd	15,235	11.24	1,712	-	1,712
NPX-Welcome Metaverse Contents fund	3,911	25.00	978	-	978
Hana Beyond Finance Fund	88,152	26.67	23,507	-	23,507
All Together Korea Fund 5	10,245	100.00	10,245	-	10,245
Hana-New Deal K-Growth fund	26,952	90.00	24,258	(229)	24,029
Defense Technology Innovation Private Investment Trust	2,997	98.33	2,948	-	2,948
SHINJIN INTERNATIONAL CORPORATION	(9,298)	24.20	(2,250)	2,250	-
KG FASHION CO., Ltd.	297	20.55	61	(61)	-
PT Sinarmas Hana Finance	28,071	30.00	8,421	209	8,630

17-6 Details of investment shares in marketable associates and a joint venture as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Company	Market price	Price per share (in Korean won)
BIDV	1,974,243	2,309

<December 31, 2022>

Company	Market price	Price per share (in Korean won)
BIDV	1,572,811	2,073

17-7 A company that the Group holds more than 20% of shares, but excluded from investments in associates, as of December 31, 2023, is as follows:

<December 31, 2023>

Company Name	Country	Industry	Ownership (%)
COLORART (*)	Korea	Sign and advertisement manufacturing	20.93

(*) The Group holds more than 20% of shares, but excluded the company from investment in associates due to its limited control over the company because of its corporate workout.

There is no company that the Group holds more than 20% of shares, but is excluded from investments in associates, as of December 31, 2022.

Investment trusts whose significant influence on related activities is limited by trust contracts are excluded from investment stocks in associates.

18. Property, plant and equipment

18-1 Property, plant and equipment as of December 31, 2023 and 2022, consist of the following (Korean won in millions):

<December 31, 2023>

Classification	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Government grants	Book value
Land	873,584	–	(3,786)	–	869,798
Buildings	988,291	(325,864)	(10,203)	–	652,224
Leasehold improvements	340,431	(274,428)	–	–	66,003
Equipment and vehicles	936,718	(736,238)	–	(43)	200,437
Construction in progress	10,484	–	–	–	10,484
Others	31,258	–	–	–	31,258
Right-of-use assets – real estate	1,409,240	(843,956)	–	–	565,284
Right-of-use assets – equipment and vehicles	30,507	(14,472)	–	–	16,035
Right-of-use assets – others	6,043	(2,356)	–	–	3,687
Total	4,626,556	(2,197,314)	(13,989)	(43)	2,415,210

<December 31, 2022>

Classification	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Government grants	Book value
Land	880,392	–	(3,786)	–	876,606
Buildings	959,580	(299,508)	(10,215)	–	649,857
Leasehold improvements	324,237	(263,184)	–	–	61,053
Equipment and vehicles	827,523	(683,660)	–	(78)	143,785
Construction in progress	8,511	–	–	–	8,511
Others	31,258	–	–	–	31,258
Right-of-use assets – real estate	1,288,611	(653,559)	–	–	635,052
Right-of-use assets – equipment and vehicles	28,893	(13,700)	–	–	15,193
Right-of-use assets – others	5,560	(861)	–	–	4,699
Total	4,354,565	(1,914,472)	(14,001)	(78)	2,426,014

18-2 Changes in property, plant and equipment for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Beginning balance	Acquisition	Disposal	Depreciation	Transfers	Others	Ending balance
Land	876,606	2,623	(271)	-	(9,189)	29	869,798
Buildings	649,857	51,010	(773)	(34,038)	(13,797)	(35)	652,224
Leasehold improvements	61,053	28,481	(455)	(23,242)	-	166	66,003
Equipment and vehicles	143,863	149,725	(649)	(93,607)	528	620	200,480
Construction in progress	8,511	9,924	-	-	(3,860)	(4,091)	10,484
Others	31,258	-	-	-	-	-	31,258
Government grants	(78)	-	-	35	-	-	(43)
Right-of-use assets - real estate	635,052	156,246	(5,375)	(220,968)	-	329	565,284
Right-of-use assets - equipment and vehicles	15,193	9,085	(790)	(7,862)	-	409	16,035
Right-of-use assets - others	4,699	838	(480)	(1,636)	-	266	3,687
Total	2,426,014	407,932	(8,793)	(381,318)	(26,318)	(2,307)	2,415,210

<2022>

Classification	Beginning balance	Acquisition	Disposal	Depreciation	Transfers	Impairment loss	Others	Ending balance
Land	691,423	-	(1,377)	-	186,630	-	(70)	876,606
Buildings	497,737	28,387	(1,486)	(32,452)	158,013	(12)	(330)	649,857
Leasehold improvements	60,967	21,616	(1,162)	(22,799)	2,142	-	289	61,053
Equipment and vehicles	135,809	76,872	(517)	(68,992)	858	-	(167)	143,863
Construction in progress	9,772	249,113	(261)	-	(249,649)	-	(464)	8,511
Others	46,287	-	(15,029)	-	-	-	-	31,258
Government grants	(86)	(44)	-	52	-	-	-	(78)
Right-of-use assets - real estate	548,398	291,957	(7,064)	(197,659)	-	-	(580)	635,052
Right-of-use assets - equipment and vehicles	13,326	10,159	(724)	(7,134)	-	-	(434)	15,193
Right-of-use assets - others	808	3,933	(62)	(1,038)	-	-	1,058	4,699
Total	2,004,441	681,993	(27,682)	(330,022)	97,994	(12)	(698)	2,426,014

19. Investment properties

19-1 Details of investment properties as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Government grants	Book value
Land	467,073	-	(3,125)	-	463,948
Buildings	386,860	(172,175)	(1,225)	(1,885)	211,575
Total	853,933	(172,175)	(4,350)	(1,885)	675,523

<December 31, 2022>

Classification	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Government grants	Book value
Land	457,439	-	(3,125)	-	454,314
Buildings	367,958	(153,237)	(1,225)	(2,868)	210,628
Total	825,397	(153,237)	(4,350)	(2,868)	664,942

19-2 Changes in investment properties for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Beginning balance	Disposal	Depreciation	Transfer (*)	Ending balance
Land	454,314	(744)	–	10,378	463,948
Buildings	213,496	(1,206)	(14,770)	15,940	213,460
Government grants	(2,868)	–	983	–	(1,885)
Total	664,942	(1,950)	(13,787)	26,318	675,523

(*) The amount represents the change in the carrying amount of investment properties held by the Group due to the change in the ratio of lease occupancy.

<2022>

Classification	Beginning balance	Acquisition	Disposal	Depreciation	Transfer (*)	Ending balance
Land	407,058	–	(6,111)	–	53,367	454,314
Buildings	385,887	–	(7,690)	(13,340)	(151,361)	213,496
Government grants	(2,256)	(1,493)	–	881	–	(2,868)
Total	790,689	(1,493)	(13,801)	(12,459)	(97,994)	664,942

(*) The amount represents the change in the carrying amount of investment properties held by the Group due to the change in the ratio of lease occupancy.

19-3 Details of valuation techniques for measuring investment property and inputs used in the measurement as of December 31, 2023 and 2022 are as follows (Korean won in millions):

Classification	Fair value (*)		Description of the valuation techniques	Inputs used in the fair value measurement
	December 31, 2023	December 31, 2022		
Land and buildings	1,027,340	1,052,023	Appraised value of land reference method and estimates based on cost method	Appraised value of land and refinancing cost

(*) The fair value of investment property is classified as Level 3 of fair value hierarchy as it reflects the most recent market transaction price, followed by individual third-party transaction condition, and significant input factor, which is not predictable.

19-4 Rental income and operating expenses arising from the Group's investment properties for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Rental income	10,395	9,608
Operating cost directly related to investment properties that generate rental income	544	670

20. Intangible assets

20-1 Details of intangible assets as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Government grants	Book value
Goodwill	892	-	-	-	892
Industrial proprietary rights	2,800	(2,228)	-	-	572
Core deposits	5,357	(3,630)	-	-	1,727
Software	353,366	(245,864)	-	-	107,502
Systems development costs	1,142,380	(962,424)	-	(52)	179,904
Memberships	27,295	-	(2,933)	-	24,362
Others	334,197	(220,251)	(25)	-	113,921
Total	1,866,287	(1,434,397)	(2,958)	(52)	428,880

<December 31, 2022>

Classification	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Government grants	Book value
Goodwill	892	-	-	-	892
Industrial proprietary rights	2,588	(1,982)	-	-	606
Core deposits	5,265	(3,187)	-	-	2,078
Software	297,032	(214,775)	-	-	82,257
Systems development costs	1,081,185	(886,280)	-	(83)	194,822
Memberships	25,948	-	(2,933)	-	23,015
Others	273,367	(190,915)	(15)	-	82,437
Total	1,686,277	(1,297,139)	(2,948)	(83)	386,107

20-2 Changes in the carrying amount of intangible assets for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Beginning balance	Acquisition	Disposal	Amortization	Impairment loss	Others	Ending balance
Goodwill	892	-	-	-	-	-	892
Industrial proprietary rights	606	206	-	(246)	-	6	572
Core deposits	2,078	-	-	(387)	-	36	1,727
Software	82,257	56,375	-	(31,175)	-	45	107,502
Systems development costs	194,905	57,774	-	(75,406)	-	2,683	179,956
Memberships	23,015	2,044	(666)	-	-	(31)	24,362
Others (*)	82,437	58,150	(20)	(29,475)	(10)	2,839	113,921
Government grants	(83)	-	-	31	-	-	(52)
Total	386,107	174,549	(686)	(136,658)	(10)	5,578	428,880

(*) Of the other intangible asset amortization costs, ₩27,686 million is included in other operating expenses.

<2022>

Classification	Beginning balance	Acquisition	Disposal	Amortization	Impairment loss	Others	Ending balance
Goodwill	892	-	-	-	-	-	892
Industrial proprietary rights	513	398	-	(311)	-	6	606
Core deposits	2,316	-	-	(383)	-	145	2,078
Software	81,256	27,877	-	(26,844)	-	(32)	82,257
Systems development costs	173,806	87,655	-	(66,830)	-	274	194,905
Memberships	20,449	2,663	(15)	-	(220)	138	23,015
Others (*)	77,454	32,963	-	(28,232)	-	252	82,437
Government grants	(115)	-	-	32	-	-	(83)
Total	356,571	151,556	(15)	(122,568)	(220)	783	386,107

(*) Of the other intangible asset amortization costs, ₩26,977 million is included in other operating expenses.

21. Non-current assets held for sale

Details of non-current assets held for sale as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Acquisition cost (*)	40,602	36,423
Accumulated impairment loss	(124)	-
Book value	40,478	36,423
Net fair value	40,478	36,423

(*) Acquisition cost is presented as net of accumulated depreciation before classification as non-current assets held for sale.

Non-current assets held for sale are composed of 124 collaterals acquired for the purpose of repayment of loans and one other whose sale is currently in progress as of December 31, 2023.

22. Other assets and merchant banking account assets

22-1 Details of other assets as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Guarantee deposits paid	638,872	632,878
Accounts receivable	11,290,946	6,615,170
Accrued income	1,904,053	1,574,847
Prepaid expenses	158,133	113,074
Suspense payments	383,972	269,386
Expenditures	2,483	1,873
Deposit money to court	9,193	8,783
Domestic exchange settlement debit	4,193,365	4,223,350
Other miscellaneous assets	64,495	78,015
Allowance for other assets	(11,503)	(11,421)
Total	18,634,009	13,505,955

22-2 Changes in the allowance for other assets for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Beginning balance	11,421	9,241
Provision for allowance for possible losses	4,117	6,280
Write-offs	(540)	(860)
Sales of non-performing loans, etc.	(420)	(163)
Collection of loans written off in prior year	495	1,025
Interest income on impaired assets	(1)	3
Exchange rate fluctuation and others	(3,569)	(4,105)
Ending balance	11,503	11,421

22-3 Details of merchant banking account assets as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification		December 31, 2023	December 31, 2022
On-balance-sheet items			
Merchant banking account-loans at FVTPL		199,767	198,790
Merchant banking account-debt securities at FVTPL		3,440,806	3,415,666
CMA assets	Debt securities at FVTPL	997,251	1,016,905
Total		4,637,824	4,631,361
Off-balance-sheet item			
Commitment		770,000	620,000

23. Deposits

23-1 Details of deposit liabilities as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Demand deposits		
Demand deposits in Korean won	16,130,967	14,732,552
Demand deposits in foreign currency	31,630,980	40,871,143
Subtotal	47,761,947	55,603,695
Time and savings deposits		
Time and savings deposits in Korean won (*)	278,789,580	266,881,680
Time and savings deposits in foreign currency	23,665,607	24,320,573
Subtotal	302,455,187	291,202,253
Certificate of deposits	19,532,319	13,052,533
Total	369,749,453	359,858,481

(*) Time and savings deposits in Korean won include savings deposits (₩40,213,612 million as of December 31, 2023, and ₩39,861,040 million as of December 31, 2022) and corporate savings deposits (₩58,318,632 million as of December 31, 2023, and ₩57,322,227 million as of December 31, 2022).

23-2 Allocations of deposit liabilities by the customer as of December 31, 2023 and 2022 are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Individuals	122,951,894	112,111,078
Corporations	123,338,987	129,975,988
Other banks	22,490,050	21,293,082
Public institutions	21,830,459	16,398,077
Other financial institutions	46,902,752	44,929,310
Government	7,714,009	8,206,272
Non-profit corporations	16,107,455	13,812,098
Foreign organizations	2,503,999	3,049,951
Others	5,909,848	10,082,625
Total	369,749,453	359,858,481

24. Financial liabilities at FVTPL

24-1 Details of financial liabilities at FVTPL as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Securities borrowed	452,426	323,661
Derivative liabilities held for trading	6,042,066	10,742,577
Total	6,494,492	11,066,238

24-2 Details of financial liabilities designated at FVTPL as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Deposits	173,339	162,069
Debentures in Korean won	61,379	-
Total	234,718	162,069

Financial liabilities are at FVTPL in order to eliminate or significantly reduce a measurement or recognition inconsistency.

24-3 Difference between the book value and maturity amount of the financial liabilities designated at FVTPL as of December 31, 2023 and 2022, is as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Book value	234,718	162,069
Repayment amount at maturity	270,000	210,000
Difference	(35,282)	(47,931)

25. Borrowings

Details of borrowings as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	Lender	Annual interest rate (%)	December 31, 2023	December 31, 2022
Borrowings in Korean won				
BOK borrowings	BOK	0.25~2.00	3,420,958	5,085,245
Government borrowings	Korea Development Bank, etc.	0.50~5.16	2,155,315	2,061,794
Other borrowings	Korea Energy Management Corporation, etc.	0.00~3.60	4,843,543	3,584,732
Subtotal			10,419,816	10,731,771
Borrowings denominated in foreign currencies				
Bank overdrafts	Foreign banks, etc.	0.00~20.13	268,487	380,662
Other borrowings	Wells Fargo, HSBC, etc.	0.00~7.70	9,250,262	9,664,760
Subtotal			9,518,749	10,045,422
Call money				
Call money in foreign currencies	MIZUHO Bank, etc.	0.07~7.40	934,111	970,661
Bonds sold under repurchase agreements				
Bonds sold under repurchase agreements in Korean won	General customers	0.00	30	30
Bonds sold under repurchase agreements in foreign currencies	Citi	6.03~6.50	1,140,907	487,702
Subtotal			1,140,937	487,732
Others				
Bills sold	General customers	0.00~4.06	27,410	26,063
Deferred origination costs			(7,109)	(5,052)
Total			22,033,914	22,256,597

26. Debentures

Details of debentures as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	Lender	Annual interest rate (%)	December 31, 2023	December 31, 2022
Debentures in Korean won				
Debentures	Institutions	1.13~4.52	17,070,000	16,330,000
Subordinated debentures	Institutions, etc.	2.14~4.76	3,321,124	4,071,139
Net loss (gain) on fair value hedges (current period)			7,188	(26,241)
Net gain on fair value hedges (prior to previous fiscal year)			(36,738)	(10,497)
Less present value discount			(20,223)	(5,804)
Subtotal			20,341,351	20,358,597
Debentures in foreign currencies				
Debentures	Institutions	0.01~6.47	5,636,602	5,115,126
Subordinated debentures	Institutions, etc.	4.25~4.38	773,640	1,042,641
Net loss (gain) on fair value hedges (current period)			74,161	(290,369)
Net loss (gain) on fair value hedges (prior to previous fiscal year)			(271,131)	15,583
Less present value discount			(12,444)	(8,239)
Subtotal			6,200,828	5,874,742
Total			26,542,179	26,233,339

27. Net defined benefit liabilities (assets)

27-1 Details of net defined benefit liabilities (assets)

Details of net defined benefit liabilities (assets) as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Present value of defined benefit obligation	2,221,636	1,996,586
Fair value of plan assets	(2,048,061)	(2,064,640)
Net defined benefit liabilities	173,575	9,106
Net defined benefit assets	-	77,160

27-2 Defined benefit obligation

27-2-1 Changes in the present value of defined benefit obligation

Changes in the present value of defined benefit obligation for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Beginning balance	1,996,586	2,027,138
Current service cost	128,683	138,218
Interest cost	98,760	49,398
Remeasurements	181,634	(19,141)
Benefits paid	(183,794)	(198,401)
Changes due to transfers between affiliates	(441)	(765)
Others	208	139
Ending balance	2,221,636	1,996,586

27-2-2 Total costs recognized in accordance with defined benefit plans

Total costs incurred in relation to defined benefit pension plans for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Current service cost	128,683	138,218
Interest cost	98,760	49,398
Interest income on plan assets	(100,800)	(43,270)
Total	126,643	144,346

27-2-3 Weighted-average duration of defined benefit obligation as of December 31, 2023 and 2022 is 7.60 years and 7.66 years, respectively.

27-3 Actuarial assumptions

27-3-1 Principal assumptions for the actuarial valuation method as of December 31, 2023 and 2022 are as follows:

<December 31, 2023>

Classification	Rate(%)	Content
Demographic assumptions		
Death rate	0.003~0.063	Korea Insurance Development Institute
Retirement rate	7.00	-
Financial assumptions		
Wage growth rate	5.80	Average of past 5 years
Discount rate	4.25	Return rate of AAA corporate bond

<December 31, 2022>

Classification	Rate(%)	Content
Demographic assumptions		
Death rate	0.003~0.063	Korea Insurance Development Institute
Retirement rate	6.10	-
Financial assumptions		
Wage growth rate	5.80	Average of past 5 years
Discount rate	5.15	Return rate of AAA corporate bond

27-3-2 Changes in the present values of defined benefit liability due to changes in the principal actuarial assumptions as of December 31, 2023 and 2022 are as follows (Korean won in millions):

<December 31, 2023>

Classification	Present value of defined benefit liability	1% point increase	1% point decrease
Discount rate	2,221,636	2,045,775	2,365,833
Wage growth rate	2,221,636	2,367,760	2,041,468

<December 31, 2022>

Classification	Present value of defined benefit liability	1% point increase	1% point decrease
Discount rate	1,996,586	1,837,975	2,124,835
Wage growth rate	1,996,586	2,127,792	1,833,138

27-4 Plan assets

27-4-1 Changes in the fair value of plan assets for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Beginning balance	2,064,640	1,850,061
Employer contributions	625	308,653
Interest income on plan assets	100,800	43,270
Remeasurements of the net defined benefit liabilities	(20,558)	(10,300)
Benefit paid	(97,235)	(126,204)
Changes due to transfers between affiliates	(211)	(840)
Ending balance	2,048,061	2,064,640

27-4-2 Details of plan assets

Details of plan assets as of December 31, 2023 and 2022 are as follows (Korean won in millions):

<December 31, 2023>

Classification	Active market price exists	Active market price inexists	Total
Time deposits	-	847,883	847,883
Others(*)	-	1,200,178	1,200,178
Total	-	2,048,061	2,048,061

(*) Guaranteed income contracts and equity-linked bonds are included, etc.

<December 31, 2022>

Classification	Active market price exists	Active market price inexists	Total
Time deposits	–	2,060,339	2,060,339
Others	–	4,301	4,301
Total	–	2,064,640	2,064,640

27-4-3 The Group expects to contribute ₩130,561 million next year in relation to the defined benefit plans.

27-5 Remeasurements of the net defined benefit liability

Remeasurements of the net defined benefit liability as of December 31, 2023 and 2022 are as follows (Korean won in millions):

Classification	2023	2022
Actuarial gains and losses		
Effects on changing financial assumptions	(118,245)	425,234
Effects on changing demographic assumptions	–	(337,902)
Others	(63,389)	(68,191)
Subtotal	(181,634)	19,141
Return on plan assets		
Actual return on plan assets	80,242	32,971
Amount included in net interest of net defined benefit liability	(100,800)	(43,271)
Subtotal	(20,558)	(10,300)
Total	(202,192)	8,841

28. Contingent liabilities, agreements and provisions

28-1 Details of provisions as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Provision for payment guarantees		
Financial guarantee contracts (*)	466	449
Non-financial guarantee contracts	71,609	81,450
Bills endorsed	2	13
Subtotal	72,077	81,912
Provision for unused commitments	73,065	56,480
Other provisions		
Provision for restoration	57,976	51,596
Provision for lawsuits	3,400	43,215
Others	554,055	331,775
Subtotal	615,431	426,586
Total	760,573	564,978

(*) The Group recognizes the amount exceeding the unamortized amount of the initial fair value at subsequent measurement of the financial guarantee contracts as provisions for payment guarantees. The Group recognizes the unamortized amount as financial guarantee contract liabilities in the amount of ₩18,607 million and ₩14,843 million as of December 31, 2023 and 2022, respectively.

28-2 Changes in provision for unused commitments for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Unused commitments			Total
	12-month ECL	Lifetime ECL		
		Non-credit-impaired loan	Credit-impaired loan	
Beginning balance	35,404	19,107	1,969	56,480
Transfer to 12-month ECL	1,298	(1,273)	(25)	-
Transfer to non-credit-impaired loan	(972)	979	(7)	-
Transfer to credit-impaired loan	(7)	(14)	21	-
Provision (reversal of)	21,912	(1,589)	93	20,416
Changes in exchange rates	(3,833)	2	-	(3,831)
Ending balance	53,802	17,212	2,051	73,065

<2022>

Classification	Unused commitments			Total
	12-month ECL	Lifetime ECL		
		Non-credit-impaired loan	Credit-impaired loan	
Beginning balance	41,221	19,270	1,388	61,879
Transfer to 12-month ECL	1,488	(1,463)	(25)	-
Transfer to non-credit-impaired loan	(860)	869	(9)	-
Transfer to credit-impaired loan	(10)	(10)	20	-
Provision (reversal of)	(4,266)	324	595	(3,347)
Changes in exchange rates	(2,169)	117	-	(2,052)
Ending balance	35,404	19,107	1,969	56,480

28-3 Changes in provision for financial guarantee contracts for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Financial guarantee contracts			Total
	12-month ECL	Lifetime ECL		
		Non-credit-impaired loan	Credit-impaired loan	
Beginning balance	172	277	-	449
Transfer to 12-month ECL	6	(6)	-	-
Transfer to non-credit-impaired loan	(2)	2	-	-
Transfer to credit-impaired loan	-	-	-	-
Provision (reversal of)	229	(233)	-	(4)
Changes in exchange rates	8	13	-	21
Ending balance	413	53	-	466

<2022>

Classification	Financial guarantee contracts			Total
	12-month ECL	Lifetime ECL		
		Non-credit-impaired loan	Credit-impaired loan	
Beginning balance	133	14	-	147
Transfer to 12-month ECL	1	(1)	-	-
Transfer to non-credit-impaired loan	(11)	11	-	-
Transfer to credit-impaired loan	-	-	-	-
Provision	46	253	-	299
Changes in exchange rates	3	-	-	3
Ending balance	172	277	-	449

28-4 Changes in other provisions for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Beginning balance	Provision (reversal of)	Used	Others	Ending balance
Non-financial payment guarantees	81,463	(12,937)	-	3,085	71,611
Other provisions					
Provision for restoration	51,596	5,808	(1,875)	2,447	57,976
Provision for lawsuits	43,215	(23,106)	(16,711)	2	3,400
Others	331,775	260,324	(38,044)	-	554,055
Subtotal	426,586	243,026	(56,630)	2,449	615,431
Total	508,049	230,089	(56,630)	5,534	687,042

<2022>

Classification	Beginning balance	Provision (reversal of)	Used	Others	Ending balance
Non-financial payment guarantees	34,902	44,623	-	1,938	81,463
Other provisions					
Provision for restoration	54,894	(1,314)	(2,960)	976	51,596
Provision for lawsuits	77,734	(19,236)	(15,954)	671	43,215
Others	289,408	64,238	(21,428)	(443)	331,775
Subtotal	422,036	43,688	(40,342)	1,204	426,586
Total	456,938	88,311	(40,342)	3,142	508,049

28-5 Details of financial and payment guarantees as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	Guarantee balance	
	December 31, 2023	December 31, 2022
Financial guarantee contracts in Korean won		
Payment guarantees for issuance of debentures	94,500	94,500
Payment guarantees for collateral for loans	44,402	43,130
Payment guarantees for purchasing loans	356,998	307,369
Subtotal	495,900	444,999
Financial guarantee contracts in foreign currencies		
Local financial payment guarantees	2,256	2,725
Confirmed payment guarantees in Korean won	2,447,238	2,446,127
Confirmed payment guarantees in foreign currencies		
Acquisition of letter of credit	2,115,715	2,213,888
Acceptance of letter of guarantees	114,864	101,659
Others	12,719,947	10,215,065
Subtotal	14,950,526	12,530,612
Contingent payment guarantees		
Letters of credit	4,148,521	4,080,758
Others	1,988,457	1,575,953
Subtotal	6,136,978	5,656,711
Bills endorsed	753	10,707
Total	24,033,651	21,091,881

28-6 Commitments

Details of unused commitments as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	Unused commitments balance	
	December 31, 2023	December 31, 2022
Commitments on loans in Korean won	65,144,227	60,462,709
Commitments on loans in foreign currencies	30,837,779	28,960,160
Commitments on credit lines on asset-backed securities (*)	118,300	85,200
Commitments on purchase of securities (*)	13,625,533	11,875,336
Commitments on discounted notes from merchant banking	770,000	620,000
Total	110,495,839	102,003,405

(*) The financial guarantee contracts as of December 31, 2023 and 2022, amount to ₩13,731,626 million and ₩10,565,130 million, respectively.

28-7 Lawsuits

As of December 31, 2023, the Group is involved in 390 lawsuits as a plaintiff and 181 lawsuits as a defendant. The aggregate amounts of claims as plaintiff and defendant are ₩371,186 million and ₩305,077 million, respectively. The Group recognizes provisions in consideration of the likelihood of winning a lawsuit.

The Group's material lawsuits in progress as a defendant are as follows (Korean won in millions):

Plaintiff	Amount	Status of lawsuit		Content
		First trial	On appeal	
F********Bankruptcy administrator	43,315	Won	In progress (Second trial)	Return of an illicit gain
MT******	25,271	In progress	-	Return of frozen funds
****Cooperation Co., Ltd.	15,000	In progress	-	Return of an illicit gain
**** **Ward Co., Ltd.	10,000	In progress	-	Compensation for damages
****Securities Co., Ltd.	10,000	In progress	-	Compensation for damages

On the other hand, although not included in the list above, ** bank in China has filed an additional execution for 183 million yuan in relation to the default of *** financing leases against the Group at Shanghai Financial Court in December 2023. As of December 31, 2023, it is not possible to reasonably predict the financial impact on the Group's consolidated financial statements.

28-8 Due to the decline of the Hong Kong H Index, losses on Hong Kong H Index-linked securities sold by the Group are expected. As of December 31, 2023, the Group cannot reasonably predict and estimate the financial impact on the Group's financial statements. In addition, an investigation on unfair collaborative practices of four major commercial banks, including the Group, is underway by the Fair Trade Commission and the Group cannot reasonably predict the result.

28-9 In connection with the Ukraine crisis in February 2022, international sanctions against the Russian Federation of the international community could affect companies and individuals subject to sanctions, as well as companies, industries and economies that do business directly or indirectly with Russia. As of the settlement date, the Bank expects to have a financial impact on the business of KEB Hana Bank Russia, a subsidiary of Russia, but cannot reasonably predict the estimate.

29. Other liabilities and merchant banking account liabilities

29-1 Details of other liabilities as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Accounts payable from trust accounts	7,019,423	7,895,817
Foreign exchange settlement credits	941,693	937,940
Domestic exchange settlement credits	7,071,891	5,503,827
Accounts payable	11,692,542	6,936,315
Accrued expenses	4,551,927	2,758,991
Unearned revenue	136,764	127,583
Deposits for letters of guarantees and others	553,160	1,877,691
Suspense payables	263,320	75,021
Taxes withheld	183,385	129,209
Security subscriptions	40,884	281,894
Accounts for agency businesses	201,001	190,874
Liability incurred by agency relationship	2,505,394	2,869,079
Lease liabilities	593,475	667,779
Financial guarantee contracts	18,607	14,843
Other liabilities	32,476	13,176
Total	35,805,942	30,280,039

29-2 Details of merchant banking account liabilities as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Merchant banking account deposits	4,153,035	3,666,199
Other merchant banking account liabilities (*)	1,662	1,074
Total	4,154,697	3,667,273

(*) Including accrued expenses

29-3 Details of lease liabilities as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Face amount	Present value discount	Book value
Real estate for business purpose	657,443	(85,050)	572,393
Equipment and vehicles	17,788	(915)	16,873
Other assets	4,391	(182)	4,209
Total	679,622	(86,147)	593,475

<December 31, 2022>

Classification	Face amount	Present value discount	Book value
Real estate for business purpose	731,006	(83,957)	647,049
Equipment and vehicles	16,542	(709)	15,833
Other assets	5,136	(239)	4,897
Total	752,684	(84,905)	667,779

29-4 Changes in lease liabilities for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Beginning balance	Increase	Depreciation	Paid (*)	Others	Ending balance
Real estate for business purpose	647,049	120,894	23,294	(214,789)	(4,055)	572,393
Equipment and vehicles	15,833	9,697	496	(9,118)	(35)	16,873
Other assets	4,897	671	140	(1,415)	(84)	4,209
Total	667,779	131,262	23,930	(225,322)	(4,174)	593,475

(*) Total cash outflow related to lease liabilities for the year ended December 31, 2023, is ₩225,214 million.

<2022>

Classification	Beginning balance	Increase	Depreciation	Paid (*)	Others	Ending balance
Real estate for business purpose	547,794	296,367	15,440	(206,537)	(6,015)	647,049
Equipment and vehicles	13,334	10,077	311	(7,768)	(121)	15,833
Other assets	434	5,444	106	(928)	(159)	4,897
Total	561,562	311,888	15,857	(215,233)	(6,295)	667,779

(*) Total cash outflow related to lease liabilities for the year ended December 31, 2022, is ₩215,137 million.

29-5 Details of contractual cash flows before discounting the lease liabilities by remaining maturity as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Less than 1 month	1 month ~3 months	3 months ~6 months	6 months ~1 year	1 year ~5 years	More than 5 years	Total
Real estate for business purpose	18,348	27,165	39,453	70,823	280,895	220,759	657,443
Equipment and vehicles	676	1,346	1,952	3,465	10,349	–	17,788
Other assets	247	337	585	1,100	2,122	–	4,391
Total	19,271	28,848	41,990	75,388	293,366	220,759	679,622

<December 31, 2022>

Classification	Less than 1 month	1 month ~3 months	3 months ~6 months	6 months ~1 year	1 year ~5 years	More than 5 years	Total
Real estate for business purpose	17,783	33,018	48,965	91,886	315,184	224,170	731,006
Equipment and vehicles	643	1,230	1,708	3,144	9,817	–	16,542
Other assets	184	235	418	852	3,447	–	5,136
Total	18,610	34,483	51,091	95,882	328,448	224,170	752,684

30. Capital stock and other paid-in capital

30-1 Details of capital stock as of December 31, 2023 and 2022, are as follows (Korean won in millions and shares):

Classification	December 31, 2023	December 31, 2022
Number of shares authorized	2,000,000,000	2,000,000,000
Par value per share (in Korean won)	5,000	5,000
Number of shares issued	1,071,915,717	1,071,915,717
Common stock	5,359,578	5,359,578

30-2 Details of capital surplus and capital adjustments as of December 31, 2023 and 2022, are as follows (Korea won in millions):

Classification	December 31, 2023	December 31, 2022
Capital surplus (*)	6,161,303	6,159,820
Capital adjustments		
Stock option	-	17
Others	(37,921)	(37,703)
Subtotal	(37,921)	(37,686)
Total	6,123,382	6,122,134

(*) As of December 31, 2023, the Group's capital surplus includes the amount recognized at the time of the business combination under common control.

30-3 Details of hybrid securities as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	Issuance date	Expiry date	Annual interest rate (%)	December 31, 2023	December 31, 2022
Hybrid securities in Korean won	2013-10-25	2043-10-25	5.45	-	179,737
Hybrid securities in foreign currencies	2021-10-19	-	3.50	353,738	353,738
Total				353,738	533,475

The Group can repay the above hybrid securities early for five years from the issuance date or every six months(the date of interest payment) after five years if it obtains approval from the Director of the Financial Supervisory Service. Meanwhile, the Group has repaid hybrid securities in Korean won early on October 25, 2023.

31. Accumulated other comprehensive income (loss)

Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Beginning balance	Increase (decrease) (excluding reclassification and transfer of retained earnings)	Transfer of retained earnings	Changes in equity in subsidiaries	Reclassification (*)	Tax effects	Ending balance
Gain (loss) on valuation of financial assets at FVOCI	(1,018,647)	861,959	(69,253)	-	(9,236)	(204,542)	(439,719)
Changes in equity of investments in associates	75,396	(11,640)	-	-	-	3,073	66,829
Gain (loss) on valuation of net investment hedges of foreign operations	(49,822)	(30,022)	-	-	-	7,926	(71,918)
Exchange differences on translation of foreign operations	(84,186)	66,694	-	-	-	(4,641)	(22,133)
Loss on valuation of fair value hedges	(24,984)	-	-	-	-	-	(24,984)
Remeasurement of defined benefit plans	(463,290)	(202,305)	-	-	-	53,475	(612,120)
Total	(1,565,533)	684,686	(69,253)	-	(9,236)	(144,709)	(1,104,045)

(*) Loss on valuation of financial assets at FVOCI recognized as accumulated other comprehensive income (loss) is reclassified due to disposal of financial assets at FVOCI.

<2022>

Classification	Beginning balance	Increase (decrease) (excluding reclassification and transfer of retained earnings)	Transfer of retained earnings	Changes in equity in subsidiaries	Reclassification (*)	Tax effects	Ending balance
Gain (loss) on valuation of financial assets at FVOCI	(387,864)	(840,352)	3,692	(53)	(8,956)	214,886	(1,018,647)
Changes in equity of investments in associates	73,448	1,132	-	-	-	816	75,396
Gain (loss) on valuation of net investment hedges of foreign operations	(29,294)	(28,241)	-	-	-	7,713	(49,822)
Exchange differences on translation of foreign operations	(89,441)	7,555	-	97	-	(2,397)	(84,186)
Gain (loss) on valuation of fair value hedges	(13,123)	(16,360)	-	-	-	4,499	(24,984)
Remeasurement of defined benefit plans	(469,703)	8,860	-	-	-	(2,447)	(463,290)
Total	(915,977)	(867,406)	3,692	44	(8,956)	223,070	(1,565,533)

(*) Loss on valuation of financial assets at FVOCI recognized as accumulated other comprehensive income (loss) is reclassified due to disposal of financial assets at FVOCI.

32. Retained earnings

32-1 Details of retained earnings as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Legal reserve		
Earned surplus reserve (*1)	2,349,400	2,050,800
Voluntary reserve		
Revaluation reserves on property, plant and equipment (*2)	203,998	203,998
Other reserves (*3)	102,155	87,276
Regulatory reserve for bad debts (*4)	2,593,244	2,617,149
Other voluntary reserves	5,450,200	5,450,200
Subtotal	8,349,597	8,358,623
Unappropriated retained earnings	10,351,090	8,826,892
Total	21,050,087	19,236,315

(*1) Article 40 of the Banking Law of the Republic of Korea requires the Group to appropriate at least 10% of net income after income tax to legal reserve every time to pay dividends until such reserve equals 100% of its paid-in capital. This reserve is restricted to reduce deficit or be transferred to capital.
(*2) The Group records gains from revaluation of property, plant and equipment previously recognized as other comprehensive income to the voluntary reserve, as it applies the revaluation amount as deemed cost at the first-time adoption of K-IFRSs. The reserve is recognized in distributable retained earnings when the relevant property, plant and equipment are disposed of.
(*3) Relevant Japanese regulations require the Group's overseas branches located in Japan to appropriate a minimum of 10% of net income for the period as a legal reserve, until the reserve equals ￥2,000 million. This reserve is restricted from being used upon liquidation of the Japanese branches. Chennai, Panama, Singapore, Hong Kong, Hanoi and Ho Chi Minh branches' statutory reserves are included in other reserves in accordance with India, Panama, Singapore and

Vietnam's regulations.
(*4) The Group has provided allowances for possible loan losses in accordance with K-IFRS. The difference in this amount and the provision for possible loan and other asset losses accumulated in accordance with the minimum accumulation ratio required by the Financial Supervisory Service is reserved as a regulatory reserve for bad debts.

32-2 Changes in appropriated retained earnings for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Beginning balance	19,236,315	13,897,317
Net income	3,476,636	3,095,845
Dividends	(1,690,000)	(1,230,400)
Dividends on hybrid securities	(23,834)	(23,770)
Reclassification of valuation gain or loss on equity securities at FVOCI upon derecognition, etc.	50,970	(2,677)
Capital surplus income	-	3,500,000
Ending balance	21,050,087	19,236,315

32-3 Dividends

Details of calculation on common stock dividends for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions and shares in units):

Classification	2023 (*1)	2022
Number of dividend shares	1,071,915,717	1,071,915,717
Par value per share (in Korean won)	5,000	5,000
Dividend ratio	33.77%	27.05%
Dividend per share (in Korean won)	1,688.57	1,352.72
Dividends	1,810,000	1,450,000
Net income (*2)	3,476,636	3,095,845
Dividend pay out ratio based on net income	52.06%	46.84%
Adjusted income after deducting provisions for bad debt reserve (*2)	3,589,342	3,119,771
Dividends pay out ratio based on adjusted income after deducting provisions for bad debt	50.43%	46.48%

(*1) The dividend for 2023 will be presented at the annual general meeting of shareholders, which is scheduled on March 20, 2024.

(*2) Adjusted income after deducting provisions for bad debt reserve is based on the controlling company's shares.

33. Regulatory reserve for bad debts

Regulatory reserve for bad debts is calculated and disclosed in accordance with Article 29, Sections 1 and 2 of Regulation on Supervision of Banking Business of the Republic of Korea.

33-1 Details of regulatory reserve for bad debts as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Beginning balance	2,690,108	2,714,034
Planned reversal of bad debts	112,706	23,926
Ending balance	2,577,402	2,690,108

33-2 Reversal of (provisions for) bad debt reserve and income adjusted for deductions of provisions for bad debt for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Net income attributable to equity holders of the parent company before deducting reserve for bad debt	3,476,636	3,095,845
Reversal of bad debt reserve	112,706	23,926
Adjusted income after deducting reserve for bad debt	3,589,342	3,119,771
Basic EPS adjusted after reflecting reserve for bad debt (*1) (in Korean won)	3,326	2,888
Diluted EPS adjusted after reflecting reserve for bad debt (*2) (in Korean won)	3,326	2,888

(*1) The dividend on hybrid equity securities in the amount of ₩23,834 million and ₩23,770 million for the years ended December 31, 2023 and 2022, respectively, was deducted from the adjusted income after reflecting the bad debt reserve for the calculation of EPS after reflecting reserve for bad debt for each period.

(*2) Since the Group does not have dilutive potential ordinary stock, basic EPS is the same as diluted EPS.

34. Operating income and operating expenses

34-1 Operating income for the years ended December 31, 2023 and 2022, is as follows (Korean won in millions):

Classification	2023	2022
Interest income	19,793,063	13,347,231
Fees and commission income	931,532	874,721
Gains on financial instruments at FVTPL	23,575,868	31,421,014
Gains on fair value hedging derivative instruments	140,983	397,349
Gains on financial instruments at FVOCI	88,412	10,551
Gains on financial instruments at amortized cost	232	4
Reversal of credit loss	36,277	603
Other operating income	7,934,269	7,615,689
Total	52,500,636	53,667,162

34-2 Operating expenses for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Interest expenses	11,875,652	5,738,554
Fees and commission expenses	270,068	281,109
Expenses on financial instruments at FVTPL	23,084,120	31,296,313
Expenses on fair value hedging derivative instruments	114,647	460,900
Expenses on financial instruments at FVOCI	3,979	8,389
Provision of credit loss	694,584	658,252
General and administrative expenses	3,448,610	3,318,831
Other operating expenses	8,403,458	7,838,212
Total	47,895,118	49,600,560

35. Net interest income

35-1 Interest income for the years ended December 31, 2023 and 2022, is as follows (Korean won in millions):

Classification	2023	2022
Interest income in accordance with the effective interest rate method		
Interest income on due from banks	657,982	277,868
Interest income on loans	17,119,560	11,761,608
Interest income on financial assets at FVOCI	837,112	544,009
Interest income on securities at amortized cost	1,002,738	698,892
Subtotal	19,617,392	13,282,377
Interest income on financial instruments at FVTPL	175,671	64,854
Total	19,793,063	13,347,231

35-2 Interest expenses for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Interest expenses on deposit liabilities	9,772,767	4,558,562
Interest expenses on borrowings	782,002	342,306
Interest expenses on financial instruments at FVTPL	4,908	4,045
Interest expenses of debentures	986,274	671,472
Interest expenses of lease liabilities	23,929	15,857
Others	305,772	146,312
Total	11,875,652	5,738,554

36. Net fees and commission income

36-1 Fees and commission income for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Commissions received from loans and others	581,283	521,833
Commissions received on payment guarantees	101,755	89,740
Commissions related to foreign exchange	248,494	263,148
Total	931,532	874,721

36-2 Fees and commission expenses for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Commissions paid	212,279	226,715
Commissions related to foreign exchange	57,789	54,394
Total	270,068	281,109

37. Gain (loss) on financial instruments at FVTPL

37-1 Details of gain (loss) on financial instruments at FVTPL for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Gain on financial instruments at FVTPL		
Financial instruments at FVTPL		
Gain on valuation	623,974	138,271
Gain on disposals	114,121	35,850
Subtotal	738,095	174,121
Derivative instruments held for trading		
Gain on valuation of derivatives		
Gain on currency-related derivatives	3,756,674	8,065,307
Gain on interest rate-related derivatives	477,114	908,399
Gain on stock-related derivatives	5,948	3,333
Others	1,875	-
Subtotal	4,241,611	8,977,039
Gain on transaction of derivatives		
Gain on currency-related derivatives	12,213,996	16,472,062
Gain on interest rate-related derivatives	6,342,524	5,744,598
Gain on stock-related derivatives	34,424	13,394
Subtotal	18,590,944	22,230,054
Gain on securities sold	5,218	6,269
Total	23,575,868	31,387,483
Loss on financial instruments at FVTPL		
Financial instruments at FVTPL		
Loss on valuation	46,692	253,836
Loss on disposals	59,253	106,893
Others	1,720	1,408
Subtotal	107,665	362,137
Derivative instruments held for trading		

Classification	2023	2022
Loss on valuation of derivatives		
Loss on currency-related derivatives	3,280,101	8,742,678
Loss on interest rate-related derivatives	487,610	1,080,768
Loss on stock-related derivatives	4,472	23,154
Others	-	3,020
Subtotal	3,772,183	9,849,620
Loss on transaction of derivatives		
Loss on currency-related derivatives	12,651,931	16,406,795
Loss on interest rate-related derivatives	6,495,300	4,660,249
Loss on stock-related derivatives	23,738	9,687
Subtotal	19,170,969	21,076,731
Loss on securities sold	20,596	7,825
Total	23,071,413	31,296,313
Net amount	504,455	91,170

37-2 Details of gain (loss) on financial instruments designated at FVTPL for the years ended December 31, 2023 and 2022, are as follows
(Korean won in millions):

Classification	2023	2022
Gain on financial instruments designated at FVTPL		
Deposits		
Gain on valuation	–	33,531
Total	–	33,531
Loss on financial instruments designated at FVTPL		
Deposits		
Loss on valuation	11,270	–
Debentures		
Loss on valuation	1,379	–
Other financial liabilities		
Loss on disposals	58	–
Total	12,707	–
Net amount	(12,707)	33,531

38. Gain (loss) on derivative financial instruments used for hedging

Gain (loss) on derivative instruments used for hedging for the years ended December 31, 2023 and 2022, is as follows (Korean won in millions):

Classification	2023	2022
Gain on hedged item		
Gain on valuation		
Gain on valuation of debentures	3,463	320,975
Gain on valuation of deposits	–	71,015
Subtotal	3,463	391,990
Gain on transaction		
Gain on transaction of debentures	1,858	731
Derivative financial instruments used for hedging		
Gain on valuation of derivatives		
Gain on currency-related derivatives	49,945	–
Gain on interest-related derivatives	73,333	–
Subtotal	123,278	–
Gain on transaction of derivatives		
Gain on currency-related derivatives	7,704	2,048
Gain on interest-related derivatives	4,680	2,580
Subtotal	12,384	4,628
Total	140,983	397,349
Loss on hedged item		
Loss on valuation		
Loss on valuation of debentures	84,812	4,365
Loss on valuation of deposits	15,177	–
Subtotal	99,989	4,365
Loss on transaction		
Loss on transaction of debentures	5,513	–
Derivative instruments used for hedging		
Loss on valuation of derivatives		

Classification	2023	2022
Loss on currency-related derivatives	7,701	129,661
Loss on interest-related derivatives	-	325,170
Subtotal	7,701	454,831
Loss on transaction of derivatives		
Loss on currency-related derivatives	1,444	90
Loss on interest-related derivatives	-	1,614
Subtotal	1,444	1,704
Total	114,647	460,900
Net amount	26,336	(63,551)

39. Gain (loss) on financial instruments at FVOCI

Details of gain (loss) on financial instruments at FVOCI for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Gain on disposal of financial instruments at FVOCI	88,412	10,551
Loss on disposal of financial instruments at FVOCI	3,979	8,389
Net amount	84,433	2,162

40. Gain (loss) on financial instruments at amortized cost

Details of gain (loss) on financial instruments designated at amortized cost for the years ended December 31, 2023 and 2022, are as follows
(Korean won in millions):

Classification	2023	2022
Gain on disposal of financial instruments at amortized cost	232	4

For the years ended December 31, 2023 and 2022, the Group disposed portion of securities at amortized cost for the purpose of managing the credit risk.

41. Provision for (reversal of) credit loss

Provision for (reversal of) bad debts due to the change in credit loss for the years ended December 31, 2023 and 2022, is as follows (Korean won in millions):

Classification	2023	2022
Provision for (reversal of) credit loss of debt securities at FVOCI	867	(603)
Reversal of (provision for) possible loan loss for debt securities at amortized cost	(36,277)	66,966
Provision for bad debts of loan losses	689,600	585,006
Provision for bad debts of other asset losses	4,117	6,280
Total	658,307	657,649

42. General and administrative expenses

General and administrative expenses for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Salaries	1,655,117	1,615,246
Retirement benefits-defined benefits plans	126,643	144,346
Retirement benefits-defined contribution plans	627	261
Termination benefits	127,643	177,008
Employee welfare benefits	104,107	100,551
Depreciation	395,105	342,481
Amortization	108,972	95,591
Rental fees	55,895	51,099
Entertainment expenses	20,186	16,455
Taxes and dues	149,001	121,087
Advertising expenses	182,739	181,095
Others	522,575	473,611
Total	3,448,610	3,318,831

43. Other operating income

Details of other operating income for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Gain on disposal of loans	63,312	22,954
Reversal of provisions for payment guarantees	12,941	-
Reversal of allowances for unused commitments	-	3,347
Reversal of other allowances	-	20,228
Trust commissions	209,343	177,573
Gain on foreign exchange transaction	7,374,765	7,170,247
Gain on merchant banking accounts (*)	184,550	119,943
Dividend income	11,529	10,798
Others	77,829	90,599
Total	7,934,269	7,615,689

(*) Details of gain on merchant banking accounts for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Interest income	149,433	93,710
Fees and commission income	450	492
Gain on disposal of debt securities at FVTPL	1,523	1,897
Gain on valuation of debt securities at FVTPL	-	910
Gain on valuation of CMA securities	162	103
Gain on disposal of bills	32,982	22,831
Total	184,550	119,943

44. Other operating expenses

Details of other operating expenses for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Loss on disposal of loans	23,888	3,070
Provision for payment guarantees	-	44,922
Provision for unused commitments	20,416	-
Provision for other allowances	182,051	-
Contribution to Korea Credit Guarantee Fund	461,950	409,833
Insurance fee on deposit	477,734	449,567
Loss on foreign exchange transaction	7,035,300	6,794,255
Merchant banking accounts expenses (*)	139,877	89,351
Others	62,242	47,214
Total	8,403,458	7,838,212

(*) Details of loss on merchant banking accounts for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Interest expenses	139,484	89,351
Others	393	-
Total	139,877	89,351

45. Non-operating income

Details of non-operating income for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Rental fee income	10,395	9,608
Gain on disposal of property, plant and equipment	742	6,202
Gain on disposal of investment properties	600	7,241
Gain on disposal of non-current assets held for sale	568	-
Gain on disposal of investments in associates and joint ventures	2,941	3,414
Gain on equity method	179,345	221,832
Gain on termination of right-of-use assets	992	1,511
Others	26,983	17,485
Total	222,566	267,293

46. Non-operating expenses

Details of non-operating expenses for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Loss on disposal of property, plant and equipment	247	1,146
Loss on impairment of property, plant and equipment	–	12
Loss on disposal of investment properties	–	1,044
Loss on impairment of intangible assets	10	220
Loss on impairment of non-current assets held for sale	1,100	–
Loss on equity method	11,232	32,819
Collection expenses for written-off claims	2,143	1,741
Collection commissions for written-off claims	5,020	5,455
Loss on investments in associates and joint ventures	2,289	1,099
Loss on impairment of investments in associates and joint ventures	1,395	520
Loss on termination of right-of-use assets	1,222	1,871
Donations	108,906	42,321
Others	81,437	74,161
Total	215,001	162,409

47. Income tax expenses

47-1 The components of income tax expenses for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Current income taxes		
Current income taxes	974,544	1,214,080
Prior year's income tax adjustments recognized in the current year	(38,354)	(24,481)
Changes in deferred tax assets (liabilities)	433,217	(282,051)
Income taxes directly recognized in equity	(162,992)	224,156
Tax effect of consolidated tax returns	(80,765)	(71,917)
Income tax expenses	1,125,650	1,059,787

47-2 Reconciliations of income tax expenses applicable to the net income before income tax expenses at the Korean statutory tax rate and to income tax expenses at the effective income tax rate of the Group for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Net income before tax	4,613,083	4,171,486
Corporate tax according to applicable tax rate (*)	1,196,413	1,168,977
Tax-free income	(11,123)	(7,176)
Non-deductible expenses	7,962	4,184
Tax credits	(26,941)	(28,674)
Overseas corporate tax	82,993	60,708
Changes due to consolidated tax system	(80,765)	(71,917)
Adjustments	(38,354)	(24,481)
Others (tax rate fluctuation, etc.)	(4,535)	(41,834)
Corporate tax expense	1,125,650	1,059,787
Effective tax rate (%)	24.40	25.41

(*) 9.9% is applied to income under ₩200 million, 20.9% is applied to income exceeding ₩200 million and under ₩20 billion, 23.1% is applied to income exceeding ₩20 billion and under ₩300 billion and 26.4% is applied to income above ₩300 billion for the nine-month period ended December 31, 2023, and 11% is applied to income under ₩200 million, 22% is applied to income exceeding ₩200 million and under ₩20 billion, 24.2% is applied to income exceeding ₩20 billion and under ₩300 billion and 27.5% is applied to income above ₩300 billion for the year ended December 31, 2022.

47-3 Details of temporary differences and deferred tax assets (liabilities) as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Deductible (taxable) temporary differences	Deferred tax assets (liabilities)
Gain on valuation of securities	(113,175)	(29,878)
Valuation of investment in associates	(609,860)	(161,003)
Loss on valuation of derivatives	80,498	21,251
Deemed dividends	286,044	75,515
Deferred loan fees, net of expenses	(365,704)	(96,546)
Accrued income	(387,111)	(102,197)
Accrued expenses	69,841	18,438
Provisions for payment guarantees	70,683	18,660
Plan assets	(2,047,920)	(540,651)
Defined benefit liabilities	2,211,820	583,921
Other provisions	628,928	166,037
Bad debt expenses	505,378	133,420
Depreciation	6,362	1,680
Fair value valuation resulting from merger	6,937	1,831
Dormant deposits	90,862	23,987
Allowance for advanced depreciation	(180,315)	(47,603)
Deemed cost for property and equipment	(607,617)	(160,410)
Loss on valuation of financial instruments at FVOCI	606,213	160,040
Investment in kind	18,479	4,879
Financial guarantee contracts	5,493	1,450
Others	(1,200,003)	(316,801)
Subtotal	(924,167)	(243,980)
Domestic deferred tax liabilities		(243,980)
Foreign deferred tax assets (*)		133,742
Foreign deferred tax liabilities (*)		(9,220)
Total		(119,458)

(*) Deferred tax assets of foreign branches are not offset against the deferred tax liabilities due to the differrences in tax jurisdictions.

<December 31, 2022>

Classification	Deductible (taxable) temporary differences	Deferred tax assets (liabilities)
Loss on valuation of securities	559,829	147,795
Valuation of investment in associates	(589,134)	(155,531)
Loss on valuation of derivatives	927,438	244,844
Deemed dividends	281,421	74,295
Deferred loan fees, net of expenses	(363,572)	(95,983)
Accrued income	(344,814)	(91,031)
Accrued expenses	94,987	25,077
Provisions for payment guarantees	81,109	21,413
Plan assets	(1,987,305)	(524,648)
Defined benefit liabilities	1,987,305	524,648
Other provisions	429,186	113,305
Bad debt expenses	707,373	186,747
Depreciation	(1,724)	(455)
Fair value valuation resulting from merger	6,937	1,831
Dormant deposits	22,133	5,843
Allowance for advanced depreciation	(180,315)	(47,603)
Deemed cost for property and equipment	(607,839)	(160,469)
Loss on valuation of financial instruments at FVOCI	1,380,998	364,583
Investment in kind	18,479	4,878
Financial guarantee contracts	4,631	1,222
Others	(1,657,614)	(437,611)
Subtotal	769,509	203,150
Domestic deferred tax assets		203,150
Foreign deferred tax assets (*)		112,868
Foreign deferred tax liabilities (*)		(2,259)
Total		313,759

(*) Deferred tax assets of foreign branches are not offset against the deferred tax liabilities due to the differrences in tax jurisdictions.

The effective income tax rate of 26.4% as of December 31, 2023, is applied when calculating deferred tax assets or liabilities. Also, deferred tax assets are recognized when it is foreseeable that future taxable income will be incurred and that future tax credits will be realized.

47-4 The unrealizable temporary differences on investments in associates as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Deductible temporary differences	337,867	337,867
Taxable temporary differences	(355,579)	(355,579)
Total	(17,712)	(17,712)

47-5 Changes in deferred taxes charged (credited) directly to equity for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	December 31, 2023	December 31, 2022	Changes
Gain on valuation of equity securities at FVOCI	158,113	362,656	(204,543)
Changes in equity on investments in associates	(23,972)	(27,044)	3,072
Exchange differences on translation of foreign operations	(4,428)	213	(4,641)
Gain on valuation of net investment hedges of foreign operations	26,824	18,898	7,926
Gain on valuation of fair value hedges	9,477	9,477	-
Remeasurements of the defined benefit plans	215,467	161,991	53,476
Subtotal	381,481	526,191	(144,710)
Reclassification of valuation gain or loss on equity securities at FVOCI			(18,282)
Total			(162,992)

<2022>

Classification	December 31, 2022	December 31, 2021	Changes
Gain on valuation of equity securities at FVOCI	362,656	147,772	214,884
Changes in equity on investments in associates	(27,044)	(27,859)	815
Exchange differences on translation of foreign operations	213	2,610	(2,397)
Gain on valuation of net investment hedges of foreign operations	18,898	11,112	7,786
Gain on valuation of fair value hedges	9,477	4,978	4,499
Remeasurements of the defined benefit plans	161,991	164,438	(2,447)
Subtotal	526,191	303,051	223,140
Reclassification of valuation gain or loss on equity securities at FVOCI			1,016
Total			224,156

48. Earnings per share

48-1 Weighted-average number of shares of common stock for the years ended December 31, 2023 and 2022, is as follows (shares):

Classification	Periods	Number of shares	Weights	Weighted-average number of shares of common stock
December 31, 2023	2023.01.01~2023.12.31	1,071,915,717	365/365	1,071,915,717
December 31, 2022	2022.01.01~2022.12.31	1,071,915,717	365/365	1,071,915,717

Since the Group does not have potentially dilutive common stock, the weighted-average number of shares of common stock outstanding per basic share is the same as the weighted-average number of shares of common stock outstanding per diluted share.

48-2 The Group's basic EPS for the years ended December 31, 2023 and 2022, is calculated as follows (Korean won in millions, except per share amounts):

Classification	2023	2022
Net income for the period attributable to owners	3,476,636	3,095,845
Dividends on hybrid equity securities	(23,834)	(23,770)
Total	3,452,802	3,072,075
Weighted-average number of shares of common stock outstanding	1,071,915,717	1,071,915,717
Basic EPS (*) (in Korean won)	3,221	2,866

(*) Basic EPS is the same as diluted EPS for the years ended December 31, 2023 and 2022.

49. Share-based payment

The Group operates a Performance Share Plan. It is a share-based payment with cash settlement linked to the stocks of HFG, and the amount of shares are determined based on performance for three years from the grant date.

GLN International Co., Ltd., a subsidiary of the Group, granted 400,000 new share options to an executive during November 2021. The exercise price of the stock purchase option is ₩500 per share, and the options vest if the executive has served for more than two years from the date of grant, and the exercise period is within five years from the date of grant. However, due to the retirement of the executive concerned, all of the share options have been canceled due to the failure to meet the terms of service, and there are no share options granted as of the end of the reporting period.

49-1 Details of liabilities related to share-based payment and total intrinsic value of rights accounted for as accounts payable in case that option holders achieve rights to receive cash or other assets as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Book value of liabilities related to share-based payment		
Performance share (granted by the Group)	29,972	36,127

49-2 The compensation costs for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Costs recognized due to share-based payment		
Equity-linked special incentive (granted by the Group)	7,304	10,782
Stock options (granted by subsidiary)	(17)	15
Total	7,287	10,797

49-3 Details of performance-linked stocks granted to the executives and department head of the Group as of December 31, 2023, are as follows:

Classification	8th	9th	10th	11th	12th	13th
Granted by	Hana Bank	Hana Bank	Hana Bank	Hana Bank	Hana Bank	Hana Bank
Grant date	2018.01.01	2019.01.01	2020.01.01	2021.01.01	2022.01.01	2023.01.01
Payment date	2020.12.31	2021.12.31	2022.12.31	2023.12.31	2024.12.31	2025.12.31
Evaluation period	2018.01.01~2020.12.31	2019.01.01~2021.12.31	2020.01.01~2022.12.31	2021.01.01~2023.12.31	2022.01.01~2024.12.31	2023.01.01~2025.12.31
Reservation period	2021.01.01~2021.12.31	2022.01.01~2022.12.31	2023.01.01~2023.12.31	2024.01.01~2024.12.31	2025.01.01~2025.12.31	2026.01.01~2026.12.31
Payment period	Within 2022.4.30	Within 2023.4.30	Within 2024.4.30	Within 2025.4.30	Within 2026.4.30	Within 2027.4.30
Payment method	Market-based compensation	Market-based compensation	Market-based compensation	Market-based compensation	Market-based compensation	Market-based compensation
Shares at settlement date (*)	10,250 shares	25,373 shares	309,551 shares	168,063 shares	102,509 shares	79,313 shares

(*) The Group provides the executives and department head of the Group with the right to receive stocks. The number of stocks granted is adjusted based on the performance. The number of stocks granted is adjusted based on the assessment indicator that constitutes the Group's performance (relative shareholders' rate of return) of 40% and the Bank's performance (return on equity, net income, soundness) of 60%.

50. Cash flow information

50-1 Details of cash and cash equivalents as of December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	December 31, 2023	December 31, 2022
Cash	1,742,359	1,903,972
Due from banks in Korean won	10,450,468	15,950,890
Due from banks in foreign currencies	18,371,452	23,232,995
Subtotal	30,564,279	41,087,857
Restricted balances (*)	1,824,242	2,010,077
Deposits with a maturity of more than three months at the time of acquisition	457,734	577,354
Net amount	28,282,303	38,500,426

(*) Restricted balances exclude reserve deposits that meet the definition of cash equivalents.

50-2 Significant non-cash transactions for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

Classification	2023	2022
Reduction in capital surplus	-	3,500,000
Recognition of right-of-use assets	166,171	306,049
Recognition of lease liabilities	131,262	311,888
Change in valuation of financial assets at FVOCI	852,837	852,663
Transfer from property, plant and equipment to investment properties	26,318	97,994
Changes in equity on investments in associates	11,641	1,132
Exchange differences on translation of foreign operations	75,374	313
Conversion from debt instruments	188	40,370

50-3 Reconciliation of liabilities arising from financing activities for the years ended December 31, 2023 and 2022, is as follows (Korean won in millions):

<2023>

Classification	Beginning balance	Financing activities	Exchange rate fluctuation	Fair value hedging	Acquisition and termination of lease	Others	Ending balance
Borrowings	22,256,597	(1,339,106)	1,116,423	-	-	-	22,033,914
Debentures	26,233,339	150,040	32,507	110,223	-	16,070	26,542,179
Lease liabilities	667,779	(201,285)	-	-	131,262	(4,281)	593,475
Derivatives used for hedging	412,250	13,433	-	(100,399)	-	(10,941)	314,343
Total	49,569,965	(1,376,918)	1,148,930	9,824	131,262	848	49,483,911

<2022>

Classification	Beginning balance	Financing activities	Exchange rate fluctuation	Fair value hedging	Acquisition and termination of lease	Others	Ending balance
Borrowings	17,524,480	3,926,509	805,608	-	-	-	22,256,597
Debentures	27,699,757	(1,465,060)	257,968	(271,934)	-	12,608	26,233,339
Lease liabilities	561,562	(199,280)	-	-	311,888	(6,391)	667,779
Derivatives used for hedging	27,703	-	-	383,816	-	731	412,250
Total	45,813,502	2,262,169	1,063,576	111,882	311,888	6,948	49,569,965

51. Related parties

51-1 Transactions with related parties for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Entity	Income			Expenses			
		Interest income	Fees and commission income	Other income	Bad debt expenses	Interest expenses	Fees and commission expenses	Other expenses
Ultimate parent company	HFG	333	3,954	114	-	374	-	-
Associates	Bank of Jilin	91	3	-	-	181	-	10
	CM International financing leases	1,309	-	-	(1,754)	-	-	-
	Beijing Langzi Asset Management Co., Ltd.	-	1	1	-	162	-	-
	Hana Equity Partners I, L.P.	-	-	-	-	4	-	-
	Korea Credit Bureau	856	10	-	(12)	10	-	2
	Templeton Hana Asset Management Co., Ltd.	-	-	-	-	379	-	-
	Hana - KVIC Unicorn Fund of Funds	-	-	-	-	131	-	-
	BIDV	304	6	270	(24)	684	5	431
	Hana Micro Finance., Ltd.	-	1,008	-	-	-	-	-
	Hana Ventures No. 7 New Technology Business Investment Association	-	3	-	-	5	-	-
	HORIZON PRIVATE EQUITY FUND	-	-	-	-	69	-	2
	TossBank Corp.	2,596	-	-	-	62	-	-
	SHINJIN INTERNATIONAL CORPORATION	314	2	-	(107)	-	-	-
	Sinsa Station area Complex Development PFV Co., Ltd.	1,274	-	-	112	-	-	-
	Hana-Capstone AI Platform Fund	-	-	-	-	53	-	-
	Cheongna Medipolis PFV Co., Ltd.	-	-	-	-	92	-	-
	Hana Beyond Finance Fund	-	37	-	-	500	-	-
	UNION TCB FUND II	-	-	-	-	6	-	-
	No.1 KEBHANASTAY REITS Co., Ltd	363	3	-	6	8	-	-
	MASHUP ANGELS VALUE UP FUND2	-	4	-	-	12	-	-
Subtotal		7,107	1,077	271	(1,779)	2,358	5	445
Joint venture	PT. SINARMAS HANA FINANCE	2,818	3	-	17	-	-	-
Entities under common control	Hana Securities Co., Ltd.	197	2,509	483,638	12	9,018	-	460,917
	Hana Card Co., Ltd.	579	43,517	9,443	50	6,393	5,460	-
	Hana Capital Co., Ltd.	-	828	273	59	361	-	34
	Hana Asset Trust Co., Ltd.	-	64	-	-	2,886	5,146	-
	Hana Alternative Asset Management Co., Ltd.	162	56	47	-	392	-	-
	Hana TI Co., Ltd.	5	21	95	-	8,409	8,654	81,457
	Hana Life Insurance Co., Ltd.	178	14,394	4,556	-	48	-	1,316
	Hana Savings Bank	-	33	-	-	-	-	-
	Hana Investors Services Company	156	3	36	-	126	-	-
	Hana Ventures Inc.	-	1	2,144	-	378	1,291	-
	Hana Alternative Special Investment Private Real Estate Investment Trust No.123-1	-	-	2,859	-	-	-	-
	Hana F&I Inc	2,908	500	12	175	97	-	-
	Hana Ventures No. 4 New Technology Business Investment Association	-	3	-	-	1	-	-

Classification	Entity	Income			Expenses			
		Interest income	Fees and commission income	Other income	Bad debt expenses	Interest expenses	Fees and commission expenses	Other expenses
	Hana Insurance. Co., Ltd.	–	113	23	–	–	–	–
	Hana Alternative Infra Special Investment Private Trust No.3-1	–	–	1,109	–	–	–	–
	Hana Alternative Infra Special Investment Private Trust No.3-2	–	–	222	–	–	–	–
	Hana Ventures No. 6 New Technology Business Investment Association	–	2	–	–	1	–	–
	Hana Alternative Infra Special Investment Private Trust No.3-4	–	–	3,835	–	–	–	–
	Hana Alternative Investment PRC Logistics General Private Investment Trust No.1(professional)	457	–	–	–	–	–	–
	Hana Alternative General Private Real Estate Investment Trust No.180	–	–	1,888	–	–	–	–
	Finnq Co., Ltd.	–	31	1	–	2,134	788	–
Subtotal		4,642	62,075	510,181	296	30,244	21,339	543,724
Other related parties	Hana Power Infrastructure No.1 Private Investment Co., Ltd.	598	60	–	(36)	53	–	–
	Mirae Credit Information Services Corp.	66	11	72	(9)	62	1,133	–
	F&U Credit Information Co., Ltd.	–	19	–	–	2	–	–
	Lotte Ventures Corp.	–	–	1	–	1	–	–
	GMHB Co., Ltd.	–	–	–	–	1	–	–
	KORAMCO THE ONE REIT	–	–	–	–	–	–	1,519
	Dangsandong PFV Co., Ltd.	–	–	–	–	1	–	–
	Daegu MBC Site Complex Development PFV	7,823	173	–	657	–	–	–
	Apollon Private Equity Fund	–	–	709	–	–	–	–
	Lakebridge Growth First Private Investment Co., Ltd.	–	–	1,442	–	1	–	–
	YH Leisure Development Co., Ltd.	4,431	–	–	(30)	42	–	–
	Hana Ventures No.5 New Technology Business Investment Association	–	–	–	–	10	–	–
	Hana Innovation Venture Scale-up Fund	–	–	–	–	118	–	–
	Hana Must Seven Special Purpose Acquisition Company	–	–	–	–	1	–	–
	Hana Financial Sixteenth Special Purpose Acquisition Company	–	–	–	–	1	–	–
	Hana Financial Nineteenth Special Purpose Acquisition Company	–	–	–	–	13	–	–
	Gyeonggi Hana Turn-around Fund No.2	–	–	–	–	111	–	–
	Hana Untact Digital Innovation Fund	–	–	–	–	56	–	–
	Hana Financial Twenty-first Special Purpose Acquisition Company	–	–	–	–	85	–	–
	Hana Financial Twenty-second Special Purpose Acquisition Company	–	–	–	–	65	–	–
	Hana Financial Twenty-third Special Purpose Acquisition Company	–	–	–	–	61	–	–
	Hana Financial Twenty-fourth Special Purpose Acquisition Company	–	–	–	–	99	–	–
	Hana Financial Twenty-fifth Special Purpose Acquisition Company	–	–	–	–	234	–	–
	Hana Financial Twenty-sixth Special Purpose Acquisition Company	–	–	–	–	72	–	–
	Hana Financial Twenty-seventh Special Purpose Acquisition Company	–	–	–	–	69	–	–
	Anda Mobility Infrastructure Fund No.1	–	–	–	–	1	–	–

Classification	Entity	Income			Expenses			
		Interest income	Fees and commission income	Other income	Bad debt expenses	Interest expenses	Fees and commission expenses	Other expenses
	Hana Financial Twenty-eighth Special Purpose Acquisition Company	–	–	–	–	32	–	–
	Hana Financial Twenty-ninth Special Purpose Acquisition Company	–	–	–	–	15	–	–
	Anda Mobility Infrastructure Fund No.2	–	–	–	–	1	–	–
	The Hahm Green Energy Fund	–	–	60	–	–	–	–
	VL Taube Private Equity Fund	–	–	200	–	–	–	–
	HANA 30 Special Purpuse Acquisition Company	–	–	–	–	1	–	–
Subtotal		12,918	263	2,484	582	1,208	1,133	1,519
Key management	Key management	44	–	–	–	278	–	–
Total		27,862	67,372	513,050	(884)	34,462	22,477	545,688

<2022>

Classification	Entity	Income			Expenses			
		Interest income	Fees and commission income	Other income	Bad debt expenses	Interest expenses	Fees and commission expenses	Other expenses
Ultimate parent company	HFG	15	4,421	–	–	58	–	–
Associates	Bank of Jilin	100	3	–	–	–	–	5
	CM International financing leases	2,407	–	–	16,015	–	–	–
	Beijing Langzi Asset Management Co., Ltd.	67	1	1	(22)	8	–	–
	Hana Equity Partners I, L.P.	–	5	–	–	2	–	–
	Korea Credit Bureau	978	–	–	16	108	–	–
	Templeton Hana Asset Management Co., Ltd.	–	1	2	–	213	–	–
	Hana – KVIC Unicorn Fund of Funds	–	–	–	–	78	–	–
	BIDV	780	–	–	(15)	1,284	1	–
	Hana Micro Finance., Ltd.	–	1,600	–	(343)	–	–	–
	All Together Korea Fund 5	–	–	62	–	–	–	–
	Hana Ventures No.7 New Technology Business Investment Association	–	3	–	–	3	–	–
	TossBank Corp.	10,541	–	1	–	2	–	–
	SHINJIN INTERNATIONAL CORPORATION	4	–	–	–	–	–	–
	Inhee.Co,Ltd	–	1	–	–	–	–	–
	Sinsa Station area Complex Development PFV Co., Ltd.	1,606	100	–	9,199	–	–	–
	Hana-Capstone AI Platform Fund	–	–	–	–	54	–	–
	Cheongna Medipolis PFV Co., Ltd.	–	–	–	–	53	–	–
	Hana Beyond Finance Fund	–	8	–	–	229	–	–
Subtotal		16,483	1,722	66	24,850	2,034	1	5
Joint venture	PT. SINARMAS HANA FINANCE	2,398	2	–	76	–	–	–
Entities under common control	Hana Securities Co., Ltd.	76	1,947	469,067	44	3,823	–	552,481
	Hana Card Co., Ltd.	29	36,985	6,813	20	2,574	8,803	562
	Hana Capital Co., Ltd.	17	407	–	4	300	–	398
	Hana Asset Trust Co., Ltd.	–	39	–	–	3,856	3,380	–
	Hana Alternative Asset Management Co., Ltd.	5	53	–	–	823	–	–
	Hana TI Co., Ltd.	–	16	56	–	7,368	7,099	77,039
	Hana Life Insurance Co., Ltd.	8	10,757	7,782	–	31	–	3,066
	Hana Savings Bank	–	19	–	–	–	–	–
	Hana Investors Services Company	7	2	–	–	47	–	–
	Hana Ventures Inc.	–	1	–	–	97	–	–
	Hana Alternative Special Investment Private Real Estate Investment Trust No.123-1	2,775	–	1,916	–	–	–	–
	Hana F&I Inc	298	237	1	2	72	–	–
	Hana Ventures No.4 New Technology Business Investment Association	–	3	–	–	2	–	–
	Hana Insurance. Co., Ltd.	–	48	9	–	–	2,141	–
	Hana Alternative Infra Special Investment Private Trust No.3-1	–	–	499	–	–	–	–
	Hana Alternative Infra Special Investment Private Trust No.3-2	–	–	211	–	–	–	–
	Hana Ventures No.6 New Technology Business Investment Association	–	3	–	–	3	–	–
	Hana Alternative Infra Special Investment Private Trust No.3-4	–	–	734	–	–	–	–
	Hana Alternative General Private Real Estate Investment Trust No.180	–	–	799	–	–	–	–

Classification	Entity	Income			Expenses			
		Interest income	Fees and commission income	Other income	Bad debt expenses	Interest expenses	Fees and commission expenses	Other expenses
	Finnq Co., Ltd.	–	405	2	–	486	684	–
Subtotal		3,215	50,922	487,889	70	19,482	22,107	633,546
Other related parties	Hana Power Infrastructure No.1 Private Investment Co., Ltd.	588	60	–	(69)	20	–	–
	Mirae Credit Information Services Corp.	227	10	72	9	42	1,139	–
	UBS Hana Asset Management Co., Ltd.	–	1	9	–	353	–	–
	F&U Credit Information Co., Ltd.	–	17	–	–	11	–	–
	Lotte Ventures Corp.	–	–	1	–	–	–	–
	GMHB Co., Ltd.	857	–	–	(266)	1	–	–
	KORAMCO THE ONE REIT	–	–	–	–	–	–	2,069
	Daegu MBC Site Complex Development PFV	5,201	219	–	181	–	–	–
	Lakebridge Growth First Private Investment Co., Ltd.	–	–	39	–	1	–	–
	YH Leisure Development Co., Ltd.	3,917	–	–	(160)	29	–	–
	Hana Ventures No.5 New Technology Business Investment Association	–	–	–	–	6	–	–
	Hana Innovation Venture Scale-up Fund	–	–	–	–	76	–	–
	Hana Must Seven Special Purpose Acquisition Company	–	–	–	–	1	–	–
	Hana Financial Fourteenth Special Purpose Acquisition Company	–	–	–	–	1	–	–
	Hana Financial Fifteenth Special Purpose Acquisition Company	–	–	–	–	1	–	–
	Hana Financial Sixteenth Special Purpose Acquisition Company	–	–	–	–	1	–	–
	Hana Financial Seventeenth Special Purpose Acquisition Company	–	2	–	–	40	–	–
	Hana Financial Nineteenth Special Purpose Acquisition Company	–	–	–	–	29	–	–
	Hana-History No.1 New Technology Investment Association	–	–	–	–	3	–	–
	Hana Financial Twentieth Special Purpose Acquisition Company	–	–	–	–	1	–	–
	Gyeonggi Hana Turn around Fund No.2	–	–	16	–	94	–	–
	Hana Untact Digital Innovation Fund	–	–	21	–	69	–	–
	Imgok Rental Housing Co., Ltd.	–	–	–	–	1	–	–
	Hana Financial Twenty-first Special Purpose Acquisition Company	–	–	–	–	17	–	–
	The Hahm Green Energy Fund	–	–	–	–	25	–	–
	Hana Financial Twenty-second Special Purpose Acquisition Company	–	–	–	–	13	–	–
	Hana Financial Twenty-third Special Purpose Acquisition Company	–	–	–	–	12	–	–
	Hana Financial Twenty-fourth Special Purpose Acquisition Company	–	–	–	–	19	–	–
	Hana Financial Twenty-fifth Special Purpose Acquisition Company	–	–	–	–	44	–	–
	Eugene Asia Food Tech Fund-1	–	–	37	–	–	–	–
Subtotal		10,790	309	195	(305)	910	1,139	2,069
Key management	Key management	25	–	–	–	89	–	–
Total		32,926	57,376	488,150	24,691	22,573	23,247	635,620

51-2 Significant financial transactions with related parties for the years ended December 31, 2023 and 2022, are as follows:

51-2-1 Details of significant loans to related parties for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Entity	Loans (*1)				
		Beginning balance	Increase	Decrease	Others (*2)	Ending balance
Associates	Bank of Jilin	3,200	118,250	(121,450)	–	–
	CM International financing leases	61,969	59,778	(61,761)	(208)	59,778
	Korea Credit Bureau	40,000	20,000	(50,000)	–	10,000
	BIDV	6,337	19,684	(32,578)	6,557	–
	TossBank Corp.	–	2,720,000	(2,720,000)	–	–
	SHINJIN INTERNATIONAL CORPORATION	1,444	–	(1,444)	–	–
	Sinsa Station area Complex Development PFV Co., Ltd.	9,800	–	–	–	9,800
	No.1 KEBHANASTAY REITS Co., Ltd	–	18,641	–	–	18,641
Subtotal		122,750	2,956,353	(2,987,233)	6,349	98,219
Joint venture	PT. SINARMAS HANA FINANCE	37,144	431	(764)	1,240	38,051
Entities under common control	Hana Securities Co., Ltd.	3,239	–	(638)	–	2,601
	Hana F&I Inc	–	1,293,800	(1,203,600)	–	90,200
	Hana Alternative Investment PRC Logistics General Private Investment Trust No.1(professional)	–	6,447	–	–	6,447
Subtotal		3,239	1,300,247	(1,204,238)	–	99,248
Other related parties	Mirae Credit Information Services Corp.	11,116	–	(418)	–	10,698
	Hana Power Infrastructure No.1 Private Investment Co., Ltd.	7,000	–	(7,000)	–	–
	Daegu MBC Site Complex Development PFV	94,708	22,187	–	–	116,895
	YH Leisure Development Co., Ltd.	112,323	–	(9,323)	–	103,000
Subtotal		225,147	22,187	(16,741)	–	230,593
Key management	Key management	774	121	–	–	895
Total		389,054	4,279,339	(4,208,976)	7,589	467,006

(*1) Intraday overdrafts between related parties are excluded.

(*2) Others include the effect of changes in exchange rate.

<2022>

Classification	Entity	Loans (*1)				
		Beginning balance	Increase	Decrease	Others (*2)	Ending balance
Associates	Bank of Jilin	6,300	108,600	(111,700)	-	3,200
	CM International financing leases	63,341	-	-	(1,372)	61,969
	Beijing Langzi Asset Management Co., Ltd.	11,161	-	(12,083)	922	-
	Korea Credit Bureau	-	40,000	-	-	40,000
	BIDV	11,855	419,413	(425,749)	818	6,337
	TossBank Corp.	-	1,060,000	(1,060,000)	-	-
	SHINJIN INTERNATIONAL CORPORATION	1,444	-	-	-	1,444
	Sinsa Station area Complex Development PFV Co., Ltd.	75,500	9,800	(75,500)	-	9,800
Subtotal		169,601	1,637,813	(1,685,032)	368	122,750
Joint venture	PT. SINARMAS HANA FINANCE	32,491	7,086	(1,572)	(861)	37,144
Entities under common control	Hana Securities Co., Ltd.	924	4,061	(1,746)	-	3,239
	Hana Capital Co., Ltd.	-	100,000	(100,000)	-	-
	Hana Alternative Special Investment Private Real Estate Investment Trust No.123-1	-	45,537	(45,537)	-	-
	Hana F&I Inc.	-	265,400	(265,400)	-	-
Subtotal		924	414,998	(412,683)	-	3,239
Other related parties	Hana Power Infrastructure No.1 Private Investment Co., Ltd.	13,023	-	(1,907)	-	11,116
	Mirae Credit Information Services Corp.	-	7,000	-	-	7,000
	Smartscore Co., Ltd.	-	38	(38)	-	-
	GMHB Co., Ltd.	32,500	-	(32,500)	-	-
	Daegu MBC Site Complex Development PFV	85,120	9,588	-	-	94,708
	YH Leisure Development Co., Ltd.	115,463	-	(3,140)	-	112,323
Subtotal		246,106	16,626	(37,585)	-	225,147
Key management	Key management	749	25	-	-	774
Total		449,871	2,076,548	(2,136,872)	(493)	389,054

(*1) Intraday overdrafts between related parties are excluded.

(*2) Others include the effect of changes in exchange rate.

51-2-2 Details of significant cash investments with related parties for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Entity	Investment in cash	
		Investment	Collection and others
Associates	Bank of Jilin	-	(13,864)
	Beijing Langzi Asset Management Co., Ltd.	-	(1,178)
	Korea Credit Bureau Co., Ltd	-	(90)
	Templeton Hana Asset Management Co., Ltd.	-	(396)
	Company K Startup Winwin Fund	-	(550)
	BSK-6 Patent Technology Investment Association	-	(409)
	Hana-KVIC Unicorn Fund of Funds	-	(6,000)
	Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	-	(2,377)
	All Together Korea Fund 5	210	(210)
	HORIZON PRIVATE EQUITY FUND	-	(16,268)
	TossBank Corp.	50,677	-
	Hana-New Deal K-Growth fund	4,500	-
	Taurus Cloud Fund	91	-
	Cheongna Medipolis PFV Co., Ltd.	16,628	-
	Hana Beyond Finance Fund	8,000	(721)
	Defense Technology Innovation Private Investment Trust	5,900	-
	Hana Prop-Tech Fund No.1	3,000	-
	UNION TCB FUND II	1,200	-
	Artificial Photosynthesis Lab Co.,Ltd.	1,666	-
	MASHUP ANGELS VALUE UP FUND2	1,200	-
	Hana KTOP Short term Financial Bond Active ETF (Bond)	60,107	-
	Hana KTOP25-08 Credit(A+) Active ETF (Bond)	49,995	-
Subtotal		203,174	(42,063)
Entities under common control	Hana Alternative Special Investment Private Real Estate Investment Trust No.123-1	-	(7,469)
	Hana Alternative Infra Special Investment Private Trust No.3-1	4,926	(1,250)
	Hana Alternative Infra Special Investment Private Trust No.3-2	-	(31)
	Hana Alternative Infra Special Investment Private Trust No.3-4	-	(15,819)
	Hana Alternative General Private Real Estate Investment Trust No.180	35,956	-
	Hana the Third Private Equity Fund	-	(248)
	Hana Alternative Infrastructure General Private Special Asset Fund No.1 (Professional)	19,137	-
	Hana Balance Private investment trust 1	10,000	-
	Hana Private investment trust 12 [Bond]	50,000	-

Classification	Entity	Investment in cash	
		Investment	Collection and others
	Hana Private investment trust 13 [Bond]	50,000	-
	Hana Private investment trust 14 [Bond]	50,000	-
	Hana Private investment trust 15 [Bond]	50,000	-
	Hana Private investment trust 16 [Bond]	50,000	-
Subtotal		320,019	(24,817)
Other related parties	Hana Digital Transformation Fund	-	(1,800)
	Apollon Private Equity Fund	-	(394)
	Heat Private Equity Fund	-	(1,008)
	Lakebridge Growth First Private Investment Co., Ltd.	-	(6,317)
	Hana Innovation Venture Scale-Up Fund	-	(208)
	Hana K-NewDeal Unicorn Fund	1,800	-
	KDBI-HANA Business Reorganization Value-up Private Equity Fund	27,703	-
Subtotal		29,503	(9,727)
Total		552,696	(76,607)

<2022>

Classification	Entity	Investment in cash	
		Investment	Collection and others
Associates	Beijing Langzi Asset Management Co., Ltd.	-	(1,708)
	Hana First Private Equity Fund	-	(120)
	Templeton Hana Asset Management Co., Ltd.	-	(198)
	Company K Startup Winwin Fund	-	(7,090)
	BSK-6 Patent Technology Investment Association	-	(327)
	Hana - KVIC Unicorn Fund of Funds	25,130	-
	Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	-	(27)
	All Together Korea Fund 5	62	(62)
	HORIZON PRIVATE EQUITY FUND	-	(15,436)
	TossBank Corp.	70,000	-
	Hana-New Deal K-Growth fund	22,500	-
	Hana-Capstone AI Platform Fund	15,000	-
	Taurus Cloud Fund	77	-
	Hana Beyond Finance Fund	24,000	-
	Defense Technology Innovation Private Investment Trust	2,950	-
Subtotal		159,719	(24,968)
Entities under common control	Hana Securities Co., Ltd.	-	(563)
	Hana Alternative Infra Special Investment Private Trust No.3-1	14,454	-
	Hana Alternative Infra Special Investment Private Trust No.3-4	356	-
	Hana Alternative General Private Real Estate Investment Trust No.180	37,233	-
Subtotal		52,043	(563)
Other related parties	Hana Digital Transformation Fund	-	(1,596)
	Lakebridge Growth First Private Investment Co., Ltd.	-	(175)
	Hana Innovation Venture Scale-up Fund	1,040	-
	Gyeonggi Hana Turn around Fund No.2	1,350	-
	Hana Untact Digital Innovation Fund	2,700	-
	Hana K-NewDeal Unicorn Fund	7,200	-
	The Hahm Green Energy Fund	6,000	-
Subtotal		18,290	(1,771)
Total		230,052	(27,302)

51-2-3 Details of significant deposits with related parties for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Entity	Deposits (*1)				
		Beginning balance	Increase	Decrease	Others (*2)	Ending balance
Associates	Korea Credit Bureau	8,000	-	(8,000)	-	-
	Templeton Hana Asset Management Co., Ltd.	10,500	7,500	(7,500)	-	10,500
	Hana Ventures No.7 New Technology Business Investment Association	200	-	(200)	-	-
	HORIZON PRIVATE EQUITY FUND	-	2,823	(2,823)	-	-
	Hana-Capstone AI Platform Fund	42	43	(42)	-	43
	Cheongna Medipolis PFV Co., Ltd	2,500	70	-	-	2,570
	Hana Beyond Finance Fund	35,000	-	(35,000)	-	-
	MASHUP ANGELS VALUE UP FUND2	-	4,110	(860)	-	3,250
Subtotal		56,242	14,546	(54,425)	-	16,363
Joint venture	PT. SINARMAS HANA FINANCE	5	-	(5)	-	-
Entities under common control	Hana Securities Co., Ltd.	11,045	10,015	(19,060)	15,000	17,000
	Hana Card Co., Ltd.	10	10	(10)	-	10
	Hana Capital Co., Ltd.	1,900	-	(1,900)	-	-
	Hana Asset Trust	175,000	125,000	(270,000)	-	30,000
	Hana Alternative Asset Management Co., Ltd.	13,000	-	(13,000)	-	-
	Hana TI Co., Ltd.	-	8,468	(4,180)	-	4,288
	Hana Fund Service Co., Ltd.	3,000	7,000	(3,000)	-	7,000
	Hana Ventures Inc.	11,000	59,000	(54,000)	-	16,000
	Hana Ventures No.4 New Technology Business Investment Association	200	-	(200)	-	-
	Hana Ventures No.6 New Technology Business Investment Association	200	-	(200)	-	-
	Finnq Co., Ltd.	47,500	30,000	(37,500)	-	40,000
Subtotal		262,855	239,493	(403,050)	15,000	114,298
Other related parties	GMHB Co., Ltd.	100	-	-	-	100
	YH Leisure Development Co., Ltd.	5,000	-	(5,000)	-	-
	Hana Ventures No.5 New Technology Business Investment Association	500	-	(500)	-	-
	Hana Innovation Venture Scale-up Fund	5,000	-	(5,000)	-	-
	Hana Financial Nineteenth Special Purpose Acquisition Company	1,813	-	(1,813)	-	-
	Gyeonggi Hana Turn around Fund No.2	7,000	-	(7,000)	-	-
	Hana Untact Digital Innovation Fund	3,000	-	(3,000)	-	-
	Hana Financial Twenty-first Special Purpose Acquisition Company	2,100	-	(2,100)	-	-
	Hana Financial Twenty-second Special Purpose Acquisition Company	1,600	-	(1,600)	-	-
	Hana Financial Twenty-third Special Purpose Acquisition Company	1,500	-	(1,500)	-	-
	Hana Financial Twenty-fourth Special Purpose Acquisition Company	2,450	-	(2,450)	-	-
	Hana Financial Twenty-fifth Special Purpose Acquisition Company	5,800	-	(5,800)	-	-
	Hana Financial Twenty-sixth Special Purpose Acquisition Company	-	3,230	(1,700)	-	1,530

Classification	Entity	Deposits (*1)				
		Beginning balance	Increase	Decrease	Others (*2)	Ending balance
	Hana Financial Twenty-seventh Special Purpose Acquisition Company	-	1,650	(1,650)	-	-
	Hana Financial Twenty-eighth Special Purpose Acquisition Company	-	2,200	-	-	2,200
	Hana Financial Twenty-ninth Special Purpose Acquisition Company	-	1,000	-	-	1,000
Subtotal		35,863	8,080	(39,113)	-	4,830
Key management	Key management	5,502	1,919	-	-	7,421
Total		360,467	264,038	(496,593)	15,000	142,912

(*1) Deposits/Withdrawals arising from operations between related parties are excluded.

(*2) The amount from the change in the classification of related parties is included.

<2022>

Classification	Entity	Deposits (*1)			
		Beginning balance	Increase	Decrease	Ending balance
Associates	Korea Credit Bureau	-	8,000	-	8,000
	Templeton Hana Asset Management Co., Ltd.	11,000	10,500	(11,000)	10,500
	Company K Startup Winwin Fund	300	-	(300)	-
	Hana Ventures No.7 New Technology Business Investment Association	-	400	(200)	200
	Hana-Capstone AI Platform Fund	42	42	(42)	42
	Cheongna Medipolis PFV Co., Ltd	-	2,500	-	2,500
	Hana Beyond Finance Fund	-	35,000	-	35,000
Subtotal		11,342	56,442	(11,542)	56,242
Joint venture	PT. SINARMAS HANA FINANCE	12	5	(12)	5
Entities under common control	Hana Securities Co., Ltd.	5,100	7,560	(1,615)	11,045
	Hana Card Co., Ltd.	1,005	10	(1,005)	10
	Hana Capital Co., Ltd.	-	5,800	(3,900)	1,900
	Hana Asset Trust	165,000	175,000	(165,000)	175,000
	Hana Alternative Asset Management Co., Ltd.	49,000	98,000	(134,000)	13,000
	Hana TI Co., Ltd.	-	100,000	(100,000)	-
	Hana Investors Services Company	-	3,000	-	3,000
	Hana Ventures Inc.	3,000	16,500	(8,500)	11,000
	Hana F&I Inc.	-	1,500	(1,500)	-
	Hana Ventures No.4 New Technology Business Investment Association	-	400	(200)	200
	Hana Ventures No.6 New Technology Business Investment Association	-	400	(200)	200
	Finnq Co., Ltd.	-	89,000	(41,500)	47,500
Subtotal		223,105	497,170	(457,420)	262,855
	Mirae Credit Information Services Corp.	300	-	(300)	-
	UBS Hana Asset Management Co., Ltd.	16,000	18,000	(16,000)	18,000
	F&U Credit Information Co., Ltd.	509	502	(1,011)	-
	GMHB Co., Ltd.	100	-	-	100
	YH Leisure Development Co., Ltd.	-	5,000	-	5,000

Classification	Entity	Deposits (*1)			
		Beginning balance	Increase	Decrease	Ending balance
Other related parties	Creation Innovation Co., Ltd	10	-	(10)	-
	Hana Ventures No.5 New Technology Business Investment Association	-	1,000	(500)	500
	Hana Innovation Venture Scale-Up Fund	-	13,000	(8,000)	5,000
	Hana Financial Nineteenth Special Purpose Acquisition Company	1,800	13	-	1,813
	Gyeonggi Hana Turn around Fund No.2	-	17,000	(10,000)	7,000
	Hana Untact Digital Innovation Fund	-	13,000	(10,000)	3,000
	Hana Financial Twenty-first Special Purpose Acquisition Company	-	2,100	-	2,100
	The Hahm Green Energy Fund	-	5,600	(5,600)	-
	Hana Financial Twenty-second Special Purpose Acquisition Company	-	1,600	-	1,600
	Hana Financial Twenty-third Special Purpose Acquisition Company	-	1,500	-	1,500
	Hana Financial Twenty-fourth Special Purpose Acquisition Company	-	2,450	-	2,450
	Hana Financial Twenty-fifth Special Purpose Acquisition Company	-	5,800	-	5,800
Subtotal		18,719	86,565	(51,421)	53,863
Key management	Key management	3,596	1,906	-	5,502
Total		256,774	642,088	(520,395)	378,467

(*1) Deposits/Withdrawals arising from operations between related parties are excluded.

51-2-4 Details of significant borrowings from related parties for the years ended December 31, 2023 and 2022, are as follows (Korean won in millions):

<2023>

Classification	Entity	Beginning balance	Increase	Decrease	Others (*)	Ending balance
Associates	Bank of Jilin	-	36,276	-	-	36,276
	BIDV	10,740	100,016	(110,656)	(100)	-
Total		10,740	136,292	(110,656)	(100)	36,276

(*) Others include the effect of changes in exchange rate.

<2022>

Classification	Entity	Beginning balance	Increase	Decrease	Others (*)	Ending balance
Associate	BIDV	80,755	1,349,738	(1,422,233)	2,480	10,740

(*) Others include the effect of changes in exchange rate.

51-3 Outstanding receivables and payables with related parties arising from the above transactions as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Entity	Loans	Other receivables	Allowance for loan losses	Deposits	Other liabilities
Ultimate parent company	HFG	-	6,578	-	281,569	86,654
Associates	Bank of Jilin	-	-	-	3,068	36,450
	CM International financing leases	59,778	-	47,866	17	-
	Beijing Langzi Asset Management Co., Ltd.	-	-	-	3,035	-
	Hana Equity Partners I, L.P	-	-	-	114	-
	Korea Credit Bureau	10,000	-	4	894	-
	Templeton Hana Asset Management Co., Ltd.	-	-	-	11,391	-
	Midan City Development Co., Ltd.	-	-	-	2	-
	Hana - KVIC Unicorn Fund of Funds	-	-	-	1,863	-
	BIDV	-	1,270	-	372	835
	Hana Ventures No.7 New Technology Business Investment Association	-	-	-	385	-
	SHINJIN INTERNATIONAL CORPORATION	-	1	-	-	-
	Sinsa Station area Complex Development PFV Co., Ltd.	9,800	-	9,957	-	-
	Hana-Capstone AI Platform Fund	-	-	-	14,462	-
	Cheongna Medipolis PFV Co., Ltd	-	-	-	2,570	-
	Hana Beyond Finance Fund	-	-	-	14,913	-
	UNION TCB FUND II	-	-	-	627	-
	Artificial Photosynthesis Lab Co.,Ltd.	-	-	-	1,718	-
	No.1 KEBHANASTAY REITS Co., Ltd	18,641	-	6	7,211	-
	MASHUP ANGELS VALUE UP FUND2	-	-	-	4,453	-
Subtotal		98,219	1,271	57,833	67,095	37,285
Joint venture	PT. SINARMAS HANA FINANCE	38,051	54	246	3	-
Entities under common control	Hana Securities Co., Ltd.	2,601	239,866	112	555,567	237,736
	Hana Card Co., Ltd.	-	11,961	199	918,319	47,505
	Hana Capital Co., Ltd.	-	27	112	134,104	4,789
	Hana Asset Trust Co., Ltd.	-	1	-	33,937	373
	Hana Alternative Asset Management Co., Ltd.	-	3,172	-	112,125	968
	Hana TI Co., Ltd.	-	207,398	-	17,932	221,166
	Hana Life Insurance Co., Ltd.	-	5,454	-	-	3,769
	Hana Investors Services Company	-	3,067	-	7,758	819
	Hana Ventures Inc.	-	-	-	21,007	636
	Hana F&I Inc	90,200	1,073	202	36,067	283
	Hana Ventures No.4 New Technology Business Investment Association	-	-	-	148	-
	Hana Insurance. Co., Ltd.	-	1	-	519	-
	Hana Ventures No.6 New Technology Business Investment Association	-	-	-	116	-
	Hana Alternative Investment PRC Logistics General Private Investment Trust No.1(professional)	6,447	-	-	-	-
	Finnq Co., Ltd.	-	-	-	46,270	-
Subtotal		99,248	472,020	625	1,883,869	518,044
	Hana Power Infrastructure No.1 Private Investment Co., Ltd.	10,698	-	135	37,978	-

Classification	Entity	Loans	Other receivables	Allowance for loan losses	Deposits	Other liabilities
Other related parties	Mirae Credit Information Services Corp.	-	-	-	1,888	-
	F&U Credit Information Co., Ltd.	-	-	-	996	-
	Lotte Ventures Corp.	-	-	-	1,554	-
	GMHB Co., Ltd.	-	-	-	100	-
	KORAMCO THE ONE REIT	-	1,354	-	-	-
	Daegu MBC Site Complex Development PFV	116,895	-	1,785	2	-
	YH Leisure Development Co., Ltd.	103,000	-	141	164	-
	Creation Innovation Co., Ltd.	-	-	-	106	-
	Hana Ventures No.5 New Technology Business Investment Association	-	-	-	509	-
	Hana Innovation Venture Scale-Up Fund	-	-	-	5,564	-
	Hana Must Seven Special Purpose Acquisition Company	-	-	-	1,331	-
	People Korea Two Co., Ltd.	-	-	-	36	-
	Gyeonggi Hana Turn around Fund No.2	-	-	-	6,120	-
	Hana Untact Digital Innovation Fund	-	-	-	2,477	-
	Imgok Rental Housing Co., Ltd.	-	-	-	1	-
	Hana Financial Twenty-first Special Purpose Acquisition Company	-	-	-	2,624	-
	Choice & Soyern Construction Co., Ltd.	-	-	-	104	-
	Hana Financial Twenty-second Special Purpose Acquisition Company	-	-	-	2,050	-
	Hana Financial Twenty-third Special Purpose Acquisition Company	-	-	-	1,475	-
	Hana Financial Twenty-fourth Special Purpose Acquisition Company	-	-	-	3,024	-
	Hana Financial Twenty-fifth Special Purpose Acquisition Company	-	-	-	6,636	-
	Eugene Asia Food Tech Fund-1	-	-	-	204	-
	Hana Financial Twenty-sixth Special Purpose Acquisition Company	-	-	-	2,238	-
	Hana Financial Twenty-seventh Special Purpose Acquisition Company	-	-	-	2,101	-
	Anda Mobility Infrastructure Fund No.1	-	-	-	760	-
	Hana Financial Twenty-eighth Special Purpose Acquisition Company	-	-	-	3,262	-
	Hana Financial Twenty-ninth Special Purpose Acquisition Company	-	-	-	2,007	-
	Anda Mobility Infrastructure Fund No.2	-	-	-	809	-
	HI-DCP MCE Industries Fund No.1	-	-	-	141	-
	HANA 30 Special Purpuse Acquisition Company	-	-	-	3,051	-
	HANA 31 Special Purpuse Acquisition Company	-	-	-	2,388	-
Subtotal		230,593	1,354	2,061	91,700	-
Key management	Key management	895	-	1	9,367	-
Total		467,006	481,277	60,766	2,333,603	641,983

<December 31, 2022>

Classification	Entity	Loans	Other receivables	Allowance for loan losses	Deposits	Other liabilities
Ultimate parent company	HFG	–	8,715	–	28,718	672,478
Associates	Bank of Jilin	3,200	2,409	–	1,611	–
	CM International financing leases	61,969	–	49,620	18	–
	Beijing Langzi Asset Management Co., Ltd.	–	–	–	3,601	–
	Hana Equity Partners I, L.P	–	–	–	115	–
	Korea Credit Bureau	40,000	–	16	8,169	–
	Templeton Hana Asset Management Co., Ltd.	–	–	–	10,672	–
	Midan City Development Co., Ltd.	–	–	–	2	–
	Hana – KVIC Unicorn Fund of Funds	–	–	–	3,993	–
	BIDV	6,337	5,394	24	2,045	10,740
	Hana Ventures No. 7 New Technology Business Investment Association	–	–	–	495	–
	SHINJIN INTERNATIONAL CORPORATION	1,444	1	107	–	–
	Sinsa Station area Complex Development PFV Co., Ltd.	9,800	–	9,845	45	–
	Hana-Capstone AI Platform Fund	–	–	–	16,841	–
	Cheongna Medipolis PFV Co., Ltd	–	–	–	2,500	–
	Hana Beyond Finance Fund	–	–	–	42,439	–
Subtotal		122,750	7,804	59,612	92,546	10,740
Joint venture	PT. SINARMAS HANA FINANCE	37,144	47	229	5	–
Entities under common control	Hana Securities Co., Ltd.	3,239	69,942	100	925,719	151,692
	Hana Card Co., Ltd.	–	15,344	150	309,912	44,938
	Hana Capital Co., Ltd.	–	146	54	506,174	4,701
	Hana Asset Trust Co., Ltd.	–	–	–	179,749	1,968
	Hana Alternative Asset Management Co., Ltd.	–	4,229	–	36,762	1,114
	Hana TI Co., Ltd.	–	211,454	–	5,425	217,978
	Hana Life Insurance Co., Ltd.	–	8,691	–	–	4,671
	Hana Investors Services Company	–	4,090	–	4,190	841
	Hana Ventures Inc.	–	–	–	12,876	35
	Hana F&I Inc	–	1,430	27	40,340	284
	Hana Ventures No.4 New Technology Business Investment Association	–	–	–	245	–
	Hana Insurance. Co., Ltd.	–	–	–	35	–
	HANA ASSET MANAGEMENT ASIA PTE. Ltd.	–	–	–	5,117	–
	Hana Ventures No.6 New Technology Business Investment Association	–	–	–	249	–
	Finnq Co., Ltd.	–	–	–	53,949	–
Subtotal		3,239	315,326	331	2,080,742	428,222
	Gunsan bio-energy Corp.	–	–	–	549	–
	Hana Power Infrastructure No.1 Private Investment Co., Ltd.	11,116	–	170	4,264	–
	Mirae Credit Information Services Corp.	7,000	–	9	2,267	–
	UBS Hana Asset Management Co., Ltd.	–	–	–	18,287	–
	F&U Credit Information Co., Ltd.	–	–	–	1,149	–
	Lotte Ventures Corp.	–	–	–	96	–
	GMHB Co., Ltd.	–	–	–	100	–
	KORAMCO THE ONE REIT	–	1,354	–	–	–
	Dangsandong PFV Co., Ltd.	–	–	–	675	–
	Daegu MBC Site Complex Development PFV	94,708	–	1,127	2	–
	Lakebridge Growth First Private Investment Co., Ltd	–	–	–	330	–
	YH Leisure Development Co., Ltd.	112,323	–	172	5,045	–

Classification	Entity	Loans	Other receivables	Allowance for loan losses	Deposits	Other liabilities
Other related parties	Creation Innovation Co., Ltd	-	-	-	70	-
	Hana Ventures No.5 New Technology Business Investment Association	-	-	-	592	-
	Hana Innovation Venture Scale-Up Fund	-	-	-	10,943	-
	Hana Must Seven Special Purpose Acquisition Company	-	-	-	1,389	-
	Hana Financial Sixteenth Special Purpose Acquisition Company	-	-	-	1,275	-
	Hana Financial Nineteenth Special Purpose Acquisition Company	-	-	-	2,423	-
	People Korea Two Co., Ltd.	-	-	-	47	-
	Hana Financial Twentieth Special Purpose Acquisition Company	-	-	-	778	-
	Gyeonggi Hana Turn around Fund No.2	-	-	-	11,370	-
	Hana Untact Digital Innovation Fund	-	-	-	8,252	-
	Imgok Rental Housing CO., Ltd.	-	-	-	38	-
	Hana Financial Twenty-first Special Purpose Acquisition Company	-	-	-	2,572	-
	Choice & Soyern Construction Co., Ltd.	-	-	-	104	-
	Hana Financial Twenty-second Special Purpose Acquisition Company	-	-	-	2,007	-
	Hana Financial Twenty-third Special Purpose Acquisition Company	-	-	-	1,911	-
	Hana Financial Twenty-fourth Special Purpose Acquisition Company	-	-	-	2,954	-
	Hana Financial Twenty-fifth Special Purpose Acquisition Company	-	-	-	6,536	-
	Eugene Asia Food Tech Fund-1	-	-	-	247	-
Subtotal		225,147	1,354	1,478	86,272	-
Key management	Key management	774	-	-	8,007	-
Total		389,054	333,246	61,650	2,296,290	1,111,440

51-4 Significant payment guarantees and collaterals provided to related parties as of December 31, 2023 and 2022, are as follows (Korean won in millions):

<December 31, 2023>

Classification	Entity	Payment guarantees or collaterals provided	Limit
Associates	Korea Credit Bureau	Unused loan commitments in Korean won	30,000
	Hana Micro Finance., Ltd.	Acceptance and guarantees in foreign currencies	64,470
	All Together Korea Fund 5	Purchase of securities	990,000
	Hana-New Deal K-Growth fund	Purchase of securities	61,200
	Taurus Cloud Fund	Purchase of securities	430
	Hana Beyond Finance Fund	Purchase of securities	48,000
	Defense Technology Innovation Private Investment Trust	Purchase of securities	50,150
	UNION TCB FUND II	Purchase of securities	10,800
	No.1 KEBHANASTAY REITS Co., Ltd	Unused loan commitments in Korean won	1,259
Joint venture	PT. SINARMAS HANA FINANCE	Unused loan commitments in foreign currencies	3,113
Entities under common control	Hana Securities Co., Ltd.	Unused loan commitments in Korean won	130,000
		Acceptance and guarantees in Korean won	626
	Hana Card Co., Ltd.	Unused loan commitments in Korean won	500,000
		Acceptance and guarantees in foreign currencies	40,000
	Hana Capital Co., Ltd.	Unused loan commitments in Korean won	260,000
	Hana TI Co., Ltd.	Unused loan commitments in Korean won	7
	Hana F&I Inc.	Unused loan commitments in Korean won	249,800
	Hana Alternative Infra Special Investment Private Trust No.3-1	Purchase of securities	2,085
	Hana Alternative Infra Special Investment Private Trust No.3-4	Purchase of securities	18,451
	Hana Alternative General Private Real Estate Investment Trust No.180	Purchase of securities	78,402
	Hana Alternative Infrastructure General Private Special Asset Fund No.1 (Professional)	Purchase of securities	30,863
Other related parties	Hana Digital Transformation Fund	Purchase of securities	1,000
	Daegu MBC Site Complex Development PFV	Unused loan commitments in Korean won	43,105
	Hana Innovation Venture Scale-Up Fund	Purchase of securities	520
	Gyeonggi Hana Turn around Fund No.2	Purchase of securities	450
	Hana Untact Digital Innovation Fund	Purchase of securities	450
	Hana K-NewDeal Unicorn Fund	Purchase of securities	9,000
	Nautic Green Innovation ESG Co-investment No. 1 Private Equity Fund	Purchase of securities	672
	KDBI-HANA Business Reorganization Value-up Private Equity Fund	Purchase of securities	42,298

<December 31, 2022>

Classification	Entity	Payment guarantees or collaterals provided	Limit
Associates	Hana Micro Finance., Ltd.	Acceptance and guarantees in foreign currencies	98,849
	Hana-New Deal K-Growth fund	Purchase of securities	65,700
	Taurus Cloud Fund	Purchase of securities	522
	Hana Beyond Finance Fund	Purchase of securities	56,000
	Cheongna Medipolis PFV Co., Ltd.	Purchase of securities	16,628
	Templeton Hana Asset Management Co., Ltd.	Purchase of securities	4,619
	All Together Korea Fund 5	Purchase of securities	990,000
	Defense Technology Innovation Private Investment Trust	Purchase of securities	56,050
Joint venture	PT. SINARMAS HANA FINANCE	Unused loan commitments in foreign currencies	1,688
Entities under common control	Hana Alternative Infra Special Investment Private Trust No.3-1	Purchase of securities	5,761
	Hana F&I Inc	Unused loan commitments in Korean won	140,000
	Hana Card Co., Ltd.	Unused loan commitments in Korean won	500,000
		Acceptance and guarantees in foreign currencies	40,000
	Hana Capital Co., Ltd.	Unused loan commitments in Korean won	260,000
	Hana Alternative Infra Special Investment PrivateTrust No.3-4	Purchase of securities	2,632
	Hana Securities Co., Ltd.	Unused loan commitments in Korean won	130,000
	Hana Alternative General Private Real Estate Investment Trust No.180	Purchase of securities	114,359
Other related parties	Hana Digital Transformation Fund	Purchase of securities	1,000
	Hana Innovation Venture Scale-Up Fund	Purchase of securities	520
	Daegu MBC Site Complex Development PFV	Unused loan commitments in Korean won	65,292
	Gyeonggi Hana Turn around Fund No.2	Purchase of securities	450
	Hana Untact Digital Innovation Fund	Purchase of securities	450
	Hana K-NewDeal Unicorn Fund	Purchase of securities	10,800

51-5 Significant payment guarantees and collaterals provided from related parties as of December 31, 2023 and 2022, are as follows
(Korean won in millions):

<December 31, 2023>

Classification	Entity	Payment guarantees or collaterals provided	Limit
Associate	BIDV	Acceptance and guarantees in foreign currencies	59,120
Entities under common control	Hana Securities Co., Ltd.	Collateral provided	70,000
		Unsettled arrangements	2,550,693
	Hana Card Co., Ltd.	Unused loan commitments in Korean won	138,607
		Unsettled arrangements	206,857
	Hana Capital Co., Ltd.	Collateral provided	475,557
	Hana Life Insurance Co., Ltd.	Collateral provided	15,000
		Unsettled arrangements	104,872
	Hana F&I Inc.	Collateral provided	790,621
	Hana Insurance. Co., Ltd.	Collateral provided	1,870
	Finnq Co., Ltd.	Collateral provided	50

<December 31, 2022>

Classification	Entity	Payment guarantees or collaterals provided	Limit
Associate	BIDV	Acceptance and guarantees in foreign currencies	59,306
Entities under common control	Hana Life Insurance Co., Ltd.	Collateral provided	13,525
		Unsettled arrangements	94,633
	Hana F&I Inc	Collateral provided	271,875
	Hana Card Co., Ltd.	Unsettled arrangements	307,812
		Unused loan commitments in Korean won	139,110
	Hana Capital Co., Ltd.	Collateral provided	475,051
	Finnq Co., Ltd.	Collateral provided	50
	Hana Securities Co., Ltd.(*)	Collateral provided	70,000
		Unsettled arrangements	3,654,925

(*) As a swap bank of investment trust to which Hana Securities Co., Ltd. is committed to purchase private bonds, the Group is provided with an obligation for additional investment or supplementation of forward exchange or currency swap of investment trust.

51-6 The amounts of intangible assets and others acquired by Hana TI Co., Ltd. for the years ended December 31, 2023 and 2022, are ₩4,590 million and ₩10,867 million, respectively.

51-7 The defined benefit plans deposited to Hana Securities Co., Ltd. as of December 31, 2023 and 2022, are ₩116,406 million and ₩111,311 million, respectively.

51-8 The amounts of bonds the Group purchased through Hana Securities Co., Ltd. for the years ended December 31, 2023 and 2022, are ₩1,207,700 million and ₩2,427,089 million, respectively, and the amounts sold are ₩132,826 million and ₩100,878 million, respectively.

51-9 For the year ended December 31, 2022, the Group purchased land from Hana TI Company Ltd., and the carrying amount of the purchased land was ₩226,530 million.

51-10 Details of compensation for standing directors and executive officers for the years ended December 31, 2023 and 2022, are as follows
(Korean won in millions):

Classification	2023	2022
Short-term employee payment	25,271	19,986
Retirement benefit	311	682
Share-based payment	3,698	3,297

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Independent Auditor's Report

To the Shareholders and Board of Directors
Hana Bank Co., Ltd. and its subsidiaries:

Audit Opinion

We have audited the accompanying consolidated financial statements of Hana Bank Co., Ltd. (the "Bank") and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statement of financial position as of December 31, 2022, and the related consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cashflows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2022, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Korean International Financial Reporting Standards ("K-IFRSs").

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Basis for Audit opinion

We conducted our audit in accordance with Korean Standards on Auditing ("KSAs"). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audit of the consolidated financial statements in the Republic of Korea, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other matter

The Group's consolidated financial statements for the reporting period ended December 31, 2021, were audited by Ernst & Young Han Young in accordance wit h K-IFRSs, and in this auditor's report dated March 10, 2022, an unqualified opin ion was expressed. Meanwhile, the consolidated financial statements for which the auditor expressed an unqualified opinion are the financial statements before reflec ting the adjustments described in Note 2-2-8 to the financial statements, and the financial statements as of and for the year ended December 31, 2021, shown for comparison, are consolidated financial statement that reflect the adjustments.

Responsibilities of management and those charged with governance for the consolidated financial statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with K-IFRSs, and for such internal control as management determines is necessary to enable the preparation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financ ial reporting process.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with KSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with KSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

Deloitte.

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonablenes s of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to therelated disclosures in the consolidated financial statements or, if such disclosuresare inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Deloitte Anjin LLC

March 10, 2023

This audit report is effective as of March 10, 2023, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the date of the independent auditor's report to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

HANA BANK CO., LTD.
and its subsidiaries

Consolidated Financial Statements

as of and for the years ended December 31, 2022 and 2021

(With the Independent Auditor's Report)

Consolidated Statements of Financial Position

As of December 31, 2022 and 2021

Hana Bank Co., Ltd. and its subsidiaries (Korean won in millions)

Accounts	December 31, 2022		December 31, 2021	
Assets				
1. Cash and due from banks (Notes 4, 5, 6, 8, 10, 50)	41,087,857		27,693,932	
2. Financial assets at FVTPL (Notes 4, 5, 6, 7, 8, 11, 14, 16)	18,455,415		10,918,562	
3. Derivative assets used for hedging (Notes 4 ,5 ,6, 7, 8, 16)	8,062		68,670	
4. Financial assets at FVOCI (Notes 4, 5, 6, 7, 8, 12, 14)	32,960,581		35,234,358	
5. Securities at amortized cost (Notes 4, 5, 6, 7, 8, 13, 14)	37,583,487		22,467,884	
6. Loans (Notes 4, 5, 6, 7, 8, 15)	330,186,341		309,177,708	
7. Investments in associates and a joint venture (Note 17)	2,958,288		2,630,970	
8. Property, plant and equipment (Notes 9, 18)	2,426,014		2,004,441	
9. Investment properties (Notes 9, 19)	664,942		790,689	
10. Intangible assets (Notes 9, 20)	386,107		356,571	
11. Net defined benefit assets (Note 27)	77,160		-	
12. Current tax assets	24,733		18,141	
13. Deferred tax assets (Note 47)	316,018		182,851	
14. Other assets (Notes 4, 5, 6, 7, 8, 22)	13,505,955		13,864,730	
15. Merchant banking account assets (Notes 4, 5, 6, 8, 22)	4,631,361		4,741,939	
16. Non-current assets held for sale (Note 21)	36,423		42,130	
Total assets		485,308,744		430,193,576
Liabilities				
1. Deposits (Notes 4, 5, 6, 8, 23)	359,858,481		321,125,300	
2. Financial liabilities at FVTPL (Notes 4, 5, 6, 7, 8, 16, 24)	11,228,307		4,188,107	
3. Derivative liabilities used for hedging (Notes 4, 5, 6, 7, 8, 16)	516,418		111,192	
4. Borrowings (Notes 4, 5, 6, 7, 8, 25, 50)	22,256,597		17,524,480	
5. Debentures (Notes 4, 5, 6, 8, 26, 50)	26,233,339		27,699,757	
6. Net defined benefit liabilities (Note 27)	9,106		177,077	
7. Provisions (Note 28)	564,978		518,964	
8. Current tax liabilities	726,579		566,972	
9. Deferred tax liabilities (Note 47)	2,259		151,143	
10. Other liabilities (Notes 4, 5, 6, 7, 8, 29, 50)	30,280,039		26,465,833	
11. Merchant banking account liabilities (Notes 4, 5, 6, 8, 29)	3,667,273		2,908,280	
Total liabilities		455,343,376		401,437,105
Equity				
Equity attributable to owners of the parent		29,685,969		28,489,982
1. Capital stock (Note 30)	5,359,578		5,359,578	
2. Capital surplus (Note 30)	6,159,820		9,653,868	
3. Hybrid equity securities (Note 30)	533,475		533,475	
4. Capital adjustments (Note 30)	(37,686)		(38,279)	

Accounts	December 31, 2022		December 31, 2021	
5. Retained earnings (Note 32) (Regulatory reserve for bad debts in the amount of: December 31, 2022 : ₩2,714,034 million December 31, 2021 : ₩2,426,281 million Required provision for bad debts in the amount of: December 31, 2022 : ₩(23,926) million December 31, 2021 : ₩287,753 million Planned provision for bad debts in the amount of: December 31, 2022 : ₩(23,926) million December 31, 2021 : ₩287,753 million) (Note 33)	19,236,315		13,897,317	
6. Accumulated other comprehensive loss (Note 31)	(1,565,533)		(915,977)	
Non-controlling interests		279,399		266,489
Total equity		29,965,368		28,756,471
Total liabilities and equity		485,308,744		430,193,576

"See notes to consolidated financial statements."

Consolidated Statements of Profit or Loss and Other Comprehensive Income

For the years ended December 31, 2022 and 2021

Hana Bank Co., Ltd. and its subsidiaries (Korean won in millions)

Accounts	2022		2021	
I. Net interest income (Notes 9, 34, 35)		7,608,677		6,150,597
1. Interest income	13,347,231		8,786,664	
Interest income on financial instruments at FVOCI and AC	13,282,377		8,746,993	
Interest income on financial instruments at FVTPL	64,854		39,671	
2. Interest expenses	(5,738,554)		(2,636,067)	
II. Net fee and commission income (Notes 9, 34, 36)		593,612		552,794
1. Fees and commission income	874,721		837,656	
2. Fees and commission expenses	(281,109)		(284,862)	
III. Net gain on financial instruments at FVTPL (Notes 16, 34, 37)		124,701		548,567
IV. Net gain (loss) on derivative financial instruments used for hedging (Notes 34, 38)		(63,551)		(47,686)
V. Net gain on financial instruments at FVOCI (Notes 34, 39, 50)		2,162		79,260
VI. Net gain on financial instruments at AC (Notes 13, 34, 40)		4		20
VII. Provision for allowance for credit loss (Notes 34, 41)		(657,649)		(243,339)
VIII. General and administrative expenses (Notes 9, 34, 42)		(3,318,831)		(2,973,063)
IX. Other operating income (Notes 34, 43)		7,615,689		4,791,160
X. Other operating expenses (Notes 34, 44)		(7,838,212)		(5,439,873)
XI. Operating income		4,066,602		3,418,437
XII. Net non-operating income (expenses)		104,884		60,037
1. Non-operating income (Notes 9,17,45)	267,293		237,853	
Gain from using equity method	221,832		136,687	
Other income	45,461		101,166	
2. Non-operating expenses (Notes 9,17,46)	(162,409)		(177,816)	
Loss from using equity method	(32,819)		(9,015)	
Other expenses	(129,590)		(168,801)	
XIII. Income before income tax expenses		4,171,486		3,478,474
XIV. Income tax expenses (Notes 9, 47)		(1,059,787)		(902,728)
XV. Net income		3,111,699		2,575,746
1. Owners of the parent (Adjusted income after regulatory reserve for bad debt in the amount of December 31, 2022 : ₩3,119,771 million December 31, 2021 : ₩2,282,608 million) (Note 33)		3,095,845		2,570,361
2. Non-controlling interests		15,854		5,385
XVI. Other comprehensive income (loss) (Note 31)		(663,519)		140,698
Items that may be reclassified subsequently to profit or loss:	(600,406)		99,246	
1. Gain (Loss) on valuation of debt securities at FVOCI	(578,842)		(313,699)	
2. Gain (Loss) on translation of foreign operations	(2,710)		281,829	

Accounts	2022		2021	
3. Changes in equity on investments in associates	1,675		171,904	
4. Gain (Loss) on valuation of net investment hedges of foreign operations	(20,529)		(40,788)	
Items that will not be reclassified subsequently to profit or loss:	(63,113)		41,452	
1. Remeasurement of defined benefit plans	6,395		47,643	
2. Gain (Loss) on valuation of equity securities at FVOCI	(57,920)		8,639	
3. Changes in equity on investments in associates	273		(692)	
4. Gain (Loss) on valuation of fair value hedges	(11,861)		(14,138)	
XVII. Total comprehensive income		2,448,180		2,716,444
1. Owners of the parent	2,443,568		2,693,704	
2. Non-controlling interests	4,612		22,740	
XVIII. Earnings per share (Note 48) (Korean won)				
1. Basic earnings per share		2,866		2,389
2. Diluted earnings per share		2,866		2,389

"See notes to consolidated financial statements."

Consolidated Statements of Changes in Equity

For the years ended December 31, 2022 and 2021

Hana Bank Co., Ltd. and its subsidiaries (Korean won in millions)

Accounts	Capital stock	Capital surplus	Hybrid equity securities	Capital adjustments	Retained earnings	Accumulated other comprehensive loss	Equity attributable to equity holder of the parent	Non-controlling interests	Total
I. As of January 1, 2021	5,359,578	9,654,018	179,737	(37,703)	12,414,342	(1,002,192)	26,567,780	243,749	26,811,529
Dividends	–	–	–	–	(714,700)	–	(714,700)	–	(714,700)
Interim dividend	–	–	–	–	(400,000)	–	(400,000)	–	(400,000)
Dividends on hybrid equity securities	–	–	–	–	(9,814)	–	(9,814)	–	(9,814)
Issuance of hybrid equity securities	–	–	353,738	–	–	–	353,738	–	353,738
Stock option	–	–	–	2	–	–	2	–	2
Acquisition of subsidiaries	–	(150)	–	–	–	–	(150)	–	(150)
Paid-in capital increases of subsidiaries	–	–	–	(578)	–	–	(578)	–	(578)
Reclassification of valuation gain or loss on equity securities at FVOCI upon derecognition	–	–	–	–	37,128	(37,128)	–	–	–
Subtotal	5,359,578	9,653,868	533,475	(38,279)	11,326,956	(1,039,320)	25,796,278	243,749	26,040,027
Net income	–	–	–	–	2,570,361	–	2,570,361	5,385	2,575,746
Loss on valuation of financial assets at FVOCI	–	–	–	–	–	(304,299)	(304,299)	(762)	(305,061)
Gain on translation of foreign operations	–	–	–	–	–	263,948	263,948	17,881	281,829
Loss on valuation of net investment hedges of foreign operations	–	–	–	–	–	(40,788)	(40,788)	–	(40,788)
Loss on valuation of fair value hedges	–	–	–	–	–	(14,137)	(14,137)	–	(14,137)
Remeasurement of defined benefit plans	–	–	–	–	–	47,407	47,407	236	47,643
Changes in equity on investments in associates	–	–	–	–	–	171,212	171,212	–	171,212
Total comprehensive income	–	–	–	–	2,570,361	123,343	2,693,704	22,740	2,716,444
II. As of December 31, 2021	5,359,578	9,653,868	533,475	(38,279)	13,897,317	(915,977)	28,489,982	266,489	28,756,471

Accounts	Capital stock	Capital surplus	Hybrid equity securities	Capital adjustments	Retained earnings	Accumulated other comprehensive loss	Equity attributable to equity holder of the parent	Non-controlling interests	Total
I. As of January 1, 2022	5,359,578	9,653,868	533,475	(38,279)	13,897,317	(915,977)	28,489,982	266,489	28,756,471
Dividends	–	–	–	–	(660,400)	–	(660,400)	–	(660,400)
Interim dividend	–	–	–	–	(570,000)	–	(570,000)		(570,000)
Dividends on hybrid equity securities	–	–	–	–	(23,770)	–	(23,770)	–	(23,770)
Stock option	–	–	–	15	–	–	15	–	15
Reduction in capital surplus	–	(3,500,000)	–	–	3,500,000	–	–	–	–
Paid-in capital increases of subsidiaries	–	5,952	–	–	–	44	5,996	8,298	14,294
Reclassification of valuation gain or loss on equity securities at FVOCI upon derecognition	–	–	–	–	(2,677)	2,677	–	–	–
Others	–	–	–	578	–	–	578	–	578
Subtotal	5,359,578	6,159,820	533,475	(37,686)	16,140,470	(913,256)	27,242,401	274,787	27,517,188
Net income	–	–	–	–	3,095,845	–	3,095,845	15,854	3,111,699
Loss on valuation of financial assets at FVOCI	–	–	–	–	–	(633,406)	(633,406)	(3,357)	(636,763)

Accounts	Capital stock	Capital surplus	Hybrid equity securities	Capital adjustments	Retained earnings	Accumulated other comprehensive loss	Equity attributable to equity holder of the parent	Non-controlling interests	Total
Gain on translation of foreign operations	-	-	-	-	-	5,158	5,158	(7,867)	(2,709)
Loss on valuation of net investment hedges of foreign operations	-	-	-	-	-	(20,529)	(20,529)	-	(20,529)
Loss on valuation of fair value hedges	-	-	-	-	-	(11,861)	(11,861)	-	(11,861)
Remeasurement of defined benefit plans	-	-	-	-	-	6,413	6,413	(18)	6,395
Changes in equity on investments in associates	-	-	-	-	-	1,948	1,948	-	1,948
Total comprehensive income	-	-	-	-	3,095,845	(652,277)	2,443,568	4,612	2,448,180
II. As of December 31, 2022	5,359,578	6,159,820	533,475	(37,686)	19,236,315	(1,565,533)	29,685,969	279,399	29,965,368

"See notes to consolidated financial statements."

Consolidated Statements of Cash Flows

For the years ended December 31, 2022 and 2021

Hana Bank Co., Ltd. and its subsidiaries (Korean won in millions)

Accounts	2022		2021	
I. Net cash flows provided by (used in) operating activities		27,162,831		8,312,411
1. Income before income tax expenses	4,171,486		3,478,474	
2. Adjustments to income and expenses:	(7,619,475)		(6,162,004)	
Interest expenses	5,738,554		2,636,067	
Interest income	(13,347,231)		(8,786,664)	
Dividend income	(10,798)		(11,407)	
3. Adjustments to non-cash items:	2,142,309		1,363,945	
Loss (Gain) on valuation of financial instruments at FVTPL	957,084		135,434	
Loss (Gain) on disposal of financial instruments at FVTPL	17,774		(8,392)	
Loss (Gain) on valuation of derivative instruments used for hedging	77,479		47,083	
Gain on disposal of financial instruments at FVOCI	(2,162)		(79,260)	
Provision for (Reversal of) loss on credit risk of financial instruments at FVOCI	(603)		(194)	
Gain on disposal of financial instruments at amortized cost	(4)		(20)	
Allowance for financial instruments at amortized cost	66,966		10,282	
Net allowance for loans and other assets	591,286		233,251	
Loss (Gain) on disposal of investments in associates and a joint venture	(2,315)		5,512	
Impairment loss on investments in associates and a joint venture	520		628	
Gain on equity method	(189,013)		(127,672)	
Depreciation and amortization	465,049		451,498	
Gain on disposal of property and equipment and intangible assets	(11,923)		(22,976)	
Impairment loss on property and equipment and intangible assets	232		12,835	
Loss on termination of right-of-use assets	360		2,633	
Loss on disposal of right-of-use assets	670		-	
Retirement benefits	144,346		158,520	
Share-based payment expense	10,797		15,197	
Net provisions transferred in	85,264		55,507	
Net loss (gain) on foreign currency translation	(68,484)		473,690	
Others	(1,014)		389	
4. Changes in operating assets and liabilities:	20,866,397		4,170,847	
Financial assets at FVTPL (items held for trading)	(7,437,089)		4,582,096	
Derivative assets used for hedging	731		5,153	
Loans	(15,917,597)		(19,361,233)	
Net defined benefit assets	(77,160)		-	
Other assets	1,152,513		(1,521,997)	
Merchant banking account assets	111,591		(1,277,023)	
Deposits	34,242,815		24,688,523	
Financial liabilities at FVTPL	6,588,007		(4,353,288)	
Derivative liabilities used for hedging	-		(1,848)	
Net defined benefit liabilities	(303,480)		(288,313)	
Provisions	(39,253)		(21,775)	
Other liabilities	1,786,326		1,058,545	
Merchant banking account liabilities	758,993		662,007	
5. Cash provided by operating activities:	12,958,964		8,778,597	
Interest received	12,935,766		8,753,788	
Dividend received	23,198		24,809	

Accounts	2022		2021	
6. Cash used in operating activities:	(5,356,850)		(3,317,448)	
Interest paid	(4,391,698)		(2,687,735)	
Income tax paid	(965,152)		(629,713)	
II. Net cash flows provided by (used in) investing activities		(14,765,081)		(7,276,612)
1. Increase in financial assets at FVTPL (other than items held for trading)	(6,985,446)		(14,250,824)	
2. Decrease in financial assets at FVTPL (other than items held for trading)	6,213,194		14,304,122	
3. Increase in financial assets at FVOCI	(10,734,129)		(18,757,341)	
4. Decrease in financial assets at FVOCI	12,359,959		16,853,173	
5. Increase in securities at amortized cost	(16,705,097)		(10,360,043)	
6. Decrease in securities at amortized cost	1,664,805		5,296,145	
7. Increase in investments in associates and a joint venture	(159,719)		(96,523)	
8. Decrease in investments in associates and a joint venture	11,664		300	
9. Acquisition of property and equipment	(375,988)		(334,946)	
10. Disposal of property and equipment	25,559		37,507	
11. Disposal of investment properties	19,997		76,501	
12. Acquisition of intangible assets	(151,556)		(126,690)	
13. Disposal of intangible assets	15		3,153	
14. Government grants	1,536		937	
15. Disposal of non-current assets held for sale	9,275		3,995	
16. Others	40,850		73,922	
III. Net cash flows provided by financing activities		1,022,872		1,449,875
1. Net decrease (increase) in borrowings	3,926,509		(510,352)	
2. Issuance of debentures	10,945,334		12,181,935	
3. Redemption of debentures	(12,410,394)		(9,238,614)	
4. Dividends paid	(1,230,400)		(1,114,700)	
5. Issuance of hybrid equity securities	-		353,739	
6. Dividends on hybrid equity securities	(23,770)		(9,814)	
7. Redemption of lease liabilities	(199,280)		(220,521)	
8. Change in equity ownership of subsidiaries	14,873		(727)	
9. Change in derivative used for hedging	-		8,929	
IV. Net increase (decrease) in cash and cash equivalents (I+II+III)		13,420,622		2,485,674
V. Cash and cash equivalents at the beginning of the year		25,478,635		22,354,459
VI. Effect of changes in exchange rate on cash and cash equivalents		(398,831)		638,502
VII. Cash and cash equivalents at the end of the year (Note 50)		38,500,426		25,478,635

"See notes to consolidated financial statements."

Notes to consolidated financial statements

as of and for the years ended December 31, 2022 and 2021

1. Company information

General information on Hana Bank Co., Ltd., previously Korea Exchange Bank (the "Bank" or the "Parent company") and its subsidiaries (collectively the "Group") in accordance with K-IFRS 1110 is as follows.

1-1 Summary of the Parent company (The Bank)

The Bank was established on January 30, 1967, as a government-controlled bank to engage in foreign exchange and trade finance business under the *Korea Exchange Bank Act* enacted on July 28, 1966. On December 30, 1989, the *Korea Exchange Bank Act* was repealed, and the Bank was reorganized as a stock company under the Commercial Act of the Republic of Korea. On April 4, 1994, the Bank was listed on the Korea Exchange (previously, Korea Stock Exchange). On February 28, 2004, the Bank merged its subsidiary, Korea Exchange Bank Credit Service Co., Ltd. On August 31, 2014, the Bank spun off its credit card division.

On February 9, 2012, Hana Financial Group Inc. ("HFG") had control over the Bank by acquiring 52.27% equity interest in the Bank, and later on April 5, 2013, the Bank became a wholly owned subsidiary of HFG after HFG acquired the remaining interest in the Bank through an all-inclusive exchange of the shares.

The Bank changed to its current name on September 1, 2015, following the merger of Korea Exchange Bank ("KEB Bank") and Hana Bank.

The Bank provides commercial banking service under the Banking Act of the Republic of Korea, trust banking service under the Financial Investment Services And Capital Markets Act, merchant banking service due to the merger with the Korea International Merchant Bank, foreign exchange business and other related businesses. As of December 31, 2021, the Bank's headquarter is located in Seoul

, with its 593 domestic branches (including 62 satellite offices) and 25 overseas branches (including one satellite offices and four offices).

The Bank is authorized to issue 2,000 million shares (par value amount : ₩5,000) of common stock, and as of December 31, 2022, after a number of capital increases and decreases, stock splits and conversion of preferred shares to common shares, the Bank has 1,071,915,717 shares of common stock issued and outstanding with the total capital stock amounting to ₩5,359,578 million.

The Group's consolidated financial statements as of and for the year ended December 31, 2022 were approved by the Board of Directors on March 6, 2023.

1-2 Scope and overview of consolidation

The Group's ownership percentages in its consolidated subsidiaries as of December 31, 2022 are summarized as follows (ownership in %):

Investee	Country	Major business	Share ratio (%)	Reporting date
Subsidiaries of Hana Bank				
Hana Bank (China) Co., Ltd.	China	Bank	100.00	2022.12.31
KEB Hana Bank Canada	Canada	Financial Business	100.00	2022.12.31
KEB Hana Bank (Deutschland) A.G. (KEBDAG)	Germany	Financial Business	100.00	2022.12.31
PT Bank KEB Hana (KEBI)	Indonesia	Financial Business	69.01	2022.12.31
Banco KEB Hana Do Brasil S.A. (KEBB)	Brazil	Financial Business	100.00	2022.12.31
KEB Hana NY Financial Corp (NYFinCo)	USA	Financial Business	100.00	2022.12.31
KEB Hana LA Financial Corp (LAFinCo)	USA	Financial Business	100.00	2022.12.31
KEB Hana Global Finance Limited (KHGF)	HongKong	Financial Business	100.00	2022.12.31
KEB RUS LLC.	Russia	Financial Business	99.99	2022.12.31
Hana Bancorp, Inc.	USA	Financial Business	96.77	2022.12.31
KEB Hana Bank Mexico	Mexico	Financial Business	99.99	2022.12.31
GLN international Inc.	Korea	Other financial business	85.44	2022.12.31
Hana Tech Value-Up Investment Fund (*)	Korea	Other financial business	98.04	2022.12.31
Hana 1Q Startup Investment Fund (*)	Korea	Other financial business	90.91	2022.12.31
Hana UBS Power PEF Invest Trust 21 (*)	Korea	Asset Management Company	100.00	2022.12.31
Hyundai Trust PEF Invest 16 (*)	Korea	Asset Management Company	100.00	2022.12.31
Kyobo AXA Tomorrow PEF Invest Trust KH-1 (*)	Korea	Asset Management Company	100.00	2022.12.31
Sevenstar Co., Ltd. (*)	Korea	Other financial business	-	2022.12.31
Marine Solution Co., Ltd. (*)	Korea	Other financial business	-	2022.12.31

Investee	Country	Major business	Share ratio (%)	Reporting date
Joong-ang star Co., Ltd. (*)	Korea	Other financial business	-	2022.12.31
Hana Display First Co., Ltd. (*)	Korea	Other financial business	-	2022.12.31
Ocean Betts The First Co., Ltd. (*)	Korea	Other financial business	-	2022.12.31
Hana H in the holdings 1st LLC (*)	Korea	Other financial business	-	2022.12.31
H-Plus 1st, LLC (*)	Korea	Other financial business	-	2022.12.31
Hana CK 1st Co., Ltd (*)	Korea	Other financial business	-	2022.12.31
Hana H in the holdings 2nd LLC (*)	Korea	Other financial business	-	2022.12.31
PIOTOWER1st, LLC (*)	Korea	Other financial business	-	2022.12.31
HEONEQ1st, LLC (*)	Korea	Other financial business	-	2022.12.31
HCONEQ1st, LLC (*)	Korea	Other financial business	-	2022.12.31
H-Hotel1Q 1st LLC. (*)	Korea	Other financial business	-	2022.12.31
DPS 2nd Ltd (*)	Korea	Other financial business	-	2022.12.31
BBQ 1Q 1st. LLC (*)	Korea	Other financial business	-	2022.12.31
SK office 1Q 1st. LLC (*)	Korea	Other financial business	-	2022.12.31
Cleanenergy 1Q 1st. LLC (*)	Korea	Other financial business	-	2022.12.31
HANA DL First Co., Ltd (*)	Korea	Other financial business	-	2022.12.31
HANA TERMINUS First Co., Ltd (*)	Korea	Other financial business	-	2022.12.31
THE HAM ONEQ 1st. LLC (*)	Korea	Other financial business	-	2022.12.31
HANA BAY 1st. LLC (*)	Korea	Other financial business	-	2022.12.31
HANA I.S 1st. LLC (*)	Korea	Other financial business	-	2022.12.31
HANA I.G 1st. LLC (*)	Korea	Other financial business	-	2022.12.31
GRAND ONEQ 1st. LLC (*)	Korea	Other financial business	-	2022.12.31
THE MIRAE ONEQ 1st. LLC (*)	Korea	Other financial business	-	2022.12.31
DONG DAEGU TERMINAL 2nd. LLC (*)	Korea	Other financial business	-	2022.12.31
KENDALL NO.9 1st. LLC (*)	Korea	Other financial business	-	2022.12.31
BYK 3rd Co., Ltd (*)	Korea	Other financial business	-	2022.12.31
Mini Hana 1st, LLC (*)	Korea	Other financial business	-	2022.12.31
Jinwoori 1Q 1st, LLC (*)	Korea	Other financial business	-	2022.12.31
Hana Double H 1Q 4th Co.,Ltd (*)	Korea	Other financial business	-	2022.12.31
Hana Double H 1Q 5th Co.,Ltd (*)	Korea	Other financial business	-	2022.12.31
H-ECHO 1st, LLC (*)	Korea	Other financial business	-	2022.12.31
HANA STARLORD 1st, LLC (*)	Korea	Other financial business	-	2022.12.31
CLEAN WORLD 1st, LLC (*)	Korea	Other financial business	-	2022.12.31
H-HANA 1st, LLC (*)	Korea	Other financial business	-	2022.12.31
HANA ANANTI 1st, LLC (*)	Korea	Other financial business	-	2022.12.31
One Q B777F 66872 Co., Ltd (*)	Cayman Islands	Other financial business	-	2022.12.31
NAE CHON HANA 1st, LLC (*)	Korea	Other financial business	-	2022.12.31
DRAGON HANA 1st, LLC (*)	Korea	Other financial business	-	2022.12.31
HANA BAEKSA LOGISTICS 1st, LLC (*)	Korea	Other financial business	-	2022.12.31
HANA S ONE Q 1st, LLC (*)	Korea	Other financial business	-	2022.12.31

Investee	Country	Major business	Share ratio (%)	Reporting date
HOME PLUS HANA CONNECT, LLC (*)	Korea	Other financial business	-	2022.12.31
Antarctica 1st, Ltd (*)	Korea	Other financial business	-	2022.12.31
Enerbility Hana 1st, Ltd (*)	Korea	Other financial business	-	2022.12.31
Hana Plant 1st, Ltd (*)	Korea	Other financial business	-	2022.12.31
Gs Hana 1st, Ltd (*)	Korea	Other financial business	-	2022.12.31
Cha Cha Hana 1st, Ltd (*)	Korea	Other financial business	-	2022.12.31
T A 1st, Ltd (*)	Korea	Other financial business	-	2022.12.31
Neostar 6th, Ltd (*)	Korea	Other financial business	-	2022.12.31
Galaxia 1Q 1st, Ltd (*)	Korea	Other financial business	-	2022.12.31
Trust accounts guaranteeing the repayment of principal (*)	Korea	Trust account	-	2022.12.31
Subsidiaries of Hana Bancorp, Inc.				
KEB Hana Bank USA	USA	Bank	100.00	2022.12.31

(*) Although the entity is a structured special purpose company (SPC), the Group recognized the entity as a subsidiary considering its exposure to variable returns and ability to direct its activities.

Condensed financial statements as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total Comprehensive income (loss)
Hana Bank (China) Co., Ltd.	10,666,735	9,554,035	1,112,700	526,554	(97,191)	(124,308)
KEB Hana Bank Canada	1,788,935	1,543,596	245,339	76,573	16,039	16,303
KEB Hana Bank (Deutschland) A.G.	1,157,221	1,028,804	128,417	44,421	8,627	9,374
PT Bank KEB Hana	3,841,423	2,979,403	862,020	316,465	51,563	15,327
Banco KEB Hana Do Brasil S.A.	208,558	168,209	40,349	25,795	2,791	6,908
KEB Hana NY Financial Corp.	368,894	296,550	72,344	10,870	980	5,569
KEB Hana LA Financial Corp.	682,091	590,785	91,306	24,511	6,441	11,807
KEB Hana Global Finance Limited	215,235	120,686	94,549	12,119	4,574	10,023
KEB Hana Bank Russia	1,208,118	1,110,804	97,314	67,425	13,862	20,559
Hana Bancorp, Inc.(*)	488,768	366,125	122,643	15,125	(940)	151
KEB Hana Bank Mexico	356,088	250,609	105,479	16,271	346	12,139
GLN International Co., Ltd.	57,439	1,267	56,172	257	(6,132)	(6,132)
Trust accounts guaranteeing the repayment of principal	1,579,252	1,557,875	21,377	39,811	(24,356)	(24,356)

(*) The amounts are consolidated amounts of the intermediate parent.

<December 31, 2021>

Classification	Assets	Liabilities	Equity	Operating income	Net income (loss)	Comprehensive income (loss)
Hana Bank (China) Co., Ltd.	10,673,261	9,436,252	1,237,009	481,552	57,141	194,157
KEB Hana Bank Canada	1,600,343	1,371,307	229,036	44,760	8,179	26,673
KEB Hana Bank (Deutschland) A.G.	1,117,471	998,428	119,043	28,462	6,390	6,682
PT Bank KEB Hana	3,630,748	2,784,056	846,692	236,060	17,520	72,677
Banco KEB Hana Do Brasil S.A.	214,635	181,193	33,442	15,569	2,675	3,157
KEB Hana NY Financial Corp.	283,007	216,233	66,774	4,767	478	5,946
KEB Hana LA Financial Corp.	469,226	389,727	79,499	13,000	5,286	11,566
KEB Hana Global Finance Limited	218,824	134,298	84,526	9,193	3,820	10,480
KEB Hana Bank Russia	725,579	648,823	76,756	29,521	5,553	2,725
Hana Bancorp, Inc.(*)	347,368	307,601	39,767	11,960	(470)	2,373
KEB Hana Bank Mexico	246,554	153,214	93,340	7,871	756	5,773
GLN International Co., Ltd.	48,592	1,177	47,415	2	(2,009)	(2,009)
Trust accounts guaranteeing the repayment of principal	1,699,941	1,654,207	45,734	35,802	407	407

(*) The amounts are consolidated amounts of the intermediate parent.

The following entities are excluded from the Group's scope of consolidation as of December 31, 2022 and 2021, since the group aimed at investing in majority owned companies or securities and has no control over the power of investee related activities, exposure to variable profits, and the ability to use power to influence the group's variable profits.

<December 31, 2022>

Company name	Country	Major business	Share ratio (%)
Hana – KVIC Unicorn Fund of Funds	Korea	Investment	90.91
All Together Korea Fund 5	Korea	Investment	100.00
Hana-New Deal K-Growth fund	Korea	Investment	90.00
Defense Technology Innovation Private Investment Trust	Korea	Investment	98.33

<December 31, 2021>

Company name	Country	Major business	Share ratio (%)
Hana – KVIC Unicorn Fund of Funds	Korea	Investment	90.91
All Together Korea Fund 5	Korea	Investment	100.00
Hana-New Deal K-Growth fund	Korea	Investment	90.00

Subsidiaries included in and excluded from the consolidation scope for the year ended December 31, 2022 are as follows:

Company	Reasons
Included in scope of consolidation:	
Subsidiaries of Hana Bank	
BYK 3rd Co., Ltd.	Newly invested
Mini Hana 1st, LLC	Newly invested
Jinwoori 1Q 1st, LLC	Newly invested
Hana Double H 1Q 4th Co.,Ltd	Newly invested
Hana Double H 1Q 5th Co.,Ltd	Newly invested
H-ECHO 1st, LLC	Newly invested
HANA STARLORD 1st, LLC	Newly invested

Company	Reasons
CLEAN WORLD 1st, LLC	Newly invested
H-HANA 1st, LLC	Newly invested
HANA ANANTI 1st, LLC	Newly invested
One Q B777F 66872 Co., Ltd.	Newly invested
NAE CHON HANA 1st, LLC	Newly invested
DRAGON HANA 1st, LLC	Newly invested
HANA BAEKSA LOGISTICS 1st, LLC	Newly invested
HANA S ONE Q 1st, LLC	Newly invested
HOME PLUS HANA CONNECT, LLC	Newly invested
Antarctica 1st, Ltd	Newly invested
Enerbility Hana 1st, Ltd	Newly invested
Hana Plant 1st, Ltd	Newly invested
Gs Hana 1st, Ltd	Newly invested
Cha Cha Hana 1st, Ltd	Newly invested
T A 1st, Ltd	Newly invested
Neostar 6th, Ltd	Newly invested
Galaxia 1Q 1st, Ltd	Newly invested
Excluded from the scope of consolidation:	
Subsidiaries of Hana Bank	
HI Leading Solution PEF Invest Trust 143 [Bond]	Excluded due to the disposal
BEST ONE Q 1st	Excluded due to the disposal (End of credit offering)
Netoneq 1st L.L.C	Excluded due to the disposal (End of credit offering)
DONGAM TOWER 1st Co., Ltd.	Excluded due to the disposal (End of credit offering)
Hana Double H 1Q 2nd Co., Ltd.	Excluded due to the disposal (End of credit offering)
Hana Double H 1Q 3rd Co., Ltd.	Excluded due to the disposal (End of credit offering)
KSPARTNERSHIP 1st 2020, Inc.	Excluded due to the disposal (End of credit offering)

1-2-1 Hana Bank (China) Co., Ltd. (Hana Bank China)

Hana Bank (China) Co., Ltd. (Hana Bank China) was incorporated in Beijing to engage in commercial banking, foreign currency exchanges and other related operations in China on December 14, 2007. The Bank contributed the assets and liabilities of the branches in Shanghai and Shenyang, and its interests in the International Bank of Qingdao, which is the subsidiary of the Bank, to the Hana Bank China in the form of equity contributions on December 24, 2007. Hana Bank China, one of subsidiaries in China, acquired and merged with KEB China, one of affiliates in the Hana Financial Group, on December 15, 2014. (Before the merger, equity interests in Hana Bank China were 59.7% for Hana Bank and 40.3% for Korea Exchange Bank). Its paid-in capital is 3.35 billion yuan (Share ratio : 100%) as of December 31, 2022.

1-2-2 KEB Hana Bank Canada

KEB Hana Bank Canada was established in Toronto, Canada, on October 6, 1981, to provide financial services to Korean companies and residents in Toronto and the surrounding area. Its paid-in capital is 83,400 thousand Canadian dollars (Share ratio : 100%) as of December 31, 2022.

1-2-3 KEB Hana Bank (Deutschland) A.G.

KEBDAG was established in Frankfurt, Germany, on December 29, 1992, to provide financial services to Korean companies and residents in Frankfurt and the surrounding area. Its paid-in capital is 23,008 thousand euro (Share ratio : 100%) as of December 31, 2022.

1-2-4 PT Bank KEB Hana

PT Bank KEB Hana was established in Jakarta, Indonesia, on November 5, 1990, to provide financial services to Korean companies and residents in Jakarta.
In accordance with the regulations of the Bank Indonesia, two or more local banks with the same ultimate parent company are prohibited to operate as an independent entity in Indonesia. Accordingly, PT Bank KEB Indonesia (KEBI), a subsidiary of the Bank, and PT Bank Hana, a subsidiary of Hana Bank, have completed a merger process on February 20, 2014, and changed the name to PT Bank KEB Hana. PTBank KEB Hana was incorporated into a subsidiary of KEB on February 28, 2014, since KEB owned the major shares of PT Bank KEB Hana after the acquisition. Its paid-in capital is 3,160,093 million rupiah (Share ratio : 69.01%) as of December 31, 2022.

1-2-5 Banco KEB Hana Do Brasil S.A. (KEBB)

KEBB was incorporated on May 21, 1999, to provide investment finance services for foreign clients, advisory services for domestic companies that seek to invest overseas, finance arrangement and security investment trust services. Its paid-in capital is 126,351 thousand reals (Share ratio : 100%) as of December 31, 2022.

1-2-6 KEB Hana NY Financial Corp. (NYFinCo)

NYFinCo was established in New York, USA, on April 8, 2004, to provide financia l services to Korean companies and residents in New York and the surrounding area. Its paid-in capital is 1 dollar (Share ratio : 100%) as of December 31, 2022.

1-2-7 KEB Hana LA Financial Corp. (LAFinCo)

LAFinCo was established in Los Angeles, USA, on April 8, 2004, to provide financial services to Korean companies and residents in Los Angeles and the surrounding area. Its paid-in capital is 2 dollars (Share ratio : 100%) as of December 31, 2022.

1-2-8 KEB Hana Global Finance Limited (KHGF)

KHGF was established on July 2, 2009, in Hong Kong to provide investment finance services for foreign clients, advisory services for domestic companies that seek to invest overseas, finance arrangement and security investment trust services. Its paid-in capital is 50,000 thousand dollars (Share ratio : 100%) as of December31, 2022.

1-2-9 KEB RUS LLC

KEB launched a Moscow representative office in 2008 to provide financial information and consulting services for Korean and local companies in Russia. KEB RUS LLC was established on August 15, 2014, after obtaining permission to operate corporation from Russian supervisory authorities in order to expand the business area. Its paid-in capital is 4.78 billion RUB (Share ratio : 99.99%) as of December31, 2022.

1-2-10 Hana Bancorp, Inc.

Hana Bancorp, Inc. (previously, BNB Financial Service Corporation) was incorporated on April 8, 1988, to engage in the bank and related businesses. HFG acquiredownership of BNB Financial Service Corporation and incorporated Hana Bancorp,Inc. as its subsidiary on August 30, 2013, and changed the name to Hana Bancorp, Inc. The Bank purchased the securities from HFG on March 28, 2016. Its paid-in capital is 48,596 thousand dollars (Share ratio : 96.77%) as of December 31, 2022.

1-2-11 KEB Hana Bank Mexico

KEB Hana Bank Mexico was established in Mexico City on November 3, 2017, to engage in provision of financial services to Korean companies and local corporations and obtained approval for the commencement of business from the local supervisory agency on January 31, 2019. Its paid-in capital is 1,666,828 thousand Mexican pesos (Share ratio : 99.99%) as of December 31, 2022.

1-2-12 GLN International Co., Ltd.

GLN International Co., Ltd. was established in Korea on July 7, 2021, and primarily engages in the electronic finance business (global payment brokerage, etc.). Its paid-in capital is 58.5 billion Korean won (Share ratio : 85.44%) as of December 31, 2022.

1-3 Structured entities

1-3-1 Consolidated structured entities

1-3-1-1 Hana UBS Power PEF Invest Trust 21 and a set of two other private equity investment vehicles

In accordance with K-IFRS 1110 *Consolidated Financial Statements,* two other private equity investment vehicles and Hana UBS Power PEF Invest Trust 21 were included in consolidation scope because the Group has existing rights that give it the current ability to direct the relevant activities, and is not only exposed, or has rights, to variable returns, but also has the ability to use its power to affect the Group's returns from its involvement with the investee.

1-3-1-2 Sevenstar Co., Ltd. and 50 other special purpose entities

In accordance with K-IFRS 1110 *Consolidated Financial Statements,* 50 special purpose companies and Sevenstar Co., Ltd. were included in consolidation scope because the Group has existing rights that give it the current ability to direct the relevant activities, and is not only exposed, or has rights, to variable returns, but also has the ability to use its power to affect the Group's returns from its involvement with the investee.

1-3-1-3 Trust accounts

In accordance with K-IFRS 1110 *Consolidated Financial Statements,* trust accounts are included in consolidation scope because the Group has existing rights that give it the current ability to direct the relevant activities, and is not only exposed,or has rights, to variable returns, but also has the ability to use its power to affect the Group's returns from its involvement with the investee.

1-3-1-4 Hana Tech Value-Up Investment Fund and one other fund

In accordance with K-IFRS 1110 *Consolidated Financial Statements,* Hana Tech Value-Up Investment Fund and one other fund are included in consolidation scope because the Group has existing rights that give it the current ability to direct the relevant activities, and is not only exposed, or has rights, to variable returns, but also has the ability to use its power to affect the Group's returns from its involvement with the investee.

1-3-1-5 Contractual commitments to consolidated structured entities

The consolidated structured company for the securitization of assets is established for the securitization of loans. The Group is involved in the acquisition of subordinated bonds issued by the consolidated structured company or provided credit for the asset-backed commercial paper and others, and is exposed to the risk of not being able to recover the acquisition amounts based on the investment performance. Characteristics and intentions of contractual commitments offered by the Group to the consolidated structured entities are as follows:

Company name	The characteristics and purposes	Intention
Development trust and other trusts	The Group offers principal conservation commitment to trust accounts. The Group is required to conserve the deficit amount in case the trust account stands below th e principal as a result of the operation.	Credit risk mitigation on financial management of trust account
Hana Display First Co., Ltd.	The Group partially purchased asset-backed commercial paper (ABCP) (purchase commitment of ₩200,000 million) from Hana Display First Co., Ltd.	Operating activities
Ocean Betts The First Co., Ltd.	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) fro m Ocean Betts The First Co., Ltd.	Operating activities
Hana H in the holdings 1st LLC.	The Group partially purchased ABCP (purchase commitment of ₩150,000 million) from Hana H in the holdings 1st LLC.	Operating activities
H-Plus 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩100,000 million) from H-Plus 1st, L.L.C.	Operating activities
Hana CK 1st Co., Ltd	The Group partially purchased ABCP (purchase commitment of ₩57,300 million) fro m Hana CK 1st Co., Ltd	Operating activities
Hana H in the holdings 2nd , LLC.	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) fro m Hana H in the holdings 2nd , LLC	Operating activities
PIOTOWER1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩60,000 million) fro m PIOTOWER1st, LLC	Operating activities
HEONEQ1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from HEONEQ1st L.L.C	Operating activities
HOONEQ1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from HOONEQ1st L.L.C	Operating activities
DPS 2nd Ltd.	The Group partially purchased ABCP (purchase commitment of ₩45,700 million) from DPS 2nd Ltd.	Operating activities
H-Hotel1Q 1st LLC.	The Group partially purchased ABCP (purchase commitment of ₩48,000 million) from H-Hotel1Q 1st LLC.	Operating activities
BBQ 1Q 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩20,000 million) from BBQ 1Q 1st. LLC	Operating activities
SK Office 1q 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩60,000 million) from SK Office 1q 1st. LLC	Operating activities
Cleanenergy 1Q 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩60,000 million) from Cleanenergy 1Q 1st. LLC	Operating activities
HANA DL First Co., Ltd	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from HANA DL First Co., Ltd	Operating activities
HANA TERMINUS First Co., Ltd	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from HANA TERMINUS First Co., Ltd	Operating activities
THE HAM ONEQ 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩40,000 million) from THE HAM ONEQ 1st. LLC	Operating activities
HANA I.G 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩20,000 million) from HANA I.G 1st. LLC	Operating activities
GRAND ONEQ 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩40,000 million) from GRAND ONEQ 1st. LLC	Operating activities
THE MIRAE ONEQ 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from THE MIRAE ONEQ 1st. LLC	Operating activities
DONG DAEGU TERMINAL 2nd. LLC	The Group partially purchased ABCP (purchase commitment of ₩20,000 million) from DONG DAEGU TERMINAL 2nd. LLC	Operating activities
KENDALL NO.9 1st. LLC	The Group partially purchased ABCP (purchase commitment of ₩30,300 million) from KENDALL NO.9 1st. LLC	Operating activities
BYK 3rd Co., Ltd.	The Group partially purchased ABCP (purchase commitment of ₩20,000 million) from BYK 3rd Co., Ltd.	Operating activities
Mini Hana 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from Mini Hana 1st, LLC	Operating activities
Jinwoori 1Q 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from Jinwoori 1q 1st, LLC	Operating activities
Hana Double H 1Q 4th Co.,Ltd	The Group partially purchased ABCP (purchase commitment of ₩11,100 million) from Hana Double H 1Q 4th Co.,Ltd	Operating activities

Company name	The characteristics and purposes	Intention
Hana Double H 1Q 5th Co.,Ltd	The Group partially purchased ABCP (purchase commitment of ₩11,100 million) from Hana Double H 1Q 5th Co.,Ltd	Operating activities
H-ECHO 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩80,000 million) from H-ECHO 1st, LLC	Operating activities
HANA STARLORD 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from HANA STARLORD 1st, LLC	Operating activities
CLEAN WORLD 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩20,000 million) from CLEAN WORLD 1st, LLC	Operating activities
H-HANA 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩90,000 million) from H-HANA 1st, LLC	Operating activities
HANA ANANTI 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from HANA ANANTI 1st, LLC	Operating activities
NAE CHON HANA 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩49,600 million) from NAE CHON HANA 1st, LLC	Operating activities
DRAGON HANA 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from DRAGON HANA 1st, LLC	Operating activities
HANA BAEKSA LOGISTICS 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩34,600 million) from HANA BAEKSA LOGISTICS 1st, LLC	Operating activities
HANA S ONE Q 1st, LLC	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from HANA S ONE Q 1st, LLC	Operating activities
HOME PLUS HANA CONNECT, LLC	The Group partially purchased ABCP (purchase commitment of ₩60,000 million) from HOME PLUS HANA CONNECT, LLC	Operating activities
Antarctica 1st, Ltd	The Group partially purchased ABCP (purchase commitment of ₩60,000 million) from Antarctica 1st, Ltd	Operating activities
Enerbility Hana 1st, Ltd	The Group partially purchased ABCP (purchase commitment of ₩50,000 million) from Enerbility Hana 1st, Ltd	Operating activities
Hana Plant 1st, Ltd	The Group partially purchased ABCP (purchase commitment of ₩100,000 million) from Hana Plant 1st, Ltd	Operating activities
Gs Hana 1st, Ltd	The Group partially purchased ABCP (purchase commitment of ₩60,000 million) from Gs Hana 1st, Ltd	Operating activities
Cha Cha Hana 1st, Ltd	The Group partially purchased ABCP (purchase commitment of ₩30,000 million) from Cha Cha Hana 1st, Ltd	Operating activities
T A 1st, Ltd	The Group partially purchased ABCP (purchase commitment of ₩10,000 million) from T A 1st, Ltd	Operating activities
Neostar 6th, Ltd	The Group partially purchased ABCP (purchase commitment of ₩40,000 million) from Neostar 6th, Ltd	Operating activities
Galaxia 1Q 1st, Ltd	The Group partially purchased ABCP (purchase commitment of ₩26,300 million) from Galaxia 1Q 1st, Ltd	Operating activities
Hana Tech Value-Up Investment Fund	The Group is providing an additional commitment of 15 billion won to Hana Tech Value-Up Investment Fund	Operating activities

1-3-2 Unconsolidated structured entities

1-3-2-1 The nature of the Group's interests in unconsolidated structured entities

Details of the nature of the Group's interests in unconsolidated structured entities as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Type	Characteristics and purposes	Major method of financing arrangement	Total assets	
			December 31, 2022	December 31, 2021
Special purpose company securitization	Securitization of backed asset	Issuing ABL/ABCP and others	7,029,016	6,712,934
Real estate finance	Operation for real estate (including social overhead capital (SOC)) developmen	Investment and borrowing	114,016,572	21,698,071
Shipping finance and primary market finance	Building or purchasing ships and non per forming loan (NPL) purchase, M&A	Investment and borrowing	40,597,660	16,377,650
Investment fund and trust	Managing investment property	Issuing beneficiary certificates	135,837,775	114,822,595

1-3-2-2 Maximum exposure to loss from interests in unconsolidated structured entities (Korean won in millions)

<December 31, 2022>

Classification	Special purpose company	Real estate finance	Shipping finance and primary market finance	Investment fund and trust
Assets				
Loans (A)	772,224	3,594,661	1,523,953	1,022,347
Securities (B)	1	65,156	-	11,640,474
Derivatives (C)	8,778	6,104	19,536	-
Others (D)	1,430	16,301	8,883	-
Liabilities				
Derivative liabilities	41,255	2,347	6,460	-
Provisions	206	2,365	490	63
Others	17	61	45	-
Carrying amount of net asset	740,955	3,677,449	1,545,377	12,662,758
Maximum exposure to loss	1,077,495	4,508,450	1,906,570	15,013,673
Financial assets (A+B+C+D)	782,433	3,682,222	1,552,372	12,662,821
Credit and other commitment	295,062	826,228	354,198	2,350,852

<December 31, 2021>

Classification	Special purpose company	Real estate finance	Shipping finance and primary market finance	Investment fund and trust
Assets				
Loans (A)	352,998	2,123,688	1,095,757	952,946
Securities (B)	1	29,347	–	9,774,345
Derivatives (C)	4,391	3,782	12,639	–
Others (D)	1,253	6,988	4,694	–
Liabilities				
Derivative liabilities	6,574	170	1,200	–
Provisions	2,198	2,265	979	241
Others	24	124	61	–
Carrying amount of net asset	349,847	2,161,246	1,110,850	10,727,050
Maximum exposure to loss	1,185,938	3,109,342	1,575,275	12,188,753
Financial assets (A+B+C+D)	358,643	2,163,805	1,113,090	10,727,291
Credit and other commitment	827,295	945,537	462,185	1,461,462

2. Basis of preparation and significant accounting policies

2-1 Basis of preparation

The Group prepares statutory financial statements in Korean in accordance with Korean International Financial Reporting Standards ("K-IFRS") enacted by the Act on External Audit of Stock Companies. The accompanying consolidated financial statements have been translated into English from statements prepared in Korean. In the event of any differences in interpreting the financial statements or the independent auditor's report thereon, Korean version, which is used for regulatory reporting purposes, shall prevail.

2-2 Changes in significant accounting policies

The significant accounting policies used for the preparation of the consolidated financial statements are the same as those adopted in preparing consolidated financial statements for the year ended December 31, 2021, except for the adoption of new standards and interpretations effective as of January 1, 2022.

Changes in accounting policies in accordance with the adoption of new standards and interpretations for the current reporting period are as follows:

2-2-1 K-IFRS 1103 *Business Combinations – Reference to the Conceptual Framework (Amendment)*

The amendments update K-IFRS 1103 so that it refers to the Conceptual Framework (2018) instead of the Framework (2007). They also add to K-IFRS 1103 a requirement that, for obligations within the scope of K-IFRS 1037, an acquirer applies K-IFRS 1037 to determine whether at the acquisition date a present obligationexists as a result of past events. For a levy that would be within the scope of K-IFRS 2121 *Levies, the acquirer* applies K-IFRS 2121 to determine whether the obligating event that gives rise to a liability to pay the levy has occurred by the acquisition date. Finally, the amendments add an explicit statement that an acquirer does not recognize contingent assets acquired in a business combination.

The amendments are effective for business combinations for which the date of acquisition is on or after the beginning of the first annual period beginning on or after January 1, 2022. There is no material impact of this amendment on the Group's consolidated financial statements.

2-2-2 K-IFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets - Onerous Contracts - Cost of Fulfilling a Contract (Amendment)*

The amendment specifies that the 'cost of fulfilling a contract' comprises the 'costs that relate directly to the contract.' Costs that relate directly to a contract consist of both the incremental costs of fulfilling that contract (examples would be direct labor or materials) and an allocation of other costs that relate directly to fulfilling contracts (an example would be the allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract).

The amendment applies to contracts for which the entity has not yet fulfilled all its obligations at the beginning of the annual reporting period in which the entity first applies the amendments. Comparatives are not restated. Instead, the entity shall recognize the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings or other component of equity, as appropriate, at the date of initial application. There is no material impact of this amendment on the Group's consolidated financial statements.

2-2-3 Annual Improvements to K-IFRSs 2018-2020

The annual improvements include amendments to four standards such as K-IFRS 1101 *First-Time Adoption of K-IFRSs*, K-IFRS 1109 *Financial Instruments*, K-IFRS 1116 *Leases*, and K-IFRS 1041 *Agriculture*.

2-2-3-1 K-IFRS 1101 *First-time Adoption of K-IFRSs (Amendment)*

The amendment provides additional exemption to a subsidiary, which becomes a first-time adopter later than its parent in respect of accounting for cumulative translation differences. As a result of the amendment, a subsidiary that uses the exemption in K-IFRS 1101 paragraph D16(1) can now also elect to measure cumulative translation differences for all foreign operations at the carrying amount that would be included in the parent's consolidated financial statements, based on the parent's date of transition to K-IFRSs, if no adjustments were made for consolidation procedures and for the effects of the business combination in which the parent acquired the subsidiary. A similar election is available to an associate or joint venture that uses the exemption in K-IFRS 1101 paragraph D16(1). There is no material impact of this amendment on the Group's consolidated financial statements.

2-2-3-2 K-IFRS 1109 *Financial Instruments (Amendment)*

The amendment clarifies that in applying the '10 percent' test to assess whether to derecognize a financial liability, an entity includes only fees paid or received between the entity (the borrower) and the lender, including fees paid or received by either the entity or the lender on the other's behalf. The amendment is applied prospectively to modifications and exchanges that occur on or after the date the entity first applies the amendment. There is no material impact of this amendment on the Group's consolidated financial statements.

2-2-3-3 K-IFRS *1116 Leases (Amendment)*
The amendment removes the illustration of the reimbursement of leasehold improvements. There is no material impact of this amendment on Group's consolidated financial statements.

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's consolidated financial statements are disclosed below.

2-2-4 K-IFRS 1001 *Presentation of Financial Statements and IFRS Practice Statement 2 Making Materiality Judgements - Disclosure of Accounting Policies (Amendments)*
The amendment changes the requirements in K-IFRS 1001 with regard to disclosure of accounting policies. The amendments replace all instances of the term 'significant accounting policies' with 'material accounting policy information. ' Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected toinfluence decisions that the primary users of general purpose financial statementsmake on the basis of those financial statements.
The supporting paragraphs in K-IFRS 1001 are also amended to clarify that accounting policy information that relates to immaterial transactions, other events or conditions is immaterial and need not be disclosed. Accounting policy information may be material because of the nature of the related transactions, other events or conditions, even if the amounts are immaterial. However, not all accounting policy information relating to material transactions, other events or conditions is itself material. The board has also developed guidance and examples to explain and demonstrate the application of the 'four-step materiality process' described in IFRS Practice Statement 2. The amendment to K-IFRS 1001 is effective for annual periods beginning on or after January 1, 2023, with earlier application permitted and are applied prospectively. The amendments to IFRS Practice Statement 2 do not contain an effective date or transition requirements.

2-2-5 K-IFRS 1001 *Presentation of Financial Statements- Disclosure of financial liabilities with condition to adjust exercise price (Amendment)*

The amendments require disclosure of valuation gains or losses (limited to those recognized in the profit or loss) of the conversion options or warrants (or financial liabilities including them), if all or part of the financial instrument with exercise price that is adjusted depending on the issuer's share price change is classified asfinancial liability as defined in paragraph 11 (2) of K-IFRS 1032.
The amendments are applied retrospectively for annual periods beginning on or after January 1, 2023, with early application permitted.

2-2-6 K-IFRS 1008 *Accounting Polices, Changes in Accounting Estimates and Errors - Definition of Accounting Estimates (Amendments)*

The amendment replaces the definition of a change in accounting estimates with a definition of accounting estimates. Under the new definition, accounting estimates are "monetary amounts in financial statements that are subject to measurementuncertainty."
The definition of a change in accounting estimates was deleted. However, the IASB retained the concept of changes in accounting estimates in the Standard with the following clarifications:
- A change in accounting estimate that results from new information or new developments is not the correction of an error
- The effects of a change in an input or a measurement technique used to develop an accounting estimate are changes in accounting estimates if they do not result from the correction of prior period errors

The amendment is effective for annual periods beginning on or after January 1, 2023, to changes in accounting policies and changes in accounting estimates that occur on or after the beginning of that period, with earlier application permitted.

2-2-7 K-IFRS 1012 *Income Taxes - Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments)*

The amendment reduces the scope of the initial recognition exception. Under the amendment, an entity does not apply the initial recognition exemption for transactions that give rise to equal taxable and deductible temporary differences. Depending on the applicable tax law, equal taxable and deductible temporary differences may arise on initial recognition of an asset and liability in a transaction that is nota business combination and affects neither accounting nor taxable profit. For example, this may arise upon recognition of a lease liability and the corresponding right-of-use asset applying K-IFRS 1116 at the commencement date of a lease. Following the amendment to K-IFRS 1012, an entity is required to recognize the related deferred tax asset and liability, with the recognition of any deferred tax asset being subject to the recoverability criteria in K-IFRS 1012.

The amendments apply to transactions that occur on or after the beginning of the earliest comparative period presented. In addition, at the beginning of the earliest comparative period an entity recognizes:

・A deferred tax asset (to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised) and a deferred tax liability for all deductible and taxable temporary differences associated with:

- Right-of-use assets and lease liabilities
- Decommissioning, restoration and similar liabilities and the corresponding amounts recognized as part of the cost of the related asset

・The cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at that date.

The amendment is effective for annual reporting periods beginning on or after January 1, 2023, with earlier application permitted.

2-2-8 K-IFRS 1007 *Statement of Cash Flows - Cash and Cash Equivalents*

The Group has applied an accounting policy that excludes demand deposits whose use is restricted in accordance with relevant regulations, such as reserve deposits , etc., from cash and cash equivalents. However, in accordance with the result of the IFRS Interpretations Committee's agenda decision 'Demand Deposits with Restrictions on Use arising from a Contract with a Third Party' in March 2022, the Group changed its accounting policy to classify deposits with restrictions on use, such as reserve deposits, etc., corresponding to demand deposits, as cash equivalents, although their use is restricted in accordance with relevant regulations.

This change in accounting policy has no impact on the statement of financial position and statement of profit or loss and other comprehensive income, and the statement of cash flows has been rewritten retrospectively. The major changes in the statement of cash flows for the previous year are as follows. (Korean won in millions):

Classification	Before the change	After the change	Increase (decrease)
IV. Net increase in cash and cash equivalents (I+II+III)	(1,756,934)	2,485,674	4,242,608
V. Cash and cash equivalents at the beginning of the period	6,290,488	22,354,459	16,063,971
VI. Effect of changes in exchange rate on cash and cash equivalents	158,160	638,502	480,342
VII. Cash and cash equivalents at the end of the period	4,691,714	25,478,635	20,786,921

2-3 Scope and principles of consolidation

Significant methods of accounting for consolidation when preparing consolidated financial statements are as follows:

2-3-1 Subsidiaries

The Bank has the ability to determine the financial and operating policies of subsidiaries. Generally, the Bank classified the entity as subsidiary in case the Bank has existing rights that give it the current ability to direct the relevant activities, and is not only exposed, or has rights, to variable returns, but also has the ability to use its power to affect the Group's returns from its involvement wit h the investee. Subsidiaries are fully consolidated from the date on which the control is transferred to the Group and excluded from the subsidiaries at the point when the Group loses the control.

2-3-2 Offset of the investment accounts of the Group and the corresponding equity accounts

The investment accounts of the Group and the corresponding equity accounts of the subsidiaries are eliminated in consolidation.

2-3-3 Process of difference between the costs of investment

The consolidated financial statements reflect on only the share of the consolidate d subsidiaries post application of purchase accounting method. When applying the acquisition method, if the transfer consideration, the amount of non-controlling interest in the acquiree, and the total fair value of the parent's previous holdings exceed the fair value of the subsidiary's asset liabilities, the difference is recognized as goodwill and is considered for impairment at the end of each reporting period.

Changes in the parent's ownership interest in a subsidiary that does not lose control after the date of acquisition of control are treated as capital transactions.

2-3-4 Elimination of intercompany transactions and the unrealized gain or loss, etc.

All significant intercompany transactions and the account balances among the consolidated companies are eliminated on consolidation. Unrealized gains or losses included in loans and borrowings arising from transactions between consolidated companies are eliminated on consolidation. The related accounts receivable and payable are also eliminated on consolidation.

2-3-5 Investments in associates and a joint venture

Investments in entities over which the Group has control or significant influence are accounted for using the equity method. Under the equity method of accounting, the Group's initial investment in an investee is recorded at acquisition cost. Subsequently, a share of changes in equity (the Group's share of amount of the changes in associates' net assets) is adjusted to reflect in the carrying value. The share of changes in equity is accounted differently per sources. If the change in net asset has occurred due to net income or loss, it is accounted for as gain or loss on equity method. If it has occurred due to unappropriated retained earnings carried over from prior years, it is accounted for as changes in retained earnings under equity method. The change in net assets due to changes in equity, except those mentioned above, is accounted for as equity adjustments in equity method or negative equity changes in equity method.

If the carrying amount of investments in associates is equal or under '0,' it suspends equity method and carries the investments value at '0.' If the Group has investment assets, such as preferred shares and long-term bonds of associates, it continues recognizing its share of further losses to the extent of the carrying amount of such assets value '0.' The Group resumes the application of the equitymethod if the Group's share of income or change in equity of an investee exceedsthe Group's share of losses accumulated during the period of suspension of the equity method of accounting.

At the date of acquisition, the excess of the cost of the investment over the Group's share of the net fair value of the investee's identifiable assets and liabilities is accounted for as goodwill or negative goodwill. The goodwill is not amortized, and if there is any indication that investment shares in associates and joint ventures, including those, have been impaired, it is being considered against the recoverable value (greater of net fair value and value in use). In addition, the difference between the fair value and the carrying amount of the identifiable assets and liabilities of the investee at the time of stock acquisition is amortized or reversed according to the equity method of the investee.

The Group's share in the investee's unrealized profits and losses resulting from transactions between the Group and its investee is eliminated to the extent of the interest in the investee.

2-3-6 Special reserve on trust accounts

A special reserve provided under the arrangement of guaranteed fixed rate of return and guaranteed repayment of the principal is included under the retained earnings in the consolidated financial statements.

2-3-7 Non-controlling interests

Subsidiaries' equity that is not included in the Group's share is accounted as non-controlling interests. In case, subsidiaries' non-controlling interests are below '0', negative non-controlling interests are presented as deduction of equity.

2-4 Foreign currency transaction

2-4-1 Functional currency

When preparing for the consolidated financial statements, the Group measures and recognizes all items and transactions according to the functional currency. The term, functional currency, is defined as the monetary unit of account of the principal economic environment in which the entity operates, and trades between entities using its own functional currency and other currencies that are converted to the Group's functional currency to be measured and recognized.

2-4-2 Transactions and balances at the end of the reporting period

Transactions in foreign currencies are initially recognized as functional currency, applying spot or average exchange rates. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency spot rate of exchange at the reporting date and differences arising on settlement or translation of monetary items are recognized in profit or loss. Non-monetary assets and liabilities at fair value in a foreign currency are translated at the exchange rates at the end of the reporting date. When a gain or loss on a non-monetary item is recognized in profit or loss, any exchange differences of that gain or loss is recognized in profit or loss and when a gain or loss on a non-monetary item is recognized in other comprehensive income, any exchange differences of that gain or loss are recognized in other comprehensive income. Non-monetary items not measured at fair value in a foreign currency are translated using the exchange rates as at the dates of the initial transactions and thus there are no exchange differences.

However, an item for which settlement is neither planned nor likely to occur in the foreseeable future is, in substance, a part of the entity's net investment in that foreign operation. Exchange differences arising on a monetary item that forms a part of a reporting entity's net investment in a foreign operation are recognized initially in other comprehensive income and reclassified from equity to profit or loss on disposal of the net investment.

2-4-3 Translation of the presentation currency
As of the reporting date, the assets and liabilities of overseas branches are translated into the Group's presentation currency, Korean won (KRW).
The Group's assets and liabilities are translated at the rate of exchange prevailing at the reporting date, and the Group's consolidated statements of profit or loss and other comprehensive income and changes in equity are translated using the exchange rates at transaction date or the average exchange rates for the period. The exchange differences arising on translation are recognized in other comprehensive income.

2-5 Cash and cash equivalents
Cash and cash equivalents in the consolidated statements of financial position comprise of cash at bank and on hand, etc. The purpose of cash and cash equivalents is not to make short-term investments, but to meet short-term cash demands. Cash and cash equivalents are highly liquid, easily convertible and subject to an insignificant risk of changes in value.

Deposits restricted from use by the Group under contracts with third parties are included as part of cash, unless such restrictions prevent deposits from meeting the definition of cash any longer. Contractual restrictions affecting the use of cash and deposits are described in Note 10-2.

2-6 Financial assets-classification and subsequent measurement
At initial recognition, financial assets are classified as measured at fair value through profit or loss ("FVTPL"), fair value through other comprehensive income ("FVOCI") and amortized cost, financial liabilities are classified as measured at FVTPL and amortized cost, and in accordance with their characteristics and purposes.

Regular-way purchase or sale of financial assets is recognized at the trade date that an entity commits itself to purchase or sell an asset. Regular-way purchase or sale of financial assets means purchase or sale of financial assets under a contract, whose terms require delivery of the asset within the time frame established generally by regulation or convention in the marketplace concerned.

Financial assets and liabilities are initially measured at fair value, and the transaction costs directly attributable to the acquisition (issuance) of financial assets (liabilities) are added to (deducted from) the fair value at initial recognition if they are not measured at FVTPL. The fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction betweenmarket participants at the measurement date. The fair value of financial instruments is generally measured at the transaction price (the fair value of the consideration received or transferred) at initial recognition.

2-6-1 Financial assets at FVTPL

Financial assets held for trading or designated as at FVTPL and financial assets that are not classified as at FVOCI or amortized cost are classified as FVTPL.

Also, the Bank may designate a financial asset as measured at FVTPL, if doing so eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise from measuring assets or liabilities or recognizing the gains and losses on them on a different base.

Financial assets at FVTPL are measured at fair value and the gain or loss on valuation is recognized as profit or loss. Dividends and interest income from the financial assets are also recognized as profit or loss.

2-6-2 Financial assets at FVOCI

The Group classifies debt securities, which are held within a business model, whose objective is achieved by both collecting contractual cash flows and selling financial assets, and meet the assessment of contractual cash flow characteristics and equity securities designated as measured at FVOCI, which are held not with intention to sell, but for strategic purpose, as financial assets at FVOCI. Financial assets at FVOCI are measured at fair value after initial recognition. Gain or loss arising from changes in the fair value is recognized as other comprehensive income, except for interest income under the effective interest method, dividends and foreign exchange differences on monetary assets that are directly recognized in profit or loss.

When financial assets at FVOCI are disposed of, the cumulative income recognized in other comprehensive income is transferred to the current profit or loss. However, the cumulative income recognized for equity securities designated as financial assets at FVOCI is not transferred to the current profit or loss.

The fair value of financial assets at FVOCI presented in foreign currencies is translated using the exchange rate at the end of the reporting period. Changes in the fair value from exchange differences due to changes in amortized cost are recognized in the current profit or loss, while other changes are recognized directly in equity.

2-6-3 Financial assets at amortized cost

Financial assets within a business model, whose objective is achieved by collecting contractual cash flows which meet the contractual cash flow characteristics, are classified as financial assets at amortized cost. After initial recognition, the financial assets are measured at amortized cost using the effective interest rate ("EIR") method and presented by deducting from the amortized cost the allowance for loan losses. Interest income is recognized by using the effective interest rate method.

The Group defers loan origination fees ("LOF")/ loan origination costs ("LOC") associated with originating loans and LOCs that have future economic benefits. Loanbalances are reported net of these LOF/LOCs. The deferred LOF/LOCs are amortized based on the effective interest rate method, with the amortization recognized as adjustments to interest income.

2-7 Derivative financial instruments and hedge accounting

Derivative instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are classified as trading derivatives or hedging derivatives depending on whether hedge accounting is applied. After initial recognition, derivative instruments are subsequently remeasured at fair value. Any gains or losses arising from changes in fair value on derivatives are taken directly to the consolidated financial statements, except for the effective portion of cash flow hedges or hedges of net investment in a foreign operation, which is recognized in other comprehensive income.

The Group applies fair value hedge accounting to hedge the changes in fair value, as a whole or some parts, of recognized assets or liabilities from particular risks or an unrecognized firm commitment. Cash flow hedge is accounted to hedge the changes in cash flows of recognized assets or liabilities from particular risks or a highly probable forecast transaction.

The Group documents the hedge relationship, risk management objective, strategy , the nature of the risk being hedged and method to assess the effectiveness of hedge to apply hedge accounting. The effectiveness of hedge means the effect of offsetting the exposure to changes in fair value or cash flow of hedged items by changes in fair value or cash flow of derivatives attributed by the hedged risk. The Group assesses and documents whether such hedges are expected to be highly effective and if they actually have been highly effective at the end of the reporting period.

An ineffective part of the hedge may be due to differences between underlying variables, such as acquisition date, credit risk, or liquidity, and the hedging instruments that the entity accepts to achieve an effective cost-to-cost hedging relationship.

2-7-1 Fair value hedges

When fair value hedge accounting is applied, the unrealized gain or loss on hedged items that are attributable to a hedged risk and hedging instruments is symmetrically recognized in the consolidated financial statements as current income or other comprehensive income for the same reporting period to ensure that changes in the fair value of the hedged items are offset by changes in the fair value of the hedging instruments. If an application of hedge accounting is no longer valid, the Group discontinues the hedge accounting prospectively. Any adjustment to the carrying amount of hedged items is amortized to profit or loss in the consolidatedstatements of comprehensive income over the remaining maturity using the effective interest method.

2-7-2 Cash flow hedges

When cash flow hedge accounting is applied, the effective portion of the unrealize d gain or loss on the hedging instrument is directly recognized in other comprehe nsive income (loss) in the consolidated statements of financial position to ensure that changes in the cash flows of the hedged items are offset by change in the cas h flows of the hedging instruments, while any ineffective portion is recognized immediately in the consolidated statements of comprehensive income.Amounts recognized as other comprehensive income are transferred to the statement of comprehensive income when the hedged transaction affects profit or loss. If an application of hedge accounting no longer meets the criteria, the Group discont in ues the hedge accounting prospectively and the cumulative gain or loss on the hedging instrument previously recognized in other comprehensive income is trans ferred to profit or loss in the consolidated statements of profit or loss and other comprehensive income.

2-7-3 Hedge accounting of net investment in a foreign operation

When applying hedge accounting of net investment in a foreign operation, the effective portion of changes in fair value of the hedging instrument is recognized in other comprehensive income and the ineffective portion of the hedge is recognized as current profit or loss in order to offset changes in the fair value of the hedged item caused by the hedging with changes in the fair value of the hedging instrument. The effective portion of hedge recognized in other comprehensive income will be reclassified from other comprehensive income to current profit or loss in accordance with K-IFRS 1021 *The Effects of Changes in Foreign Exchange Rates* at the time of disposal of a foreign operation or disposal of a portion of its foreign operations in the future.

2-7-4 Embedded derivatives

An embedded derivative is a component of a hybrid contract that also includes a non-derivative host, with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. Derivatives embedded in other financial instruments or other host contracts are accounted for as separate derivatives when their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at FVTPL.

2-7-5 'Day 1' profit or loss

In case of derivatives in Level 3, fair value is determined using data that is not observable from markets. The difference between the transaction price and fair value at initial recognition (a 'Day 1' profit or loss) is deferred and amortized up to its maturity by using the straight-line method.

2-7-6 Credit risk valuation adjustment

When assessing derivatives at fair value, expected loss from credit risk is measur ed and deducted from derivative assets to reflect credit risk of counterparties.

2-8 Expected credit loss (ECL) for financial assets

Loss allowance is recognized for financial assets at FVOCI and amortized cost using the ECL model.

ECL is the weighted-average amount of possible outcomes within a certain range, reflecting the time value of money, estimates on the past, current and future situations and information accessible without excessive cost or effort.

The ECL can be measured in three following ways:

- General approach: When financial assets do not fall into below two categories and are off-balance-sheet undrawn commitments
- Simplified approach: When financial assets are trade receivables, contract assets or lease receivables
- Credit-impaired approach: When financial assets are credit-impaired at initial recognition

The general approach is applied differently depending on the significance of the increase of the credit risk. If, at the reporting date, the credit risk on a financial instrument has not increased significantly since initial recognition, the Bank shall measure the loss allowance for that financial instrument at an amount equal to 12-month ECL. If the credit risk on that financial instrument has increased significantly since initial recognition, the Bank shall measure the loss allowance for a financial instrument at an amount equal to the lifetime ECL at each reporting date.

The loss allowance is measured at an amount equal to lifetime ECL for the simplified approach, and the Bank shall only recognize the cumulative changes in lifetime ECL since initial recognition as a loss allowance for purchased or originated credit-impaired financial assets at each reporting date for the credit-impaired approach.

The following non-exhaustive list of information may be relevant in assessing changes in credit risk:

- Significant changes in internal price indicators of credit risk as a result of a change in credit risk since inception
- Other changes in the rates or terms of an existing financial instrument that would be significantly different
- An actual or expected significant change in the financial instrument's external credit rating
- An actual or expected internal credit rating downgrade for the borrower or decrease in behavioral scoring used to assess credit risk internally
- An actual or expected significant change in the operating results of the borrower
- Past-due information, etc.

2-8-1 Reflecting forward-looking information

The Group measures the significance of the increase of the credit risk and the ECL using forward-looking information.

The Group assumes that the risk component is correlated with changes in market conditions and calculates the ECL using the forward-looking information by mod eling macroeconomic variables and risk components.

The forward-looking information used to measure the ECL is derived from 'stress-case' or 'worst-case' scenarios.

2-8-2 Measurement of ECL for financial assets at amortized cost
ECL for financial assets at amortized cost is measured as the present value of the difference between the contractual cash flows that are due to the Bank under the contract and the cash flows that the Bank expects to receive. For this purpose, the Group calculates expected contractual cash flows for individually significant financial assets (allowance for loan losses on an individual assessment)
.

Financial assets insignificant in value individually are measured on a collective basis with financial assets with similar credit risks (allowance for loan losses on a collective assessment).

2-8-2-1 Allowance for loan losses on an individual assessment basis
Allowance for loan losses on an individual assessment basis is based on the best estimates of management in regard to the present value of cash flows expected to be recovered from receivables. In estimating the cash flows, the Group uses all available information, including the financial conditions, such as the operating cash flows of counterparties and the net realizable value of collateral provided.

2-8-2-2 Allowance for loan losses on a collective assessment basis
Allowance for loan losses on a collective assessment basis uses the estimation model that accounts for the forward-looking information based on the past loss rate to measure the ECL. The model considers the probability of default ("PD") and the loss given default ("LGD") reflecting the type of instruments and borrowers, credit rating, portfolio size and collection period. Also, certain assumptions are applied to model the expected credit loss measurement and to determine input variables based on past experiences and forward-looking information. Methodologies and assumptions for this model are regularly reviewed to minimize the difference between the allowance for loan losses and the actual loss.

The ECL for financial assets at amortized cost is recognized as the allowance for loan losses, and when the financial asset is determined to be irrecoverable, the carrying amount and allowance for loan losses are decreased. If financial assets previously written off are recovered, the allowance for loan losses is increased, and the difference is recognized in the current profit or loss.

2-8-3 ECL measurement for financial assets at FVOCI

The measurement method is the same as the one for financial assets at amortized cost, but the change in the allowance is recognized as other comprehensive income. The allowance for financial assets at FVOCI is reclassified from other comprehensive income to current profit or loss when the assets are disposed of or repaid.

2-9 Derecognition of financial assets

A financial asset is derecognized when the contractual rights to the cash flows from the financial asset expire, or the Group transfers substantially all the risks and rewards of ownership of the financial asset. If the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset, but has retained control, the Group recognizes the asset and the associated liability to the extent of the Group's continuing involvement in the financial asset. If most of the risks and rewards of owning a financial asset are controlled without holding or transferring it, the Group recognizes them in its consolidated statement of financial position as the Group continues to be involved in the financial asset and related liabilities to be paid.

2-10 Classification and measurement of financial liabilities

All financial liabilities are classified as financial liabilities at FVTPL, borrowings or others are measured initially at their fair value, minus transaction costs, except in the case of financial liabilities recorded at FVTPL.

2-10-1 Financial liabilities at FVTPL

Financial liabilities at FVTPL include financial liabilities held for trading and financ ial liabilities designated upon initial recognition as at FVTPL. Financial liabilities are classified as held for trading if they are acquired for the purpose of selling in the near term. All derivatives, including an embedded derivative separated from the host contract, are reclassified as financial liabilities at FVTPL, except for financial liabilities designated as effective hedging instruments or financial guarantee contracts. After initial recognition, the changes in the fair value of the financial liabilities at FVTPL and the related interest expenses are recognized as profit or loss.

The Group performs securities lending and borrowing classified as held for trading financial liabilities. When the Group borrows securities from Korea Securities Depository, securities borrowed are managed as memorandum value and, when selling them, they are recorded as securities sold. At closing, the difference in theprice securities are sold and the market price prevailing on the closing date is taken into account as valuation gain or loss on securities sold, and at the time of selling the securities, the difference in book value and the price securities are purchased is recorded as trading gain or loss on securities sold.

2-10-2 Deposits, borrowings and debentures
Interest-bearing deposits, borrowings and debentures are subsequently measured at amortized cost using the effective interest method. The difference between the consideration received after deducting transaction costs and the amount repayable on maturity is amortized by the effective interest method and recognized in profit or loss for the relevant period.

2-11 Derecognition of financial liabilities
A financial liability is derecognized when the obligation under the liability is discharged, canceled or expired. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the consolidated statements of profit or loss and other comprehensive income.

2-12 Offsetting of financial assets and liabilities

Financial assets and financial liabilities are offset, and the net amount reported in the consolidated statements of financial position if, and only if, there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the asset and settle the liability simultaneously.

2-13 Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) 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. If the obligation is expected, it is unlikely or the amount of the loss cannot be estimated reliably, the amount isdisclosed. If the effect of the time value of money is material, provisions are stated at present value.

The Group accounts for the payment guarantee provision in the same way in accounting allowance for loan losses on a collective assessment basis, by applying the Cash Conversion Factor, to the confirmed/unconfirmed payment guarantees and bills endorsed. The Group provides an allowance for loan losses on a certain portion of unused credit line. The Group records the provision for such unused balances as an allowance for loan losses on unused commitments, which are calculated by applying a Credit Conversion Factor ("CCF") and provision rates.

2-14 Financial guarantee contract

A financial guarantee contract is a contract that requires the issuer 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 and is measured at fair value on the date of initial recognition. After initial recognition, the Group, as an issuer of such a contract, measures it at the higher of (i) the amount determined in accordance with K-IFRS1109 *Financial Instruments* or (ii) the amount initially recognized less, when appropriate, cumulative amortization recognized in accordance with K-IFRS 1115 *Revenue from Contract with Customer.*

2-15 Bonds purchased under resale agreements and bonds sold under repurchase agreements

Bonds purchased under resale agreements and bonds sold under repurchase agreements are included in loans and borrowings, respectively, in the accompanying consolidated statements of financial position. Interest income and expenses from purchase or sale are recognized as interest income on loans and interest expenses on borrowings.

2-16 Property, plant and equipment

Property, plant and equipment are measured at cost, and the carrying amount after initial recognition is expressed as the amount of the acquisition cost minus the accumulated depreciation and the accumulated impairment loss. The cost of property, plant and equipment is an expenditure directly related to the purchase or construction of the asset, including the cost directly related to the location and condition required to operate the asset in the manner intended by management, and the cost initially estimated to be required to dismantle, remove, or restore the site.

The subsequent costs are recognized as an asset when it is probable that future economic benefits associated with the asset will flow to the Group and the costs of the asset can be measured reliably. The other maintenances and repairs are expensed in the year in which they are incurred, and the carrying amount of certain parts that are replaced is derecognized.

Land is not depreciated. For depreciation of other assets, amount of acquisition cost, less residual value is calculated on a straight-line basis and declining-balance basis over the following estimated useful life of the asset:

Classification	Depreciation method	Years
Buildings, building components and structures	Straight-line method	5 to 55
Leasehold improvements	Straight-line method	3 to 10
Equipment and vehicles	Declining-balance method	3 to 20

If the recoverable amount of an asset is estimated to be less than its carrying amount, the carrying amount of the asset is immediately reduced to its recoverable amount.
The residual value and economic useful life are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for, if necessary. Any gain or loss arising on derecognition of the asset is recognized in 'Non-operating income' or 'Non-operating expenses' in the consolidated statements of comprehensive income in the year the asset is derecognized.

2-17 Investment properties
Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are stated using the cost model.

Investment properties are derecognized when either they have been disposed of or the investment property is permanently withdrawn from use and no future economic benefit is expected from its disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognized in the consolidated statements of profit or loss and other comprehensive income in the period of derecognition, and transfers are made to or from investment property only when there is a change in use. Land is not depreciated among investment properties, and the depreciation method of the building is a straight-line method, and the useful life is five to 55 years. The depreciation method, residual value, and useful life of investment property are reviewed at the end of each reporting period, and if it is deemed appropriate to change it, it is accounted for as a change in accounting estimates.

2-18 Intangible assets

An intangible asset, which comprises industrial property right, software, development costs and others, is recognized as an asset only if it is probable that future economic benefits associated with the asset will flow to the Group and the costs of the asset can be measured reliably. Intangible assets acquired individually are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is its fair value as of the date of acquisition in accordancewith KIFRS 1103 *Business Combination.* Amortization of intangible assets with definite useful lives is calculated on the following amortization method over the estimated useful life of the assets:

Classification	Depreciation method	Years
Industrial property right, software and system development costs	Straight-line method	5
Core deposits	Straight-line method	14
Other intangible assets	Straight-line method	1 to 12

Intangible assets with indefinite useful lives are not amortized, but are annually tested for impairment or whenever there is an indication that the intangible asset may be impaired. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable.

2-19 Impairment of non-financial assets

The Group tests the depreciable asset for impairment whenever there is a change of environment or an event that the carrying amount may not be recoverable. The Group recognizes an excess of the carrying amount over the recoverable amount as an impairment loss. The Group defines recoverable amount as the higher of an asset's or cash-generating unit ("CGU")'s fair value, less costs to sell, or its value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels (CGUs) for which there are separate and identifiable cash flows. The Group assesses reversal of an impairment loss recognized for the non-financial assets other than goodwill at the end of the reporting period.

2-20 Net defined benefit liabilities (assets)

The Group calculates defined benefit liabilities and pension benefit expenses based on defined benefit plan and defined contribution plan when an employee retires in accordance to pension-related regulations. For defined benefit plans, the cost of retirement benefits is measured by an actuary services company, using the projected unit credit method. The present value of defined benefit obligation is computed by discounting expected future cash outflows with market rate of return measured against the yield of high-graded corporate bond, whose date of payment and maturity is similar to that of a defined benefit obligation. Actuarial gains and losses, incurred from the change in actuarial assumptions and the difference between the assumptions and the actual results, are recognized in other comprehensive income for the period. Past service cost is recognized immediately to the extent that the benefits are already vested and otherwise is amortized on a straight-line basis over the period until the benefits become vested.

The Group has entered into retirement trust fund and retirement pension plan agreements to pay retirement benefits to its employees. The retirement benefit obligation represents the present value of the defined benefit obligation as adjusted for unrecognized past service cost and as reduced by the fair value of plan assets. Any asset resulting from this calculation is limited to unrecognized actuarial losses and past service cost, plus the present value of available refunds and reductions in future contributions to the plan.

2-21 Share-based payment

In the case of equity-settled share-based payment, the goods or services received and the corresponding increase in equity are measured directly at the fair value of the goods or services and accounted for as compensation costs and equity. If the goods or services provided cannot be reliably measured, the endowed equity is indirectly estimated at fair value and the Group accounts for compensation costs and equity (capital adjustment). The cost of cash-settled transactions is measured initially at fair value at the grant date, taking into

account the terms and conditions upon which the instruments were granted. This fair value is expensed over the period until vesting with recognition of a corresponding liability. The liability is remeasured to fair value at each reporting date up to, and including the settlement date, with changes in fair value recognized in the consolidated statements of comprehensive income.
Also, in the case of a selectable share-based payment transaction in which the employees have a choice between a cash-settled transaction and an equity-settled transaction, the Group records the amount dependingon its substance.

2-22 Employee benefits

2-22-1 Short-term employee benefits
When employees have rendered services to the Group during an accounting period, the Group recognizes the undiscounted amount of short-term employee benefits. This amount is expected to be settled in whole before 12 months after the endof the reporting period, in exchange for those services.

2-22-2 Termination benefits
The Group recognizes an expense for termination benefits when an employee accepts the offer or when a restriction on the Group's ability to withdraw the offer takes effect.

2-23 Recognition of income tax expenses and deferred tax assets and liabilities
Income taxes are composed of current and deferred taxes. All items related to taxes, other than those recognized directly in equity, are accounted for in the consolidated statements of comprehensive income. Accordingly, items recognized directly in equity and the related taxes are accounted for as other comprehensive income in the consolidated statements of comprehensive income.

The tax rates and tax laws used to compute the amount are those that are enacted, or substantively enacted, by the reporting date, in the countries where the Group operates and generates taxable income. If the applied tax laws require an interpretation, the Group calculates income tax payable expected to be paid to the taxation authorities based on the opinion made when the taxes were reported.

Deferred tax is provided on the temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

When the initial recognition of an asset or a liability in a transaction is not a business combination and, at the time of the transaction, affects neither accounting profit nor taxable profit, the Group does not recognize a deferred tax asset or liability. The Group measures deferred tax assets and liabilities 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 Group recognizes a deferred tax asset for all deductible temporary difference s to the extent that it is probable that taxable profit will be available against which the deductible temporary differences can be utilized.

The Group recognizes a deferred tax liability for all taxable temporary differences with investments in subsidiaries and associates, except to the extent that both of the following conditions are satisfied: (a) the Bank is able to control the timing of the reversal of the temporary difference and (b) it is probable that the temporary difference will not reverse in the foreseeable future.

The Group offsets deferred tax assets and liabilities if, and only if, the Group has a legally enforceable right to set off current tax assets against current tax liabilities, and the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority on either on the same taxable entity or different taxable entities, which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously,in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

2-24 Equity

2-24-1 Classification of equity

The Group classifies financial instruments at initial recognition as either financial liabilities or financial equity depending on the contractual materiality. In the case where it is possible to avoid the related contractual obligations, the financial item is classified as a financial equity. An equity is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities.

2-24-2 Stock issuance costs

New stock issuance costs or incremental costs related to the stock issuance for business combinations are recorded as a deduction from paid-in capital, net of tax effects.

2-25 Earnings per share

Basic and diluted earnings per share ("EPS") are computed by dividing net income by the weighted-average number of shares of common stock outstanding during the year.

2-26 Accounting basis for trust accounts

The Group accounts for trust operations (the "trust accounts") separately from the Group's accounts in accordance with the *Financial Investment Services and Capital Markets Act*. In this regard, the funds lent by the Group to the trust account are accounted as due to trust accounts of the Group's accounts, and the funds borrowed by the Group from the trust account are accounted as due from trust accounts of the Group's accounts. Trust compensation paid to the trustee (the Group) in connection with the operation, management and disposal of trust property is accounted as trust operation profits. The Group recognizes trust commissions earned from trust accounts as income from trust operations in connection with the operation, management and disposal of trust property. In addition, in the case of a joint operation money trust with a "guarantee contract of the principal orprofits" of the trust account, if the operating profit falls short of the "principals tobe preserved or profits to be guaranteed" and this shortage is more than covered by the trust compensation and special reserves, the Group accounts the amount paid to the trust account as trust accounts operating losses.

2-27 Lease accounting

Under KIFRS 1116 *Leases*, the Group applies a single recognition and measurement method for all leases, except for leases of low-value assets. This standard provides guidance on specific requirements and simplified methods applied by an entity.

The Group recognized the right-of-use assets and the lease liabilities that were previously classified as operating leases, except for leases of low-value assets. Right-of-use assets for most leases were recognized as carrying amounts measured as if they had been applying the standards from the inception of the lease, except that they were discounted at the lessee's incremental borrowing rate as of the date of initial application. In some leases, the right-of-use asset was recognizedbased on the amount equal to the lease liabilities, adjusted for any related prepaidand accrued lease payments previously recognized. The lease liability was measured at the present value of the remaining lease payments, discounted at the incremental borrowing rate as of the date of initial application.

The practical expedients that the Group applied are as follows:

- Application of a single discount rate to a portfolio of leases with significantly similar characteristics
- Replacement of impairment review by determining whether leases are onerous before the initial application date
- Exclusion of initial direct costs from the measurement of the right-of-use asset at the initial application date
- Using hindsight for lessee

2-28 Merchant banking account

As permitted by the Restructuring of Financial Institutions Act, the Group may continue its merchant banking operations, including leasing business, until the existing contracts acquired from the Korea International Merchant Bank upon merger are terminated.

Significant accounting policies applied to the Bank's merchant banking operations are summarized as follows:

2-28-1 Revenue recognition on discounted notes

Interest income on discounted notes is accrued over the term of the notes. Income from the sale of discounted notes is recognized at the date of transaction basedon the difference between the purchase prices and sales prices of the notes, adjusted for interest earned during the holding period.

2-28-2 Cash Management Accounts (CMA)

The Group recognizes interest income from CMA investments and interest expenses from CMA deposits as operating income and operating expenses, respectively.

2-29 Interest income and interest expenses

Interest income and interest expenses are recognized over time using the effective interest method.

The effective interest method is a method of calculating the amortized cost of a financial asset or a financial liability and allocating the interest income or interest expenses over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, when appropriate, a shorter period to the net carrying amount of the financial asset or financial 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. Cash flows at the time of the calculation include all the fees and points paid to, or received from, parties to the contract that are an integral part of the effective interestrate, including transaction costs, and all other premiums or discounts.

If income recognition on an accrual basis is deemed inappropriate due to low possibility of realizing interest income, the interest income is recognized when interestis actually received.

2-30 Fees and commission income

The Group's revenue recognition standard varies depending on the type of service provided to customers. Fee income, which is an integral part of the effective interest rate ("EIR") of financial instruments, is adjusted using the EIR and recognized as interest income.

Fee income is recognized using the five-stage revenue recognition model (Identification of a contract with a customer → Identification of performance obligations in the contract → Determination of the transaction price → Allocation of the transaction price to the separate performance obligations in the contract → Recognition of revenue upon satisfying the performance obligations) in accordance with K-IFRS 1115.

2-31 Dividend income

Dividend income is recognized when the Group's right to receive the payment is established.

2-32 Government grants

Government grants are recognized at fair value when there is a reasonable assurance that the entity will comply with the conditions attaching to it and that the grant will be received. Grants related to income are recognized as revenue on a systematic basis over the period necessary to match the related costs that the grant isintended to cover. On the other hand, grants related to an asset are presented bysubtracting the carrying amount of the asset and accounting for by deducting depreciation expenses over the useful life of the asset.

3. Significant judgments and accounting estimates

In the application of the Group's accounting policies, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily observable from objective sources. The estimation and assumption are based on other factors that are related to historical experience. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future period if the revision affects both current period and future period.

In the process of applying the Group's accounting policies, management has made the following judgments that have a significant effect on the amounts recognized in the consolidated financial statements.

3-1 Fair value of financial instruments

The fair value of financial instruments is determined by referencing quoted market prices in active markets in the first place. For financial instruments not traded in an active market, the fair value is determined using appropriate valuation techniques, including (i) between knowledgeable and willing parties in a recent arm's-length transaction, (ii) reference to the current fair value of another instrument that is substantially the same, (iii) discounted cash flow ("DCF") analysis and (iv) option-pricing models.

3-2 Expected credit loss of financial assets

The Group recognizes impairment losses on debt instruments, lease receivables, loan commitment and financial guarantee contracts that were accounted for at amortized cost, or FVOCI, based on the ECL impairment model using a three-stage model for 12-month ECL, or lifetime ECL, based on changes in credit risk since initial recognition of financial assets.

Classification		Loss allowance
STAGE 1	Credit risk on a financial instrument has not increased significantly since initial recognition.	12-month ECL: Expected credit losses that result from default events on a financial instrument that are possible within the 12 months after the reporting date.
STAGE 2	Credit risk on a financial instrument has increased significantly since initial recognition.	Lifetime ECL: Expected credit losses that result from all possible default events over the expected life of a financial instrument.
STAGE 3	Credit-impaired.	

The cumulative changes in lifetime ECL since initial recognition are recognized as loss allowance for a financial asset that is considered credit impaired at initial recognition.

3-3 Retirement benefit

The cost of providing benefits under the defined benefit plans is determined using the actuarial valuation. Actuarial assumptions were made for the discount rate and an increase in the future pay rate. Retirement benefits include significant uncertainties in the estimates due to the longer duration of the period.

3-4 Impairment of non-financial assets

The Group assesses at the end of each reporting period, whether there is an indication that non-financial assets may be impaired. An intangible asset with an indefinite useful life is tested for impairment annually or tested whenever there is an indication that the intangible asset may be impaired. Other non-financial assets aretested for impairment whenever there is an indication that the book value cannot be recovered. For the calculation of value in use, management estimates an expected future cash flow incurred from the asset or CGU. For the calculation of present value of the expected future cash flow, appropriate discount rate is selected.

3-5 Income tax

There have been various transactions and tax accounting methods, which have made computing the final tax expenses for the period uncertain. The contingent liability from any future tax assessments is based on the estimates of the likelihood of additional taxes imposed and has been included in the Group's consolidated financial statements for the current period. When the finalized tax expenses assessments are different from the appropriated amounts, the differences, if any, are recognized in current deferred tax assets, liabilities and expenses for the period.

4. Fair value measurement of financial assets and liabilities

The standards the Group applies when measuring fair values of financial assets and liabilities are described below:

a. Quoted market prices as of the settlement date in an active market are the best evidence of fair value and should be used when available.
b. If a market for a financial instrument is not active, the Group establishes fair value by using a valuation technique that makes maximum use of market inputs and includes (i) recent arm's length market transactions, (ii) reference to the current fair value of another instrument that is substantially the same, (iii) discounted cash flow analysis, and (iv) option-pricing models. An acceptable valuation technique incorporates all factors that market participants would consider in setting a price and is consistent with accepted economic methodologies for pricing financial instruments.
c. When determining fair value using the valuation techniques, comparison with the current market transaction of another instrument that is substantially the same as the financial instrument needed to be objectively substantiated or inclusion of variables in the marketable data must be performed. Not all of the significant market variables are observable and in relevant cases, the reasonable estimates or assumptions are required to determine the fair value.

4-1 Fair value hierarchy of financial instruments

Fair value hierarchy of financial instruments as of December 31, 2022, and 2021, is as follows (Korean won in millions):

<December 31, 2022>

Classification	Levels of the fair value hierarchy (*1)			Total
	Quoted market price (Level 1)	Observable input (Level 2)	Unobservable input (Level 3)	
Financial assets				
Financial assets at FVTPL				
Equity securities	17,943	–	24,945	42,888
Debt securities	2,148,533	5,459,986	944,860	8,553,379
Derivative assets held for trading	213	9,814,434	37,107	9,851,754
Convertible privately placed bonds	–	–	7,394	7,394
Subtotal	2,166,689	15,274,420	1,014,306	18,455,415
Financial assets at FVOCI				
Equity securities	252,039	34	558,432	810,505
Debt securities	10,351,695	21,798,381	–	32,150,076
Subtotal	10,603,734	21,798,415	558,432	32,960,581
Derivative assets used for hedging	–	8,062	–	8,062
Merchant banking account assets	–	4,631,361	–	4,631,361
Total	12,770,423	41,712,258	1,572,738	56,055,419
Financial liabilities				
Financial liabilities at FVTPL				
Derivative liabilities held for trading	1,177	10,681,705	59,695	10,742,577
Securities borrowed	323,661	–	–	323,661
Financial liabilities designated as at FVTPL	–	162,069	–	162,069
Subtotal	324,838	10,843,774	59,695	11,228,307
Derivative liabilities used for hedging	–	485,580	30,838	516,418
Total	324,838	11,329,354	90,533	11,744,725

(*1) The Group recognizes transfers between levels at the beginning of reporting period when events or changes in circumstances causing the transfers between levels have occurred.

<December 31, 2021>

Classification	Levels of the fair value hierarchy (*1)			Total
	Level 1	Level 2	Level 3	
Financial assets				
Financial assets at FVTPL				
Equity securities	81,433	–	14,900	96,333
Debt securities	1,037,868	4,900,268	611,871	6,550,007
Derivative assets held for trading	15	4,090,684	10,650	4,101,349
Convertible privately placed bonds	–	–	170,873	170,873
Subtotal	1,119,316	8,990,952	808,294	10,918,562
Financial assets at FVOCI				
Equity securities	326,532	50	584,998	911,580
Debt securities	12,718,463	21,604,315	–	34,322,778
Subtotal	13,044,995	21,604,365	584,998	35,234,358
Derivative assets used for hedging	–	68,670	–	68,670
Merchant banking account assets	–	4,741,939	–	4,741,939
Total	14,164,311	35,405,926	1,393,292	50,963,529
Financial liabilities				
Financial liabilities at FVTPL				
Derivative liabilities held for trading	–	3,838,118	11,345	3,849,463
Securities borrowed	143,044	–	–	143,044
Financial liabilities designated as at FVTPL	–	195,600	–	195,600
Subtotal	143,044	4,033,718	11,345	4,188,107
Derivative liabilities used for hedging	–	102,068	9,124	111,192
Total	143,044	4,135,786	20,469	4,299,299

(*1) The Group recognizes transfers between levels at the beginning of each reporting period when events or changes in circumstances causing the transfers between levels have occurred.

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation techniques:
a. Level 1: The fair values are based on quoted (unadjusted) prices in active markets.
b. Level 2: The fair values are based on techniques using observable inputs in active markets.
c. Level 3: The fair values are based on techniques using unobservable inputs.

Details of fair value, valuation techniques, and inputs used to develop those measurements classified into Level 2 assets and liabilities that are measured at fair value as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	Fair value	Description of the valuation technique	Inputs used in the fair value measurement
Financial assets			
Financial assets at FVTPL			
Debt securities	5,459,986	Net asset value model, DCF model	Underlying asset prices such as bond, stock, etc., Discount rate
Derivative assets held for trading	9,814,434	Black-Scholes model, Black model, DCF model and Hull-White 1 factor model	Exchange rate, Stock Index, Volatility, Swap yield curve, Swaption volatility, Yield curve of each currency
Subtotal	15,274,420		
Financial assets at FVOCI			
Equity securities	34	Market value	Stock price
Debt securities	21,798,381	DCF model	Discount rate
Subtotal	21,798,415		
Derivative assets used for hedging	8,062	Hull-White 1 factor model	Exchange rate, Swap yield curve, Swaption volatility, Yield curve of each currency
Merchant banking account assets	4,631,361	DCF model	Discount rate
Total	41,712,258		
Financial liabilities			
Financial liabilities at FVTPL			
Derivative liabilities held for trading	10,681,705	Black-Scholes model, Black model, DCF model and Hull-White 1 factor model	Exchange rate, Stock Index,Volatility, Swap yield curve, Swaption volatility, Yield curve of each currency
Financial liabilities designated as at FVTPL	162,069	Hull-White 1 factor model	Swap yield curve, Swaption volatility
Subtotal	10,843,774		
Derivative liabilities used for hedging	485,580	Hull-White 1 factor model	Exchange rate, Swap yield curve, Swaption volatility, Yield curve of each currency
Total	11,329,354		

<December 31, 2021>

Classification	Fair value	Description of the valuation technique	Inputs used in the fair value measurement
Financial assets			
Financial assets at FVTPL			
Debt securities	4,900,268	Net asset value model, DCF model	Underlying asset prices such as bond, stock, etc., Discount rate
Derivative assets held for trading	4,090,684	Black-Scholes model, Black model,	Exchange rate, Stock Index,Volatility, Swap yield curve, Swaption volatility,

Classification	Fair value	Description of the valuation technique	Inputs used in the fair value measurement
		DCF model and Hull-White 1 factor model	Yield curve of each currency
Subtotal	8,990,952		
Financial assets at FVOCI			
Equity securities	50	Market value	Stock price
Debt securities	21,604,315	DCF model	Discount rate
Subtotal	21,604,365		
Derivative assets used for hedging	68,670	Hull-White 1 factor model	Exchange rate, Swap yield curve, Swaption volatility, Yield curve of each currency
Merchant banking account assets	4,741,939	DCF model	Discount rate
Total	35,405,926		
Financial liabilities			
Financial liabilities at FVTPL			
Derivative liabilities held for trading	3,838,118	Black-Scholes model, Black model, DCF model and Hull-White 1 factor model	Exchange rate, Stock Index,Volatility, Swap yield curve, Swaption volatility, Yield curve of each currency
Financial liabilities designated as at FVTPL	195,600	Hull-White 1 factor model	Swap yield curve, Swaption volatility
Subtotal	4,033,718		
Derivative liabilities used for hedging	102,068	Hull-White 1 factor model	Exchange rate, Swap yield curve, Swaption volatility, Yield curve of each currency
Total	4,135,786		

Details of fair value, valuation techniques, inputs to valuation, and significant unobservable inputs used to develop those measurements classified into Level 3 assets and liabilities that are measured at fair value as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	Fair value	Description of the valuation technique	Inputs used in the fair value measurement	Significant unobservable inputs used in the fair value measurement	Range (%)	The effect of changes in unobservable inputs on fair value
Financial assets						
Financial assets at FVTPL						
Equity securities	24,945	Dividend discount model, Discounted cash flow model	Growth rate, Discount rate and Liquidating value,	Growth rate	0.00	Positive
				Discount rate	5.19~ 11.95	Negative
				Liquidating value	0.00	Positive
Debt securities	944,860	Dividend discount model, Binomial model, Net asset value model	Discount rate, Liquidating value, Underlying asset price and Volatility of underlying assets	Discount rate	5.68~ 6.88	Negative
				Liquidating value	0.00	Positive
				Volatility of underlying	23.56~ 35.06	Positive

Classification	Fair value	Description of the valuation technique	Inputs used in the fair value measurement	Significant unobservable inputs used in the fair value measurement	Range (%)	The effect of changes in unobservable inputs on fair value
				assets		
Derivative assets held for trading	37,107	Binomial model, Hull-White 2 factor model	Stock index, Swap yield curve, Volatility of underlying assets, Correlation within evaluation model, Exchange rate, etc	Correlation between IRS rates, Correlation between Exchange rate and Stock index, Correlation between Stock index and Stock index	-25.30~ 74.90	Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
				Volatility of underlying assets	21.83~ 31.73	Positive
Convertible privately placed bonds	7,394	Acquisition cost	-	-	-	-
Subtotal	1,014,306					
Financial assets at FVOCI						
Equity securities	558,432	Binomial model, FCFE model, Discounted cash flow model, Comparable Company Analysis, Net asset method	Growth rate, Discount rate, Liquidating value, Underlying asset price and Volatility of underlying assets,	Growth rate	0.00	Positive
				Discount rate	9.08~ 19.14	Negative
				Liquidating value	0.00	Positive
				Volatility of underlying assets	21.98~ 46.53	Positive
Total	1,572,738					
Financial liabilities						
Financial liabilities at FVTPL						
Derivative liabilities held for trading	59,695	Binomial model, Hull-White 2 factor model	Stock index, Swap yield curve, Volatility of underlying assets, Correlation within evaluation model, Exchange rate, etc	Correlation between IRS rates, Correlation between Exchange rate and Stock index, Correlation between Stock index and Stock index	-5.90~ 73.00	Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
				Volatility of underlying assets	21.83~ 46.53	Positive
Derivative liabilities used for hedging	30,838	Hull-White 2 factor model	Swap yield curve, Swaption volatility, Correlation within evaluation model and Exchange rate	Correlation between KRW IRS rates, Correlation between USD IRS rates	39.00~ 96.00	Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
Total	90,533					

<December 31, 2021>

Classification	Fair value	Description of the valuation technique	Inputs used in the fair value measurement	Significant unobservable inputs used in the fair value measurement	Range (%)	The effect of changes in unobservable Inputs on fair value
Financial assets						
Financial assets at FVTPL						
Equity securities	14,900	Income approach, Multiple	Growth rate, Discount rate and Liquidating value,	Growth rate	1.00	Positive
				Discount rate	13.88~ 25.46	Negative
				Liquidating value	0.00	Positive
Debt securities	611,871	Income approach, Net asset value model	Discount rate, Liquidating value	Discount rate	5.13~ 21.37	Negative
				Liquidating value	0.00	Positive
Derivative assets held for trading	10,650	Hull-White 2 factor model	Swap yield curve, Swaption volatility, Correlation within evaluation model and Exchange rate	Correlation between USD IRS rates	53.00~ 79.00	Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
Convertible privately placed bonds	170,873	LSMC	Underlying asset price, Volatility of underlying assets, and Discount rate	Volatility of underlying assets	17.89~ 34.16	Positive
Subtotal	808,294					
Financial assets at FVOCI						
Equity securities	584,998	LSMC, Income approach, Net asset value model, multiple, Binomial model	Growth rate, Discount rate, Underlying asset price and Volatility of underlying assets	Growth rate	1.00	Positive
				Discount rate	10.42~ 18.02	Negative
				Volatility of underlying assets	23.32~ 25.49	Positive
Total	1,393,292					
Financial liabilities						
Financial liabilities at FVTPL						
Derivative liabilities held for trading	11,345	Hull-White 2 factor model	Swap yield curve, Swaption volatility, Correlation within evaluation model, and Exchange rate	Correlation between USD IRS rates	53.00~ 79.00	Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
Derivative liabilities used for hedging	9,124	Hull-White 2 factor model	Swap yield curve, Swaption volatility, Correlation within evaluation model, and Exchange rate	Correlation between KRW IRS rates, Correlation between USD IRS rates	53.00~ 98.00	Fair value increase or decrease based on the changes in correlation by the effect of trading instruments and market status
Total	20,469					

4-2 Changes in the fair value of financial assets and liabilities categorized as Level 3

Changes in the fair value of financial instruments categorized as Level 3 of the fair value hierarchy of financial instruments that are measured at fair value in the consolidated statements of financial position for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

<2022>

Classification		Financial assets at FVTPL			Financial assets at FVOCI	Net derivative instruments	
		Equity securities	Debt securities	Convertible privately placed bonds	Equity securities	Held for trading	Designated as hedging
Beginning balance		14,900	611,871	170,873	584,998	(695)	(9,124)
Total profit or loss	Profit or loss	608	(11,451)	1,550	-	(22,790)	(21,714)
	Other comprehensive loss	-	-	-	(26,024)	-	-
Buy / issue		10,027	453,969	7,337	-	897	-
Sell / settlement		(590)	(109,529)	(172,366)	(542)	-	-
Ending balance		24,945	944,860	7,394	558,432	(22,588)	(30,838)

<2021>

Classification		Financial assets at FVTPL			Financial assets at FVOCI	Net derivative instruments	
		Equity securities	Debt securities	Convertible privately placed bonds	Equity securities	Held for trading	Designated as hedging
Beginning balance		5,462	483,414	257,607	648,250	(1,191)	152
Total profit or loss	Profit or loss	171	50,170	7,542	-	780	(9,276)
	Other comprehensive loss	-	-	-	(52,564)	-	-
Buy / issue		11,315	182,837	10,000	1,010	(284)	-
Sell / settlement		(2,048)	(104,550)	(104,276)	(11,698)	-	-
Ending balance		14,900	611,871	170,873	584,998	(695)	(9,124)

4-3 Current gains or losses recognized from changes in Level 3 financial instruments measured at fair value

Current gains or losses recognized from changes in Level 3 financial instruments at fair value for the years ended December 31, 2022 and 2021, are recorded in the consolidated statements of comprehensive income as follows.
(Korean won in millions):

<2022>

Classification	Total gains or losses recognized in profit or loss	Profit or loss recognized related to financial instruments held at the end of reporting period
Loss on financial instruments at FVTPL	(32,083)	(25,872)
Loss related to derivative instruments used for hedging	(21,714)	(21,714)
Total	(53,797)	(47,586)

<2021>

Classification	Total gains or losses recognized in profit or loss	Profit or loss recognized related to financial instruments held at the end of reporting period
Gain on financial instruments at FVTPL	58,663	55,340
Loss related to derivative instruments used for hedging	(9,276)	(9,124)
Total	49,387	46,216

4-4 Transfers between fair value hierarchy

There is no transfer into or out of Level 3 of the fair value hierarchy for the years ended December 31, 2022 and 2021.

4-5 Sensitivity Analysis

Sensitivity of the fair value measurement for each Level 3 financial instrument upon the changes in significant unobservable input, whose results are favorable and unfavorable changes in profit or loss or other comprehensive income as of December 31, 2022 and 2021, is as follows (Korean won in millions):

The sensitivity analysis of financial instruments classified as Level 3 amount to ₩1,046,318 million and ₩1,080,315 million as of December 31, 2022 and 2021, respectively, is impossible in practice and, thus, is excluded.

<December 31, 2022>

Classification	Favorable changes	Unfavorable changes
Financial assets		
Financial assets at FVTPL		
Equity securities (*2)	21	(11)
Debt securities (*3)	1,093	(1,047)
Derivative assets held for trading (*1)	86	(72)
Subtotal	1,200	(1,130)
Financial assets at FVOCI		
Equity securities (*2)	18,160	(10,963)
Total	19,360	(12,093)
Financial liabilities		
Derivative liabilities held for trading (*1)	152	(169)
Derivative liabilities used for hedging (*1)	6	(1)
Total	158	(170)

(*1) Unfavorable and favorable changes in fair value are calculated by increasing/decreasing 10% of 1) correlation between rates of Interest Rate Swap (IRS) of KRW, 2) correlation between rates of IRS of KRW and USD, 3) correlation between rates of IRS of USD and exchange rates of KRW/USD, 4) correlation between stock index and individual stock, and 5) correlation within evaluation model.

(*2) Changes in fair value of equity securities are calculated by increasing/decreasing growth rate (0.0~1.0%) and discount rate (-1.0~1.0%), which are main unobservable inputs.

(*3) Changes in fair value of debt securities are calculated by increasing/decreasing discount rate (-1.0~1.0%), which is the main unobservable input.

It is impossible in practice to assess sensitivity based on the changes in input variables of beneficiary securities, but favorable or unfavorable changes in fair value, only limited to real estate, are calculated by changing discount rate of lease cash flow (-1.0~1.0%) and growth rate of selling price of real estate (-1.0~1.0%)

<December 31, 2021>

Classification	Favorable changes	Unfavorable changes
Financial assets		
Financial assets at FVTPL		
Equity securities (*2)	25	(20)
Debt securities (*3)	821	(767)
Convertible privately placed bonds (*4)	397	(294)
Derivative assets held for trading (*1)	567	(749)
Subtotal	1,810	(1,830)
Financial assets at FVOCI		
Equity securities (*2)	18,591	(14,587)
Total	20,401	(16,417)
Financial liabilities		
Derivative liabilities held for trading (*1)	729	(552)
Derivative liabilities used for hedging (*1)	287	(241)
Total	1,016	(793)

(*1) Unfavorable and favorable changes in fair value are calculated by increasing/decreasing 10% of 1) correlation between rates of Interest Rate Swap (IRS) of KRW, 2) correlation between rates of IRS of KRW and USD, 3) correlation between rates of IRS of USD and exchange rates of KRW/USD, 4) correlation bet ween stock index and individual stock, and 5) correlation within evaluation model.
(*2) Changes in fair value of equity securities are calculated by increasing/decreasing growth rate (0.0~1.0%) and discount rate (-1.0~1.0%), which are main unobservable inputs.
(*3) Changes in fair value of debt securities are calculated by increasing/decreasing discount rate (-1.0~1.0%), which is the main unobservable input. It is impossible in practice to assess sensitivity based on the changes in input variable s of beneficiary securities, but favorable or unfavorable changes in fair value, only limited to real estate, are calculated by changing discount rate of lease cash flow (-1.0~1.0%) and growth rate of selling price of real estate (-1.0~1.0%).
(*4) For convertible privately placed bonds, favorable and unfavorable changes in fair value are calculated by increasing or decreasing the price (-10.0~10.0%) and

variability (-10.0~10.0%) of underlying assets, which are the main unobservable inputs.

4-6 Financial assets and liabilities which are not measured at fair value
Financial assets and liabilities not measured at fair value in the consolidated financial statements, but for which the fair value is disclosed.
Fair value hierarchy of financial instruments at amortized cost as of December 31, 2022, and 2021, is as follows (Korean won in millions):

<December 31, 2022>

Classification	Levels of the fair value hierarchy			Total
	Level 1	Level 2	Level 3	
Financial assets:				
Cash and due from banks	1,903,972	39,183,885	-	41,087,857
Securities at amortized cost	3,579,863	32,007,819	-	35,587,682
Loans	-	-	327,015,538	327,015,538
Others	-	-	13,107,936	13,107,936
Total	5,483,835	71,191,704	340,123,474	416,799,013
Financial liabilities:				
Deposits	-	55,603,695	303,901,950	359,505,645
Borrowings	-	970,661	21,135,577	22,106,238
Debentures	-	25,675,257	-	25,675,257
Others	-	-	29,271,369	29,271,369
Merchant banking account liabilities	-	-	3,667,273	3,667,273
Total	-	82,249,613	357,976,169	440,225,782

<December 31, 2021>

Classification	Levels of the fair value hierarchy			Total
	Level 1	Level 2	Level 3	
Financial assets:				
Cash and due from banks	2,023,877	25,670,055	-	27,693,932
Securities at amortized cost	2,322,694	19,824,693	-	22,147,387
Loans	-	-	307,893,947	307,893,947
Others	-	-	13,524,389	13,524,389
Total	4,346,571	45,494,748	321,418,336	371,259,655
Financial liabilities:				
Deposits	-	50,706,451	271,332,462	322,038,913
Borrowings	-	1,091,728	16,413,204	17,504,932

Classification	Levels of the fair value hierarchy			Total
	Level 1	Level 2	Level 3	
Debentures	–	27,661,273	–	27,661,273
Others	–	–	25,694,939	25,694,939
Merchant banking account liabilities	–	–	2,908,280	2,908,280
Total	–	79,459,452	316,348,885	395,808,337

Details of fair value, valuation technique, and inputs used to develop those measurements classified into Level 2 assets and liabilities that are not measured at fair value as of December 31, 2022 and 2021, are as follows (Korean won in millions):

<December 31, 2022>

Classification	Fair value	Valuation technique	Inputs
Financial assets:			
Cash and due from banks	39,183,885	DCF model	Discount rate
Securities at amortized cost	32,007,819	DCF model	Discount rate
Total	71,191,704		
Financial liabilities:			
Deposits	55,603,695	DCF model	Discount rate
Borrowings	970,661	DCF model	Discount rate
Debentures	25,675,257	DCF model	Discount rate
Total	82,249,613		

<December 31, 2021>

Classification	Fair value	Valuation technique	Inputs
Financial assets:			
Cash and due from banks	25,670,055	DCF model	Discount rate
Securities at amortized cost	19,824,693	DCF model	Discount rate
Total	45,494,748		
Financial liabilities:			
Deposits	50,706,451	DCF model	Discount rate
Borrowings	1,091,728	DCF model	Discount rate
Debentures	27,661,273	DCF model	Discount rate
Total	79,459,452		

Details of fair value, valuation technique, and inputs used to develop those measurements classified into Level 3 assets and liabilities disclosed but not measured at fair value as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	Fair value	Valuation technique	Inputs
Financial assets			
Loans	327,015,538	DCF model	Credit and other spread, rate of advance redemption, etc.
Other financial assets	13,107,936	DCF model	Discount rate
Total	340,123,474		
Financial liabilities			
Deposits	303,901,950	DCF model	Other spread, rate of advance redemption
Borrowings	21,135,577	DCF model	Other spread
Other financial liabilities	29,271,369	DCF model	Discount rate
Merchant banking account liabilities	3,667,273	(*)	
Total	357,976,169		

(*) The carrying amount is considered fair value without applying the DCF method because it is derived from various transactions and has a relatively short or no maturity.

<December 31, 2021>

Classification	Fair value	Valuation technique	Inputs
Financial assets			
Loans	307,893,947	DCF model	Credit and other spread, rate of advance redemption, etc.
Other financial assets	13,524,389	DCF model	Discount rate
Total	321,418,336		
Financial liabilities			
Deposits	271,332,462	DCF model	Other spread, rate of advance redemption
Borrowings	16,413,204	DCF model	Other spread
Other financial liabilities	25,694,939	DCF model	Discount rate
Merchant banking account liabilities	2,908,280	(*)	
Total	316,348,885		

(*) The carrying amount is considered fair value without applying the DCF method because it is derived from various transactions and has a relatively short or no maturity.

4-7 Gain and loss on deferred Day 1

Changes in gain (loss) on deferred Day 1 for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	2022	2021
Beginning balance	(548)	(149)
Amount of new accrual	(1,734)	(535)
Amounts recognized as current profit or loss	152	136
Ending balance	(2,130)	(548)

4-8 Financial instruments transfer transaction

4-8-1 Bonds sold under repurchase agreements

As of the end of December 31 2022 and 2021, details of financial instruments that did not meet the derecognition requirements due to the sale of securities held by the Group on condition of repurchase at a fixed price during the bonds sold under repurchase agreements are as follows (Korean won in millions):

<December 31, 2022>

Classification	Book value	Fair value
Transferred asset sets		
Financial assets at FVOCI	46	46
Financial assets at amortized cost	484,066	443,630
Related liabilities		
Bonds sold under repurchase agreements	487,732	436,183

<December 31, 2021>

Classification	Book value	Fair value
Transferred asset sets		
Financial assets at FVOCI	203,961	203,961
Financial assets at amortized cost	910,146	903,179
Related liabilities		
Bonds sold under repurchase agreements	1,078,571	1,059,729

4-8-2 Loaned securities

When lending securities held by the Group, ownership of the securities is transferred, however, the securities would be returned at the end of the rental period. Therefore, the Group continues to recognize the entire loaned securities as it retains most of the risks and rewards of the securities. Details of loaned securities as of the end of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	Book value	Fair value
Financial assets at FVTPL	412,492	412,492
Financial assets at FVOCI	1,925,345	1,925,345
Financial assets at amortized cost	416,386	395,502

<December 31, 2021>

Classification	Book value	Fair value
Financial assets at FVTPL	49,906	49,906
Financial assets at FVOCI	2,538,542	2,538,542
Financial assets at amortized cost	59,586	58,624

4-8-3 Asset-backed securitization

The Group's consolidated structured companies issued asset-backed securities by securitizing their securities and loans. The Group retains the contractual right to receive cash flows from the financial assets, but the received cash flows are effectively transferred to the holder of asset-backed securities. In addition, the Group bears related risks through purchase agreements or credit exposures.

As of the end of December 31, 2022 and 2021, details of financial instruments that were transferred, but not derecognized in relation to asset-backed securitization transactions by the Group are as follows (Korean won in millions):

Classification		December 31, 2022	December 31, 2021
		Book value(*)	Book value(*)
Transferred asset sets	Financial assets at FVTPL	20,000	20,000
	Loans at amortized cost	1,291,332	1,335,098
	Total	1,311,332	1,355,098
Related liabilities	Asset-backed securitization borrowing	1,321,944	1,335,319
	Asset-backed securitization bond	-	30,000
	Total	1,321,944	1,365,319

(*) Carrying amount is before allowances for doubtful debts.

5. Fair value of financial assets and liabilities

Book values and fair values of financial assets and liabilities as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022		December 31, 2021	
	Book value	Fair value	Book value	Fair value
Financial assets:				
Cash and due from banks	41,087,857	41,087,857	27,693,932	27,693,932
Financial assets at FVTPL	18,455,415	18,455,415	10,918,562	10,918,562
Financial assets at FVOCI	32,960,581	32,960,581	35,234,358	35,234,358
Securities at amortized cost	37,583,487	35,587,682	22,467,884	22,147,387
Loans	330,186,341	327,015,538	309,177,708	307,893,947
Derivative assets used for hedging	8,062	8,062	68,670	68,670
Other financial assets	13,108,142	13,107,936	13,524,234	13,524,389
Merchant banking account assets	4,631,361	4,631,361	4,741,939	4,741,939
Total	478,021,246	472,854,432	423,827,287	422,223,184
Financial liabilities:				
Financial liabilities at FVTPL	11,228,307	11,228,307	4,188,107	4,188,107
Deposits	359,858,481	359,505,645	321,125,300	322,038,913
Borrowings	22,256,597	22,106,238	17,524,480	17,504,932
Debentures	26,233,339	25,675,257	27,699,757	27,661,273
Derivative liabilities used for hedging	516,418	516,418	111,192	111,192
Other financial liabilities	29,271,370	29,271,369	25,694,940	25,694,939
Merchant banking account liabilities	3,667,273	3,667,273	2,908,280	2,908,280
Total	453,031,785	451,970,507	399,252,056	400,107,636

The following standards are applied in measuring the fair value of financial instruments:

a. Loans: Expected cash flows, current market interest rates and discount rates including borrowers' credit risks are factors to calculate the fair value of loans. For lines of credit available for deposit and withdrawal from time to time and loans that have a short-term maturity (less than three months), it is assumed that the carrying amounts approximate their fair value.

b. Securities at amortized cost : The fair value of securities at amortized cost is as stated by the market, broker, or by credible sources. If none of the information from these entities is usable, quoted market price of financial instruments with similar credit rating, maturity and return on investment (ROI) is used to estimate the fair value.

c. Deposits: For deposits without an explicit maturity period including deposits with no interests, deposits that have a short-term maturity (less than three months) and deposits with a floating-rate readjustment period of less than three months, it is assumed that the carrying amounts approximate their fair value. The estimated fair value of fixed interest-bearing deposits is based on discounted future cash flows using interest rates for new financial liability with similar time to maturity.

d. Borrowings: For borrowings that have a short-term maturity (less than three months) and borrowings with floating-rate readjustment period of less than three months, it is assumed that the carrying amounts approximate their fair value. The estimated fair value of fixed interest-bearing borrowings is based on discounted future cash flows using interest rates for new financial liability with similar time to maturity.

e. Debentures: For debentures issued, the fair values are determined based on quoted market prices in active market. For those issued where quoted market prices in active market are not available, a discounted cash flow model is used based on a current interest rate yield curve appropriate for the remaining term to maturity and credit spreads.

6. Categories of financial assets and financial liabilities

6-1 The Group categorizes its financial assets as of December 31, 2022 and 2021 , as follows (Korean won in millions):

<December 31, 2022>

Classification	Financial assets at FVTPL	Financial assets at FVOCI	Financial assets at amortized cost	Derivatives for hedging	Total
Cash and due from banks	-	-	41,087,857	-	41,087,857
Financial assets at FVTPL	18,455,415	-	-	-	18,455,415
Financial assets at FVOCI	-	32,960,581	-	-	32,960,581
Securities at amortized cost	-	-	37,583,487	-	37,583,487
Loans	-	-	330,186,341	-	330,186,341
Derivative assets used for hedging instruments	-	-	-	8,062	8,062
Other financial assets	-	-	13,108,142	-	13,108,142
Merchant banking account assets	4,631,361	-	-	-	4,631,361
Total	23,086,776	32,960,581	421,965,827	8,062	478,021,246

<December 31, 2021>

Classification	Financial assets at FVTPL	Financial assets at FVOCI	Financial assets at amortized cost	Derivatives for hedging	Total
Cash and due from banks	-	-	27,693,932	-	27,693,932
Financial assets at FVTPL	10,918,562	-	-	-	10,918,562
Financial assets at FVOCI	-	35,234,358	-	-	35,234,358
Securities at amortized cost	-	-	22,467,884	-	22,467,884
Loans	-	-	309,177,708	-	309,177,708
Derivative assets used for hedging instruments	-	-	-	68,670	68,670
Other financial assets	-	-	13,524,234	-	13,524,234
Merchant banking account assets	4,741,939	-	-	-	4,741,939
Total	15,660,501	35,234,358	372,863,758	68,670	423,827,287

6-2 The Group categorizes its financial liabilities as of December 31, 2022 and 2021, as follows (Korean won in millions):

<December 31, 2022>

Classification	Financial liabilities at FVTPL	Financial liabilities designated as measured at FVTPL	Financial liabilities at amortized cost	Derivatives for hedging	Total
Financial liabilities at FVTPL	11,066,238	162,069	–	–	11,228,307
Deposits	–	–	359,858,481	–	359,858,481
Borrowings	–	–	22,256,597	–	22,256,597
Debentures	–	–	26,233,339	–	26,233,339
Derivative liabilities used for hedging instruments	–	–	–	516,418	516,418
Other financial liabilities	–	–	29,271,370	–	29,271,370
Merchant banking account liabilities	–	–	3,667,273	–	3,667,273
Total	11,066,238	162,069	441,287,060	516,418	453,031,785

<December 31, 2021>

Classification	Financial liabilities at FVTPL	Financial liabilities designated as measured at FVTPL	Financial liabilities at amortized cost	Derivatives for hedging	Total
Financial liabilities at FVTPL	3,992,507	195,600	–	–	4,188,107
Deposits	–	–	321,125,300	–	321,125,300
Borrowings	–	–	17,524,480	–	17,524,480
Debentures	–	–	27,699,757	–	27,699,757
Derivative liabilities used for hedging instruments	–	–	–	111,192	111,192
Other financial liabilities	–	–	25,694,940	–	25,694,940
Merchant banking account liabilities	–	–	2,908,280	–	2,908,280
Total	3,992,507	195,600	394,952,757	111,192	399,252,056

7. Offsetting of financial assets and liabilities

The Group engages in master netting agreement with counterparties through International Swaps and Derivatives Association (ISDA) or similar agreements in relation to over-the-counter derivatives and spot exchange transactions. Under this agreement, in the event of the counterparty's bankruptcy, etc., the transaction with the counterparty will be terminated. Upon termination, the amounts to be paid or received by each party are offset and paid or received. Repurchase agreements trade and securities lending and borrowing of securities have been made by offsetting arrangement, which is similar to the arrangement for derivatives.

In the case of uncollected domestic exchange bonds and unpaid domestic exchange obligations between banks, as the Group holds the rights of setoff and settles in net amounts, the net amounts are presented in the consolidated statement of financial position. Other financial instruments include bonds and debts related to securities traded in the market, which are presented in net amounts in the separate statement of financial position as there is a legally enforceable right of setoff and intention to settle on a net basis.

7-1 Financial assets offset, the executable Master Netting Agreement and financial assets subject to a similar arrangement as of December 31, 2022 and 2021, are as follows (Korean won in millions):

<December 31, 2022>

Classification	Gross amounts of recognized financial assets	Gross amounts of financial liabilities offset	Net amounts of financial assets presented in the consolidated financial statements	Related amounts of not offset (*)		Net amount
				Financial instruments	Cash collateral	
Derivatives	9,788,886	-	9,788,886	(7,438,461)	(1,480,302)	870,123
Securities lent	2,754,223	-	2,754,223	(2,754,223)	-	-
Bonds purchased under resale agreement	11,776,664	-	11,776,664	(11,776,664)	-	-
Spot exchange that has not been received or settled	5,961,620	-	5,961,620	(5,960,185)	-	1,435
Domestic exchange settlement debit	40,665,026	36,441,676	4,223,350	-	-	4,223,350
Other accounts receivable	4,419	4,419	-	-	-	-

Classification	Gross amounts of recognized financial assets	Gross amounts of financial liabilities offset	Net amounts of financial assets presented in the consolidated financial statements	Related amounts of not offset (*)		Net amount
				Financial instruments	Cash collateral	
Total	70,950,838	36,446,095	34,504,743	(27,929,533)	(1,480,302)	5,094,908

(*) The rights to set-off exist only in case of default, insolvency or bankruptcy. Accordingly, the amounts are not offset in the consolidated statements of financial position as they do not meet the criteria for offsetting.

<December 31, 2021>

Classification	Gross amounts of recognized financial assets	Gross amounts of financial liabilities offset	Net amounts of financial assets presented in the consolidated financial statements	Related amounts of not offset (*)		Net amount
				Financial instruments	Cash collateral	
Derivatives	4,170,019	-	4,170,019	(2,848,122)	(226,812)	1,095,085
Securities lent	2,648,033	-	2,648,033	(2,648,033)	-	-
Bonds purchased under resale agreement	11,380,982	-	11,380,982	(11,380,982)	-	-
Spot exchange that has not been received or settled	7,697,333	-	7,697,333	(7,691,616)	-	5,717
Domestic exchange settlement debit	36,854,002	33,077,375	3,776,627	-	-	3,776,627
Other accounts receivable	19,711	13,237	6,474	-	-	6,474
Total	62,770,080	33,090,612	29,679,468	(24,568,753)	(226,812)	4,883,903

(*) The rights to set-off exist only in case of default, insolvency or bankruptcy. Accordingly, the amounts are not offset in the separate statements of financial position as they do not meet the criteria for offsetting.

7-2 Financial liabilities offset, the executable master netting arrangements and financial liabilities subject to a similar agreement as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	Gross amounts of recognized financial liabilities	Gross amounts of financial assets offset	Net amounts of financial liabilities presented in the consolidated financial statements	Related amounts not offset (*)		Net amount
				Financial instruments	Cash collateral	
Derivatives	11,026,763	-	11,026,763	(9,022,247)	(59,116)	1,945,400
Securities borrowed	323,661	-	323,661	(323,661)	-	-
Bonds sold under repurchase agreements	487,732	-	487,732	(487,732)	-	-
Spot exchange that has not been received or settled	5,961,729	-	5,961,729	(5,960,245)	-	1,484
Domestic exchange settlement credit	41,945,503	36,441,676	5,503,827	-	-	5,503,827

Classification	Gross amounts of recognized financial liabilities	Gross amounts of financial assets offset	Net amounts of financial liabilities presented in the consolidated financial statements	Related amounts not offset (*)		Net amount
				Financial instruments	Cash collateral	
Other accounts payable	9,592	4,419	5,173	–	–	5,173
Total	59,754,980	36,446,095	23,308,885	(15,793,885)	(59,116)	7,455,884

(*) The rights to offset exist only in case of default, insolvency or bankruptcy. Accordingly, the amounts are not offset in the consolidated statements of financial position as they do not meet the criteria for offsetting.

<December 31, 2021>

Classification	Gross amounts of recognized financial liabilities	Gross amounts of financial assets offset	Net amounts of financial liabilities presented in the consolidated financial statements	Related amounts not offset (*)		Net amount
				Financial instruments	Cash collateral	
Derivatives	3,960,655	–	3,960,655	(2,962,393)	(245,695)	752,567
Securities borrowed	143,044	–	143,044	(143,044)	–	–
Bonds sold under repurchase agreements	1,078,571	–	1,078,571	(1,078,571)	–	–
Spot exchange that has not been received or settled	7,696,787	–	7,696,787	(7,691,621)	–	5,166
Domestic exchange settlement credit	39,250,073	33,077,375	6,172,698	(6,172,698)	–	–
Other accounts payable	24,286	13,237	11,049	–	–	11,049
Total	52,153,416	33,090,612	19,062,804	(18,048,327)	(245,695)	768,782

(*) The rights to offset exist only in case of default, insolvency or bankruptcy. Accordingly, the amounts are not offset in the consolidated statements of financial position as they do not meet the criteria for offsetting.

8. Risk management

The Group is exposed to credit risk, liquidity risk, market risk and various operating risks. The objectives of risk management are to pursue economic benefits by managing the associated risk in the changing financial environment and to utilize capital efficiently.

The basic principles of risk management are as follows:
a. Minimize the rapid fluctuation in profit by balancing the risks and the income.
b. Maximize long-term shareholder value.

c. Comply with procedures to ensure operating activities are confined to allowable risk limits.
d. Examine the type and size of risk along with the changes in potential economic value of portfolios and establish risk management strategy in order to utilize assets and distribute capital efficiently.

The basic policies in order to realize the basic principles of risk management are as follows:
a. Set and comply with allowable limits for each risk type.
b. Establish an appropriate balance between income and associated risk.
c. When a conflict between income and associated risk exists, the Group pursues income while complying with the allowable risk limits.
d. Prioritize the distribution of risk in order to avoid risk concentration in certain areas.
e. Analyze the effect of various market fluctuations on parts or the entire portfolio on a regular basis.
f. Separate risk management segments, operational segments, and other segments which deal with trade confirmations and payments in order to maintain independence.

8-1 Strategy and procedure of risk management

8-1-1 Operation of and setting risk limits
The Group established and operates a limit management system to maintain the appropriate level of risk relative to the equity capital held. The Risk Management Committee approves total risk limits and limits by types of risks, taking into account of capital, business plans, risk management regulations, and institutional changes within the risk level that the Group can manage. The Risk Management Operation Committee sets up and allocates other operational limits (e.g., by organization, product, investment, and loss) to comply with allowable limits for each type of risk, approved by the Risk Management Committee and periodically checks the status of limit management.

8-1-2 Risk measurement and management

The Group prepares the appropriate risk measurement methods considering the nature of risks, and measures them by the types of risks. Risk measurement and evaluation results are regularly reviewed, and reported to the Risk Management Committee, Risk Management Operation Committee, and management. Risk measurement and evaluation results are also used for daily business management activities such as establishment of business plan and management strategy.

8-1-3 Operation of risk management information system

In order to provide advanced risk management in a rapidly changing financial environment, the Group has established a company-wide risk management system that meets the new Bank for International Settlements ("BIS") standards. The Group operates credit risk internal grading (changes are approved in November 2008, June 2016 and March 2021), advanced operational risk measurement method (changes are approved in November 2008 and June 2016) and market risk internal model (changes are approved in April 2008 and August 2016 [retrospective application in June 2016]).

8-1-4 Operation of crisis management system

The Group operates a crisis management system that can respond effectively to the crisis caused by drastic changes in the internal and external management environment. The Group operates an early warning system in order to respond to the drastic changes in the financial market in a consistent and systematic manner. In the event of an anomaly, the holding company declares the level of crisis at the group level, and the Group analyzes the impact on the portfolio in accordance with the step-by-step plan and carries out the countermeasures.

8-2 Organization and structure of risk management

The risk management organization consists of the Risk Management Committee, Risk Management Operation Committee under the Risk Management Committee within the Board of Directors, the risk management officer, and the organization in charge of risk management, which are the top decision-making bodies for the risk management. The organization in charge of risk management, independent from operating segment, manages risk limits and risk management policies.

8-2-1 Risk Management Committee

The Risk Management Committee regularly holds meeting once every quarter and resolves the establishment and management of allowable limits for risks, establishment and changes in risk management policies, and reviews the results of the management of allowable risk limits and suitability tests of risk management system.

8-2-2 Risk Management Operation Committee

The Risk Management Operation Committee is responsible for setting and allocating specific operational limits for compliance with the allowable limits for each type of risk as resolved by the Risk Management Committee, adjusting the internal capital limit between business units within the same risk type, and carrying out risk management policies and strategies set by the Risk Management Committee, including preliminary deliberations on the agenda items.

8-2-3 Organization in charge of risk management

The Risk Management Group is composed of Comprehensive Risk Management Team, Credit Risk Management Team, and Credit Supervision Team. The Risk Management Group is independent of sales and investment sector and manages the execution of risk management policies. The Comprehensive Risk Management Team oversees the market, interest rate, liquidity, operational risk, and middle office, and supports the Risk Management Committee and Risk Management Operation Committee. The Credit Risk Management Team oversees credit risk and credit concentration risk. The Credit Supervision Team oversees the loans and early warning system.

8-3 Credit risk

Credit risk is a risk incurred when the Group faces a loss because its customers or counterparties fail to discharge their contractual obligations. Credit risk arises from on-balance and off-balance accounts including loans, derivatives, securities, financial guarantees agreement and other guarantees.

8-3-1 Management of credit risk

8-3-1-1 Loans

8-3-1-1-1 Measurement of credit risk

To determine the possibility of bankruptcy for its customers or counterparties, the Group uses various methods comprehensively. Risks pertaining to the retail sector compared to those pertaining to the corporate sector are relatively easy to predict but cyclical and seasonal factors may influence the outcomes.

The frequency of impairment loss in the overall retail sector is relatively high but in terms of individual cases, the loss rate is lower than in the corporate sector. Based on these differences, the Group manages each segment differently in terms of credit rating, pricing and subsequent management.

As for the business customers, the branch managers and credit rating team carry out the credit risk assessment by using a detailed valuation model depending on the size and the nature of the industry. The corporate financial valuation model is further subdivided based on the characteristics of the loans and is a combination of statistical and expert valuation models. Also, the Loan Review team of the Credit Risk Management regularly performs the subsequent reviews in order to establish adequacy of the credit grading. As for the retail sector, a Credit Scoring System is used to compute the credit scores of the borrower. The system includes an Application Scoring Model which is used for the application of loans and a Behavioral Scoring Model which has been used after handling of the loans.

Expected loss is calculated using the expected default rate based upon the historical default rate and the estimated loss rate gives a rise to the default rate from a collection of historical information. A measured expected loss is reflected on the client's interest rate and allowances when applying or renewing a loan. Unexpected loss takes into account the allowance for potential volatility in the actual loss. Unexpected loss is calculated using the inner Credit Metrics Model with 99.9% of the confidence level and the measured figure is used as a credit risk reference value and is used as part of the unexpected loss when calculating in terest rates.

8-3-1-1-2 Management of credit risk

8-3-1-1-2-1 Management process

Both retail and corporate sectors are developing and operating a credit risk management system appropriately designed for each sector. The Credit Risk Management Committee and Credit Rating Team measure and manage credit risks for the corporate sector; Credit Risk Management Committee and Personal Loans Committee measure and manage credit risks for the retail sector.

The Group manages as well as controls the credit risk by setting the limits on the amount of risk willing to accept for individual counterparties and for geographical and industry concentration, and by monitoring exposures relating to such limits. The Group reviews on a monthly basis in accordance with the economic conditions and industry characteristics and examines the adequacy of the limits on a quarterly basis. The Group continuously manages credit rating models for retail and corporate sectors and examines the adequacy of loss given default ("LGD") and exposure at default ("EAD"), and any related information.

8-3-1-1-2-2 Credit limits management and capital allocation

The Group annually performs a comprehensive analysis on economic conditions and changes in the economic environment in order to appropriately assess the credit quality of financial assets by setting credit limits on same entities, industries, countries, and financial instruments. In addition, for the unexpected loss management, the Group regularly sets, distributes and checks for the compliance maintenance of internal capital limits according to the corporate and household sectors and the size of clients through the risk management system.

8-3-1-1-2-3 Risk monitoring and early warning system

The Group measures and manages the risk indicators such as delinquency rate, roll-rate, and roll-rate classified by past due. Also, in order to assess the credit quality of the assets, the Group operates an early warning system and regularly examines companies whose credit rating is likely to degrade.

8-3-1-1-2-4 Credit rating system

In order to separately evaluate the characteristics of clients in the corporate sector, the Group operates a detailed valuation model based on the external and non-external audit and is in the process of continuing the stability of the corporate credit rating system through the subsequent examinations and performance improvements. The Group operates a detailed valuation model based on the credit rating model and the activity rating model for the household sector in accordance with the client's characteristics. The Group improves the efficiency of the model through the subsequent examinations and performance improvements. Credit rating on new clients as well as an automatic renewal and adjustments to the credit limits are managed by the household and SOHO credit extension system.

8-3-1-1-2-5 Examination of credit

For a large amount of credit line, after the approval of credit extension, the Group regularly examines the borrower's credit status and the adequacy of the borrower's credit rating as in part of the subsequent management process. In addition, the Group significantly focuses on industries by increasing credit risks based on the analysis of the risk indicators and examines the sample for smaller credit extensions.

8-3-1-1-2-6 Risk mitigation policy

The Group obtains the collateral for the granted loans in order to reduce risks. Guidelines are implemented regarding the acceptability of types of collateral and valuation parameters. The main types of the collateral obtained are as follows:

a. Residential properties in relation with mortgage loans
b. Business assets such as equipments, plants and real estate properties
c. Financial instruments such as deposits, debt and equity securities

8-3-1-2 Debt securities

The Group trades the debt securities above the Investment-Grade Status level in order to manage the credit risks and manage the exposure of credit ratings to maintain credit quality of the assets.

8-3-1-3 Derivative instruments

The credit risk arising from the derivative instruments is managed based on the net position and maintained under a strict control limit. The degree of credit risk exposure is measured based on the positive fair values of derivative instruments. The Group manages the exposure as a part of the unused commitment of loans.

8-3-2 Significant increase in credit risk

The Group measures the expected credit loss for debt instruments at amortized cost or FVOCI in three stages as described below:

8-3-2-1 Stage 1: 12-month ECL

For financial assets of which the credit risk has not increased significantly since initial recognition, ECLs that result from default events that are possible within 12 months after the reporting date are recognized.

8-3-2-2 Stage 2: Lifetime ECL

For financial assets of which the credit risk has increased significantly, but not impaired, since initial recognition, ECLs that result from all possible default events over the expected life of the financial instrument are recognized.

8-3-2-3 Stage 3: Lifetime ECL

A financial asset is credit impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Lifetime ECL is recognized for credit-impaired financial assets, and interest income is recognized using the effective interest rate (EIR) on amortized cost.

The Group assesses at each reporting date whether the significant of the increase of the credit risk compared to that of initial recognition, using internal and external credit rating information, early warning system and number of days past due.

8-3-2-4 Occurrence of default

The Group considers that a default has occurred for financial assets on following situations:

a. When receivables are sold despite of an economic loss.
b. When receivables have decreased due to adjustments resulting in an exemption of principal, interest or related fees or delayed payments.
c. When the borrower has been declared bankruptcy or has declared bankruptcy or has taken other similar measures to delay or avoid repayments.

8-3-2-5 Method for determining whether a financial asset is credit impaired

A financial item is deemed impaired if, and only if, there is objective evidence of impairment as a result of one or more events which have occurred after the initial recognition of the item (an incurred 'loss event') and that loss event (or events) has an impact on the estimated future cash flows, such as changes in arrears or economic conditions which correlate with defaults, delinquency in interest for more than 90 days, credit deterioration resulting in misleading information and damages incurred due to poor exposure.

8-3-3 Measurement of ECL

ECL is measured at the probability-weighted amounts of the present value of all cash shortfalls over the expected life of the financial instrument. A cash shortfall is the difference between the cash flows that are due to an entity in accordance with the contract and the cash flows that the entity expects to receive.

However, the Group adjusts historical data, such as credit loss experience, on the basis of current observable data to reflect the effects of the current conditions and its forecasts of future conditions that did not affect the period on which the historical data is based, and to remove the effects of the conditions in the historical period that are not relevant to the future contractual cash flows. Also, the Group measures ECL using the macroeconomic factors such as the growth rate, interest rate and stock indices. The methodology for future economic forecasts is regularly reviewed.

If the credit risk on financial instruments, for which lifetime ECLs have been recognized, subsequently improves so that the requirement for recognizing lifetime ECLs is no longer met, the loss allowance should be measured at an amount equal to 12 month ECLs.

8-3-4 Write-off policy

Financial assets are written off when an entity has no reasonable expectations of recovering the contractual cash flows on a financial asset in its entirety or a portion thereof. Generally, financial assets are written off when it is determined that the Group is not able to generate sufficient cash flows to make repayments. However, financial assets written off can be recovered by the Group.

8-3-5 The maximum exposure to credit risk

The maximum exposure to credit risk as of December 31, 2022 and 2021, is as follows. The following table shows the maximum exposure to credit risk before the effect of mitigation through credit enhancement and collateral agreements, and reflects the impairment losses and master netting.

Equity securities in financial assets at FVTPL and financial assets at FVOCI are excluded (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
On-balance-sheet items		
Due from banks	39,183,885	25,670,055
Financial assets at FVTPL		
Debt securities	8,553,379	6,550,007
Derivative assets held for trading	9,851,754	4,101,349
Private convertible bonds	7,394	170,873
Subtotal	18,412,527	10,822,229
Financial assets at FVOCI	32,150,076	34,322,778
Securities at amortized cost	37,583,487	22,467,884
Derivative assets used for hedging instruments	8,062	68,670
Loans	330,186,341	309,177,708
Other financial assets	13,108,142	13,524,234
Merchant banking account assets	4,631,361	4,741,939
Total	475,263,881	420,795,497
Off-balance-sheet items		
Financial guarantee contracts	447,724	368,042
Payment guarantee	20,644,157	16,502,708
Commitments	101,383,405	90,818,933
Merchant banking account-commitment	620,000	790,000
Total	123,095,286	108,479,683

8-3-6 Details of effects of credit risk mitigation by collateral and other credit enhancements

The financial effects related to credit risk mitigated by collateral and other credit enhancements as of December 31, 2022 and 2021, are as follows (Korean won in millions):

<December 31, 2022>

Classification	Impaired loan	
	Individual assessment	Collective assessment
Guarantees	13,949	159,755
Deposits	92	11,930
Real estates	157,237	217,226
Others	5,694	5,283
Total	176,972	394,194

<December 31, 2021>

Classification	Impaired loan	
	Individual assessment	Collective assessment
Guarantees	12,936	100,248
Deposits	90	10,593
Real estates	202,495	189,377
Securities	-	58
Others	22,630	3,500
Total	238,151	303,776

8-3-6-1 The amount of financial assets for which loss allowance is not recognized due to sufficient collaterals is ₩1,288,560 million and ₩455,162 million as of December 31, 2022 and 2021, respectively.

8-3-6-2 There is no change in the collateral policy of the Group.

8-3-7 Credit risk exposure

8-3-7-1 Loans

As of December 31, 2022 and 2021, gross carrying amounts of loans by internal credit rating in accordance with the loss allowance measurement method are as follows (Korean won in millions):

<December 31, 2022>

Classification	12-month expected credit loss	Lifetime expected credit loss		Total
		Non-credit-impaired loans	Credit-impaired loans	
Household loans				
Grade 1	100,581,728	18,267,978	-	118,849,706
Grade 2	6,808,923	6,154,047	-	12,962,970
Grade 3	150,384	235,570	342,308	728,262
Subtotal	107,541,035	24,657,595	342,308	132,540,938
Corporate loans				
Grade 1	122,350,304	3,063,130	-	125,413,434
Grade 2	59,477,536	10,398,130	3,258	69,878,924
Grade 3	78,389	3,031,102	553,833	3,663,324
Subtotal	181,906,229	16,492,362	557,091	198,955,682
Total	289,447,264	41,149,957	899,399	331,496,620

<December 31, 2021>

Classification	12-month expect ed credit loss	Lifetime expected credit loss		Total
		Non-credit-impaired loan	Credit-impaired loans	
Household loans				
Grade 1	101,423,012	18,898,029	-	120,321,041
Grade 2	7,028,503	5,378,956	-	12,407,459
Grade 3	76,266	112,718	284,187	473,171
Subtotal	108,527,781	24,389,703	284,187	133,201,671
Corporate loans				
Grade 1	106,745,190	2,576,683	-	109,321,873

Classification	12-month expected credit loss	Lifetime expected credit loss		Total
		Non-credit-impaired loan	Credit-impaired loans	
Grade 2	55,184,699	9,739,824	-	64,924,523
Grade 3	53,864	2,112,371	617,979	2,784,214
Subtotal	161,983,753	14,428,878	617,979	177,030,610
Total	270,511,534	38,818,581	902,166	310,232,281

Net deferred origination fees and costs are not reflected in the gross carrying amounts above.

The Group categorizes loans based on the nature of the borrowers as follows:

<December 31, 2022>

Classification	Household loans	Corporate loans	SOHO
Grade 1	Less than or equal to 0.49% of PD	Less than or equal to 0.58% of PD	Less than or equal to 2.85% of PD
Grade 2	From 0.49% to 24.93% of PD	From 0.58% to 12.83% of PD	From 2.85% to 27.43% of PD
Grade 3	From 24.93% to 100% of PD	From 12.83% to 100% of PD	From 27.43% to 100% of PD

<December 31, 2021>

Classification	Household loans	Corporate loans	SOHO
Grade 1	Less than or equal to 0.58% of PD	Less than or equal to 0.51% of PD	Less than or equal to 2.56% of PD
Grade 2	From 0.58% to 30.72% of PD	From 0.51% to 10.99% of PD	From 2.56% to 25.64% of PD
Grade 3	From 30.72% to 100% of PD	From 10.99% to 100% of PD	From 25.64% to 100% of PD

8-3-7-2 Off-balance-sheet items

As of December 31, 2022 and 2021, exposures of off-balance-sheet items by internal credit rating in accordance with the loss allowance measurement method are as follows (Korean won in millions):

<December 31, 2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired off-balance-sheet items	Credit-impaired off-balance-sheet items	
Financial guarantee contracts				
Grade 1	300,233	60,616	-	360,849
Grade 2	59,553	22,248	-	81,801
Grade 3	-	5,070	4	5,074
Subtotal	359,786	87,934	4	447,724
Payment guarantees				
Grade 1	16,321,420	579,746	-	16,901,166
Grade 2	2,956,691	404,440	-	3,361,131
Grade 3	8	359,682	22,170	381,860
Subtotal	19,278,119	1,343,868	22,170	20,644,157
Commitments				
Grade 1	82,254,638	4,969,974	-	87,224,612
Grade 2	11,438,109	2,424,262	-	13,862,371
Grade 3	1,270	259,611	35,541	296,422
Subtotal	93,694,017	7,653,847	35,541	101,383,405
Total	113,331,922	9,085,649	57,715	122,475,286

<December 31, 2021>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired off-balance-sheet items	Credit-impaired off-balance-sheet items	
Financial guarantee contracts				
Grade 1	219,042	55,091	-	274,133
Grade 2	63,309	26,447	-	89,756
Grade 3	-	4,149	4	4,153
Subtotal	282,351	85,687	4	368,042
Payment guarantees				
Grade 1	11,774,377	1,075,730	-	12,850,107
Grade 2	2,740,338	588,344	-	3,328,682
Grade 3	8	297,838	26,073	323,919
Subtotal	14,514,723	1,961,912	26,073	16,502,708
Commitments				
Grade 1	72,077,603	4,980,300	-	77,057,903
Grade 2	10,512,662	2,931,905	-	13,444,567
Grade 3	7,526	282,149	26,788	316,463
Subtotal	82,597,791	8,194,354	26,788	90,818,933
Total	97,394,865	10,241,953	52,865	107,689,683

The Group categorizes off-balance-sheet items based on the nature of the borrowers as follows:

<December 31, 2022>

Classification	Household loans	Corporate loans	SOHO
Grade 1	Less than or equal to 0.49% of PD	Less than or equal to 0.58% of PD	Less than or equal to 2.85% of PD
Grade 2	From 0.49% to 24.93% of PD	From 0.58% to 12.83% of PD	From 2.85% to 27.43% of PD
Grade 3	From 24.93% to 100% of PD	From 12.83% to 100% of PD	From 27.43% to 100% of PD

<December 31, 2021>

Classification	Household loans	Corporate loans	SOHO
Grade 1	Less than or equal to 0.58% of PD	Less than or equal to 0.51% of PD	Less than or equal to 2.56% of PD
Grade 2	From 0.58% to 30.72% of PD	From 0.51% to 10.99% of PD	From 2.56% to 25.64% of PD
Grade 3	From 30.72% to 100% of PD	From 10.99% to 100% of PD	From 25.64% to 100% of PD

8-3-7-3 Debt securities

As of December 31, 2022 and 2021, gross carrying amounts of debt securities by internal credit rating in accordance to the loss allowance measurement method are as follows (Korean won in millions):

<December 31, 2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt	Credit-impaired debt	
Securities at amortized cost				
Grade 1	37,502,676	-	-	37,502,676
Grade 2	71,783	-	-	71,783
Grade 3	-	24,507	67,337	91,844
Subtotal	37,574,459	24,507	67,337	37,666,303
Financial assets at FVOCI				
Grade 1	32,135,336	-	-	32,135,336
Grade 2	14,740	-	-	14,740
Grade 3	-	-	-	-
Subtotal	32,150,076	-	-	32,150,076
Total	69,724,535	24,507	67,337	69,816,379

<December 31, 2021>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt	Credit-impaired debt	
Securities at amortized cost				
Grade 1	22,317,152	-	-	22,317,152
Grade 2	76,096	68,827	-	144,923
Grade 3	-	25,113	-	25,113
Subtotal	22,393,248	93,940	-	22,487,188
Financial assets at FVOCI				
Grade 1	34,322,778	-	-	34,322,778
Grade 2	-	-	-	-
Grade 3	-	-	-	-
Subtotal	34,322,778	-	-	34,322,778
Total	56,716,026	93,940	-	56,809,966

The credit ratings of debt securities based on the internal rating used by the Group and credit ratings by external credit rating agencies are as follows:

Classification	Internal credit rating	Domestic rating agencies	Overseas rating agencies	
			Moody's	Fitch
Grade 1	A1 ~ A7	AAA ~ BBB	Aaa ~ Ba2	AAA ~ BB
Grade 2	B1 ~ B6	BBB- ~ BB-	Ba3 ~ B3	BB- ~ B-
Grade 3	C1 ~ C3	B+ ~ CCC	Caa1 ~ C	CCC+ ~ C

8-3-8 Credit risk concentration

8-3-8-1 Credit risk concentration in each major industry as of December 31, 2022 and 2021, is as follows (Korean won in millions):

<December 31, 2022>

Classification	Industry	Amounts	Ratio (%)
On balance sheet items			
Due from banks	Financial services	39,183,885	100.0
	Financial services	14,814,380	80.5
	Manufacturing	1,038,021	5.6

Classification	Industry	Amounts	Ratio (%)
Financial assets at FVTPL	Public administration	2,196,846	11.9
	Construction	21,425	0.1
	Wholesale & retail	54,384	0.3
	Others	287,471	1.6
	Subtotal	18,412,527	100.0
Financial assets at FVOCI	Financial services	15,191,734	47.3
	Manufacturing	193,539	0.6
	Public administration	13,374,970	41.6
	Construction	55,070	0.2
	Wholesale & retail	117,243	0.4
	Others	3,217,520	9.9
	Subtotal	32,150,076	100.0
Securities at amortized cost	Financial services	19,193,033	51.0
	Manufacturing	234,257	0.6
	Public administration	9,639,915	25.6
	Construction	43,495	0.1
	Wholesale & retail	40,000	0.1
	Others	8,515,603	22.6
	Subtotal	37,666,303	100.0
Derivative assets used for hedging	Financial services	8,062	100.0
Loans	Household loans	132,540,938	39.9
	Corporate loans		
	Financial services	23,746,610	7.2
	Manufacturing	51,273,420	15.5
	Construction	5,381,239	1.6
	Wholesale & retail	23,518,055	7.1
	Real estate rental	44,535,435	13.4
	Others	50,500,923	15.2
	Deferred loan fees and ex penses	356,338	0.1
	Subtotal	331,852,958	100.0
Merchant banking account assets	Financial services	817,368	17.6
	Real estate rental	1,007,544	21.8
	Others	2,806,449	60.6
	Subtotal	4,631,361	100.0
Total		463,905,172	
Off balance sheet items			
Financial guarantee contracts	Financial services	45,120	10.1
	Manufacturing	219,522	49.0
	Construction	6,643	1.5
	Wholesale & retail	58,813	13.1

Classification	Industry	Amounts	Ratio (%)
	Real estate rental	1,014	0.2
	Others	116,612	26.1
	Subtotal	447,724	100.0
Payment guarantees	Household	353,026	1.7
	Financial services	2,232,794	10.8
	Manufacturing	11,165,598	54.1
	Construction	1,600,908	7.8
	Wholesale & retail	3,664,550	17.8
	Real estate rental	168,777	0.8
	Others	1,458,504	7.0
	Subtotal	20,644,157	100.0
Commitments	Household	28,780,642	28.4
	Corporate commitment		
	Financial services	10,972,913	10.8
	Manufacturing	29,530,082	29.1
	Construction	2,001,940	2.0
	Wholesale & retail	9,501,969	9.4
	Real estate rental	3,736,829	3.7
	Others	16,859,030	16.6
	Subtotal	101,383,405	100.0
Merchant banking account – Commitment	Financial services	310,000	50.0
	Manufacturing	50,000	8.1
	Wholesale & retail	110,000	17.7
	Real estate rental	100,000	16.1
	Others	50,000	8.1
	Subtotal	620,000	100.0
Total		123,095,286	

<December 31, 2021>

Classification	Industry	Amounts	Ratio (%)
On balance sheet items			
Due from banks	Financial services	25,670,055	100.0
Financial assets at FVTPL	Financial services	8,828,745	81.6
	Manufacturing	580,959	5.4
	Public administration	1,138,512	10.5
	Construction	8,829	0.1
	Wholesale & retail	56,576	0.5
	Others	208,608	1.9
	Subtotal	10,822,229	100.0
	Financial services	17,122,535	49.9

Classification	Industry	Amounts	Ratio (%)
Financial assets at FVOCI	Manufacturing	205,355	0.6
	Public administration	13,147,848	38.3
	Construction	320,173	0.9
	Wholesale & retail	123,332	0.4
	Others	3,403,535	9.9
	Subtotal	34,322,778	100.0
Securities at amortized cost	Financial services	9,595,238	42.7
	Manufacturing	71,370	0.4
	Public administration	7,160,783	31.8
	Construction	164,833	0.7
	Others	5,494,964	24.4
	Subtotal	22,487,188	100.0
Derivative assets used for hedging	Financial services	68,670	100.0
Loans	Household loans	133,201,671	42.9
	Corporate loans		
	Financial services	21,566,489	6.9
	Manufacturing	44,054,422	14.2
	Construction	3,659,682	1.2
	Wholesale & retail	21,339,225	6.9
	Real estate rental	42,863,699	13.8
	Others	43,547,093	14.0
	Deferred loan fees and ex penses	378,995	0.1
	Subtotal	310,611,276	100.0
Merchant banking account assets	Financial services	668,878	14.1
	Manufacturing	49,827	1.1
	Wholesale & retail	119,976	2.5
	Real estate rental	1,208,226	25.5
	Others	2,695,032	56.8
	Subtotal	4,741,939	100.0
Total		408,724,135	
Off balance sheet items			
Financial guarantee contracts	Financial services	46,299	12.6
	Manufacturing	170,742	46.4
	Construction	4,083	1.1
	Wholesale & retail	48,765	13.2
	Real estate rental	1,778	0.5
	Others	96,375	26.2
	Subtotal	368,042	100.0
	Household	19,369	0.1
	Financial services	871,139	5.3

Classification	Industry	Amounts	Ratio (%)
Payment guarantees	Manufacturing	9,410,325	57.0
	Construction	1,602,680	9.7
	Wholesale & retail	3,264,298	19.8
	Real estate rental	149,210	0.9
	Others	1,185,687	7.2
	Subtotal	16,502,708	100.0
Commitments	Household	26,777,184	29.5
	Corporate commitment		
	Financial services	9,716,634	10.7
	Manufacturing	26,621,403	29.3
	Construction	2,229,649	2.5
	Wholesale & retail	8,182,614	9.0
	Real estate rental	3,326,788	3.7
	Others	13,964,661	15.3
	Subtotal	90,818,933	100.0
Merchant banking account – Commitment	Financial services	460,000	58.2
	Manufacturing	50,000	6.3
	Wholesale & retail	130,000	16.5
	Real estate rental	100,000	12.7
	Others	50,000	6.3
	Subtotal	790,000	100.0
Total		108,479,683	

8-3-8-2 Details of the Bank's corporate loans by industry affected by the spread of COVID-19 as of December 31, 2022 and 2021, are as follows. The effect on the industries may vary significantly based on future economic conditions. Household loan debtors subject to measurement of lifetime ECL as disclosed in Note 8-3-7-1, may be impacted by the spread of COVID-19. The effect may vary significantly based on future economic conditions. (Korean won in millions):

<December 31, 2022>

Industry	Financial assets at FVTPL	Financial assets at FVOCI	Loans	Off-balance-sheet items	Total
Air transportation	-	-	580,356	430,460	1,010,816
Lodging	863	-	2,994,626	154,459	3,149,948
Food	-	-	5,467,561	182,859	5,650,420
Automobile	68,475	9,515	6,409,319	5,106,494	11,593,803
Petroleum refining	1,380	9,268	1,497,568	2,585,076	4,093,292
Travel	200	-	101,466	38,203	139,869
Total	70,918	18,783	17,050,896	8,497,551	25,638,148

<December 31, 2021>

Industry	Financial assets at FVTPL	Financial assets at FVOCI	Loans	Off-balance-sheet items	Total
Air transportation	1,945	-	559,030	279,853	840,828
Lodging	3,080	-	3,029,192	177,187	3,209,459
Food	33	-	5,050,157	179,597	5,229,787
Automobile	3,454	9,849	6,148,826	5,026,484	11,188,613
Petroleum refining	482	9,728	704,732	2,375,842	3,090,784
Travel	200	-	109,169	25,410	134,779
Total	9,194	19,577	15,601,106	8,064,373	23,694,250

8-3-8-3 Credit risk concentration in each major country as of December 31, 2022 and 2021 is as follows (Korean won in millions):

<December 31, 2022>

Classification	Country	Amounts	Ratio (%)
On balance sheet items			
Due from banks	Korea	25,196,900	64.3
	China	1,200,457	3.1
	United States	7,348,690	18.8
	Japan	872,357	2.2
	Singapore	27,443	0.1
	Hong Kong	87,291	0.2
	Others	4,450,747	11.3
	Subtotal	39,183,885	100.0
Financial assets at FVTPL	Korea	15,584,056	84.6
	China	666,650	3.6
	United States	70,691	0.4
	Japan	570	0.0
	Hong Kong	59,826	0.3
	Others	2,030,734	11.1
	Subtotal	18,412,527	100.0
Financial assets at FVOCI	Korea	27,628,411	85.9
	China	1,977,918	6.2
	United States	617,790	1.9
	Hong Kong	46,266	0.1
	Others	1,879,691	5.9
	Subtotal	32,150,076	100.0
Securities at amortized cost	Korea	35,125,996	93.3
	China	128,242	0.3
	United States	5,958	0.0
	Others	2,406,107	6.4
	Subtotal	37,666,303	100.0
Derivative assets used for hedging	Korea	8,062	100.0
	Korea	301,245,204	90.8
	China	6,047,574	1.8
	United States	4,638,052	1.4

Classification	Country	Amounts	Ratio (%)
Loans	Japan	1,855,875	0.6
	Hong Kong	2,536,360	0.8
	Others	15,173,555	4.5
	Deferred loan fees and expenses	356,338	0.1
	Subtotal	331,852,958	100.0
Merchant banking account assets	Korea	4,631,361	100.0
Total		463,905,172	
Off balance sheet items			
Financial guarantee contracts	Korea	447,724	100.0
Payment guarantees	Korea	15,270,693	74.0
	China	1,831,845	8.9
	United States	213,716	1.0
	Japan	23,331	0.1
	Others	3,304,572	16.0
	Subtotal	20,644,157	100.0
Commitments	Korea	96,532,123	95.2
	China	782,903	0.8
	United States	652,870	0.6
	Japan	199,854	0.2
	Others	3,215,655	3.2
	Subtotal	101,383,405	100.0
Merchant banking account –commitment	Korea	620,000	100.0
Total		123,095,286	

<December 31, 2021>

Classification	Country	Amounts	Ratio (%)
On balance sheet items			
Due from banks	Korea	18,763,463	73.1
	China	1,075,075	4.2
	United States	593,570	2.3
	Japan	1,727,822	6.7
	Singapore	39,474	0.2
	Hong Kong	58,383	0.2
	Others	3,412,268	13.3
	Subtotal	25,670,055	100.0

Classification	Country	Amounts	Ratio (%)
Financial assets at FVTPL	Korea	9,748,677	90.1
	China	1,967	0.0
	United States	3,941	0.0
	Japan	32,325	0.3
	Hong Kong	8,548	0.1
	Others	1,026,771	9.5
	Subtotal	10,822,229	100.0
Financial assets at FVOCI	Korea	29,406,615	85.7
	China	2,195,189	6.4
	United States	360,650	1.1
	Japan	13,460	0.0
	Hong Kong	69,187	0.2
	Others	2,277,677	6.6
	Subtotal	34,322,778	100.0
Securities at amortized cost	Korea	20,362,979	90.6
	China	131,144	0.6
	United States	497,558	2.2
	Others	1,495,507	6.6
	Subtotal	22,487,188	100.0
Derivative assets used for hedging	Korea	12,112	17.6
	Hong Kong	2,177	3.2
	Others	54,381	79.2
	Subtotal	68,670	100.0
Loans	Korea	283,213,387	91.2
	China	6,069,569	2.0
	United States	3,980,410	1.3
	Japan	1,840,661	0.6
	Hong Kong	2,339,276	0.8
	Others	12,788,978	4.0
	Deferred loan fees and expenses	378,995	0.1
	Subtotal	310,611,276	100.0
Merchant banking account assets	Korea	4,741,939	100.0
Total		408,724,135	
Off balance sheet items			
Financial guarantee contracts	Korea	368,042	100.0
	Korea	13,187,883	79.9

Classification	Country	Amounts	Ratio (%)
Payment guarantees	China	1,822,912	11.0
	United States	26,714	0.2
	Japan	29,602	0.2
	Others	1,435,597	8.7
	Subtotal	16,502,708	100.0
Commitments	Korea	86,794,414	95.6
	China	622,891	0.7
	United States	272,565	0.3
	Japan	272,926	0.3
	Others	2,856,137	3.1
	Subtotal	90,818,933	100.0
Merchant banking account -commitment	Korea	790,000	100.0
Total		108,479,683	

8-4 Liquidity risk

The Group defines liquidity risk as the possibility of incurring losses due to a temporary shortage in funds caused by a maturity mismatch or an unexpected capital outlay leading to rise in interest, or sale of assets at a price below normal price.

8-4-1 Measurement of liquidity risk

The Group maintains a limit management indicator to measure the liquidity coverage ratio, liquidity ratio in foreign currency, net stable funding ratio, foreign currency maturity mismatch ratio, and long-term access to financing ratio in foreign currency in accordance with the guidelines and standards of the Financial Supervisory Service. In addition, the Group maintains a monitoring indicator to measure unbalance of funding, etc., to manage the liquidity risk, and manages early warning indicators in order to identify worsening trends in early stage to respond in a timely manner.

8-4-2 Management of liquidity risk

At an early stage, the Group identifies factors affecting liquidity in order to manage liquidity risks and has achieved an adequate level of liquidity via performing a systematic management.

The Group has the following basic principles for liquidity risk management:

a. Set and comply with liquidity risk limits, and coordinate and manage early warning indicator to identify liquidity risk at early stage.
b. Regularly execute an analysis of stress tests and prepare an emergency procurement plan in case of liquidity.
c. Focus on maintaining a diversified portfolio in order to avoid excessive concentrations of risks.
d. Evaluate and manage the effect of a large amount of money which is loaned out, invested, or procured on liquidity risks.

In order to manage liquidity risk, the Group builds internal control systems for each department. In order to comply with liquidity ratios and the maturity mismatch ratio set by the Financial Supervisory Service, the Comprehensive Risk Management department conducts daily monitoring. Liquidity risk status is reported to the Risk Management Operation Committee on a monthly basis and to the Risk Management Committee on a quarterly basis.

In order to maintain the liquidity risk management indicators to stay within the acceptable limits, the Treasury Department recommends the necessary measures in relation to the procurement and operation of the assets and liabilities traded in the capital market. In addition, stages of emergency planning have been establish ed in order to respond to liquidity emergencies. The Planning and Management Department has established a portfolio management strategy based on the internal and external liquidity risk management requirements and on the outlook of the procurement and operating markets.

8-4-3 Analysis of contract maturity

8-4-3-1 Analysis criteria
The details of the remaining contractual maturities of financial liabilities are analyzed by the earliest maturity date when the Group would be required to pay, based on the undiscounted cash outflows of the Group's financial liabilities.
In addition, financial liabilities at FVTPL and depository liabilities (payment on demand) are shown at fair value in the immediate payment column. All derivatives used for hedging are presented based on the net cash flows as all products are paid in the net amount. A contract maturity exists in payment guarantees that correspond to financial guarantees such as bond issuance and loan security provided by the Group, loan commitment and other credit granting. However, payment must be made immediately once the counterparty requests payment. As such they are included in the immediate payment column.

8-4-3-2 The remaining contractual maturities of financial liabilities and off-balance-sheet items
The remaining contractual maturities of financial liabilities and off-balance sheet items as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	On demand	Less than 1 month	1~3 months	3 months ~ 1 year	1 year ~ 5 years	More than 5 years	Total
On-balance sheet items:							
Financial liabilities							
Financial liabilities at FVTPL	11,059,332	-	-	-	-	272,236	11,331,568
Deposits	155,430,882	34,916,185	42,648,480	115,044,070	16,453,108	1,473,256	365,965,981
Borrowings	4,025,607	6,361,471	3,143,744	4,393,807	4,053,189	518,789	22,496,607
Debentures	139	960,000	2,835,568	10,712,756	9,535,633	2,579,021	26,623,117
Derivative liabilities used for hedging instruments	-	9,543	1,709	33,127	63,048	(20,827)	86,600
Other financial liabilities	9,838,792	16,447,155	1,524	22,964	38,264	1,811	26,350,510
Merchant banking account liabilities	1,122,469	2,544,804	-	-	-	-	3,667,273
Total	181,477,221	61,239,158	48,631,025	130,206,724	30,143,242	4,824,286	456,521,656
Off-balance sheet items:							
Finance guarantee contracts	447,724	-	-	-	-	-	447,724
Payment guarantee	20,644,157	-	-	-	-	-	20,644,157
Commitment	101,383,405	-	-	-	-	-	101,383,405

Classification	On demand	Less than 1 month	1~3 months	3 months ~ 1 year	1 year ~ 5 years	More than 5 years	Total
Merchant banking account - commitment	620,000	-	-	-	-	-	620,000
Total	123,095,286	-	-	-	-	-	123,095,286

<December 31, 2021>

Classification	On demand	Less than 1 month	1~3 months	3 months ~ 1 year	1 year ~ 5 years	More than 5 years	Total
On-balance sheet items:							
Financial liabilities							
Financial liabilities at FVTPL	3,992,508	-	-	-	-	272,236	4,264,744
Deposits	165,533,923	20,700,790	33,296,656	91,983,758	9,541,542	2,063,196	323,119,865
Borrowings	3,653,917	6,090,821	1,434,291	3,334,225	2,585,329	449,091	17,547,674
Debentures	12,741	1,287,866	1,500,000	9,556,473	12,471,814	3,178,252	28,007,146
Derivative liabilities used for hedging instruments	-	351	956	3,603	29,867	(89,540)	(54,763)
Other financial liabilities	6,531,978	17,730,235	2,095	41,785	18,030	985	24,325,108
Merchant banking account liabilities	895,438	2,012,842	-	-	-	-	2,908,280
Total	180,620,505	47,822,905	36,233,998	104,919,844	24,646,582	5,874,220	400,118,054
Off-balance sheet items:							
Finance guarantee contracts	368,042	-	-	-	-	-	368,042
Payment guarantee	16,502,708	-	-	-	-	-	16,502,708
Commitment	90,818,933	-	-	-	-	-	90,818,933
Merchant banking account - commitment	790,000	-	-	-	-	-	790,000
Total	108,479,683	-	-	-	-	-	108,479,683

Assets available for use to execute unused loan commitments after redeeming all financial liabilities are cash and bank deposits, debt securities, equity securities, and loans. In addition, the Group is able to cope with unexpected cash outflows through the sale of securities and the additional sources of funding such as asset backed securitization.

8-5 Market risk

Market risk is risk incurred in asset and liabilities subject to management based on the changes in market prices such as interest rate, stocks and foreign exchange, etc.

8-5-1 Market risk management

The purpose of market risk management is to manage the loss of assets and liabilities incurred due to changes in market variables such as interest rates, foreign exchanges and equity prices to remain within the allowable limits in order to ensure the profitability and stability.

8-5-2 Market risk management targets

Market risk management targets include marketable securities, foreign currency net positions, derivatives and other assets and liabilities with embedded market risks. The Group classifies exposures to market risk into either trading or non-trading positions and manages each of those portfolios separately.

8-5-3 Management of market risk related to trading position

8-5-3-1 Trading position classification

The trading position includes interest rate positions, equity price positions, commodity, positions, and all foreign exchange positions:

a. Financial instruments for the purpose of acquiring the profit incurred due to short-term trading or short-term price fluctuations.
b. Financial instruments for the purpose of hedging risks.
c. Financial instruments for the purpose of acquiring arbitrages.
d. Financial instruments for the purpose of acquisition, mediation and market creation.
e. Derivatives which are not applied to fair value hedge accounting under K-IFRS.
f. All foreign exchange and gold positions in accordance with *Detailed Regulations on Supervision of Banking Business Appendix 3-2.*

8-5-3-2 Management of the trading position limits

The Risk Management Committee divides capital, annual loss, exposure and

Value at Risk (VaR) limit in relation to market risks of the trading position by business unit (division) annually. Within the given limit, the Risk Management Operation Committee further subdivides the limits by business units (divisions) and desks. The Risk Management Group provides information necessary for deliberation and review by the Committee, reports trading limits and measures risks. The Middle Office performs mark-to-market measures, monitors trade violations and compliance with the limits.

The Middle Office establishes and complies with trading policy regulations, measures market risk for trading positions, and checks daily compliance within the acceptable limits for each risk. The office also conducts daily inspections of changes in the management exposure, compliance with the limit, post verification, and crisis analysis, and reports the results to the management team every day.

8-5-3-3 Value at Risk

Value at Risk (VaR) is a method that manages and measures the degree of market risks of the trading position subject to exposure. VaR is a method of calculating the potential losses, where the adverse market fluctuation affects the current portfolio during the holding period under a set of confidence level.
The Group calculates the VaR by applying Historical Simulation Method for 10 days in the 99% confidence level. Furthermore, the stress test is performed to measure the size of the loss in order to account for the method's limited use in extreme cases.

8-5-3-4 Back test

Back-testing is performed daily to secure the appropriateness of VaR model. When back-testing is performed, the Group compares the daily profits and losses with VaR of the previous day, examines the excess and reports the result of subsequent examinations separately to the director of the Risk Management Grou p. If any excess exists, the Group analyses the result of subsequent examination and reports to the Financial Supervisory Service and management.

8-5-3-5 Details of market risk VaR

Details of market risk 10 Day VaR (including 10-Day Stressed VaR) by risk type as of December 31, 2022 and 2021 are summarized as follows (Korean won in millions):

Classification	December 31, 2022	Average	Minimum	Maximum	December 31, 2021
Interest rates risk	56,845	42,105	19,665	127,062	31,506
Foreign exchange rates risk	424,728	340,097	286,400	441,244	363,066
Stock price risk	1,118	6,149	661	13,869	11,194
Option risk	1,804	2,319	1,305	3,308	2,278
Total risk (*)	442,757	347,830	295,620	456,868	356,249

(*) The calculation of the total risk VaR takes into consideration the correlation and diversification effects between each risk factor and therefore, it is not the same as the total of VaRs.

8-5-4 Management of market risk related to non-trading position

8-5-4-1 Interest rate risk

Interest rate risk of non-trading position is a risk of losses in financial assets and liabilities with interest rates due to adverse changes in interest rates and is incurred when maturity structure does not match interest rate setting cycle of the related assets and liabilities. The Group manages the interest rate risks of non-trading position in order to maintain the stability of net interest income and net asset value based on changes in interest rates. The following is subject to the Group's management of interest rate risk:

a. Financial assets with interest rates such as bank deposits, debt securities, and loans.
b. Financial liabilities with interest rates, such as depository liabilities, borrowings, and debentures.
c. Financial derivatives such as interest rate swaps.

Interest rate risk is calculated using the gap between interest-sensitive assets and liabilities. The interest rate risks measure the interest rate gap ratio as a primary indicator; △EVE, △NII ratio and duration are used as secondary indicators. The Risk Management Committee and Risk Management Operation Committee establish the interest risk limits on an annual basis; the compliance thereof is reported to Risk Management Operation Committee as well as the Risk Management Committee on a monthly and quarterly basis, respectively.

Economic Value of Equity (△EVE) refers to changes in the economic value of equity capital, indicating the effect of adverse changes in interest rates on the present value of assets, liabilities and others. As of December 31, 2022 and 2021, the Group's △EVE is as follows (Korean won in millions):

Classification	December 31, 2022	Average	Min	Max	December 31, 2021
△EVE	2,106,981	1,478,804	1,081,494	2,168,761	1,008,935

△EVE calculates the maximum value compared to the default scenario by applying six interest rates (parallel rise, parallel fall, short-term fall, Long-term rise, short-term rise Long-term fall, short-term rise and short-term fall) after generating cash flows for the interest-sensitive assets and liabilities under the Banking Supervision Execution Schedule 9-1.

The Group is closely monitoring the output and market of various industry working groups that manage the transition to new interest rate indicators, including those announced by London Interbank Offered Rate ("LIBOR") regulators. A fundamental shift in interest rate indicators (hereinafter, 'interest rate indicator reform') is taking place around the world, and certain interbank lending rates (hereinafter 'IBORs') are being replaced by new risk-free interest rates. In particular, LIBOR, with the exception of overnight, 1-month, 3-month, 6-month, and 12-month USD LIBOR, all of the calculations were stopped as of December 31, 2021. 5-month USD LIBOR which was mentioned earlier will also be discontinued as of June 30, 2023.
In response to these changes, the Group selected the head of the finance market

as an executive officer, and established a plan for LIBOR conversion, which consi sts of workflows such as determination of alternative interest rates by affiliated TF, computer development, employee and customer communication management , risk management, tax, finance, legal, and accounting system establishment, etc. Progress according to the plan is reported to the Risk Management Committee on a regular basis and will be reported to the Board of Directors if necessary. The objective of the plan is to understand where exposure to LIBOR is occurring within the business, and to prepare and implement an action plan to facilitate the t ransition to alternative interest rate indicator. To manage the risks posed by such interest rate indicator reform, the Group manages and supervises interest rate indicator reform by evaluating the extent to which a contract references IBOR cash flows, whether these contracts need to be modified as a result of interest rate indicator reform, and how to manage communication with counterparties on interest rate indicator reform.

8-5-4-1-1 Details of the financial instruments that have not been converted to a n alternative indicator interest rate as of December 31, 2022, are as follows. (Korean won in millions):

Classification	Non-derivative financial assets(*1)			Non-derivative financial liabilities(*1)	Derivatives(*2)	Commitments and Finance guarantee contracts (*2)
	Financial assets measured at FVOCI	Financial assets measured at amortized costs	Total	Financial liabilites measured at amortized costs		
USD LIBOR(*3)	32,245	5,236,730	5,268,975	1,393,822	61,721,472	40,438

(*1) The amount of non-derivative financial instruments is based on the book value.
(*2) The amounts of derivatives and commitments and finance guarantee are bas ed on the nominal amounts.
(*3) For financial instruments related to USD-LIBOR, those with maturities before June 30, 2023 are excluded.

8-5-4-2 Equity price risk

Equity price risk is a risk incurred when the fair value of equities results in changes in the level of related revenue and capital. Fluctuation in equity reflects the sensitivity of each equity. Effects on capital due to the fluctuation in equity price risk as of December 31, 2022 are as follows (Korean won in millions):

Classification	20% decline	10% decline	10% rise	20% rise
Equity price risk	(80,370)	(40,185)	40,185	80,370

8-5-5 Currency risk concentration

Currency risk is a risk incurred when the value of a financial instrument or future cash flows fluctuates due to the changes in foreign exchange rates. Currency risk arises from the financial instruments expressed in currencies other than the functional currency. Currency risk does not arise from the financial instruments expressed in the functional currency or in non-monetary items. In order to establish the stop loss and limits, the Group manages the foreign exchange net exposure amount of the trading and non-trading positions by each currency.

Significant foreign currency assets and liabilities denominated in Korean won as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	USD	JPY	EUR	CNY	IDR	Others	Total
Assets							
Cash and due from bank	18,976,739	1,328,010	1,088,487	1,054,512	313,483	1,027,003	23,788,234
Financial assets at FVTPL	286,849	1,088	20,155	13,530	10,254	108,052	439,928
Financial assets at FVOCI	2,098,897	-	-	1,965,233	295,867	1,292,404	5,652,401
Securities at amortized cost	1,803,278	-	150,933	58,488	160,655	1,644,945	3,818,299
Loans	25,880,111	1,751,839	4,462,084	6,870,991	1,439,045	4,834,913	45,238,983
Others	3,251,413	166,333	340,695	333,508	49,281	433,891	4,575,121
Total	52,297,287	3,247,270	6,062,354	10,296,262	2,268,585	9,341,208	83,512,966
Liabilities							
Financial liabilities at FVTPL	250,577	4,653	20,461	17,168	-	109,451	402,310
Deposits	42,320,051	2,790,262	5,075,467	8,667,227	1,390,599	4,948,110	65,191,716
Borrowings	9,020,224	136,405	923,417	381,299	43,523	993,865	11,498,733

Classification	USD	JPY	EUR	CNY	IDR	Others	Total
Debentures	4,673,935	–	605,055	336,151	19,709	239,892	5,874,742
Derivative liabilities used for hedging	226,919	–	–	–	–	–	226,919
Others	5,527,525	190,884	673,383	501,354	38,205	304,711	7,236,062
Total	62,019,231	3,122,204	7,297,783	9,903,199	1,492,036	6,596,029	90,430,482

<December 31, 2021>

Classification	USD	JPY	EUR	CNY	IDR	Others	Total
Assets							
Cash and due from bank	8,817,426	1,916,714	441,143	751,699	206,960	943,380	13,077,322
Financial assets at FVTPL	115,497	1,476	5,865	1,999	122,071	22,151	269,059
Financial assets at FVOCI	2,323,006	–	–	2,183,286	282,334	1,430,360	6,218,986
Securities at amortized cost	1,547,755	–	90,376	119,932	199,405	1,195,406	3,152,874
Loans	23,673,488	1,906,806	3,845,868	6,853,211	1,449,769	3,904,500	41,633,642
Derivative assets used for hedging	49,388	–	–	–	–	–	49,388
Others	3,700,457	227,785	443,338	137,470	49,171	414,210	4,972,431
Total	40,227,017	4,052,781	4,826,590	10,047,597	2,309,710	7,910,007	69,373,702
Liabilities							
Financial liabilities at FVTPL	66,400	13	3,334	2,358	1,252	9,022	82,379
Deposits	31,218,821	2,336,792	4,067,928	7,694,570	1,397,598	4,888,044	51,603,753
Borrowings	5,165,212	128,189	1,170,876	435,611	3,882	709,508	7,613,278
Debentures	4,743,281	–	660,527	340,786	20,213	231,796	5,996,603
Derivative liabilities used for hedging	22,764	–	–	–	–	–	22,764
Others	4,985,848	503,140	1,169,409	232,058	18,638	341,772	7,250,865
Total	46,202,326	2,968,134	7,072,074	8,705,383	1,441,583	6,180,142	72,569,642

8-6 Operating risk

Operational risk is the risk of loss arising from system failure, human error, fraud or other external events. Risks related to legal or regulatory implications are identified as operational risks, but risks related to the strategy of damaging reputation are excluded from operational risks. Operational risk includes losses from internal operational problems and externalities, such as natural disasters, etc., and legal lawsuit, but excludes losses from policy decision errors or unmeasurable reputation damage, etc. Operational risk does not have a direct correlation with income and the Group needs to mitigate such risk through internal controls and insurance.

The Group calculates the operational risk capital on a consolidated basis.
The Group uses the Advanced Measurement Approach (AMA) and the subsidiary uses the basic indicator to manage total capital. Length of the period in which the AMA is in use is one year with a 99.9% confidence level. The Group uses the loss distribution approach to measure nine different business units and seven operational risk event types. In addition, the Group combines the loss distribution of the internal and external data on losses with results of the scenario analysis to calculate the amount of capital and takes into account business environment and changes in the controls in order to adjust the amount of capital. The Group uses the basic indicator by applying specific coefficient to the average profit of three years.

The Risk Management Committee determines the operational risk limits. In case the excess limit is expected, the management plan for the excess of internal capital limits should be reported to the Risk Management Operation Committee, and if additional limits are given, an approval from the Risk Management Committee is needed beforehand. If under exceptional case where the limit is exceeded, an expost facto approval from the Risk Management Committee is needed for the information on exceeded amount, post hoc results, as well as the subsequent plans.

8-7 Capital management

The Group implements the BIS capital requirement system in order to secure the capital adequacy and comply with the supervisory regulations. By BIS (Bank for International Settlements) regulation, the Group keeps its BIS capital adequacy ratio (hereinafter BIS ratio) above the minimum BIS ratio for risk-weighted assets. In addition, the Group performs a capital adequacy assessment in order to cope with an unexpected loss.

Risk-weighted assets which are calculated per each risk type when calculating BIS ratio are as follows:

a. Risk-weighted assets of credit risk are calculated using the Basic Internal Ratings-Based Approach (IRB).The Group uses the Standardized Approach (SA) for governments, banks, public institutes, overseas exposure, other assets, etc.
b. The risk-weighted assets of the market risk are calculated by multiplying 12.5 to the amount of capital required by adding individual risks calculated by the standard model to the general risk calculated by the internal model.
c. Risk-weighted assets of the operational risk are calculated by multiplying 12.5 to the amount of operational risk capital calculated by Advanced Measurement Approach (AMA) for the Bank and Basic Indicator Approach (BIA) for its subsidiaries.

Regulatory capital in accordance with the Regulations on the Supervision of Banking Business for calculating BIS ratio is as follows:

a. Common equity: Capital incurred in connection with common stock issued to meet the eligible requirement, capital surplus and capital adjustments, retained earnings, accumulated other comprehensive income and other capital surplus, capital adjustments, non controlling interest on common shares issued by banks, affiliated subsidiaries, etc.
b. Other basic capital: The capital securities to meet accreditation requirements of other basic capital, capital surplus associated with the issuance of the other basic capital, non-qualifying capital securities and the accredited amount as other basic capital of a non-controlling interest on equity securities issued by a subsidiary, etc.
c. Supplementary capital: The capital securities to meet supplementary capital accreditation requirements, capital surplus associated with the issuance of supplementary capital, the accredited amount of supplementary capital of non-qualifying capital securities, the accredited amount as supplementary capital of a non-controlling interest on equity securities issued by a subsidiary, eligible allowance for possible loan losses on "normal" or "precautionary" category assets, allowance for possible loan losses in excess of the total amount of expected losses, etc.

Regulatory capital and BIS ratios as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Common equity		
Capital stock, capital surplus and capital adjustments incurred in connection with common stock issued that meets eligible requirements	5,359,508	5,359,508
Retained earnings	19,236,315	13,897,317
Accumulated other comprehensive income and other capital surplus, capital adjustments	4,556,672	8,699,684
Non-controlling interest on common shares issued by a bank, a consolidated subsidiary	67,750	66,234
Deduction	(1,343,267)	(1,105,748)
Subtotal	27,876,978	26,916,995
Other basic capital		
Equity securities satisfying the criteria of other basic capital	355,740	355,740
Amount accredited as supplementary capital of non-qualifying capital securities	-	42,750
Amount accredited as other basic capital of a non-controlling interest on equity securities issued by a subsidiary	14,518	14,193
Subtotal	370,258	412,683
Supplementary capital		
Equity securities satisfying the criteria of supplementary capital	2,993,076	3,029,520
Amount accredited as supplementary capital of non-qualifying capital securities	-	197,420
Amount accredited as supplementary capital of a non-controlling interest on equity securities issued by a subsidiary	19,358	20,064
Allowance for possible loan losses on assets categorized as "normal" or "precautionary"	273,899	236,047
Allowance for qualified bad debt exceeding the estimated total loss, etc.	136,038	-
Subtotal	3,422,371	3,483,051
Total	31,669,607	30,812,729
Risk-weighted assets		
Credit risk-weighted assets (*)	154,742,641	143,139,525
Operational risk-weighted assets	18,539,555	19,712,497
Market risk-weighted assets	17,119,721	15,881,479
Total	190,401,917	178,733,501
BIS capital ratio		
Total capital ratio	16.63%	17.24%
Common equity ratio	14.64%	15.06%
Basic capital ratio	14.84%	15.29%
Supplementary capital ratio	1.80%	1.95%

(*) The equity below the lowest limit is presented in credit risk weighted assets.

8-7-1 Internal capital adequacy assessment and management

Internal capital is the amount which allows for continuous operation of business while accounting for all risks. Internal capital is defined as the size of capital needed to cope with unexpected loss under a certain rate. The purpose of managing the internal capital is to compare the size of internal capital and available capital (Tier 1) and to serve as a measure of financial strength. Managing the internal capital also provides the amount of risk-adjusted capital and basic measurement. The indicators are composed of the risk appetite ratio as well as exhaustion ratio of foreign holding limits. The risk appetite ratio is an internal capital ratio established after taking into consideration a capital buffer in Tier 1 capital. The exhaustion ratio of foreign holding limits is a ratio used to measure the amount of internal capital used against the internal capital limits.

Internal capital limits are established after accounting for the size of current and subsequent Tier 1 capital as well as the components, quality, risk appetite, target credit rating, operational strategy and business plans. The Risk Committee determines risk types and the internal capital limits for the Group more than once a year. In the case where new operations or the expansion of operations result in the amount exceeding the internal capital limits, an approval from the Risk Committee is needed beforehand. If such a situation occurs in cases outlined as exceptions, an approval from the Risk Committee is needed for the information on exceeded amount, post hoc results, as well as the subsequent plans.

9. Operating segment information

9-1 General information

In order to set strategies to achieve goal and efficiently conduct performance assessment, the business sectors of the Group are divided by the operations as follows:

a. Operating bank segment: It consists of two banks (Center (excluding Chungcheong) and Chungcheong). It offers household loan and deposit, retirement pension, company loan, deposit, etc.

b. Capital market segment: This segmentation offers investment and operation of securities, buying and selling of public bonds, development and operation of derivatives.

c. Other segment: It consists of the overseas business segment, headquarter supporting segment, trust segment, risk segment, audit segment and after-management segment.

9-2 Profit or loss by operating segment

9-2-1 Details of net income by operating segments for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	Operating group segments		Finance sector and other sectors	Subtotal	Adjustments	Total
	Center (excluding Chungcheong)	Chungcheong				
Net interest income	6,640,213	723,768	254,246	7,618,227	(9,550)	7,608,677
Interest income	15,999,130	1,666,734	(4,289,059)	13,376,805	(29,574)	13,347,231
Interest expenses	(9,358,917)	(942,966)	4,543,305	(5,758,578)	20,024	(5,738,554)
Net fees and commission income	712,061	56,595	149,665	918,321	(324,709)	593,612
Net other operating profit (loss)	(2,250,918)	(284,247)	(2,365,215)	(4,900,380)	869,577	(4,030,803)
Net segment profit (loss)	5,101,356	496,116	(1,961,304)	3,636,168	535,318	4,171,486
Income tax expenses (benefit)	1,402,873	136,432	(530,983)	1,008,322	51,465	1,059,787
Net segment income (loss)	3,698,483	359,684	(1,430,321)	2,627,846	483,853	3,111,699

<2021>

Classification	Operating group segments		Finance sector and other sectors	Subtotal	Adjustments	Total
	Center (excluding Chungcheong)	Chungcheong				
Net interest income	4,334,984	454,483	1,372,235	6,161,702	(11,105)	6,150,597
Interest income	9,243,184	967,732	(1,416,287)	8,794,629	(7,965)	8,786,664
Interest expenses	(4,908,200)	(513,249)	2,788,522	(2,632,927)	(3,140)	(2,636,067)
Net fees and commission income	690,793	53,710	114,196	858,699	(305,905)	552,794
Net other operating profit (loss)	(2,129,703)	(259,100)	(1,873,123)	(4,261,926)	1,037,009	(3,224,917)
Net segment profit (loss)	2,896,074	249,093	(386,692)	2,758,475	719,999	3,478,474
Income tax expenses (benefit)	796,420	68,501	(105,790)	759,131	143,597	902,728
Net segment income (loss)	2,099,654	180,592	(280,902)	1,999,344	576,402	2,575,746

Operating segment information was rewritten due to changes in the organizational structure for the year ended December 31, 2022.

9-2-2 Revenue from external customers in each operating sector for the years ended December 31, 2022 and 2021 is as follows (Korean won in millions):

<2022>

Classification	Operating group segments		Finance sector and other sectors	Subtotal	Adjustments	Total
	Center (excluding Chungcheong)	Chungcheong				
Revenue or loss from external customers	6,752,514	686,539	731,761	8,170,814	(127,731)	8,043,083

<2021>

Classification	Operating group segments		Finance sector and other sectors	Subtotal	Adjustments	Total
	Center (excluding Chungcheong)	Chungcheong				
Revenue or loss from external customers	4,579,488	440,099	1,645,263	6,664,850	(30,010)	6,634,840

Operating segment information was rewritten due to changes in the organizational structure for the year ended December 31, 2022.

9-2-3 Significant non-cash transactions included in income of operating segments for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	Operating group segments		Finance sector and other sectors	Subtotal	Adjustments	Total
	Center (excluding Chungcheong)	Chungcheong				
Earnings from equity method investments	–	–	189,013	189,013	–	189,013
Depreciation and amortization	(146,176)	(9,791)	(281,460)	(437,427)	(645)	(438,072)
Total	(146,176)	(9,791)	(92,447)	(248,414)	(645)	(249,059)

<2021>

Classification	Operating group segments		Finance sector and other sectors	Subtotal	Adjustments	Total
	Center (excluding Chungcheong)	Chungcheong				
Earnings from equity method investments	–	–	127,672	127,672	–	127,672
Depreciation and amortization	(140,972)	(9,349)	(274,959)	(425,280)	(1,146)	(426,426)
Total	(140,972)	(9,349)	(147,287)	(297,608)	(1,146)	(298,754)

Operating segment information has been restated according to changes in the org anizational structure during this year.

9-3 Information about geographic region

Gain and loss by geographic region from the external customers for the years ended December 31, 2022 and 2021 and non-current assets by geographic regio as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	Gain and Loss from external customers(*1)		Non-current assets(*2)	
	2022	2021	December 31, 2022	December 31, 2021
Domestic	7,160,295	5,864,036	3,278,506	2,968,061
Foreign				
Hong Kong	73,208	63,991	5,320	3,997
Singapore	60,878	47,155	1,943	1,563
United States	85,888	64,664	29,170	6,872
Japan	36,579	29,158	3,486	3,894
China	247,818	242,903	62,936	63,523
Indonesia	182,806	134,433	57,301	66,195
United Kingdom	6,537	5,975	2,601	2,626
Canada	49,635	31,952	11,274	10,809
Others	267,168	180,583	19,263	18,324
Subtotal	1,010,517	800,814	193,294	177,803
Adjustments	(127,729)	(30,010)	5,263	5,837
Total	8,043,083	6,634,840	3,477,063	3,151,701

(*1) Gain and loss from external customers is divided into categories of domestic and overseas based on the locations of operating branches.
(*2) Non-current assets consist of property and equipment, investment property, intangible asset and right-of-use assets and are divided into categories of domestic and overseas based on the location of assets.

10. Cash and due from banks

10-1 Cash and due from banks as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	Counterparty	December 31, 2022	December 31, 2021
Cash		1,903,972	2,023,877
Due from banks in Korean won			
Reserve deposits	Bank of Korea ("BOK")	15,928,268	13,014,317
Time deposits	Other banks	8,309	32,448
Other deposits	Other financial institutions	14,313	749
Subtotal		15,950,890	13,047,514
Due from banks in foreign currencies			
Due from other branches	BOK and other banks	11,590,380	7,814,895
Time deposits	ICICI and other banks	1,147,224	971,559
Other deposits	Other financial institutions	10,495,391	3,836,087
Subtotal		23,232,995	12,622,541
Total		41,087,857	27,693,932

10-2 Restricted balances in cash and due from banks as of December 31, 2022 and 2021 are summarized as follows (Korean won in millions):

Classification		December 31, 2022	December 31, 2021	Restriction
Due from banks in Korean won	Reserve deposits, etc.	15,928,268	13,014,317	Required under the *Banking Act* and other related regulations.
	Collective fund for Korea Stock Exchange	500	500	Pledge creation, etc.
	Subtotal	15,928,768	13,014,817	
Due from banks in foreign currencies	Due from other branches	9,596,192	5,883,929	Reserve deposits required under the *Banking Act* and other related regulations.
	Due from others	9,708,393	3,512,482	Deposits received for guarantees as margin for derivatives, etc.
	Subtotal	19,304,585	9,396,411	
Total		35,233,353	22,411,228	

11. Financial assets at FVTPL

11-1 Financial assets mandatorily measured at FVTPL as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Stocks	63,560	116,991
Government and public bonds	2,068,958	1,030,607
Financial bonds	563,364	428,518
Corporate bonds	912,624	914,785
Beneficiary certificates	2,733,298	2,291,667
Securities denominated in foreign currencies	1,786,106	1,498,313
Derivative assets held for trading	9,851,754	4,101,349
Other securities (investment, etc.)	468,357	365,459
Private convertible bonds	7,394	170,873
Total	18,455,415	10,918,562

11-2 As of December 31, 2022 and 2021, the Group does not hold any financial assets designated as at FVTPL.

12. Financial assets at FVOCI

12-1 As of December 31, 2022 and 2021, financial assets at FVOCI are as follows (Korean won in millions):

Classification	Counterparty	Fair value (Book value)	
		December 31, 2022	December 31, 2021
Stocks	Daewoo Shipbuilding & Marine Engineering Co., Ltd., etc.	714,863	801,357
Investments in partnership	Impact Finance Korea	105	130
Government and public bonds	Treasury bonds	7,264,139	7,116,345
	Housing bonds	2,383,681	2,391,403

Classification	Counterparty	Fair value (Book value)	
		December 31, 2022	December 31, 2021
	Other local bonds	226,842	274,858
	Subtotal	9,874,662	9,782,606
Finance bonds	Monetary stabilization securities	3,087,556	5,592,002
	Deposit bank bonds	1,128,701	1,243,143
	Small- and medium-sized business banking bonds	1,904,983	1,899,393
	Industrial financial bonds	3,423,699	3,016,231
	Export-import credit bonds	313,214	348,750
	Others	663,479	307,369
	Subtotal	10,521,632	12,406,888
Corporate bonds and others	State owned entity bonds	5,618,840	5,669,233
	Corporate bonds	461,899	245,063
	Others	20,640	-
	Subtotal	6,101,379	5,914,296
Other securities	Convertible bond (permanent)	89,131	80,331
Securities denominated in foreign currencies	Equity securities in foreign currencies	6,406	29,762
	Bonds in foreign currencies	5,652,403	6,218,988
	Subtotal	5,658,809	6,248,750
Total		32,960,581	35,234,358

12-2 As of December 31, 2022 and 2021, details of equity instruments included in financial assets at FVOCI are as follows (Korean won in millions):

Counterparty	Fair value (Book value)	
	December 31, 2022	December 31, 2021
UAMCO., Ltd.	188,721	176,628
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	170,845	207,809
The Korea Securities Finance Corporation	115,513	120,334
National Happiness Fund	50,942	84,067
Taihan Cable & Solution Co., Ltd	46,131	54,925
STX Engine Co., Ltd.	45,207	23,877
Kookmin Cable Investment Inc.	43,924	56,454
Korea Rating & Data	20,111	14,330
Hyundai Merchant Marine Co., Ltd.	17,387	23,924
Korea Asset Management Corporation	15,737	15,737
BC Card Co., Ltd.	10,604	9,784
HJC Inc.	9,817	8,271
Korea Money Brokerage Corp.	9,660	11,463
KG Dongbu Steel Co., Ltd.	8,387	20,908
Mirae Credit Information Co., Ltd.	7,324	5,944
Kumho Tire Co., Ltd.	6,748	11,190
DB Asset Management Co., Ltd.	5,713	5,698
CLS Group Holdings AG	5,038	4,761
POSCO Plantec Co., Ltd.	4,676	3,344
Daelim Construction Co.	2,509	4,586
Korea Securities Depository and others	25,511	47,546
Total	810,505	911,580

Equity instruments that are held by the purpose of strategic alliances, acquisition due to conversion from debt instruments and acquisition for access rights of systems and facilities are designated as measured at FVOCI.

12-3 Details of equity instruments included in the financial assets at FVOCI derecognized for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Counterparty	Fair value	Cumulative valuation gain (loss)	Reason for disposal
Sun jin Air & Tech.Co.,Ltd.	-	-	Free incineration of securities
SHINDONG DIGITECH CO., LTD	-	-	Free incineration of securities
IHSUNG CNI CO.,LTD	-	-	Sale of securities convertible to equity securities
Hansol Papertech Co., Ltd.	1	1	Sale of securities convertible to equity securities
EMnI Co., Ltd	119	119	Sale of securities convertible to equity securities
Kolmarpharma Co., Ltd.	1	1	Sale of securities convertible to equity securities
Golden Bridge Asset Management Co., Ltd.	478	78	Sales due to decreased effectiveness of strategic investment through business alliances
DAEIL LEATHER CO., LTD.	40	40	Exercise of the right to claim for reimbursement rehabilitation plan
Olive Co., Ltd.	22	22	Exercise of call option according to the rehabilitation plan
ChinHung International, Inc.	3,280	(1,320)	Resolution of the board of directors
Taihan Cable & Solution Co., Ltd	1,174	1,174	Resolution of the board of directors
KG Dongbu Steel Co., Ltd.	20,980	(3,806)	Resolution of the board of directors
Total	26,095	(3,691)	

<2021>

Counterparty	Fair value	Cumulative valuation gain (loss)	Reason for disposal
BOO YOUNG FINANCE	793	293	Liquidation of a corporation
KIRIN industrial Co.,Ltd.	46	46	Exercise of the right to sell
Dauning Co.,Ltd.	148	148	Total sale in response to a private contract
KUMHO ELECTRIC CO.,LTD.	1,672	(1,353)	Resolution of the Board of Directors
Taihan Cable & Solution Co., Ltd	12,111	(28,391)	Resolution of the Board of Directors
ChinHung International, Inc.	12,700	(2,915)	Resolution of the Board of Directors
Hyundai Merchant Marine Co., Ltd.	146,293	110,760	Resolution of the Board of Directors
HANJIN HEAVY INDUSTRIES & CONSTRUCTION CO.,LTD.	40,747	(36,905)	Resolution of the Board of Directors
IHSUNG CNI CO.,LTD	30	30	Sale of securities convertible to equity securities
Kolmarpharma Co.,Ltd.	308	308	Sale of securities convertible to equity securities
Koramco REITs Management and Trust Co., Ltd.	9,327	8,952	Sales due to decreased effectiveness of strategic investment through business alliances
K3I CO.,LTD.	458	228	Sales due to decreased effectiveness of strategic investment through business alliances
Daewoo Development Co., Ltd. -Engineering&Construction(1P)	609	-	Conversion to common stock
Hyunwoo industrial machinery Co.,Ltd	9	9	Exercise of the right to sell
Total	225,251	51,210	

12-4 There are no dividends recognized due to the equity instruments at FVOCI derecognized for the year ended December 31, 2022. Dividends recognized in relation to the equity instruments at FVOCI held as of December 31, 2022 amount to ₩8,287 million. Dividends recognized in relation to the equity instruments at FVOCI derecognized for the year ended December 31, 2021 amount to ₩133 million. Dividends recognized in relation to the equity instruments at FVOCI held as of December 31, 2021 amount to ₩7,230 million.

12-5 Changes in the loss allowance in relation to financial assets at FVOCI for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	11,298	-	-	11,298
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	-	-	-
Provision for ECL	2,516	-	-	2,516
Removed debt securities	(3,119)	-	-	(3,119)
Exchange rate fluctuation and others	455	-	-	455
Ending balance	11,150	-	-	11,150

<2021>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	10,009	-	-	10,009
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	-	-	-
Provision for ECL	5,133	-	-	5,133
Removed debt securities	(5,327)	-	-	(5,327)
Exchange rate fluctuation and others	1,483	-	-	1,483
Ending balance	11,298	-	-	11,298

12-6 Changes in the total book value in relation to financial assets at FVOCI for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	34,322,778	-	-	34,322,778
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	-	-	-
New financial assets executed or purchased	10,732,956	-	-	10,732,956
Removed debt securities	(12,330,139)	-	-	(12,330,139)
Exchange rate fluctuation and others	(575,519)	-	-	(575,519)
Ending balance	32,150,076	-	-	32,150,076

<2021>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	32,019,707	-	-	32,019,707
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	-	-	-
New financial assets executed or purchased	18,757,341	-	-	18,757,341
Removed debt securities	(16,507,219)	-	-	(16,507,219)
Exchange rate fluctuation and others	52,949	-	-	52,949
Ending balance	34,322,778	-	-	34,322,778

13. Securities at amortized cost

13-1 Details of securities measured at amortized cost as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	Category	December 31, 2022	December 31, 2021
Government and public bonds	Treasury bonds	3,177,898	2,390,365
	Housing bonds	3,585,127	3,052,061
	Other local government bonds	506,322	436,729
	Subtotal	7,269,347	5,879,155
Finance bonds	Monetary stabilization bond	649,822	-
	Deposit bank bonds	545,116	568,739
	Small- and medium-sized business banking bonds	2,299,454	320,049
	Industrial financial bonds	3,967,758	334,203
	Export-import credit bonds	429,681	130,146
	Subtotal	7,891,831	1,353,137
Corporate bonds and others	State owned entity bonds	18,316,697	11,958,377
	Corporate bonds	298,312	130,604
	Subtotal	18,615,009	12,088,981
Securities denominated in foreign currencies	Bonds in foreign currencies	3,890,116	3,165,915
Allowances		(82,816)	(19,304)
Total		37,583,487	22,467,884

13-2 Profit or loss from disposal of securities at amortized cost for the years ended December 31, 2022 and 2021 is as follows (Korean won in millions):

<2022>

Classification	Face amount	Book value	Amount of profit from disposal
Corporate bonds and others	7,800	7,796	4

For the year ended December 31, 2022, the Group disposed portion of securities at amortized cost in response to the exercise of options (prepayment option) by the issuer of securities.

<2021>

Classification	Face amount	Book value	Amount of profit from disposal
Corporate bonds and others	28,900	28,880	20

For the year ended December 31, 2021, the Group disposed portion of securities at amortized cost in response to the exercise of options (prepayment option) by the issuer of securities.

13-3 Changes in the loss allowance in relation to securities at amortized cost for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	8,104	11,200	-	19,304
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	(8,470)	8,470	-
Provision for possible loan losses	5,525	3,007	58,941	67,473
Removed debt securities	(507)	-	-	(507)
Exchange rate fluctuation and others	(49)	36	(3,441)	(3,454)
Ending balance	13,073	5,773	63,970	82,816

<2021>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	9,641	-	-	9,641
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	(4,062)	4,062	-	-
Transfer to credit-impaired debt securities	-	-	-	-
Provision for possible loan losses	5,484	6,604	-	12,088
Removed debt securities	(1,561)	(245)	-	(1,806)
Exchange rate fluctuation and others	(1,398)	779	-	(619)
Ending balance	8,104	11,200	-	19,304

13-4 Changes in the carrying amounts of securities at amortized cost for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	22,393,248	93,940	-	22,487,188
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	-	-	-	-
Transfer to credit-impaired debt securities	-	(68,827)	68,827	-
New debt securities executed or purchased	16,705,097	-	-	16,705,097
Removed debt securities	(1,664,801)	-	-	(1,664,801)
Effective interest rate amortization	(23,576)	-	-	(23,576)
Exchange rate fluctuation and others	164,491	(605)	(1,491)	162,395
Ending balance	37,574,459	24,508	67,336	37,666,303

<2021>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit-impaired debt securities	Credit-impaired debt securities	
Beginning balance	17,112,496	-	-	17,112,496
Transfer to 12-month ECL	-	-	-	-
Transfer to non-credit-impaired debt securities	(112,583)	112,583	-	-
Transfer to credit-impaired debt securities	-	-	-	-
New debt securities executed or purchased	10,360,043	-	-	10,360,043
Removed debt securities	(5,127,492)	(28,354)	-	(5,155,846)
Effective interest rate amortization	18,429	-	-	18,429
Exchange rate fluctuation and others	142,355	9,711	-	152,066
Ending balance	22,393,248	93,940	-	22,487,188

14. Pledged assets and acquired collaterals

14-1 Assets pledged as collateral as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	Category	December 31, 2022	December 31, 2021
Financial assets at FVTPL	Securities lent	412,491	49,906
	Others	390,251	-
	Subtotal	802,742	49,906
Financial assets at FVOCI	Intraday overdraft	272,486	277,657
	Securities lent	1,925,345	2,538,542
	BOK borrowings	1,240,667	829,803
	Foreign currency borrowing	-	203,962
	BOK payment	39,707	1,871,226
	Futures	374,368	202,927
	Customer RP	46	-
	Others	3,057,070	733,625
	Subtotal	6,909,689	6,657,742
Securities at amortized cost	Futures	10,000	100,047
	BOK payment	2,905,847	2,313,892
	Intraday overdraft	373,511	372,940
	BOK borrowings	4,719,163	4,311,268
	Foreign currency borrowing	484,066	910,097
	Securities lent	416,386	-
	Others	1,151,860	487,273
	Subtotal	10,060,833	8,495,517
Total		17,773,264	15,203,165

14-2 The fair value of collateral that is available for sale and repledge, irrespective of default as of December 31, 2022 and 2021 is as follows (Korean won in millions):

<December 31, 2022>

Classification	Fair value of collateral	Fair value of collateral sold or repledged
Securities	11,589,157	3,349,854

<December 31, 2021>

Classification	Fair value of collateral	Fair value of collateral sold or repledged
Securities	10,900,985	-

15. Loans

15-1 Loans as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Loans		
Loans in Korean won	274,028,231	257,200,957
Loans denominated in foreign currencies	32,053,751	28,249,074
Domestic import usance	4,546,348	4,188,861
Call loans	1,377,862	1,288,673
Bills purchased in Korean won	936,548	187,361
Bills purchased denominated in foreign currencies	5,289,419	5,799,103
Advance payments on payment guarantees	5,533	12,083
Bonds purchased under resale agreement	11,776,664	11,380,982

Classification	December 31, 2022	December 31, 2021
Privately placed corporate bonds	1,081,238	1,302,399
Others	401,026	622,788
Subtotal	331,496,620	310,232,281
Addition (deduction)		
Net deferred origination fees and costs	356,338	378,995
Allowance for loan losses	(1,666,617)	(1,433,568)
Subtotal	(1,310,279)	(1,054,573)
Total	330,186,341	309,177,708

15-2 Loans by customer as of December 31, 2022 and 2021 are listed as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Corporate loans		
Large-sized businesses	49,305,435	41,137,136
Small- and medium-sized businesses	129,742,648	118,139,802
Public sector and others	19,907,599	17,753,672
Household loans	132,540,938	133,201,671
Subtotal	331,496,620	310,232,281
Addition (deduction)		
Net deferred origination fees and costs	356,338	378,995
Allowance for loan losses	(1,666,617)	(1,433,568)
Subtotal	(1,310,279)	(1,054,573)
Total	330,186,341	309,177,708

15-3 Changes in allowance for loan losses for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit -impaired loan	Credit-impaired loan	
Beginning balance	405,354	668,520	359,694	1,433,568
Transfer to 12-month ECL	39,276	(37,361)	(1,915)	-
Transfer to non-credit-impaired loan	(37,102)	38,749	(1,647)	-
Transfer to credit-impaired loan	(8,994)	(28,298)	37,292	-
Provisions (reversal) of allowance for loan losses (*)	186,883	118,465	279,658	585,006
Write-offs	-	-	(428,658)	(428,658)
Disposal of non-performing loans, etc.	-	-	(31,429)	(31,429)
Recovering of loans written off	-	-	90,478	90,478
Exchange rate fluctuation and others	13,505	3,874	273	17,652
Ending balance	598,922	763,949	303,746	1,666,617

(*) As of December 31, 2022, in order to expand loss absorption capacity in growing economic uncertainty worldwide, the Bank has accumulated an additional ₩50,387 million in allowances for financial support interest and deferred repayment loans for small- and medium-sized companies and small business owners affected by COVID-19. The additional allowances include ₩413 million in impact of Stage 2 classification of principal and interest deferred borrowers.

<2021>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit -impaired loan	Credit-impaired loan	
Beginning balance	445,050	488,173	371,719	1,304,942
Transfer to 12- month ECL	96,828	(49,769)	(47,059)	-
Transfer to non-credit-impaired loan	(59,066)	67,101	(8,035)	-
Transfer to credit-impaired loan	(8,560)	(39,663)	48,223	-
Provisions (reversal) of allowance for loan losses	(105,552)	216,130	120,735	231,313
Write-offs	-	-	(260,825)	(260,825)
Disposal of non-performing loans, etc.	-	-	(14,513)	(14,513)
Recovering of loans written off	-	-	151,553	151,553
Exchange rate fluctuation and others	36,654	(13,452)	(2,104)	21,098

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit -impaired loan	Credit-impaired loan	
Ending balance	405,354	668,520	359,694	1,433,568

15-4 Changes in the carrying amounts of loans for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit -impaired loan	Credit-impaired loan	
Beginning balance	270,511,534	38,818,581	902,166	310,232,281
Transfer to 12-month ECL	6,182,647	(6,172,422)	(10,225)	-
Transfer to non-credit-impaired loan	(12,624,851)	12,640,990	(16,139)	-
Transfer to credit-impaired loan	(470,765)	(409,106)	879,871	-
Net increase (decrease)	25,848,699	(3,728,086)	(251,415)	21,869,198
Write-offs	-	-	(428,658)	(428,658)
Disposal of non-performing loans	-	-	(176,201)	(176,201)
Ending balance	289,447,264	41,149,957	899,399	331,496,620

<2021>

Classification	12-month ECL	Lifetime ECL		Total
		Non-credit -impaired loan	Credit-impaired loan	
Beginning balance	255,680,114	28,843,049	1,013,332	285,536,495
Transfer to 12-month ECL	4,023,151	(3,965,609)	(57,542)	-
Transfer to non-credit-impaired loan	(17,563,839)	17,610,433	(46,594)	-
Transfer to credit-impaired loan	(369,805)	(375,621)	745,426	-
Net increase (decrease)	28,741,913	(3,293,671)	(299,997)	25,148,245
Write-offs	-	-	(260,825)	(260,825)
Disposal of non-performing loans	-	-	(191,634)	(191,634)
Ending balance	270,511,534	38,818,581	902,166	310,232,281

15-5 Amortized costs before changes in contractual cash flows of loans (contractual cash flows changed for the years ended December 31, 2022 and 2021) for which allowance for loan losses has been at the lifetime ECL and net loss recognized based on the changes in contractual cash flows are as follows (Korean won in millions):

Classification	2022	2021
Amortized cost before change	81,226	83,324
Net gain (loss) due to change	(835)	(941)

15-6 Loans whose contractual cash flows changed for which the measurement of allowance for loan losses changed from the lifetime ECL to 12-month ECL on initial recognition during the reporting period are ₩1,355 million as of December 31, 2022 and ₩17,538 million as of December 31, 2021.

15-7 The contractual non-recoverable amount of the loans that has been fully written off as of the end of the reporting period but is still trying to recover is ₩4,090,534 million and ₩4,154,200 million as of December 31, 2022 and 2021.

16. Derivative instruments

16-1 Details of amounts of the unsettled derivative contract and fair value of derivatives held by the Group as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	Amounts of unsettled contract		Accumulated valuation gain (loss)			
	December 31, 2022	December 31, 2021	December 31, 2022		December 31, 2021	
			Assets	Liabilities	Assets	Liabilities
Currency						
Forward	224,433,459	186,580,115	5,673,931	5,229,138	2,505,528	1,813,422
Swap	87,834,023	81,928,667	3,418,688	4,549,082	1,293,491	1,724,641
Options purchased	664,573	452,589	3,742	–	2,344	–
Options sold	635,883	443,674	–	3,267	–	1,564
Futures	1,411,202	1,347,961	–	–	–	–
Subtotal	314,979,140	270,753,006	9,096,361	9,781,487	3,801,363	3,539,627
Interest						
Forward	2,858,744	537,163	217,225	101,410	8,725	2,541
Swap	158,972,394	115,755,021	551,422	826,106	301,485	288,892
Options purchased	66,150	201,966	–	–	424	–
Options sold	765,000	905,000	–	9,458	–	13,354
Futures	857,539	253,090	–	–	–	–
Subtotal	163,519,827	117,652,240	768,647	936,974	310,634	304,787
Stock						
Forward	524	654	286	–	184	–
Swap	72,499	–	578	1,827	–	–
Options purchased	50,219	64,119	213	–	478	–
Options sold	263,304	140,380	–	22,289	–	5,049
Futures	21,681	3,943	–	–	–	–
Subtotal	408,227	209,096	1,077	24,116	662	5,049
Others						
Credit spread adjustment	–	–	(14,331)	–	(11,310)	–
Total	478,907,194	388,614,342	9,851,754	10,742,577	4,101,349	3,849,463

16-2 Details of valuation gain (loss) of the derivatives for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022		2021	
	Valuation gain	Valuation loss	Valuation gain	Valuation loss
Currency:				
Forward	5,218,502	5,186,622	2,581,142	1,804,717
Swap	2,842,829	3,554,679	2,345,729	3,104,380
Options purchased	3,976	–	4,373	–
Options sold	–	1,377	–	1,955
Subtotal	8,065,307	8,742,678	4,931,244	4,911,052
Interest:				
Forward	208,726	99,096	8,725	2,541
Swap	698,094	977,477	290,564	489,649
Options purchased	1,579	–	4,500	–
Options sold	–	4,195	–	299
Subtotal	908,399	1,080,768	303,789	492,489
Stock:				
Forward	171	–	–	34
Swap	269	2,415	–	–
Options purchased	562	–	2,394	–
Options sold	2,331	20,739	–	1,978
Subtotal	3,333	23,154	2,394	2,012
Others:				
Credit spread adjustment	–	3,020	1,959	–
Total	8,977,039	9,849,620	5,239,386	5,405,553

16-3 Fair value hedge

16-3-1 Details of items subject to fair value hedge as of December 31, 2022 and 2021, are as follows (Korean won in millions):

<December 31, 2022>

Classification	Hedged items	Book Value		Accumulated fair value adjustments		Change in fair value
		Assets	Liabilities	Assets	Liabilities	
Application of hedge accounting						
Interest	Depository liabilities in Korean won	-	187,705	-	(62,295)	46,117
	Depository liabilities denominated in foreign currencies	-	115,865	-	(23,538)	24,898
	Finance debentures denominated in Korean won	-	93,262	-	(36,738)	26,241
	Finance debentures denominated in foreign currencies	-	2,773,530	-	(204,625)	228,870
	Subtotal	-	3,170,362	-	(327,196)	326,126
Currency and interest	Finance debentures denominated in foreign currencies	-	1,080,816	-	(70,161)	61,499
Total		-	4,251,178	-	(397,357)	387,625

<December 31, 2021>

Classification	Hedged items	Book Value		Accumulated fair value adjustments		Change in fair value
		Assets	Liabilities	Assets	Liabilities	
Application of hedge accounting						
Interest	Depository liabilities in Korean won	-	233,822	-	(16,178)	12,659
	Depository liabilities denominated in foreign currencies	-	131,765	-	1,360	3,899
	Finance debentures denominated in Korean won	-	119,503	-	(10,497)	6,345
	Finance debentures denominated in foreign currencies	-	2,455,251	-	24,976	76,182
	Subtotal	-	2,940,341	-	(339)	99,085
Currency	Financial assets measured at FVOCI	23,710	-	18,100	-	19,500
Currency and interest	Finance debentures denominated in foreign currencies	-	1,129,830	-	(8,662)	17,439
Total		23,710	4,070,171	18,100	(9,001)	136,024

As of December 31, 2022 and 2021, interest rate swaps or currency swaps are designated as hedging instrument and the fair value hedge accounting is applied in order to hedge fair value fluctuation risk incurred due to interest rate fluctuations and foreign exchange rate fluctuations in finance debentures issued a nd depository liabilities.

16-3-2 Details of derivative instruments for hedge fair value fluctuation risk held by the Group as of December 31, 2022 and 2021, are as follows:
(Korean won in millions):

<December 31, 2022>

Classification	Unsettled contract amounts	Net valuation gain (loss)	Accumulated valuation gain or loss	
			Assets	Liabilities
Currency				
Currency swaps	1,150,977	(129,660)	8,062	180,193
Interest				
Interest rate swaps	3,497,557	(325,171)	-	325,952
Total	4,648,534	(454,831)	8,062	506,145

<December 31, 2021>

Classification	Unsettled contract amounts	Net valuation gain (loss)	Accumulated valuation gain or loss	
			Assets	Liabilities
Currency				
Currency swaps	1,138,492	(64,377)	19,282	61,752
Interest				
Interest rate swaps	2,940,680	(99,230)	49,388	49,440
Total	4,079,172	(163,607)	68,670	111,192

16-3-3 Fair values of non-derivative financial instruments designated as fair value hedging instrument as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Debentures denominated in foreign currencies	-	237,100

16-3-4 Ineffective portion of gain or loss on derivatives designated as hedging instrument for the years ended December 31, 2022 and 2021, is as follows (Korean won in millions):

Classification	Ineffective portion of the hedge recognized in profit or loss for the period	
	2022	2021
Currency	(19)	(11)
Interest	(204)	(146)
Total	(223)	(157)

16-4 Hedges of net investment in foreign operations

16-4-1 Details of hedges of net investment in foreign operations as of December 31, 2022 and 2021, and fair value fluctuation for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

<December 31, 2022>

Classification	Fair value fluctuation	Other comprehensive income of hedges of net investment in foreign operations
Currency (Exchange rate risk)	28,241	(49,823)

<December 31, 2021>

Classification	Fair value fluctuation	Other comprehensive income of hedges of net investment in foreign operations
Currency (Exchange rate risk)	56,259	(29,294)

16-4-2 Details of fair values of financial instruments designated as hedging instrument of net investment of foreign operations as of December 31, 2022 and 2021, are as follows (Korean won in millions):

<December 31, 2022>

Classification	Book value		Fair value fluctuation	Changes in fair value recognized in other comprehensive income	Ineffective portion of the hedge recognized as current profit or loss
	Assets	Liabilities			
Currency forward	-	10,273	(10,273)	(7,448)	-
Borrowings denominated in foreign currencies	-	170,314	6,559	4,755	-
Debentures denominated in foreign currencies	-	1,131,686	(24,527)	(17,782)	-
Total	-	1,312,273	(28,241)	(20,475)	-

<December 31, 2021>

Classification	Book value		Fair value fluctuation	Changes in fair value recognized in other comprehensive income	Ineffective portion of the hedge recognized as current profit or loss
	Assets	Liabilities			
Debentures denominated in foreign currencies	-	779,488	(56,259)	(40,788)	-

16-5 Average hedging ratios of future nominal cash flows by the type of risk hedge as of December 31, 2022 and 2021, are as follows (Korean won in millions):

<December 31, 2022>

Classification	1 year	2 years	3 years	4 years	5 years	More than 5 years	Total
Fair value hedge							
Nominal amounts of items subject to hedge	494,058	1,375,348	-	1,435,980	760,380	582,768	4,648,534
Nominal amounts of hedging instrument	494,058	1,375,348	-	1,435,980	760,380	582,768	4,648,534
Average hedging ratio	100.18%	100.36%	-	99.95%	102.32%	100.00%	100.15%
Hedge of net investment in foreign operations							
Nominal amounts of items subject to hedge	511,355	576,205	-	224,713	-	-	1,312,273
Nominal amounts of hedging instrument	511,355	576,205	-	224,713	-	-	1,312,273
Average hedging ratio	99.42%	100.00%	-	100.00%	-	-	99.78%

<December 31, 2021>

Classification	1 year	2 years	3 years	4 years	5 years	More than 5 years	Total
Fair value hedge							
Nominal amounts of items subject to hedge	355,650	467,116	1,304,256	-	1,382,470	806,780	4,316,272
Nominal amounts of hedging instrument	355,650	467,116	1,304,256	-	1,382,470	806,780	4,316,272
Average hedging ratio	100.00%	99.75%	99.66%	-	99.90%	100.00%	99.90%
Hedge of net investment in foreign operations							
Nominal amounts of items subject to hedge	-	-	-	-	-	779,488	779,488
Nominal amounts of hedging instrument	-	-	-	-	-	779,488	779,488
Average hedging ratio	-	-	-	-	-	100.00%	100.00%

16-6 Hedging relationships affected by IBOR Reform

16-6-1 The exposure to hedging relationships due to the Group's LIBOR Reform as of December 31, 2022 and 2021 are as follows (Korean won in millions):
The USD LIBOR interest rate will be replaced by a Secure Overnight Financing Rate (SOFR) based on actual transactions. And the KRW certificate of deposit ("CD") rate can be replaced by the RFR (Risk Free Rate) in case of an emergency in the long run. In this hedging relationship, the Group assumed that the spread based on a SOFR would be similar to that included in the interest rate swap used as a hedging instrument and no other changes were assumed.

<December 31, 2022>

Interest index	Currency	Book value of non-derivative financial liabilities	Nominal value of hedging instruments
KRW 91CD	KRW	280,967	380,000
USD 3M LIBOR	USD	3,257,616	3,508,155

<December 31, 2021>

Interest index	Currency	Book value of non-derivative financial liabilities	Nominal value of hedging instruments
KRW 91CD	KRW	353,324	380,000
USD 3M LIBOR	USD	3,716,846	3,699,172

16-6-2 The nominal amount and weighted-average maturity of derivatives that will be affected by the IBOR reform for transition to an alternative index interest rate basis as of December 31, 2022 and 2021, are as follows,
(Korean won in millions, Year):

<December 31, 2022>

Interest index	Currency	Nominal value of derivatives	Weighted average of remaining life
KRW 91CD	KRW	380,000	16.74
USD 3M LIBOR	USD	3,508,155	3.48

<December 31, 2021>

Interest index	Currency	Nominal value of derivatives	Weighted average of remaining life
KRW 91CD	KRW	380,000	17.74
USD 3M LIBOR	USD	3,699,172	4.03

17. Investments in associates and a joint venture

17-1 Details of investments in associates and a joint venture as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	Type	Country	Industry	Reporting date	Ownership (%)		Book value	
					December 31, 2022	December 31, 2021	December 31, 2022	December 31, 2021
Bank of Jilin (*1)	Associates	China	Bank	2022.12.31	11.92	11.92	877,491	853,878
Hana Equity Partners I, L.P.	Associates	Korea	Other financial services	2022.12.31	29.97	29.97	95	221
Korea Credit Bureau (*1)	Associates	Korea	Credit investigation and Collection agency	2022.12.31	9.00	9.00	5,503	8,876
Templeton Hana Asset Management Co., Ltd. (*1)	Associates	Korea	Asset Management Company	2022.12.31	9.90	9.90	1,387	1,271
CM International financing leases	Associates	China	Other financial services	2022.12.31	25.00	25.00	1,629	2,150
Beijing Langzi Asset Management Co.,Ltd. (*1)	Associates	China	Credit financial business	2022.12.31	12.89	12.89	56,805	56,830
Somesevit Corporation (*1)(*2)	Associates	Korea	Construction	2022.12.31	1.92	1.92	-	-
Midan City Development Co., Ltd. (*1)(*2)(*3)	Associates	Korea	Construction	2018.03.31	2.17	2.17	-	-
Company K Startup Winwin Fund	Associates	Korea	Investment	2022.12.31	23.81	23.81	2,355	5,214
BSK-6 Patent Technology Investment Association	Associates	Korea	Investment	2022.12.31	20.00	20.00	2,748	2,559
Hana - KVIC Unicorn Fund of Funds (*4)	Associates	Korea	Investment	2022.12.31	90.91	90.91	98,244	72,529
Harvest Private Equity Fund Specializing in Start-Up and Venture Business	Associates	Korea	Investment	2022.12.31	27.30	27.30	2,805	2,877
Bank for Investment and Development of Vietnam ("BIDV") (*1)	Associates	Vietnam	Bank	2022.12.31	15.00	15.00	1,641,419	1,441,797
Hana Micro Finance., Ltd.	Associates	Myanmar	Other financial services	2022.12.31	25.00	25.00	18,199	19,056
HORIZON PRIVATE EQUITY FUND	Associates	Korea	Investment	2022.12.31	22.40	22.40	49,491	65,098
Hana Ventures No. 7 New Technology Business Investment Association	Associates	Korea	Investment	2022.12.31	27.27	27.27	1,434	1,465
TossBank Corp.(*1)	Associates	Korea	Bank	2022.12.31	8.62	10.00	87,566	49,125
Sinsa Station area Complex Development PFV Co., Ltd.(*1)	Associates	Korea	Other development supply	2022.12.31	9.00	9.00	365	451
Hana-Capstone AI Platform Fund	Associates	Korea	Other financial services	2022.12.31	36.54	36.54	29,287	14,836
Taurus Cloud Fund	Associates	Korea	Other financial services	2022.12.31	27.06	27.06	9,416	9,391
Cheongna Medipolis PFV Co., Ltd. (*1)	Associates	Korea	Real estate development and supply	2022.12.31	11.24	11.24	1,712	2,598
NPX-Welcome Metaverse Contents Fund	Associates	Korea	Other financial services	2022.12.31	25.00	25.00	978	1,000
Hana Beyond Finance Fund	Associates	Korea	Other financial services	2022.12.31	26.67	-	23,507	-
All Together Korea Fund 5 (*4)	Associates	Korea	Other financial services	2022.12.31	100.00	100.00	10,245	10,070
Hana-New Deal K-Growth fund (*4)	Associates	Korea	Other financial services	2022.12.31	90.00	90.00	24,029	1,778
Defense Technology Innovation Private Investment Trust (*4)	Associates	Korea	Other financial services	2022.12.31	98.33	-	2,948	-
SHINJIN INTERNATIONAL COPORATION (*2)(*3)(*5)	Associates	Korea	Manufacturing	2021.12.31	24.20	24.20	-	-
KG FASHION CO., LTD. (*2)(*3)(*5)	Associates	Korea	Wholesale and retail	2021.12.31	20.55	20.55	-	-
PT Sinarmas Hana Finance (*6)	Joint venture	Indonesia	Financial services	2022.12.31	30.00	30.00	8,630	7,900
Total							2,958,288	2,630,970

(*1) These companies were included in investment in associates because the

Group has significant influence over them by participating in the Board of Directors' meeting, the decision-making organization.
(*2) As of December 31, 2022, the application of the equity method has been suspended because the balance of the investment account is below "0".
(*3) As the separate financial statements as of December 31, 2022 could not be obtained, the most recent separate financial statements available from the closing date were used. The effect of significant transactions or events incurred between the end of the reporting period of the associate and that of the Group was reviewed and reflected.
(*4) As of December 31, 2022, the Group classified the investee as an associate investment stock because it could not exercise control over the investee.
(*5) After the corporate rehabilitation process ended, the Group reclassified the investments in associates from financial assets measured at FVOCI.
(*6) Since more than one investor must act together to direct related activities, the equity method was applied because the Group could not control the investee individually.

17-2 Condensed consolidated financial statements as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)	Dividends received
Bank of Jilin	99,356,297	92,088,037	7,268,260	4,248,227	409,505	362,211	–
Hana Equity Partners I, L.P.	321	5	316	2	(21)	(21)	120
Korea Credit Bureau	155,165	100,065	55,100	144,907	13,809	13,809	–
Templeton Hana Asset Management Co., Ltd.	18,839	4,824	14,015	8,129	2,483	2,483	198
CM International financing leases	1,660,081	1,638,839	21,242	27,978	(36,973)	(42,075)	–
Beijing Langzi Asset Management Co.,Ltd.	481,800	34,098	447,702	47,954	23,524	23,951	1,708
Somesevit Corporation	40,850	120,360	(79,510)	6,042	(3,572)	(3,572)	–
Midan City Development Co., Ltd.	662,631	686,733	(24,102)	–	–	–	–
Company K Startup Winwin Fund	9,899	3	9,896	25,224	18,769	18,571	2,240
BSK-6 Patent Technology Investment Association	14,525	785	13,740	1,180	876	2,579	–
Hana – KVIC Unicorn Fund of Funds	108,429	361	108,068	1,440	1,077	612	–
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	10,279	–	10,279	58	(166)	(166)	27
BIDV (*)	114,300,714	108,381,237	5,919,477	8,100,357	1,071,496	1,008,754	–
Hana Micro Finance., Ltd.	200,074	121,933	78,141	36,447	5,255	(3,354)	–
HORIZON PRIVATE EQUITY FUND	226,400	5,453	220,947	37	(13,684)	(13,684)	8,045
Hana Ventures No. 7 New Technology Business Investment Association	5,285	28	5,257	3	(113)	(113)	–
TossBank Corp.	23,398,698	22,432,155	966,543	755,905	(244,515)	(368,435)	–
Sinsa Station area Complex Developme nt PFV Co., Ltd.	233,652	229,606	4,046	148	(956)	(956)	–
Hana-Capstone AI Platform Fund	80,570	420	80,150	142	(1,502)	(1,502)	–
Taurus Cloud Fund	34,675	3	34,672	–	(171)	(171)	–
Cheongna Medipolis PFV Co., Ltd	15,373	138	15,235	–	(7,886)	(7,886)	–
NPX-Welcome Metaverse Contents fund	3,911	–	3,911	1	(89)	(89)	–
Hana Beyond Finance Fund	88,908	756	88,152	229	(1,848)	(1,848)	–
All Together Korea Fund 5	10,246	1	10,245	149	144	144	62
Hana-New Deal K-Growth fund	27,024	72	26,952	85	(21)	(21)	–
Defense Technology Innovation Private Investment Trust	3,002	5	2,997	2	(3)	(3)	–
SHINJIN INTERNATIONAL COPORATION	138	9,436	(9,298)	221	34	34	–
KG FASHION CO., LTD.	3,347	3,050	297	2,812	(262)	(262)	–
PT Sinarmas Hana Finance	113,883	85,812	28,071	17,664	2,496	2,496	–

(*) This is financial information that reflects Purchased Price Allocation (PPA) val uation and GAAP adjustments in the financial information of the Bank for Invest ment and Development of Vietnam (BIDV).

<December 31, 2021>

Classification	Assets	Liabilities	Equity	Operating income	Net income (loss)	Total comprehensive income (loss)	Dividends received
Bank of Jilin	88,184,828	81,116,728	7,068,100	3,702,700	371,737	426,308	-
Hana Equity Partners I, L.P	742	6	736	8	(1)	(1)	4,689
Korea Credit Bureau	113,859	21,284	92,575	127,751	20,486	20,486	90
Templeton Hana Asset Management Co., Ltd.	16,414	3,569	12,845	6,954	2,164	2,164	990
CM International financing leases	2,007,878	1,951,718	56,160	73,361	(56,735)	(51,738)	-
Beijing Langzi Asset Management Co.,Ltd.	474,244	26,676	447,568	28,444	32,066	32,366	1,344
Somesevit Corporation	44,567	120,510	(75,943)	4,557	(5,839)	(5,839)	-
Midan City Development Co., Ltd.	662,631	686,733	(24,102)	-	-	-	-
Company K Startup Winwin Fund	22,160	257	21,903	747	484	116	-
BSK-6 Patent Technology Investment Association	13,414	619	12,795	7	(303)	(303)	-
Hana - KVIC Unicorn Fund of Funds	79,960	179	79,781	59	(340)	(340)	-
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	10,545	-	10,545	109	(115)	(115)	27
BIDV (*)	92,956,813	87,629,602	5,327,211	6,348,533	800,354	810,114	6,262
Hana Micro Finance., Ltd.	253,452	171,957	81,495	63,461	1,984	(13,313)	-
HORIZON PRIVATE EQUITY FUND	292,739	2,743	289,996	-	(3,002)	(3,002)	-
Hana Ventures No. 7 New Technology Business Investment Association	5,370	-	5,370	1	(115)	(115)	-
TossBank Corp.	14,348,062	13,906,113	441,949	37,066	(81,653)	(77,900)	-
All Together Korea Fund 5	10,072	2	10,070	53	47	47	-
Sinsa Station area Complex Development PFV Co., Ltd.	215,351	210,345	5,006	30	6	6	-
Hana-Capstone AI Platform Fund	40,967	365	40,602	43	(448)	(448)	-
Hana-New Deal K-Growth fund	2,007	34	1,973	3	(28)	(28)	-
Taurus Cloud Fund	34,737	37	34,700	-	(37)	(37)	-
Cheongna Medipolis PFV Co., Ltd	23,297	176	23,121	-	(6,206)	(6,206)	-
NPX-Welcome Metaverse Contents fund	4,000	-	4,000	-	-	-	-
SHINJIN INTERNATIONAL COPORATION	155	9,612	(9,457)	354	(318)	(318)	-
Inhee.Co,Ltd	2,470	1,452	1,018	1,574	266	266	-
KG FASHION CO., LTD.	3,722	3,163	559	3,311	(357)	(357)	-
PT Sinarmas Hana Finance	91,908	65,574	26,334	12,471	233	233	-

(*) This is financial information that reflects Purchased Price Allocation (PPA) valuation and GAAP adjustments in the financial information of the Bank for Investment and Development of Vietnam (BIDV).

17-3 Changes in the investment in an associate and a joint venture for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	Beginning balance	Acquisition and others	Dividend	Book value before valuation	Equity method valuation			Others	Disposal	Ending balance
					Share of profit (loss)	Impairment of equity method	Changes in equity			
Bank of Jilin	853,878	–	–	853,878	49,900	–	(26,287)	–	–	877,491
Hana Equity Partners I, L.P	221	–	(120)	101	(6)	–	–	–	–	95
Korea Credit Bureau	8,876	–	–	8,876	(3,373)	–	–	–	–	5,503
Templeton Hana Asset Management Co., Ltd.	1,271	–	(198)	1,073	314	–	–	–	–	1,387
CM International financing leases	2,149	–	–	2,149	–	(520)	–	–	–	1,629
Beijing Langzi Asset Management Co.,Ltd	56,830	–	(1,708)	55,122	2,957	–	(1,274)	–	–	56,805
Somesevit Corporation	–	–	–	–	–	–	–	–	–	–
Midan City Development Co., Ltd.	–	–	–	–	–	–	–	–	–	–
Company K Startup Winwin Fund	5,214	–	(2,240)	2,974	4,278	–	(47)	–	(4,850)	2,355
BSK-6 Patent Technology Investment Association	2,559	–	–	2,559	175	–	341	–	(327)	2,748
Hana – KVIC Unicorn Fund of Funds	72,529	25,130	–	97,659	1,008	–	(423)	–	–	98,244
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	2,877	–	(27)	2,850	(45)	–	–	–	–	2,805
Bank for investment and Development of Vietnam (BIDV)	1,441,797	–	–	1,441,797	160,724	–	38,898	–	–	1,641,419
Hana Micro Finance., Ltd.	19,056	–	–	19,056	1,293	–	(2,150)	–	–	18,199
HORIZON PRIVATE EQUITY FUND	65,098	–	(8,045)	57,053	(3,217)	–	3,047	–	(7,392)	49,491
Hana Ventures No. 7 New Technology Business Investment Association	1,465	–	–	1,465	(31)	–	–	–	–	1,434
TossBank Corp.	49,125	70,000	–	119,125	(23,808)	–	(10,973)	3,222	–	87,566
Sinsa Station area Complex Development PFV Co., Ltd.	451	–	–	451	(86)	–	–	–	–	365
Hana-Capstone AI Platform Fund	14,836	15,000	–	29,836	(549)	–	–	–	–	29,287
Taurus Cloud Fund	9,391	77	–	9,468	(52)	–	–	–	–	9,416
Cheongna Medipolis PFV Co., Ltd	2,598	–	–	2,598	(886)	–	–	–	–	1,712
NPX-Welcome Metaverse Contents fund	1,000	–	–	1,000	(22)	–	–	–	–	978
Hana Beyond Finance Fund	–	24,000	–	24,000	(493)	–	–	–	–	23,507
All Together Korea Fund 5	10,070	62	(62)	10,070	175	–	–	–	–	10,245
Hana-New Deal K-Growth fund	1,778	22,500	–	24,278	(249)	–	–	–	–	24,029
Defense Technology Innovation Private Investment Trust	–	2,950	–	2,950	(2)	–	–	–	–	2,948
SHINJIN INTERNATIONAL COPORATION	–	–	–	–	–	–	–	–	–	–
KG FASHION CO., LTD.	–	–	–	–	–	–	–	–	–	–
PT Sinarmas Hana Finance	7,900	–	–	7,900	1,008	–	–	(278)	–	8,630
Total	2,630,969	159,719	(12,400)	2,778,288	189,013	(520)	1,132	2,944	(12,569)	2,958,288

<2021>

Classification	Beginning balance	Acquisition and others	Dividend	Book value before valuation	Equity method valuation			Others	Disposal	Ending balance
					Share of profit (loss)	Impairment of equity method	Changes in equity			
Bank of Jilin	758,816	–	–	758,816	4,657	–	94,111	–	(3,706)	853,878
Hana Equity Partners I, L.P	664	–	(4,689)	(4,025)	4,246	–	–	–	–	221
Korea Credit Bureau	7,697	–	(90)	7,607	1,269	–	–	–	–	8,876
Templeton Hana Asset Management Co., Ltd.	1,972	–	(990)	982	289	–	–	–	–	1,271
CM International financing leases	2,777	–	–	2,777	–	(627)	–	–	–	2,150
Beijing Langzi Asset Management Co.,Ltd.	48,308	–	(1,344)	46,964	4,186	–	5,680	–	–	56,830
Somesevit Corporation	–	–	–	–	–	–	–	–	–	–
Midan City Development Co., Ltd.	–	–	–	–	–	–	–	–	–	–
Company K Startup Winwin Fund	5,487	–	–	5,487	115	–	(88)	–	(300)	5,214
BSK-6 Patent Technology Investment Association	2,621	–	–	2,621	(62)	–	–	–	–	2,559
Hana – KVIC Unicorn Fund of Funds	55,813	18,000	–	73,813	(1,284)	–	–	–	–	72,529
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	2,937	–	(27)	2,910	(33)	–	–	–	–	2,877
Bank for Investment and Development of Vietnam (BIDV)	1,194,183	–	(6,262)	1,187,921	120,053	–	133,823	–	–	1,441,797
Hana Micro Finance., Ltd.	22,158	–	–	22,158	1,755	–	(3,595)	–	(1,262)	19,056
HORIZON PRIVATE EQUITY FUND	60,256	–	–	60,256	(538)	–	5,380	–	–	65,098
Hana Ventures No. 7 New Technology Business Investment Association	1,496	–	–	1,496	(31)	–	–	–	–	1,465
TossBank Corp.	7,500	47,500	–	55,000	(6,124)	–	249	–	–	49,125
All Together Korea Fund 5	10,023	–	–	10,023	47	–	–	–	–	10,070
Sinsa Station area Complex Development PFV Co., Ltd.	–	450	–	450	1	–	–	–	–	451
Hana-Capstone AI Platform Fund	–	15,000	–	15,000	(213)	–	–	–	49	14,836
Hana-New Deal K-Growth fund	–	1,800	–	1,800	(22)	–	–	–	–	1,778
Taurus Cloud Fund	–	9,401	–	9,401	(10)	–	–	–	–	9,391
Cheongna Medipolis PFV Co., Ltd	–	3,372	–	3,372	(699)	–	(75)	–	–	2,598
NPX-Welcome Metaverse Contents fund	–	1,000	–	1,000	–	–	–	–	–	1,000
SHINJIN INTERNATIONAL COPORATION	–	–	–	–	–	–	–	–	–	–
Inhee.Co,Ltd	–	–	–	–	–	–	–	–	–	–
KG FASHION CO., LTD.	–	–	–	–	–	–	–	–	–	–
PT Sinarmas Hana Finance	7,290	–	–	7,290	70	–	–	540	–	7,900
Koramco Professional Investment Type Real Estate No.73	1,714	–	–	1,714	–	–	–	–	(1,714)	–
Koramco Professional Investment Type Real Estate No.87	1,452	–	–	1,452	–	–	–	–	(1,452)	–
Our Crowd International Invest III	13,970	–	–	13,970	–	–	–	–	(13,970)	–
Hana Alternative Infra Special Investment Private Trust No.3-1	3,589	–	–	3,589	–	–	–	–	(3,589)	–
Hana Alternative Infra Special Investment Private Trust No.3-2	10,423	–	–	10,423	–	–	–	–	(10,423)	–
Total	2,221,146	96,523	(13,402)	2,304,267	127,672	(627)	235,485	540	(36,367)	2,630,970

17-4 The Group discontinued recognizing its losses in shares since the balance of investments in associates was "0" and the losses that are accumulated for the yea rs ended December 31, 2022 and 2021 are as follows
(Korean won in millions):

<December 31, 2022>

Company	Unrecognized amount of changes in equity	Accumulated unrecognized amount of changes in equity
Somesevit Corporation	(69)	(1,527)
Midan City Development Co., Ltd.	-	(523)
Total	(69)	(2,050)

<December 31, 2021>

Company	Unrecognized amount of changes in equity	Accumulated unrecognized amount of changes in equity
Somesevit Corporation	(112)	(1,458)
Midan City Development Co., Ltd.	-	(523)
Total	(112)	(1,981)

17-5 Details of adjustments from net assets of associates and a joint venture to carrying values of shares as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	Net assets	Ownership (%)	Share of net assets	Goodwill, etc.	Carrying value
Bank of Jilin	7,268,260	11.92	866,377	11,114	877,491
Hana Equity Partners I, L.P	316	29.97	95	-	95
Korea Credit Bureau	55,100	9.00	4,959	544	5,503
Templeton Hana Asset Management Co., Ltd.	14,015	9.90	1,387	-	1,387
CM International financing leases	21,242	25.00	5,311	(3,682)	1,629
Beijing Langzi Asset Management Co.,Ltd.	447,702	12.89	57,709	(904)	56,805
Somesevit Corporation	(79,510)	1.92	(1,527)	1,527	-
Midan City Development Co., Ltd.	(24,102)	2.17	(523)	523	-
Company K Startup Winwin Fund	9,896	23.81	2,355	-	2,355
BSK-6 Patent Technology Investment Association	13,740	20.00	2,748	-	2,748
Hana - KVIC Unicorn Fund of Funds	108,068	90.91	98,244	-	98,244
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	10,279	27.30	2,805	-	2,805
Bank for Investment and Development of Vietnam (BIDV)	5,919,477	15.00	887,922	753,497	1,641,419
Hana Micro Finance., Ltd.	78,141	25.00	19,535	(1,336)	18,199
HORIZON PRIVATE EQUITY FUND	220,947	22.40	49,491	-	49,491
Hana Ventures No. 7 New Technology Business Investment Association	5,257	27.27	1,434	-	1,434
TossBank Corp.	966,543	8.62	83,316	4,250	87,566
Sinsa Station area Complex Development PFV Co., Ltd.	4,046	9.00	365	-	365
Hana-Capstone AI Platform Fund	80,150	36.54	29,287	-	29,287
Taurus Cloud Fund	34,672	27.06	9,382	34	9,416
Cheongna Medipolis PFV Co., Ltd	15,235	11.24	1,712	-	1,712
NPX-Welcome Metaverse Contents fund	3,911	25.00	978	-	978
Hana Beyond Finance Fund	88,152	26.67	23,507	-	23,507
All Together Korea Fund 5	10,245	100.00	10,245	-	10,245
Hana-New Deal K-Growth fund	26,952	90.00	24,258	(229)	24,029
Defense Technology Innovation Private Investment Trust	2,997	98.33	2,948	-	2,948
SHINJIN INTERNATIONAL COPORATION	(9,298)	24.20	(2,250)	2,250	-
KG FASHION CO., LTD.	297	20.55	61	(61)	-
PT Sinarmas Hana Finance	28,071	30.00	8,421	209	8,630

<December 31, 2021>

Classification	Net assets	Ownership (%)	Share of net assets	Goodwill, etc.	Carrying value
Bank of Jilin	7,068,100	11.92	842,518	11,360	853,878
Hana Equity Partners I, L.P	736	29.97	221	-	221
Korea Credit Bureau	92,575	9.00	8,332	544	8,876
Templeton Hana Asset Management Co., Ltd.	12,845	9.90	1,271	-	1,271
CM International financing leases	56,160	25.00	14,040	(11,890)	2,150
Beijing Langzi Asset Management Co.,Ltd.	447,568	12.89	57,692	(862)	56,830
Somesevit Corporation	(75,943)	1.92	(1,458)	1,458	-
Midan City Development Co., Ltd.	(24,102)	2.17	(523)	523	-
Company K Startup Winwin Fund	21,903	23.81	5,214	-	5,214
BSK-6 Patent Technology Investment Association	12,795	20.00	2,559	-	2,559
Hana - KVIC Unicorn Fund of Funds	79,781	90.91	72,529	-	72,529
Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	10,545	27.30	2,877	-	2,877
Bank for Investment and Development of Vietnam (BIDV)	5,327,211	15.00	799,082	642,715	1,441,797
Hana Micro Finance., Ltd.	81,495	25.00	20,374	(1,318)	19,056
HORIZON PRIVATE EQUITY FUND	289,996	22.40	64,959	139	65,098
Hana Ventures No. 7 New Technology Business Investment Association	5,370	27.27	1,465	-	1,465
TossBank Corp.	441,949	10.00	44,195	4,930	49,125
All Together Korea Fund 5	10,070	100.00	10,070	-	10,070
Sinsa Station area Complex Development PFV Co., Ltd.	5,006	9.00	451	-	451
Hana-Capstone AI Platform Fund	40,602	36.54	14,836	-	14,836
Hana-New Deal K-Growth fund	1,973	90.00	1,776	2	1,778
Taurus Cloud Fund	34,700	27.06	9,391	-	9,391
Cheongna Medipolis PFV Co., Ltd	23,121	11.24	2,598	-	2,598
NPX-Welcome Metaverse Contents fund	4,000	25.00	1,000	-	1,000
SHINJIN INTERNATIONAL COPORATION	(9,457)	24.20	(2,289)	2,289	-
Inhee.Co,Ltd	1,018	21.84	222	(222)	-
KG FASHION CO., LTD.	559	20.55	115	(115)	-
PT Sinarmas Hana Finance	26,334	30.00	7,900	-	7,900

17-6 Details of investment shares in marketable associates and a joint venture as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Company	Market Price	Price per share (In Korean won)
Bank for Investment and Development of Vietnam (BIDV)	1,572,811	2,073

<December 31, 2021>

Company	Market Price	Price per share (In Korean won)
Bank for Investment and Development of Vietnam (BIDV)	1,466,651	1,933

(*) Bank for Investment and Development of Vietnam (BIDV) determined to pay dividends in December 2021. As a result, the number of shares of the Group increased from 603 million to 759 million shares.

17-7 There are no companies that the Group holds more than 20% of shares, but excluded from investments in associates as of December 31, 2022

Meanwhile, investment trusts whose significant influence on related activities is li mited by trust contracts are excluded from investment stocks in associates.

18. Property, plant and equipment

18-1 Property, plant and equipment as of December 31, 2022 and 2021 consist of the following (Korean won in millions):

<December 31, 2022>

Classification	Acquisition cost	Accumulated depreciation	Government grants	Accumulated Impairment loss	Book value
Land	880,392	-	-	(3,786)	876,606
Buildings	959,580	(299,508)	-	(10,215)	649,857
Leasehold improvements	324,237	(263,184)	-	-	61,053
Equipment and vehicles	827,523	(683,660)	(78)	-	143,785
Construction in progress	8,511	-	-	-	8,511
Others	31,258	-	-	-	31,258
Right-of-use assets - real estate	1,288,611	(653,559)	-	-	635,052
Right-of-use assets - equipment and vehicles	28,893	(13,700)	-	-	15,193
Right-of-use assets - others	5,560	(861)	-	-	4,699
Total	4,354,565	(1,914,472)	(78)	(14,001)	2,426,014

<December 31, 2021>

Classification	Acquisition cost	Accumulated depreciation	Government grants	Accumulated Impairment loss	Book value
Land	695,254	-	-	(3,831)	691,423
Buildings	782,017	(273,915)	-	(10,365)	497,737
Leasehold improvements	314,568	(253,601)	-	-	60,967
Equipment and vehicles	783,582	(647,773)	(86)	-	135,723
Construction in progress	9,772	-	-	-	9,772
Others	46,287	-	-	-	46,287
Right-of-use assets - real estate	1,049,080	(500,682)	-	-	548,398
Right-of-use assets - equipment and vehicles	26,821	(13,495)	-	-	13,326
Right-of-use assets - others	1,146	(338)	-	-	808
Total	3,708,527	(1,689,804)	(86)	(14,196)	2,004,441

18-2 Changes in Property, plant and equipment for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	Beginning balance	Acquisition	Disposal	Depreciation	Transfers	Impairment loss	Others	Ending balance
Land	691,423	-	(1,377)	-	186,630	-	(70)	876,606
Buildings	497,737	28,387	(1,486)	(32,452)	158,013	(12)	(330)	649,857
Leasehold improvements	60,967	21,616	(1,162)	(22,799)	2,142	-	289	61,053
Equipment and vehicles	135,809	76,872	(517)	(68,992)	858	-	(167)	143,863
Construction in progress	9,772	249,113	(261)	-	(249,649)	-	(464)	8,511
Others	46,287	-	(15,029)	-	-	-	-	31,258
Government grants	(86)	(44)	-	52	-	-	-	(78)
Right-of-use assets - real estate	548,398	291,957	(7,064)	(197,659)	-	-	(580)	635,052
Right-of-use assets - equipment and vehicles	13,326	10,159	(724)	(7,134)	-	-	(434)	15,193
Right-of-use assets - others	808	3,933	(62)	(1,038)	-	-	1,058	4,699
Total	2,004,441	681,993	(27,682)	(330,022)	97,994	(12)	(698)	2,426,014

<2021>

Classification	Beginning balance	Acquisition	Disposal	Depreciation	Transfers	Impairment loss	Others	Ending balance
Land	723,586	-	(6,272)	-	(24,084)	(1,852)	45	691,423
Buildings	533,926	14,431	(3,295)	(28,829)	(13,099)	(6,111)	714	497,737
Leasehold improvements	61,139	21,453	(1,151)	(21,746)	252	-	1,020	60,967
Equipment and vehicles	123,214	81,571	(1,119)	(69,598)	571	-	1,170	135,809
Construction in progress	7,207	217,492	(955)	-	(213,964)	-	(8)	9,772
Others	64,964	-	(18,677)	-	-	-	-	46,287
Government grants	(83)	(48)	-	45	-	-	-	(86)
Right-of-use assets - real estate	655,258	126,061	(46,011)	(198,620)	-	-	11,710	548,398
Right-of-use assets - equipment and vehicles	12,655	6,999	(759)	(6,742)	-	-	1,173	13,326
Right-of-use assets - others	146	-	(6)	(459)	-	-	1,127	808
Total	2,182,012	467,959	(78,245)	(325,949)	(250,324)	(7,963)	16,951	2,004,441

19. Investment properties

19-1 Details of investment properties as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Government grants	Book value
Land	457,439	-	(3,125)	-	454,314
Buildings	367,958	(153,237)	(1,225)	(2,868)	210,628
Total	825,397	(153,237)	(4,350)	(2,868)	664,942

<December 31, 2021>

Classification	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Government grants	Book value
Land	412,527	-	(5,469)	-	407,058
Buildings	528,190	(138,683)	(3,620)	(2,256)	383,631
Total	940,717	(138,683)	(9,089)	(2,256)	790,689

19-2 Changes in investment property for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	Beginning balance	Acquisition	Disposal	Depreciation	Transfer (*)	Ending balance
Land	407,058	-	(6,111)	-	53,367	454,314
Buildings	385,887	-	(7,690)	(13,340)	(151,361)	213,496
Government grants	(2,256)	(1,493)	-	881	-	(2,868)
Total	790,689	(1,493)	(13,801)	(12,459)	(97,994)	664,942

(*) The amount represents the change in the carrying amount of investment properties held by the Group due to the change in the ratio of lease occupancy.

<2021>

Classification	Beginning balance	Acquisition	Disposal	Depreciation	Transfer (*)	Impairment loss	Ending balance
Land	417,535	-	(34,886)	-	26,824	(2,415)	407,058
Buildings	200,440	-	(23,412)	(12,197)	223,500	(2,444)	385,887
Government grants	(1,977)	(849)	-	570	-	-	(2,256)
Total	615,998	(849)	(58,298)	(11,627)	250,324	(4,859)	790,689

(*) The amount represents the change in the carrying amount of investment properties held by the Group due to the change in the ratio of lease occupancy.

19-3 Details of valuation techniques for measuring investment property and inputs used in the measurement as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	Fair value(*)		Description of the valuation techniques	Inputs used in the fair value measurement
	December 31, 2022	December 31, 2021		
Land and Buildings	1,052,023	823,105	Appraised value of land, Estimates based on cost method	Appraised value of land, Refinancing cost

(*) The fair value of investment property is classified as Level 3 of fair value hierarchy as it reflects the most recent market transaction price, followed by individual third party transaction condition, and significant input factor, which is not predictable.

19-4 Rental income and operating expenses arising from the Group's investment properties for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	2022	2021
Rental income	9,608	8,485
Operating cost directly related to Investment properties that generate rental income	670	608

20. Intangible assets

20-1 Details of intangible assets as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Government grants	Book value
Goodwill	892	-	-	-	892
Industrial proprietary rights	2,588	(1,982)	-	-	606
Core deposits	5,265	(3,187)	-	-	2,078
Software	297,032	(214,775)	-	-	82,257
Systems development costs	1,081,185	(886,280)	-	(83)	194,822
Memberships	25,948	-	(2,933)	-	23,015
Others	273,367	(190,915)	(15)	-	82,437
Total	1,686,277	(1,297,139)	(2,948)	(83)	386,107

<December 31, 2021>

Classification	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Government grants	Book value
Goodwill	892	-	-	-	892
Industrial proprietary rights	2,183	(1,670)	-	-	513
Core deposits	4,925	(2,609)	-	-	2,316
Software	269,422	(188,166)	-	-	81,256
Systems development costs	994,705	(820,899)	-	(115)	173,691
Memberships	23,220	-	(2,771)	-	20,449
Others	240,285	(162,817)	(14)	-	77,454
Total	1,535,632	(1,176,161)	(2,785)	(115)	356,571

20-2 Changes in the carrying amount of intangible assets for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	Beginning balance	Acquisition	Disposal	Amortization	Impairment loss	Others	Ending balance
Goodwill	892	-	-	-	-	-	892
Industrial proprietary rights	513	398	-	(311)	-	6	606
Core deposits	2,316	-	-	(383)	-	145	2,078
Software	81,256	27,877	-	(26,844)	-	(32)	82,257
Systems development costs	173,806	87,655	-	(66,830)	-	274	194,905
Memberships	20,449	2,663	(15)	-	(220)	138	23,015
Others(*)	77,454	32,963	-	(28,232)	-	252	82,437
Government grants	(115)	-	-	32	-	-	(83)
Total	356,571	151,556	(15)	(122,568)	(220)	783	386,107

(*) Of the other intangible asset amortization costs, ₩26,977 million is included in other operating expenses.

<2021>

Classification	Beginning balance	Acquisition	Disposal	Amortization	Impairment loss	Others	Ending balance
Goodwill	892	-	-	-	-	-	892
Industrial proprietary rights	653	212	(70)	(276)	-	(6)	513
Core deposits	2,474	-	-	(339)	-	181	2,316
Software	62,552	42,331	(1,375)	(22,842)	-	590	81,256
Systems development costs	173,061	67,340	(2,155)	(64,719)	-	279	173,806
Memberships	19,323	1,666	(790)	-	-	250	20,449
Others(*)	88,864	15,140	(28)	(25,775)	(13)	(734)	77,454
Government grants	(103)	(41)	-	29	-	-	(115)
Total	347,716	126,648	(4,418)	(113,922)	(13)	560	356,571

(*) Of the other intangible asset amortization costs, ₩25,073 million is included in other operating expenses.

21. Non-current assets held for sale

21-1 Details of non-current assets held for sale as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Acquisition cost (*)	36,423	42,130
Accumulated impairment loss	-	-
Book value	36,423	42,130
Net fair value	36,423	42,130

(*) Acquisition cost is presented as net of accumulated depreciation before classification as non-current assets held for sale.

Non-current assets held-for-sale are composed of 132 collaterals acquired for the purpose of repayment of loans and one other of which the sale is currently in progress as of December 31, 2022.

22. Other assets and merchant banking account assets

22-1 Details of other assets as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Guarantee deposits paid	632,878	692,509
Accounts receivable	6,615,170	8,155,868
Accrued income	1,574,847	874,907
Prepaid expenses	113,074	95,456
Suspense payments	269,386	231,035
Expenditures	1,873	2,018
Deposit money to court	8,783	8,706
Domestic exchange settlement debit	4,223,350	3,776,627
Other miscellaneous assets	78,015	36,845
Allowance for other assets	(11,421)	(9,241)
Total	13,505,955	13,864,730

22-2 Changes in the allowance for other assets for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	2022	2021
Beginning balance	9,241	8,056
Write-offs	(860)	(828)
Provision for allowance for possible losses	6,280	1,938
Sales of non-performing loans, etc.	(163)	(278)
Interest income on impaired assets	3	22
Collection of loans written off in prior year	1,025	2,684
Exchange rate fluctuation and others	(4,105)	(2,353)
Ending balance	11,421	9,241

22-3 Details of merchant banking account assets as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification		December 31, 2022	December 31, 2021
On-balance-sheet items:			
Merchant banking account-loans at FVTPL		198,790	758,436
Merchant banking account-debt securities at FVTPL		3,415,666	3,334,493
CMA assets	Debt securities at FVTPL	1,016,905	649,010
Total		4,631,361	4,741,939
Off-balance-sheet items:			
Commitment		620,000	790,000

23. Deposits

23-1 Details of deposit liabilities as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Demand deposits		
Demand deposits in Korean won	14,732,552	15,666,500
Demand deposits in foreign currency	40,871,143	35,039,951
Subtotal	55,603,695	50,706,451
Time and savings deposits		
Time and savings deposits in Korean won (*)	266,881,680	247,474,068
Time and savings deposits in foreign currency	24,320,573	16,563,802
Subtotal	291,202,253	264,037,870
Certificate of deposits	13,052,533	6,380,979
Total	359,858,481	321,125,300

(*) Time and savings deposits in Korean won include savings deposits (₩39,861,040 million as of December 31, 2022, and ₩50,710,876 as of December 31, 2021) and corporate savings deposits (₩57,322,227 as of December 31, 2022, and ₩57,639,719 as of December 31, 2021).

23-2 Allocations of deposit liabilities by customer as of December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Individuals	112,111,078	102,168,279
Corporations	129,975,988	111,932,043
Other banks	21,293,082	17,900,829
Public institutions	16,398,077	13,265,257
Other financial institutions	44,929,310	49,409,660
Government	8,206,272	5,924,293
Non-profit corporations	13,812,098	12,346,117

Classification	December 31, 2022	December 31, 2021
Foreign organizations	3,049,951	3,130,833
Others	10,082,625	5,047,989
Total	359,858,481	321,125,300

24. Financial liabilities at FVTPL

24-1 Details of financial liabilities at FVTPL as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Securities borrowed	323,661	143,044
Derivative liabilities held for trading	10,742,577	3,849,463
Total	11,066,238	3,992,507

24-2 Details of financial liabilities designated at FVTPL as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Deposits	162,069	195,600

Financial liabilities are at FVTPL in order to eliminate or significantly reduce a measurement or recognition inconsistency.

24-3 Difference between the book value and maturity amount of the financial liabilities designated at FVTPL as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Book value	162,069	195,600
Repayment amount at maturity	210,000	210,000
Difference	(47,931)	(14,400)

25. Borrowings

Details of Borrowings as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	Lenders	Annual interest rate (%)	December 31, 2022	December 31, 2021
Borrowings in Korean won				
BOK borrowings	BOK	0.25~1.75	5,085,245	4,473,504
Government borrowings	Korea Development Bank, etc.	0.50~5.61	2,061,794	1,932,544
Other borrowings	Korea Energy Management Corporation, etc.	0.00~3.43	3,584,732	3,479,514
Subtotal			10,731,771	9,885,562
Borrowings denominated in foreign currencies				
Bank overdrafts	Foreign banks, etc.	0.01~12.50	380,662	313,417
Other borrowings	OCBC, etc.	0.66~8.50	9,664,760	5,129,592
Subtotal			10,045,422	5,443,009
Call money				
Call money in foreign currencies	Shinhan Bank, etc	0.09~5.60	970,661	1,091,728
Bonds sold under repurchase agreements				
Bonds sold under repurchase agreements in Korean won	General customers	0.00	30	30
Bonds sold under repurchase agreements in foreign currencies	BBVA, Citi	5.55~5.60	487,702	1,078,541
Subtotal			487,732	1,078,571
Others				
Bills sold	General customers	0.00~4.39	26,063	25,610
Deferred origination costs			(5,052)	-
Total			22,256,597	17,524,480

26. Debentures

Details of debentures as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	Lenders	Annual interest rate (%)	December 31, 2022	December 31, 2021
Debentures in Korean won				
Debentures	Institutions	0.69~4.20	16,330,000	16,450,000
Subordinated debentures	Institutions, etc.	2.14~4.76	4,071,139	5,275,139
Net gain (loss) on fair value hedges (current period)			(26,241)	(6,345)
Net gain (loss) on fair value hedges (prior to previous fiscal year)			(10,497)	(4,152)
Less present value discount			(5,804)	(11,488)
Subtotal			20,358,597	21,703,154
Debentures in foreign currencies				
Debentures	Institutions	0.01~5.55	5,115,126	5,009,893
Subordinated debentures	Institutions, etc.	4.25~9.95	1,042,641	977,378
Net loss (gain) on fair value hedges (current period)			(290,369)	(93,621)
Net gain (loss) on fair value hedges (prior to previous fiscal year)			15,583	109,935
Less present value discount			(8,239)	(6,982)
Subtotal			5,874,742	5,996,603
Total			26,233,339	27,699,757

27. Net defined benefit liabilities (assets)

27-1 Details of net defined benefit liabilities (assets)

Details of net defined benefit liabilities (assets) as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Present value of defined benefit obligation	1,996,586	2,027,138
Fair value of plan assets	(2,064,640)	(1,850,061)
Net defined benefit liabilities	9,106	177,077
Net defined benefit assets	77,160	-

27-2 Defined benefit obligation

27-2-1 Changes in present value of defined benefit obligation

Changes in present value of defined benefit obligation for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Beginning balance	2,027,138	2,085,176
Current service cost	138,218	151,562
Interest cost	49,398	39,390
Remeasurements	(19,141)	(73,053)
Benefits paid	(198,401)	(177,187)
Changes due to transference between affiliates	(765)	887
Others	139	363
Ending Balance	1,996,586	2,027,138

27-2-2 Total costs recognized in accordance to defined benefit plans

Total costs incurred in relation to defined benefit pension plans for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Current service cost	138,218	151,562
Interest cost	49,398	39,390
Interest income on plan assets	(43,270)	(32,432)
Total	144,346	158,520

27-2-3 Weighted average duration of defined benefit obligation as of December 31, 2022 and 2021, is 7.66 years and 10.05 years, respectively.

27-3 Actuarial assumptions

27-3-1 Principal assumptions for actuarial valuation method as of December 31, 2022 and 2021, are as follows:

<December 31, 2022>

Classification	Rate (%)	Content
Demographic assumptions		
Death rate	0.003~0.063	Korea Insurance Development Institute
Retirement rate	6.10	-
Financial assumptions		
Wage growth rate	5.80	Average of past 5 years
Discounting rate	5.15	Return rate of AAA corporate bond

<December 31, 2021>

Classification	Rate (%)	Content
Demographic assumptions		
Death rate	0.003~0.063	Korea Insurance Development Institute
Retirement rate	4.60	-
Financial assumptions		
Wage growth rate	5.80	Average of past 5 years
Discounting rate	2.55	Return rate of AAA corporate bond

27-3-2 Present values of defined benefit obligations based on changes in the principal actuarial assumptions as of December 31, 2022 and 2021, are as follows (Korean won in millions):

<December 31, 2022>

Classification	Present value of defined benefit obligations	Increase by 1%	Decrease by 1%
Discounting rate	1,996,586	1,837,975	2,124,835
Wage growth rate	1,996,586	2,127,792	1,833,138

<December 31, 2021>

Classification	Present value of defined benefit obligations	Increase by 1%	Decrease by 1%
Discounting rate	2,027,138	1,814,982	2,206,338
Wage growth rate	2,027,138	2,204,679	1,812,918

27-4 Plan assets

27-4-1 Changes in the fair value of plan assets plans for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Beginning balance	1,850,061	1,796,773
Employer contributions	308,653	135,788
Interest income on plan assets	43,270	32,432
Remeasurements of the net defined benefit liabilities	(10,300)	(8,388)
Benefit paid	(126,204)	(107,288)
Changes due to transference between affiliates	(840)	744
Ending balance	2,064,640	1,850,061

27-4-2 Details of plan assets

Details of plan assets as of December 31, 2022 and 2021, are as follows (Korean won in millions):

<December 31, 2022>

Classification	Active market existing	Active market not existing	Total
Time deposits	-	2,060,339	2,060,339
Others	-	4,301	4,301
Total	-	2,064,640	2,064,640

<December 31, 2021>

Classification	Active market existing	Active market not existing	Total
Time deposits	-	1,735,131	1,735,131
Others	-	114,930	114,930
Total	-	1,850,061	1,850,061

27-4-3 The Group expects to contribute ₩122,586 million in next year, in relation to the defined benefit plans.

27-5 Remeasurements of the net defined benefit liabilities

Remeasurements of the net defined benefit liabilities as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Actuarial gains and losses		
Effects on changing financial assumptions	425,234	94,686
Effects on changing demographic assumptions	(337,902)	-
Others	(68,191)	(20,872)
Subtotal	19,141	73,814
Return on plan assets		
Actual return on plan assets	32,971	24,044
Amount included in net interest of net defined benefit liabilities	(43,271)	(32,432)
Subtotal	(10,300)	(8,388)
Total	8,843	65,426

28. Contingent liabilities, agreements and provisions

28-1 Details of provisions as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Provision for payment guarantees:		
Financial guarantee contracts (*)	449	147
Non-financial guarantee contracts	81,450	34,887
Bills endorsed	13	15
Subtotal	81,912	35,049
Provision for unused commitments	56,480	61,879
Other provisions:		
Provision for restoration	51,596	54,894
Provision for lawsuits	43,215	77,734
Others	331,775	289,408
Subtotal	426,586	422,036
Total	564,978	518,964

(*) The Group recognizes the amount exceeding the unamortized amount of the initial fair value at subsequent measurement of the financial guarantee contracts as provisions for payment guarantees. The Group recognizes the unamortized amount as financial guarantee contract liabilities in the amount of ₩14,843 million and ₩12,047 million as of December 31, 2022 and 2021, respectively.

28-2 Changes in provision for unused commitments for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	Unused commitments			Total
	12-month expected credit loss	Lifetime expected credit losses		
		Non-credit-impaired loan	Credit-impaired loan	
Beginning balance	41,221	19,270	1,388	61,879
Transfer to 12-month expected credit loss	1,488	(1,463)	(25)	-
Transfer to non-credit-impaired loan	(860)	869	(9)	-
Transfer to credit-impaired loan	(10)	(10)	20	-
Provision for (reversal of) (*)	(4,266)	324	595	(3,347)
Changes in exchange rates	(2,169)	117	-	(2,052)
Ending balance	35,404	19,107	1,969	56,480

(*) As of December 31, 2022, in order to expand loss absorption capacity in growing economic uncertainty worldwide, the bank has accumulated an additional ₩186 million won in allowances for financial support interest and deferred repayment loans for small and medium-sized companies and small business owners affected by COVID-19. The additional allowances include ₩0.15 million in impact of Stage 2 classification of principal and interest deferred borrowers.

<2021>

Classification	Unused commitments			Total
	12-month expected credit loss	Lifetime expected credit losses		
		Non-credit-impaired loan	Credit-impaired loan	
Beginning balance	48,900	24,300	1,522	74,722
Transfer to 12-month expected credit loss	2,135	(1,400)	(735)	-
Transfer to non-credit-impaired loan	(1,436)	1,493	(57)	-
Transfer to credit-impaired loan	(12)	(12)	24	-
Provision (reversal of)	(8,473)	(5,183)	633	(13,023)
Changes in exchange rates	107	72	1	180
Ending balance	41,221	19,270	1,388	61,879

28-3 Changes in provision for financial guarantee contracts for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

<2022>

Classification	Financial guarantee contracts			Total
	12-month expected credit loss	Lifetime expected credit losses		
		Non-credit-impaired loan	Credit-impaired loan	
Beginning balance	133	14	-	147
Transfer to 12-month expected credit loss	1	(1)	-	-
Transfer to non-credit-impaired loan	(11)	11	-	-
Transfer to credit-impaired loan	-	-	-	-
Provision (*)	46	253	-	299
Changes in exchange rates	3	-	-	3
Ending balance	172	277	-	449

(*) As of December 31, 2022, in order to expand loss absorption capacity in growing economic uncertainty worldwide, the Bank has accumulated an additional ₩198 million won in allowances for financial support interest and deferred repayment loans for small and medium-sized companies and small business owners affected by COVID-19.

<2021>

Classification	Financial guarantee contracts			Total
	12-month expected credit loss	Lifetime expected credit losses		
		Non-credit-impaired loan	Credit-impaired loan	
Beginning balance	194	13	-	207
Transfer to 12-month expected credit loss	1	(1)	-	-
Transfer to non-credit-impaired loan	(1)	1	-	-
Transfer to credit-impaired loan	-	-	-	-
Reversal	(79)	-	-	(79)
Changes in exchange rates	18	1	-	19
Ending balance	133	14	-	147

28-4 Changes in other provisions for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

<2022>

Classification	Beginning balance	Provision (reversal of)	Used	Others	Ending balance
Non-financial payment guarantees	34,902	44,623	-	1,938	81,463
Other provisions					
Provision for restoration	54,894	(1,314)	(2,960)	976	51,596
Provision for lawsuits	77,734	(19,236)	(15,954)	671	43,215
Others	289,408	64,238	(21,428)	(443)	331,775
Subtotal	422,036	43,688	(40,342)	1,204	426,586
Total	456,938	88,311	(40,342)	3,142	508,049

<2021>

Classification	Beginning balance	Provision (reversal of)	Used	Others	Ending balance
Non-financial payment guarantees	32,540	(1,025)	-	3,387	34,902
Other provisions					
Provision for restoration	67,134	477	(15,821)	3,104	54,894
Provision for lawsuits	59,203	18,600	(449)	380	77,734
Others	249,193	50,558	(10,427)	84	289,408
Subtotal	375,530	69,635	(26,697)	3,568	422,036
Total	408,070	68,610	(26,697)	6,955	456,938

28-5 Details of financial and payment guarantees as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	Guarantee balance	
	December 31, 2022	December 31, 2021
Financial guarantee contracts in Korean won:		
Payment guarantees for issuance of debentures	94,500	71,000
Payment guarantees for collateral for loans	43,130	45,253
Payment guarantees for purchasing loans	307,369	249,240
Subtotal	444,999	365,493
Financial guarantees in foreign currencies:		
Local financial payment guarantees	2,725	2,549
Confirmed payment guarantees in Korean won	2,446,127	1,857,587
Confirmed payment guarantees in foreign currencies:		
Acquisition of letter of credit	2,213,888	2,189,997
Acceptance on letter of guarantees	101,659	91,942
Others	10,215,065	7,505,690
Subtotal	12,530,612	9,787,629
Contingent payment guarantees:		
Letters of credit	4,080,758	4,114,571
Others	1,575,953	730,839
Subtotal	5,656,711	4,845,410
Bills endorsed	10,707	12,082
Total	21,091,881	16,870,750

28-6 Commitments

Details of unused commitments as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	Unused commitments balance	
	December 31, 2022	December 31, 2021
Commitments on loans in Korean won	60,462,709	57,398,397
Commitments on loans in foreign currencies	28,960,160	23,829,959
Commitments on credit lines on asset-backed securities (*)	85,200	247,596
Commitments on purchase of securities (*)	11,875,336	9,342,981
Commitments on discounted notes from Merchant Banking	620,000	790,000
Total	102,003,405	91,608,933

(*) The financial guarantee contracts for the year ended December 31, 2022 and 2021 amount to ₩10,565,130 million and ₩8,784,258 million, respectively.

28-7 Lawsuits

As of December 31, 2022, the Group is involved in 240 lawsuits as a plaintiff and 159 lawsuits as a defendant. The aggregate amounts of claims as plaintiff and defendant are ₩294,385 million and ₩307,288 million, respectively. The Group recognizes provisions in consideration of the likelihood of winning a lawsuit.
The Group's major lawsuits in progress as a defendant are summarized as follows (Korean wonin millions):

Plaintiff	Amount	Status of lawsuit		Content
		First trial	On appeal	
F********Bankruptcy administrator	42,573	Won	In progress (Second trial)	Return of an illicit gain
****Securities Co., Ltd.	37,136	Won	In progress (Second trial)	Compensation for damages
****Investments Co., Ltd.	16,798	Won	Partial won (second trial) In progress (Third trial)	Compensation for damages
****Cooperation Co., Ltd.	15,000	In progress	-	Return of an illicit gain
****Securities Co., Ltd.	10,000	In progress	-	Compensation for damages

28-8 Due to the spread of COVID-19, major economic factors are expected to worsen due to the domestic and international economic slowdown in domestic and ripple effects of financial instability. Considering the possibility of entering a global recession caused by the global spread of COVID-19, the economic forecast scenario used to estimate expected credit losses for financial instruments has been reset. As of December 31, 2022, the Group has remeasured forward-looking information by using macro variables and estimated default rates based on the scenario. The Group also set aside additional provisions through the inspection and credit rating adjustment of COVID-19 risk industries and collected additional provisions by conservatively evaluating individual cash flows . The Group manages exposure to high-risk industries and high-risk affiliates/companies, and preemptively responds to future credit risk risks by classifying borrowers of deferred interest payments of COVID-19 as targets for full-term credit losses.

In addition, the key assumptions used by financial instruments were based on fair values calculated based on the estimated assumptions taking into account the impact of COVID-19 as of the end of the current year. The Group has prepared the consolidated financial statements by reasonably estimating the impact of COVID-19 on the consolidated financial statements for the reporting period ended on December 31, 2022. However, the ultimate impact of the future spread of COVID-19 on the consolidated financial position, financial performance and cash flows of the Group cannot be predicted.

28-9 In connection with the Ukraine crisis in February 2022, international sanctions against the Russian Federation of the international community could affect companies and individuals subject to sanctions, as well as companies, industries and economies that do business directly or indirectly with Russia. This Case is non-adjusting events after the reporting period. As of the settlement date, the Bank expects to have a financial impact on the business of KEB RUS LLC, a subsidiary of Russia, but cannot reasonably predict the estimate.

29. Other liabilities and merchant banking account liabilities

29-1 Details of other liabilities as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Accounts payable from trust accounts	7,895,817	5,874,089
Foreign exchange settlement credits	937,940	585,628
Domestic exchange settlement credits	5,503,827	6,172,698
Accounts payables	6,936,315	8,426,296
Accrued expenses	2,758,991	1,358,856
Unearned revenue	127,583	61,075
Deferred revenue	-	7
Deposits for letter of guarantees and others	1,877,691	500,949
Suspense payables	75,021	54,680
Taxes withheld	129,209	71,441
Security subscriptions	281,894	74,371
Accounts for agency businesses	190,874	352,697
Liability incurred by agency relationship	2,869,079	2,332,083
Lease liabilities	667,779	561,562
Financial guarantee contracts	14,843	12,047
Other liabilities	13,176	27,354
Total	30,280,039	26,465,833

29-2 Details of merchant banking account liabilities as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Merchant banking account deposits	3,666,199	2,908,071
Other merchant banking account liabilities (*)	1,074	209
Total	3,667,273	2,908,280

(*) Including accrued expenses

29-3 Details of lease liabilities as of December 31, 2022 and 2021, are as follows (Korean won in millions):

<December 31, 2022>

Classification	Face amount	Present value discount	Book value
Real estate for business purpose	731,006	(83,957)	647,049
Equipment and vehicles	16,542	(709)	15,833
Other assets	5,136	(239)	4,897
Total	752,684	(84,905)	667,779

<December 31, 2021>

Classification	Face amount	Present value discount	Book value
Real estate for business purpose	609,022	(61,228)	547,794
Equipment and vehicles	13,667	(333)	13,334
Other assets	445	(11)	434
Total	623,134	(61,572)	561,562

29-4 Changes in lease liabilities for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	Beginning balance	Increase	Depreciation	Paid (*)	Others	Ending balance
Real estate for business purpose	547,794	296,367	15,440	(206,537)	(6,015)	647,049
Equipment and vehicles	13,334	10,077	311	(7,768)	(121)	15,833
Other assets	434	5,444	106	(928)	(159)	4,897
Total	561,562	311,888	15,857	(215,233)	(6,295)	667,779

(*) Total cash outflow related to lease liabilities for the year ended December 31, 2022, is ₩215,137 million.

<2021>

Classification	Beginning balance	Increase	Depreciation	Paid (*)	Others	Ending balance
Real estate for business purpose	660,338	115,761	11,033	(211,701)	(27,637)	547,794
Equipment and vehicles	12,993	6,890	217	(8,437)	1,671	13,334
Other assets	150	–	21	(455)	718	434
Total	673,481	122,651	11,271	(220,593)	(25,248)	561,562

(*) Total cash outflows related to lease liabilities for the year ended December 31, 2021, is ₩220,521 million.

29-5 Details of contractual cash flows before discounting the lease liabilities by remaining maturity as of December 31, 2022 and 2021, are as follows (Korean won in millions):

<December 31, 2022>

Classification	Less than 1 month	1 – 3 months	3 – 6 months	6 months – 1 year	1 year – 5 years	More than 5 years	Total
Real estate for business purpose	17,783	33,018	48,965	91,886	315,184	224,170	731,006
Equipment and vehicles	643	1,230	1,708	3,144	9,817	–	16,542
Other assets	184	235	418	852	3,447	–	5,136
Total	18,610	34,483	51,091	95,882	328,448	224,170	752,684

<December 31, 2021>

Classification	Less than 1 month	1 – 3 months	3 – 6 months	6 months – 1 year	1 year – 5 years	More than 5 years	Total
Real estate for business purpose	18,867	35,392	47,990	88,674	193,922	224,177	609,022
Equipment and vehicles	670	1,172	1,374	2,472	7,979	–	13,667
Other assets	77	21	99	119	129	–	445
Total	19,614	36,585	49,463	91,265	202,030	224,177	623,134

30. Capital stock and other paid-in capital

30-1 Details of capital stock as of December 31, 2022 and 2021, are as follows (Korean won in millions and shares):

Classification	December 31, 2022	December 31, 2021
Number of shares authorized	2,000,000,000	2,000,000,000
Par value per share (In Korean won)	₩5,000	₩5,000
Number of shares issued	1,071,915,717	1,071,915,717
Common stock	5,359,578	5,359,578

30-2 Details of capital surplus and capital adjustments as of December 31, 2022 and 2021, are as follows (Korea won in millions):

Classification	December 31, 2022	December 31, 2021
Capital surplus (*)	6,159,820	9,653,868
Capital adjustments		
Stock option	17	2
Others	(37,703)	(38,281)
Subtotal	(37,686)	(38,279)
Total	6,122,134	9,615,589

(*) As of December 31, 2022, the Group capital surplus includes the amount recognized at the time of the business combination undercommon control.
In addition, if the total amount of capital reserve (capital surplus) and legal reserve in Article 461-2 of the Commercial Act exceeds 1.5 times the capital share, the capital reserve (capital surplus) and legal reserve can be reduced within the range of the exceeding amount according to the resolution of the general meeting. Consequently, the Bank, through the resolution of the general meeting on December 14, 2022, reduced ₩ 3,500,000 million of capital surplus and transferred it to retained earnings.

30-3 Details of hybrid securites as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	Issuance date	Expiry date	Annual interest rate (%)	December 31, 2022	December 31, 2021
Hybrid securities in Korean won	2013-10-25	2043-10-25	5.45	179,737	179,737
Hybrid securities in foreign currencies	2021-10-19	-	3.50	353,738	353,738
Total				533,475	533,475

The Group can repay the above hybrid securities early after five or 10 years after the issurance date, and can extend the maturity under the same terms on the expiry date.

31. Accumulated other comprehensive income (loss)

Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

<2022>

Classification	Beginning balance	Increase (decrease) (excluding reclassification and transfer of retained earnings)	Transfer of retained earnings	Changes in equity in subsidiaries	Reclassification (*)	Tax effects	Ending balance
Gain (loss) on valuation of financial assets at FVOCI	(387,864)	(840,352)	3,692	(53)	(8,956)	214,886	(1,018,647)
Changes in equity of investments in associates	73,448	1,132	-	-	-	816	75,396
Gain (loss) on valuation of net investment hedges of foreign operations	(29,294)	(28,315)	-	-	-	7,787	(49,822)
Exchange differences on translation of foreign operations	(89,441)	7,555	-	97	-	(2,397)	(84,186)
Gain (loss) on valuation of fair value hedges	(13,123)	(16,360)	-	-	-	4,499	(24,984)
Remeasurement of defined benefit plans	(469,703)	8,860	-	-	-	(2,447)	(463,290)
Total	(915,977)	(867,480)	3,692	44	(8,956)	223,144	(1,565,533)

(*) Loss on valuation of financial assets at FVOCI and changes in equity of investments in associates recognized as accumulated other comprehensive income (loss) is reclassified due to disposal of financial assets at FVOCI.

<2021>

Classification	Beginning balance	Increase (decrease) (excluding reclassification and transfer of retained earnings)	Transfer of retained earnings	Reclassification (*)	Tax effects	Ending balance
Gain (loss) on valuation of financial assets at FVOCI	(46,436)	(320,675)	(51,211)	(101,306)	131,764	(387,864)
Changes in equity of investments in associates	(97,765)	236,155	-	-	(64,942)	73,448
Gain (loss) on valuation of net investment hedges of foreign operations	11,494	(56,259)	-	-	15,471	(29,294)
Exchange differences on translation of foreign operations	(353,390)	282,421	-	-	(18,472)	(89,441)
Gain (loss) on valuation of fair value hedges	1,015	(19,500)	-	-	5,362	(13,123)
Remeasurement of defined benefit plans	(517,110)	65,190	-	-	(17,783)	(469,703)
Total	(1,002,192)	187,332	(51,211)	(101,306)	51,400	(915,977)

(*) Loss on valuation of financial assets at FVOCI and changes in equity of investments in associates recognized as accumulated other comprehensive income (loss) is reclassified due to disposal of financial assets at FVOCI.

32. Retained earnings

32-1 Details of retained earnings as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Legal reserve		
Earned surplus reserve (*1)	2,050,800	1,812,700
Voluntary reserve		
Revaluation reserves on property, plant and equipment (*2)	203,998	211,060
Other reserves (*3)	87,276	174,641
Regulatory reserve for bad debts (*4)	2,617,149	2,306,671
Other voluntary reserves	5,450,200	5,432,681
Subtotal	8,358,623	8,125,053
Unappropriated retained earnings	8,826,892	3,959,564
Total	19,236,315	13,897,317

(*1) Article 40 of the Banking Law of the Republic of Korea requires the Group to appropriate at least 10% of net income after income tax to legal reserve in every time to pay dividends, until such reserve equals 100% of its paid-in capital.

(*2) The Group records gains from revaluation of property, plant and equipment previously recognized as other comprehensive income to the voluntary reserve, as it applies the revaluation amount as deemed cost at the first-time adoption of K-IFRS. The reserve is recognized in distributable retained earnings when the relevant property, plant and equipment are disposed.
(*3) Relevant Japanese regulations require the Group's overseas branches located in Japan to appropriate a minimum of 10% of net income for the period as a legal reserve, until the reserve equals ￥2,000 million. This reserve is restricted to be used upon liquidation of the Japanese branches. Chennai, Panama , Singapore, Hong Kong, Hanoi and Ho Chi Minh branches' statutory reserves are included in other reserves in accordance with India, Panama, Singapore and Vietnam'sregulations.
(*4) The Group has provided allowances for possible loan losses in accordance with K-IFRS. The difference in this amount and the provision for possible loan and other asset losses accumulated in accordance with the minimum accumulation ratio required by FSS is reserved as regulatory reserve for bad debts.

32-2 Changes in appropriated retained earnings for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Beginning balance	13,897,317	12,414,342
Net income	3,095,845	2,570,361
Dividends	(1,230,400)	(1,114,700)
Dividends on hybrid equity securities	(23,770)	(9,814)
Reclassification of valuation gain on equity securities at FVOCI upon derecognition	(2,677)	37,128
Capital surplus income	3,500,000	-
Ending balance	19,236,315	13,897,317

32-3 Dividends

Details of calculation on common stock dividends for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions and shares in units):

Classification	2022(*1)	2021
Number of shares	1,071,915,717	1,071,915,717
Par value per share (In Korean won)	₩5,000	₩5,000
Par dividend ratio	27.05%	19.78%
Dividend per share (In Korean won)	₩1,352.72	₩989.25
Dividends	1,450,000	1,060,400
Net income (*2)	3,095,845	2,570,361
Dividend pay-out ratio based on net income	46.84%	41.25%
Adjusted income after deducting provisions for bad debt reserve (*2)	3,119,771	2,282,608
Dividends pay-out ratio based on adjusted income after deducting provisions for bad debt	46.48%	46.46%

(*1) Dividends for 2022 will be submitted to the general board of directors meeting scheduled for March 23, 2023.

(*2) Adjusted income after deducting provisions for bad debt reserve is based on the controlling company's shares.

33. Regulatory reserve for bad debts

Regulatory reserve for bad debt is calculated and disclosed in accordance with Article 29, Section 1 and 2 of Regulation on Supervision of Banking Business of the Republic of Korea.

33-1 Details of regulatory reserve for bad debts as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Beginning balance	2,714,034	2,426,281
Planned provision for (reversal of) bad debts	(23,926)	287,753
Ending balance	2,690,108	2,714,034

33-2 Provisions for (Reversal of) bad debt reserve and income adjusted for deductions of provisions for bad debt for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Net income attributable to equity holders of the parent company before deducting provisions for bad debt	3,095,845	2,570,361
Provision for (Reversal of) bad debt reserve	23,926	(287,753)
Adjusted income after deducting provisions for bad debt	3,119,771	2,282,608
Basic EPS adjusted after reflecting reserve for bad debt (*1) (In Korean won)	₩2,888	₩2,120
Diluted EPS adjusted after reflecting reserve for bad debt (*2) (In Korean won)	₩2,888	₩2,120

(*1) The dividend on hybrid equity securities in the amount of ₩23,770 million and ₩9,814 million for the years ended December 31, 2022 and 2021, respectively, was deducted from the adjusted income after reflecting the bad debt reserve for the calculation of earnings per share after reflecting reserve for bad debt for each period.

(*2) Since the Bank does not have dilutive potential ordinary stock,basic EPS is the same as diluted earnings per share.

34. Operating income and operating expenses

34-1 Operating income for the years ended December 31, 2022 and 2021, is as follows (Korean won in millions):

Classification	2022	2021
Interest income	13,347,231	8,786,664
Fees and commission income	874,721	837,656
Gains on financial instruments at FVTPL	31,421,014	15,513,403
Gains on fair value hedging derivative instruments	397,349	125,097
Gains on financial instruments at FVOCI	10,551	85,575
Gains on financial instruments at amortized cost	4	20
Changes in credit risk loss for financial instruments	603	194
Other operating income	7,615,689	4,791,160
Total	53,667,162	30,139,769

34-2 Operating expenses for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Interest expenses	5,738,554	2,636,067
Fees and commission expenses	281,109	284,862
Loss on financial instruments at FVTPL	31,296,313	14,964,836
Loss on fair value hedging derivative instruments	460,900	172,783
Loss on financial instruments at FVOCI	8,389	6,315
Changes of credit risk losses in financial assets	658,252	243,533
General and administrative expenses	3,318,831	2,973,063
Other operating expenses	7,838,212	5,439,873
Total	49,600,560	26,721,332

35. Net interest income

35-1 Interest income for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Interest income in accordance with the effective interest rate method		
Interest income on due from banks	277,868	63,408
Interest income on loans	11,761,608	7,838,715
Interest income on financial assets at FVOCI	544,009	441,497
Interest income on securities at amortized cost	698,892	403,373
Subtotal	13,282,377	8,746,993
Interest income on financial instruments at FVTPL	64,854	39,671
Total	13,347,231	8,786,664

35-2 Interest expenses for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Interest expense on deposit liabilities	4,558,562	2,041,287
Interest expense on borrowings	342,306	106,801
Interest expenses on financial instruments at FVTPL	4,045	4,591
Interest expense of debentures	671,472	438,438
Interest expense of lease liabilities	15,857	11,272
Others	146,312	33,678
Total	5,738,554	2,636,067

36. Net fees and commission income

36-1 Fees and commission income for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Commissions received from loans and others	521,833	523,884
Commissions received on payment guarantees	89,740	78,364
Commissions related to foreign exchange	263,148	235,408
Total	874,721	837,656

36-2 Fees and commission expenses for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Commissions paid	226,715	198,005
Commissions related to foreign exchange	54,394	86,857
Total	281,109	284,862

37. Net gain (loss) from financial instruments at FVTPL

37-1 Details of gain (loss) on financial instruments at FVTPL for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Gain on financial instruments at FVTPL		
Financial instruments at FVTPL		
Gain on valuation	138,271	111,611
Gain on disposals	35,850	51,321
Subtotal	174,121	162,932
Derivatives instruments held for trading		
Gain on valuation of derivatives		
Gain on currency-related derivatives	8,065,307	4,931,244
Gain on interest rate-related derivatives	908,399	303,789
Gain on stock-related derivatives	3,333	2,394
Others	-	1,959
Subtotal	8,977,039	5,239,386
Gain on transaction of derivatives		
Gain on currency-related derivatives	16,472,062	7,837,014
Gain on interest rate-related derivatives	5,744,598	2,253,170
Gain on stock-related derivatives	13,394	4,340
Subtotal	22,230,054	10,094,524
Gain on securities sold	6,269	6,491
Total	31,387,483	15,503,333
Loss on financial instruments at FVTPL		
Financial instruments at FVTPL		
Loss on valuation	253,836	90,766
Loss on disposals	106,893	59,870
Others	1,408	157
Subtotal	362,137	150,793
Derivatives instruments held-for-trading		
Loss on valuation of derivatives		
Loss on currency-related derivatives	8,742,678	4,911,052
Loss on interest rate-related derivatives	1,080,768	492,489
Loss on stock-related derivatives	23,154	2,012

Classification	2022	2021
Others	3,020	-
Subtotal	9,849,620	5,405,553
Loss on transaction of derivatives		
Loss on currency-related derivatives	16,406,795	7,441,737
Loss on interest rate-related derivatives	4,660,249	1,956,104
Loss on stock-related derivatives	9,687	5,479
Subtotal	21,076,731	9,403,320
Loss on securities sold	7,825	4,758
Total	31,296,313	14,964,424
Net amount	91,170	538,909

37-2 Details of gain (loss) on financial instruments designated at FVTPL for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	2022	2021
Gain on financial instruments designated at FVTPL		
Deposits		
Gain on valuation	33,531	10,058
Gain on disposals	-	12
Total	33,531	10,070
Loss on financial instruments designated as at FVTPL		
Deposits		
Loss on disposals	-	412
Total	-	412
Net amount	33,531	9,658

38. Gain (loss) on derivative financial instruments used for hedging

Gain (loss) on derivative instruments used for hedging for the years ended December 31, 2022 and 2021, is as follows (Korean won in millions):

Classification	2022	2021
Gain on hedged item		
Gain on valuation		
Gain on valuation of debentures	320,975	99,966
Gain on valuation of deposits	71,015	16,558
Subtotal	391,990	116,524
Gain on transaction		
Gain on transaction of debentures	731	4,012
Gain on transaction of deposits	–	426
Subtotal	731	4,438
Derivative instruments used for hedging		
Gain on valuation of derivatives		
Gain on valuation of currency-related derivatives	–	3,534
Gain on transaction of derivatives		
Gain on transaction of currency-related derivatives	2,048	594
Gain on transaction of interest-related derivatives	2,580	7
Subtotal	4,628	601
Total	397,349	125,097
Loss on hedged item		
Loss on valuation		
Loss on valuation of debentures	4,365	–
Loss on transaction		
Loss on transaction of debentures	–	887
Derivative instruments used for hedging		
Loss on valuation of derivatives		
Loss on valuation of currency-related derivatives	129,661	67,910
Loss on valuation of interest-related derivatives	325,170	99,231

Classification	2022	2021
Subtotal	454,831	167,141
Loss on transaction of derivatives		
Loss on transaction of currency-related derivatives	90	991
Loss on transaction of Interest-related derivatives	1,614	3,764
Subtotal	1,704	4,755
Total	460,900	172,783
Net amount	(63,551)	(47,686)

39. Gain (loss) on financial instruments at FVOCI

Details of gain (loss) on financial instruments designated at FVOCI for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Gain on disposal of financial instruments at FVOCI	10,551	85,575
Loss on disposal of financial instruments at FVOCI	8,389	6,315
Net amount	2,162	79,260

40. Gain (loss) on financial instruments at amortized cost

Details of gain (loss) on financial instruments designated at amortized cost for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

Classification	2022	2021
Gain on disposal of financial instruments at amortized cost	4	20

The Group disposed of some securities at amortized cost in accordance with the exercise of an option (put option) by the issuer of the securities for the year ended December 31, 2022.

41. Provision for (Reversal of) credit loss

Provision for (Reversal of) bad debts due to the change in credit loss for the years ended December 31, 2022 and 2021, is as follows (Korean won in millions):

Classification	2022	2021
Provision for (Reversal of) credit loss of debt securities at FVOCI	(603)	(194)
Provision for possible loan loss for debt securities at amortized cost	66,966	10,282
Provision for bad debts of loan losses	585,006	231,313
Provision for (Reversal of) bad debts of other asset losses	6,280	1,938
Total	657,649	243,339

42. General and administrative expenses

General and administrative expenses for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Salaries	1,615,246	1,618,235
Retirement benefits-defined benefits plans	144,346	158,520
Retirement benefits-defined contribution plans	261	208
Termination benefits	177,008	1,987
Employee welfare benefits	100,551	79,738
Depreciation	342,481	337,576
Amortization	95,591	88,850
Rental fees (*)	51,099	54,621
Entertainment expenses	16,455	15,266
Taxes and dues	121,087	93,843
Advertising expenses	181,095	109,461
Others	473,611	414,758
Total	3,318,831	2,973,063

(*) There is no amount corresponding to small lease expenses for the year ended December 31, 2022, and the amount corresponding to small lease expenses for the year ended December 31, 2021, was ₩72 million.

43. Other operating income

Details of other operating income for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Gain on disposal of loans	22,954	43,945
Reversal of payment guarantees	-	1,104
Reversal of allowances for unused commitments	3,347	13,023
Reversal of other allowances	20,228	-
Trust commissions	177,573	167,404
Gain on foreign exchange transaction	7,170,247	4,347,762
Gain on merchant banking accounts (*)	119,943	46,395
Dividend income	10,798	11,407
Others	90,599	160,120
Total	7,615,689	4,791,160

(*) Details of gain on merchant banking accounts for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Interest income	93,710	24,628
Fees and commission income	492	375
Gain on disposal of debt securities at FVTPL	1,897	1,796
Gain on valuation of debt securities at FVTPL	910	-
Gain on valuation of CMA securities	103	
Gain on disposal of bills	22,831	19,596
Total	119,943	46,395

44. Other operating expenses

Details of other operating expenses for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Loss on disposal of loans	3,070	12
Provision for unused commitments	44,922	-
Provisions for other allowances	-	18,600
Contribution to Korea Credit Guarantee Fund	409,833	369,238
Insurance fee on deposit	449,567	443,482
Loss on foreign exchange transaction	6,794,255	4,553,986
Loss on merchant banking accounts (*)	89,351	20,853
Others	47,214	33,702
Total	7,838,212	5,439,873

(*) Details of loss on merchant banking accounts for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Interest expenses	89,351	20,402
Others	-	451
Total	89,351	20,853

45. Non-operating income

Details of non-operating income for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Rental fee income	9,608	8,485
Gain on disposal of property, plant and equipment	6,202	11,168
Gain on disposal of investment properties	7,241	22,811
Gain on disposal of intangible assets	–	37
Gain on disposal of investments in associates and a joint venture	3,414	389
Gain on equity method	221,832	136,687
Gain on termination of right-of-use assets	1,511	1,677
Others	17,485	56,599
Total	267,293	237,853

46. Non-operating expenses

Details of non-operating expenses for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Loss on disposal of property and equipment	1,146	5,128
Loss on impairment of property and equipment	12	7,963
Loss on disposal of investment properties	1,044	4,608
Loss on impairment of investment properties	–	4,859
Loss on disposal of intangible assets	–	1,304
Loss on impairment of intangible assets	220	13
Loss on equity method	32,819	9,015
Collection expenses for written-off claims	1,741	1,578
Collection commissions for written-off claims	5,455	6,204
Loss on disposal of investments in associates	1,099	5,901
Loss on impairment of investments in associates	520	628
Loss on termination of right-of-use assets	1,871	4,310
Donations	42,321	54,984
Others	74,161	71,321
Total	162,409	177,816

47. Income tax expenses

47-1 The components of income tax expenses for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Current income taxes		
Current income taxes	1,214,080	1,017,075
Prior year's income tax adjustments recognized in the current year	(24,481)	(5,001)
Changes in deferred tax assets (liabilities)	(282,051)	(96,169)
Income taxes directly recognized in equity	224,156	37,317
Tax effect of consolidated tax returns	(71,917)	(50,494)
Income tax expenses	1,059,787	902,728

47-2 Reconciliations of income tax expenses applicable to the net income before income tax expenses at the Korea statutory tax rate and to income tax expenses at the effective income tax rate of the Group for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Net income before tax	4,171,486	3,478,474
Tax at domestic statutory rate (*)	1,168,977	935,405
Non-taxable income	(7,176)	(3,658)
Expenses not deductible for tax purposes	4,184	5,901
Tax credit	(28,674)	(30,120)
Income tax expenses of foreign branches and subsidiaries	60,708	46,874
Tax effect of consolidated tax return	(71,917)	(50,494)
Prior year's income tax adjustments recognized in the current year	(24,481)	(5,001)
Others (Effect of tax rates change, etc.)	(41,834)	3,821
Income tax expenses	1,059,787	902,728

Classification	2022	2021
Effective tax rate (%)	25.41	25.95

(*) 11% is applied to income under ₩200 million, 22% is applied to income exceeding ₩200 million and under ₩20 billion, 24.2% is applied to income exceeding ₩20 billion and under ₩300 billion and 27.5% is applied to income above ₩300 billion.

47-3 Temporary differences and deferred tax assets (liabilities) as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	Deductible (taxable) temporary differences	Deferred tax assets (liabilities)
Gain (loss) on valuation of securities	559,829	147,795
Valuation of investment in associates	(589,134)	(155,531)
Gain (loss) on valuation of derivatives	927,438	244,844
Deemed dividends	281,421	74,295
Deferred loan fees, net of expenses	(363,572)	(95,983)
Accrued income	(344,814)	(91,031)
Accrued expenses	94,987	25,077
Provisions for payment guarantees	81,109	21,413
Plan assets	(1,987,305)	(524,648)
Defined benefit obligations	1,987,305	524,648
Other provisions	429,186	113,305
Bad debt expenses	707,373	186,747
Depreciation	(1,724)	(455)
Fair value valuation resulting from merger	6,937	1,831
Dormant deposits	22,133	5,843
Allowance for advanced depreciation	(180,315)	(47,603)
Deemed cost for property and equipment	(607,839)	(160,469)
Gain (loss) on valuation of financial instruments at FVOCI	1,380,998	364,583
Investment in kind	18,479	4,878
Financial guarantee contracts	4,631	1,222
Others	(1,657,614)	(437,611)
Subtotal	769,509	203,150
Domestic deferred tax assets		203,150
Foreign deferred tax assets (*)		112,868
Foreign deferred tax liabilities(*)		(2,259)

Classification	Deductible (taxable) temporary differences	Deferred tax assets (liabilities)
Total		313,759

(*) Deferred tax assets of foreign branches are not offset against the deferred tax liabilities due to the differences in tax jurisdictions.

<December 31, 2021>

Classification	Deductible (taxable) temporary differences	Deferred tax assets (liabilities)
Gain on valuation of securities	358,807	98,672
Valuation of investment in associates	(584,697)	(160,792)
Loss on valuation of derivatives	(255,783)	(70,340)
Deemed dividends	292,686	80,489
Deferred loan fees, net of expenses	(388,842)	(106,932)
Accrued income	(211,289)	(58,104)
Accrued expenses	49,102	13,503
Provisions for payment guarantees	33,345	9,170
Plan assets	(1,849,862)	(508,712)
Defined benefit obligations	2,013,771	553,787
Other provisions	408,579	112,359
Bad debt expenses	722,889	198,794
Depreciation	(1,428)	(393)
Fair value valuation resulting from merger	9,281	2,552
Dormant deposits	25,219	6,935
Allowance for advanced depreciation	(180,315)	(49,587)
Deemed cost for property and equipment	(615,586)	(169,286)
Gain on valuation of financial instruments at FVOCI	544,460	149,727
Investment in kind	18,479	5,082
Financial guarantee contracts	4,127	1,135
Deferred reward points income	7	2
Others	129,511	35,616
Subtotal	522,461	143,677
Domestic deferred tax assets		143,677
Foreign deferred tax assets (*)		39,174
Foreign deferred tax liabilities(*)		(151,143)
Total		31,708

(*) Deferred tax assets of foreign branches are not offset against the deferred tax liabilities due to the differences in tax jurisdictions.

The effective income tax rate of 26.4% as of December 31, 2022, is applied when calculating deferred tax assets or liabilities. Also, deferred tax assets are recognized when it is foreseeable that future taxable income will be incurred and that future tax credits will be realized.

47-4 The unrealized temporary differences on investment assets of associates related companies as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Less: temporary difference	337,867	337,867
Add: temporary difference	(355,579)	(355,579)
Total	(17,712)	(17,712)

47-5 Changes in deferred taxes charged (credited) directly to equity for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

<2022>

Classification	December 31, 2022	December 31, 2021	Changes
Gain on valuation of financial assets at FVOCI	362,656	147,772	214,884
Changes in equity on investments in associates	(27,044)	(27,859)	815
Exchange differences on translation of foreign operations	213	2,610	(2,397)
Gain (loss) on valuation of net investment hedges of foreign operations	18,898	11,112	7,786
Gain (loss) on valuation of fairvalue hedges	9,477	4,978	4,499
Remeasurement of defined benefit plans	161,991	164,438	(2,447)
Subtotal	526,191	303,051	223,140
Reclassification as loss on valuation of equity securities at FVOCI			1,016
Total			224,156

<2021>

Classification	December 31, 2021	December 31, 2020	Changes
Gain on valuation of financial assets at FVOCI	147,772	16,008	131,764
Changes in equity on investments in associates	(27,859)	37,083	(64,942)
Exchange differences on translation of foreign operations	2,610	21,082	(18,472)
Gain (loss) on valuation of net investment hedges of foreign operations	11,112	(4,359)	15,471
Gain (loss) on valuation of fairvalue hedges	4,978	(384)	5,362
Remeasurement of defined benefit plans	164,438	182,221	(17,783)
Subtotal	303,051	251,651	51,400
Reclassification as loss on valuation of equity securities at FVOCI			(14,083)
Total			37,317

48. Earnings per share

48-1 Weighted-average number of common stocks for the years ended December 31, 2022 and 2021, are as follows (shares):

Classification	Periods	Number of shares	Weights	Weighted-average number of ordinary stocks
December 31, 2022	2022.01.01~2022.12.31	1,071,915,717	365/365	1,071,915,717
December 31, 2021	2021.01.01~2021.12.31	1,071,915,717	365/365	1,071,915,717

Since the Group does not have potentially dilutive common stock, the weighted average number of common stock outstanding per basic share is the same as the weighted-average number of shares of common stock outstanding per diluted share.

48-2 The Group's basic EPS for the years ended December 31, 2022 and 2021, are calculated as follows (Korean won in millions except per share amounts):

Classification	2022	2021
Net income attributable to equity holders of the parent for the year	3,095,845	2,570,361
Dividends on hybrid equity securities	(23,770)	(9,814)
Total	3,072,075	2,560,547
Weighted-average number of shares of common stocks outstanding	1,071,915,717	1,071,915,717
Basic EPS (In Korean won) (*)	₩2,866	₩2,389

(*) Basic EPS are the same as diluted EPS for the years ended December 31, 2022 and 2021.

49. Share-based payment

When the stock options are exercised, the Group has the option to settle either through issuance of new shares or treasury stock or through payment of cash equivalents to the difference between the market price and the exercise price. The number of exercisable stock options is determined in accordance with management performance and the calculation criteria for the number of exercisable shares. In addition, the Group operates a Performance Share Plan to provide performance-linked shares to the executives and heads of the Group.

49-1 Details of liabilities related to share-based payment and total intrinsic value of rights accounted for as accounts payable in case that option holders achieve rights to receive cash or other assets as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Book value of liabilities related to share-based payment		
Performance Share (granted by the Group)	36,127	31,949

49-2 The compensation costs for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Costs recognized due to share-based payment		
Equity-linked special incentive (granted by the Group)	10,782	15,197
Stock options(granted by subsidiary)	15	2
Total	10,797	15,199

49-3 Details of performance-linked stocks granted to the executives and department head of the Group as of December 31, 2022 are as follows:

Classification	8th	9th	10th	11th	12th
Granted by	Hana Bank	Hana Bank	Hana Bank	Hana Bank	Hana Bank
Grant date	2018.01.01	2019.01.01	2020.01.01	2021.01.01	2022.01.01
Payment date	2020.12.31	2021.12.31	2022.12.31	2023.12.32	2024.12.31
Grant period	2018.01.01~2020.12.31	2019.01.01~2021.12.31	2020.01.01~2022.12.31	2021.01.01~2023.12.31	2022.01.01~2024.12.31
Grace period	2021.01.01~2021.12.31	2022.01.01~2022.12.31	2023.01.01~2023.12.31	2024.01.01~2024.12.31	2025.01.01~2025.12.31
Payment period	Within 2022.4.30	Within 2023.4.30	Within 2024.4.30	Within 2025.04.30	Within 2026.4.30
Grant method	Payment of cash equivalents to the difference between the market price and the exercise price	Payment of cash equivalents to the difference between the market price and the exercise price	Payment of cash equivalents to the difference between the market price and the exercise price	Payment of cash equivalents to the difference between the market price and the exercise price	Payment of cash equivalents to the difference between the market price and the exercise price
Shares at settlement date (*)	10,438 shares	335,446 shares	275,347 shares	148,721 shares	56,515 shares

(*) The Group provides the executives and department head of the Group with the right to receive stocks. The number of stocks granted is adjusted based on the performance. The number of stocks granted is adjusted based on the assessment indicator that constitutes the Group's performance (relative shareholders' rate of return) of 40% and the Group's performance (ROE, net income, soundness) of 60%.

49-4 Details of the stock option granted by the Group as of December 31, 2022, are as follows:

Classification	Details
Granted by	GLN international Inc.
Stocks subject to exercise	Registered common stock of GLN international Inc.
Grant method	Issuance of new shares
Grant date	2021.11.04
Number of shares	400,000
Exercise period	2024.11.04~2029.11.03
Exercise price	₩500
Evaluation model	LSMC(Least-Squares Monte Carlo) simulation
Risk-free rate	Treasury bond rate

Classification	Details
Stock price volatility	15.48%
Interest rate volatility	Periodic volatility applied to Hull and White model
Fair value per share(*)	₩109.03

(*) The fair value per share is the fair value at the time the stock option is granted.

49-5 There is no stock purchase option that can be exercised as of December 31, 2022

50. Cash flow information

50-1 Details of cash and cash equivalents as of December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	December 31, 2022	December 31, 2021
Cash	1,903,972	2,023,877
Due from banks in Korean won	15,950,890	13,047,514
Due from banks in foreign currencies	23,232,995	12,622,541
Subtotal	41,087,857	27,693,932
Restricted balances (*)	2,010,077	1,624,307
Deposits with a maturity of more than three months at the time of acquisition	577,354	590,990
Net amount	38,500,426	25,478,635

(*) Restricted balances exclude reserve deposits that meet the definition of cash equivalents.

50-2 Significant non-cash transactions for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

Classification	2022	2021
Reduction in capital surplus	3,500,000	-
Change in right-of-use assets during the period	306,049	133,060
Change in lease liabilities during the period	311,888	122,651
Gain on valuation of financial assets at FVOCI	852,663	422,742
Transfer from property, plant and equipment to investment properties	97,994	250,324
Changes in equity on investments in associates	1,132	236,155
Exchange differences on translation of foreign operations	313	300,301
Conversion from debt instruments	40,370	-

50-3 Reconciliation of liabilities arising from financing activities for the years ended December 31, 2022 and 2021, is as follows (Korean won in millions):

<2022>

Classification	Beginning balance	Financing activities	Exchange rate fluctuation	Fair value hedging	Acquisition and termination of lease	Others	Ending balance
Borrowings	17,524,480	3,926,509	805,608	-	-	-	22,256,597
Debentures	27,699,757	(1,465,060)	257,968	(271,934)	-	12,608	26,233,339
Lease liabilities	561,562	(199,280)	-	-	311,888	(6,391)	667,779
Total	45,785,799	2,262,169	1,063,576	(271,934)	311,888	6,217	49,157,715

<2021>

Classification	Beginning balance	Financing activities	Exchange rate fluctuation	Fair value hedging	Acquisition and termination of lease	Others	Ending balance
Borrowings	17,106,246	(510,352)	928,586	-	-	-	17,524,480
Debentures	24,383,015	2,943,323	392,646	(24,207)	-	4,980	27,699,757
Lease liabilities	673,481	(220,521)	-	-	122,651	(14,049)	561,562
Total	42,162,742	2,212,450	1,321,232	(24,207)	122,651	(9,069)	45,785,799

51. Related parties

51-1 Transactions with related parties for the years ended December 31, 2022 and 2021, are summarized as follows (Korean won in millions):

<2022>

Classification	Entity	Income			Expenses			
		Interest income	Fees and commission income	Other income	Bad debt expenses	Interest expenses	Fees and commission expenses	Other expenses
Ultimate parent company	Hana Financial Group (HFG)	15	4,421	–	–	58	–	–
Associates	Bank of Jilin	100	3	–	–	–	–	5
	CM International financing leases	2,407	–	–	16,015	–	–	–
	Beijing Langzi Asset Management Co.,Ltd.	67	1	1	(22)	8	–	–
	Hana Equity Partners I, L.P	–	5	–	–	2	–	–
	Korea Credit Bureau	978	–	–	16	108	–	–
	Templeton Hana Asset Management Co., Ltd.	–	1	2	–	213	–	–
	Hana – KVIC Unicorn Fund of Funds	–	–	–	–	78	–	–
	Bank for Investment and Development of Vietnam (BIDV)	780	–	–	(15)	1,284	1	–
	Hana Micro Finance., Ltd.	–	1,600	–	(343)	–	–	–
	All Together Korea Fund 5	–	–	62	–	–	–	–
	Hana Ventures No. 7 New Technology Business Investment Association	–	3	–	–	3	–	–
	TossBank Corp.	10,541	–	1	–	2	–	–
	SHINJIN INTERNATIONAL COPORATION	4	–	–	–	–	–	–
	Inhee.Co,Ltd	–	1	–	–	–	–	–
	Sinsa Station area Complex Development PFV Co., Ltd.	1,606	100	–	9,199	–	–	–
	Hana-Capstone AI Platform Fund	–	–	–	–	54	–	–
	Cheongna Medipolis PFV Co., Ltd.	–	–	–	–	53	–	–
	Hana Beyond Finance Fund	–	8	–	–	229	–	–
Subtotal		16,483	1,722	66	24,850	2,034	1	5
Joint venture	PT. SINARMAS HANA FINANCE	2,398	2	–	76	–	–	–
Entities under common control	Hana Securities Co., Ltd.	76	1,947	469,067	44	3,823	–	552,481
	Hana Card Co., Ltd.	29	36,985	6,813	20	2,574	8,803	562
	Hana Capital Co., Ltd.	17	407	–	4	300	–	398
	Hana Asset Trust Co., Ltd.	–	39	–	–	3,856	3,380	–
	Hana Alternative Asset Management Co., Ltd.	5	53	–	–	823	–	–
	Hana TI Co., Ltd.	–	16	56	–	7,368	7,099	77,039
	Hana Life Insurance Co., Ltd.	8	10,757	7,782	–	31	–	3,066
	Hana Savings Bank	–	19	–	–	–	–	–
	Hana Investors Services Company	7	2	–	–	47	–	–
	Hana Ventures Inc.	–	1	–	–	97	–	–
	Hana Alternative Special Investment Private Trust No. 123-1	2,775	–	1,916	–	–	–	–
	Hana F&I Inc	298	237	1	2	72	–	–
	Hana Ventures No. 4 New Technology Business Investment Association	–	3	–	–	2	–	–
	Hana Insurance. Co., Ltd.	–	48	9	–	–	2,141	–
	Hana Alternative Infra Special Investment Private Trust No.3-1	–	–	499	–	–	–	–
	Hana Alternative Infra Special Investment Private Trust No.3-2	–	–	211	–	–	–	–

Classification	Entity	Income			Expenses			
		Interest income	Fees and commission income	Other income	Bad debt expenses	Interest expenses	Fees and commission expenses	Other expenses
	Hana Ventures No. 6 new technology business investment Association	-	3	-	-	3	-	-
	Hana Alternative Infra Special Investment Private Trust No.3-4	-	-	734	-	-	-	-
	Hana Alternative General Private Real Estate Investement Trust No. 180	-	-	799	-	-	-	-
	Finnq Co., Ltd.	-	405	2	-	486	684	-
Subtotal		3,215	50,922	487,889	70	19,482	22,107	633,546
Other related parties	Mirae Credit Information Services Corp.	227	10	72	9	42	1,139	-
	UBS Hana Asset Management Co., Ltd.	-	1	9	-	353	-	-
	F&U Credit Information Co., Ltd.	-	17	-	-	11	-	-
	Lotte Ventures Corp.	-	-	1	-	-	-	-
	Hana Power Infrastructure No. 1 Private Investment Co., Ltd.	588	60	-	(69)	20	-	-
	GMHB Co., Ltd.	857	-	-	(266)	1	-	-
	KORAMCO THE ONE REIT	-	-	-	-	-	-	2,069
	Daegu MBC Site Complex Development PFV	5,201	219	-	181	-	-	-
	Lakebridge Growth First Private Investment Co., Ltd	-	-	39	-	1	-	-
	YH Leisure Development Co., Ltd.	3,917	-	-	(160)	29	-	-
	Hana Ventures No. 5 New Technology Business Investment Association	-	-	-	-	6	-	-
	Hana Innovation Venture Scale-up Fund	-	-	-	-	76	-	-
	Hana Must Seven Special Purpose Acquisition Company	-	-	-	-	1	-	-
	Hana Financial Fourteen Special Purpose Acquisition Company	-	-	-	-	1	-	-
	Hana Financial Fifteenth Special Purpose Acquisition Company	-	-	-	-	1	-	-
	Hana Financial Sixteenth Special Purpose Acquisition Company	-	-	-	-	1	-	-
	Hana Financial Seventeen Special Purpose Acquisition Company	-	2	-	-	40	-	-
	Hana Financial Nineteen Special Purpose Acquisition Company	-	-	-	-	29	-	-
	Hana-History No1 Investment Fund	-	-	-	-	3	-	-
	Hana Financial twentieth Special Purpose Acquisition Company	-	-	-	-	1	-	-
	Gyeonggi Hana Turn around Fund No.2	-	-	16	-	94	-	-
	Hana Untact Digital Innovation Fund	-	-	21	-	69	-	-
	Imgok Rental Housing CO., Ltd.	-	-	-	-	1	-	-
	Hana Financial Twenty One Special Purpose Acquisition Company	-	-	-	-	17	-	-
	The Hahm Green Energy Fund	-	-	-	-	25	-	-
	Hana Financial Twenty-second Special Purpose Acquisition Company	-	-	-	-	13	-	-
	Hana Financial Twenty-third Special Purpose Acquisition Company	-	-	-	-	12	-	-
	Hana Financial Twenty-fourth Special Purpose Acquisition Company	-	-	-	-	19	-	-
	Hana Financial Twenty-fifth Special Purpose Acquisition Company	-	-	-	-	44	-	-
	Eugene Asia Food Tech Fund-1	-	-	37	-	-	-	-
Subtotal		10,790	309	195	(305)	910	1,139	2,069
Key management	Key management	25	-	-	-	89	-	-
Total		32,926	57,376	488,150	24,691	22,573	23,247	635,620

<2021>

Classification	Entity	Income			Expenses			
		Interest income	Fees and commission income	Other income	Bad debt expenses	Interest expenses	Fees and commission expenses	Other expenses
Ultimate parent company	Hana Financial Group (HFG)	41	4,885	-	-	19	116	-
Associates	Bank of Jilin	62	3	1	-	-	-	2
	CM International financing leases	2,282	-	-	7,590	-	-	-
	Beijing Langzi Asset Management Co.,Ltd.	629	538	20	(50)	8	-	-
	Hana Equity Partners I, L.P	-	6	-	-	8	-	-
	Korea Credit Bureau	-	-	-	-	13	-	-
	Templeton Hana Asset Management Co., Ltd.	-	1	5	-	127	-	-
	Company K Startup Winwin Fund	-	-	-	-	1	-	-
	Hana - KVIC Unicorn Fund of Funds	-	-	-	-	27	-	-
	Our Crowd International Invest III	-	-	137	-	-	-	27
	Bank for Investment and Development of Vietnam (BIDV)	307	-	-	(105)	500	-	-
	Hana Micro Finance., Ltd.	-	1,520	-	(40)	-	-	-
	Hana Ventures No. 7 New Technology Business Investment Association	-	3	-	-	1	-	-
	TossBank Corp.	12	-	-	-	330	-	-
	SHINJIN INTERNATIONAL COPORATION	-	-	-	92	-	-	-
	Inhee.Co,Ltd	-	2	-	-	-	-	-
	Sinsa Station area Complex Development PFV Co., Ltd.	185	900	-	646	-	-	-
	Hana-Capstone AI Platform Fund	-	-	-	-	8	-	-
Subtotal		3,477	2,973	163	8,133	1,023	-	29
Joint venture	PT. SINARMAS HANA FINANCE	1,427	1	-	89	-	-	-
Entities under common control	Hana Securities Co., Ltd.	127	3,653	361,563	(19)	881	-	307,850
	Hana Card Co., Ltd.	82	33,094	3,880	(13)	651	6,603	15
	Hana Capital Co., Ltd.	10	735	-	(8)	165	-	580
	Hana Asset Trust Co., Ltd.	-	57	-	-	1,247	2,268	-
	Hana Alternative Asset Management Co., Ltd.	14	51	-	-	353	-	-
	Hana TI Co., Ltd.	-	10	26	-	3,466	6,598	73,988
	Hana Life Insurance Co., Ltd.	23	14,110	4,318	-	31	-	1,067
	Hana Savings Bank	-	10	-	-	-	-	-
	Hana Investors Services Company	20	1	-	-	15	-	-
	Hana Ventures Inc.	-	-	-	-	128	501	-
	Hana F&I Inc	61	139	-	(4)	31	-	-
	Hana Insurance. Co., Ltd.	-	103	-	-	-	481	536
	Hana Alternative Investment Land Chip Real Estate Private Trust 68	-	-	-	-	-	-	43
	Hana Alternative Special Investment Private Trust No.123-1	-	-	3,811	-	-	-	-
	Hana Alternative Infra Special Investment Private Trust No.3-1	-	-	234	-	-	-	-
	Hana Alternative Infra Special Investment Private Trust No.3-2	-	-	611	-	-	-	-
	Hana Ventures No. 4 new technology business investment association	-	3	-	-	-	-	-
	Hana Ventures No. 6 new technology business investment association	-	3	-	-	-	-	-
Subtotal		337	51,969	374,443	(44)	6,968	16,451	384,079
	Gunsan bio-energy Corp.	-	-	-	-	1	-	-
	Finnq Co., Ltd.	-	674	3	-	19	1,062	-
	Mirae Credit Information Services Corp.	-	10	72	-	18	1,144	-
	UBS Hana Asset Management Co., Ltd.	-	1	15	-	148	-	-
	F&U Credit Information Co., Ltd.	-	10	-	-	4	-	-
	Lotte Ventures Corp.	-	-	1	-	6	-	-
	Hana Power Infrastructure No. 1 Private Investment Co., Ltd.	528	60	-	(104)	17	-	-

Classification	Entity	Income			Expenses			
		Interest income	Fees and commission income	Other income	Bad debt expenses	Interest expenses	Fees and commission expenses	Other expenses
Other related parties	GMHB Co., Ltd.	1,511	-	-	(142)	1	-	-
	KOCREF REIT 30	-	-	-	-	-	-	1,779
	Myoung Shin Industrial Co., Ltd.	8	-	-	(9)	-	-	-
	Fresheasy Co., Ltd.	222	1	-	(3)	41	-	-
	Dowon asset development Co., Ltd.	-	-	-	-	1	-	-
	YH Leisure Development Co., Ltd.	3,994	-	-	(31)	3	-	-
	Hana Ventures No. 5 New Technology Business Investment Association	-	-	-	-	1	-	-
	Hana Innovation Venture Scale-up Fund	-	-	-	-	12	-	-
	Daegu MBC Site Complex Development PFV	805	3,000	-	946	-	-	-
	Lakebridge Growth First Private Investment Co., Ltd	-	-	28	-	-	-	-
	Apollon Private equity fund	-	-	1,863	-	-	-	-
	Hana Must Seven Special Purpose Acquisition Company	-	-	-	-	1	-	-
	Hana Must Sixth Special Purpose Acquisition Company	-	-	-	-	1	-	-
	Hana Financial Fourteen Special Purpose Acquisition Company	-	-	-	-	1	-	-
	Hana Financial Fifteenth Special Purpose Acquisition Company	-	-	-	-	2	-	-
	Hana Financial Sixteenth Special Purpose Acquisition Company	-	-	-	-	1	-	-
	Hana Financial Seventeen Special Purpose Acquisition Company	-	-	-	-	3	-	-
	Hana Financial Nineteen Special Purpose Acquisition Company	-	-	-	-	9	-	-
	Odin2.LLC	14,648	-	-	-	-	-	-
	People Korea Two Co., Ltd.	-	-	-	-	1	-	-
Subtotal		21,716	3,756	1,982	657	291	2,206	1,779
Key management	Key management	18	-	-	-	44	-	-
Total		27,016	63,584	376,588	8,835	8,345	18,773	385,887

51-2 Significant financial transactions with related parties for the years ended December 31, 2022 and 2021, are as follows:

51-2-1 Details of significant loans to related parties for the years ended December 31, 2022 and 2021, are as follows (Korean won in millions):

<2022>

Classification	Entity	Loans (*1)				
		Beginning balance	Increase	Decrease	Others (*2)	Ending balance
Associates	Bank of Jilin	6,300	108,600	(111,700)	-	3,200
	CM International financing leases	63,341	-	-	(1,372)	61,969
	Beijing Langzi Asset Management Co.,Ltd.	11,161	-	(12,083)	922	-
	Korea Credit Bureau	-	40,000	-	-	40,000
	Bank for Investment and Development of Vietnam (BIDV)	11,855	419,413	(425,749)	818	6,337
	TossBank Corp.	-	1,060,000	(1,060,000)	-	-
	SHINJIN INTERNATIONAL COPORATION	1,444	-	-	-	1,444
	Sinsa Station area Complex Development PFV Co., Ltd.	75,500	9,800	(75,500)	-	9,800
Subtotal		169,601	1,637,813	(1,685,032)	368	122,750
Joint venture	PT. SINARMAS HANA FINANCE	32,491	7,086	(1,572)	(861)	37,144
Entities under common control	Hana Securities Co., Ltd.	924	4,061	(1,746)	-	3,239
	Hana Capital Co., Ltd.	-	100,000	(100,000)	-	-
	Hana Alternative Special Investment Private Trust No. 123-1	-	45,537	(45,537)	-	-
	Hana F&I Inc	-	265,400	(265,400)	-	-
Subtotal		924	414,998	(412,683)	-	3,239
Other related parties	Mirae Credit Information Services Corp.	-	7,000	-	-	7,000
	Smartscore Co., Ltd.	-	38	(38)	-	-
	Hana Power Infrastructure No. 1 Private Investment Co., Ltd.	13,023	-	(1,907)	-	11,116
	GMHB Co., Ltd.	32,500	-	(32,500)	-	-
	Daegu MBC Site Complex Development PFV	85,120	9,588	-	-	94,708
	YH Leisure Development Co., Ltd.	115,463	-	(3,140)	-	112,323
Subtotal		246,106	16,626	(37,585)	-	225,147
Key management	Key management	749	25	-	-	774
Total		449,871	2,076,548	(2,136,872)	(493)	389,054

(*1) Intraday overdrafts between related parties are excluded.

(*2) Others include the effect of changes in exchange rate.

<2021>

Classification	Entity	Loans (*1)				
		Beginning balance	Increase	Decrease	Others (*2)	Ending balance
Associates	Bank of Jilin	10,600	216,800	(221,100)	-	6,300
	CM International financing leases	56,793	-	-	6,548	63,341
	Beijing Langzi Asset Management Co.,Ltd.	11,675	-	(1,860)	1,346	11,161
	Bank for Investment and Development of Vietnam (BIDV)	16,320	898,147	(904,075)	1,463	11,855
	SHINJIN INTERNATIONAL COPORATION	-	-	-	1,444	1,444
	Sinsa Station area Complex Development PFV Co., Ltd.	-	75,500	-	-	75,500
Subtotal		95,388	1,190,447	(1,127,035)	10,801	169,601
Joint venture	PT. SINARMAS HANA FINANCE	18,578	15,062	(2,517)	1,368	32,491
Entities under common control	Hana Securities Co., Ltd.	580	10,850	(6,676)	(3,830)	924
	Hana Capital Co., Ltd.	-	130,000	(130,000)	-	-
	Hana F&I Inc	-	126,200	(126,200)	-	-
Subtotal		580	267,050	(262,876)	(3,830)	924
Other related parties	Smartscore Co., Ltd.	-	70	(70)	-	-
	Hana Power Infrastructure No. 1 Private Investment Co., Ltd.	14,186	-	(1,163)	-	13,023
	GMHB Co., Ltd.	32,500	-	-	-	32,500
	Myoung Shin Industrial Co., Ltd.	1,000	-	-	(1,000)	-
	Fresheasy Co., Ltd.	9,100	1,600	-	(10,700)	-
	Daegu MBC Site Complex Development PFV	-	85,120	-	-	85,120
	YH Leisure Development Co., Ltd.	116,944	-	(1,481)	-	115,463
Subtotal		173,730	86,790	(2,714)	(11,700)	246,106
Key management	Key management	690	59	-	-	749
Total		288,966	1,559,408	(1,395,142)	(3,361)	449,871

(*1) Intraday overdrafts between related parties are excluded.

(*2) Others include the effect of changes in exchange rate.

51-2-2 Details of significant cash investments with related parties for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	Entity	Investment in cash	
		Investment	Collection and others
Associates	Beijing Langzi Asset Management Co.,Ltd.	-	(1,708)
	Hana Equity Partners I, L.P	-	(120)
	Templeton Hana Asset Management Co., Ltd.	-	(198)
	Company K Startup Winwin Fund	-	(7,090)
	BSK-6 Patent Technology Investment Association	-	(327)
	Hana - KVIC Unicorn Fund of Funds	25,130	-
	Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	-	(27)
	All Together Korea Fund 5	62	(62)
	HORIZON PRIVATE EQUITY FUND	-	(15,436)
	TossBank Corp.	70,000	-
	Hana-New Deal K-Growth fund	22,500	-
	Hana-Capstone AI Platform Fund	15,000	-
	Taurus Cloud Fund	77	-
	Hana Beyond Finance Fund	24,000	-
	Defense Technology Innovation Private Investment Trust	2,950	-
Subtotal		159,719	(24,968)
Entities under common control	Hana Securities Co., Ltd.	-	(563)
	Hana Alternative Investment Infrastructure Private Equity Real Estate Investment Trust No. 3-1	14,454	-
	Hana Alternative Infra Special Investment Private Trust No.3-4	356	-
	Hana Alternative Investment General Private Equity Real Estate Investment Trust No.180	37,233	-
Subtotal		52,043	(563)
Other related parties	Hana Digital Transformation Fund	-	(1,596)
	Lakebridge Growth First Private Investment Co., Ltd	-	(175)
	Hana Innovation Venture Scale-up Fund	1,040	-
	Gyeonggi Hana Support Timber Equipment Support Fund No.2	1,350	-
	Hana Untact Digital Innovation Fund	2,700	-
	Hana K-NewDeal Unicorn Fund	7,200	-
	The Hahm Green Energy Fund	6,000	-
Subtotal		18,290	(1,771)
Total		230,052	(27,302)

<2021>

Classification	Entity	Investment in cash	
		Investment	Collection and others
Associates	Beijing Langzi Asset Management Co.,Ltd.	-	(1,344)
	Hana First Private Equity Fund	-	(4,689)
	Korea Credit Bureau	-	(90)
	Templeton Hana Asset Management Co., Ltd.	-	(990)
	Company K Startup Winwin Fund	-	(300)
	Hana - KVIC Unicorn Fund of Funds	18,000	-
	Our Crowd International Invest III	-	(497)
	Bank for Investment and Development of Vietnam (BIDV)	-	(6,262)
	Harvest Private Equity Fund Specializing in Start-Up and Venture Business I	-	(27)
	TossBank Corp.	47,500	-
	Sinsa Station area Complex Development PFV Co., Ltd.	450	-
	Hana-New Deal K-Growth fund	1,800	-
	Hana-Capstone AI Platform Fund	15,000	-
	Taurus Cloud Fund	9,401	-
	Cheongna Medipolis PFV Co., Ltd	3,372	-
	NPX-Welcome Metaverse Contents fund	1,000	-
Subtotal		96,523	(14,199)
Entities under common control	Hana Securities Co., Ltd.	-	(10,877)
	Hana Alternative Infra Special Investment Private Trust No.3-2	950	(9,035)
	Hana Alternative Infra Special Investment Private Trust No.3-4	17,912	-
Subtotal		18,862	(19,912)
Other related parties	Hana Digital Transformation Fund	-	(3,098)
	Apollon Private equity fund	-	(681)
	Lakebridge Growth First Private Investment Co., Ltd	-	(175)
	Hana Innovation Venture Scale-Up Fund	2,080	-
	Gyeonggi Hana Turn around Fund No.2	2,700	-
	Hana Untact Digital Innovation Fund	1,350	-
Subtotal		6,130	(3,954)
Total		121,515	(38,065)

51-2-3 Details of significant deposits with related parties for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	Entity	Deposits (*1)			
		Beginning balance	Increase	Decrease	Ending balance
Associates	Korea Credit Bureau	-	8,000	-	8,000
	Templeton Hana Asset Management Co., Ltd.	11,000	10,500	(11,000)	10,500
	Company K Startup Winwin Fund	300	-	(300)	-
	Hana Ventures No. 7 New Technology Business Investment Association	-	400	(200)	200
	Hana-Capstone AI Platform Fund	42	42	(42)	42
	Cheongna Medipolis PFV Co., Ltd	-	2,500	-	2,500
	Hana Beyond Finance Fund	-	35,000	-	35,000
Subtotal		11,342	56,442	(11,542)	56,242
Joint venture	PT. SINARMAS HANA FINANCE	12	5	(12)	5
Entities under common control	Hana Securities Co., Ltd.	5,100	7,560	(1,615)	11,045
	Hana Card Co., Ltd.	1,005	10	(1,005)	10
	Hana Capital Co., Ltd.	-	5,800	(3,900)	1,900
	Hana Asset Trust	165,000	175,000	(165,000)	175,000
	Hana Alternative Asset Management Co., Ltd.	49,000	98,000	(134,000)	13,000
	Hana TI Co., Ltd.	-	100,000	(100,000)	-
	Hana Fund Service Co., Ltd.	-	3,000	-	3,000
	Hana Ventures Inc.	3,000	16,500	(8,500)	11,000
	Hana F&I Inc	-	1,500	(1,500)	-
	Hana Ventures No. 4 New Technology Business Investment Association	-	400	(200)	200
	Hana Ventures No. 6 New Technology Business Investment Association	-	400	(200)	200
	Finnq Co., Ltd.	-	89,000	(41,500)	47,500
Subtotal		223,105	497,170	(457,420)	262,855
	Mirae Credit Information Services Corp.	300	-	(300)	-
	UBS Hana Asset Management Co., Ltd.	16,000	18,000	(16,000)	18,000
	F&U Credit information Co., Ltd.	509	502	(1,011)	-
	GMHB Co., Ltd.	100	-	-	100
	YH Leisure Development Co., Ltd.	-	5,000	-	5,000
	Creation Innovation Co., Ltd	10	-	(10)	-
	Hana Ventures No. 5 New Technology Business Investment Association	-	1,000	(500)	500
	Hana Innovation Venture Scale-up Fund	-	13,000	(8,000)	5,000
	Hana Financial Nineteenth Special Purpose Acquisition	1,800	13	-	1,813

Classification	Entity	Deposits (*1)			
		Beginning balance	Increase	Decrease	Ending balance
Other related parties	Company				
	Gyeonggi Hana Turn around Fund No.2	-	17,000	(10,000)	7,000
	Hana Untact Digital Innovation Fund	-	13,000	(10,000)	3,000
	Hana Financial Twenty One Special Purpose Acquisition Company	-	2,100	-	2,100
	The Hahm Green Energy Fund	-	5,600	(5,600)	-
	Hana Financial Twenty-second Special Purpose Acquisition Company	-	1,600	-	1,600
	Hana Financial Twenty-third Special Purpose Acquisition Company	-	1,500	-	1,500
	Hana Financial Twenty-fourth Special Purpose Acquisition Company	-	2,450	-	2,450
	Hana Financial Twenty-fifth Special Purpose Acquisition Company	-	5,800	-	5,800
Subtotal		18,719	86,565	(51,421)	53,863
Key management	Key management	3,596	1,906	-	5,502
Total		256,774	642,088	(520,395)	378,467

(*1) Deposits/withdrawals arising from operations between related parties are excluded.

<2021>

Classification	Entity	Deposits (*1)				
		Beginning balance	Increase	Decrease	Others (*2)	Ending balance
Associates	Korea Credit Bureau	3,000	-	(3,000)	-	-
	Templeton Hana Asset Management Co., Ltd.	18,000	11,000	(18,000)	-	11,000
	Company K Startup Winwin Fund	-	300	-	-	300
	Hana - KVIC Unicorn Fund of Funds	-	15,000	(15,000)	-	-
	TossBank Corp.	20,000	180,000	(200,000)	-	-
	Hana-Capstone AI Platform Fund	-	42	-	-	42
Subtotal		41,000	206,342	(236,000)	-	11,342
Joint venture	PT. SINARMAS HANA FINANCE	12	23	(24)	1	12
Entities under common control	Hana Securities Co., Ltd.	5,000	2,250	(2,150)	-	5,100
	Hana Card Co., Ltd.	1,005	1,005	(1,005)	-	1,005
	Hana Asset Trust	115,708	560,000	(510,708)	-	165,000
	Hana Alternative Asset Management Co., Ltd.	30,000	135,000	(116,000)	-	49,000
	Hana Investors Services Company	-	100	(100)	-	-
	Hana Ventures Inc.	15,000	3,000	(15,000)	-	3,000
	Hana F&I Inc	1,930	2,190	(4,120)	-	-
Subtotal		168,643	703,545	(649,083)	-	223,105
Other related parties	Mirae Credit Information Services Corp.	-	310	(10)	-	300
	UBS Hana Asset Management Co., Ltd.	18,000	26,000	(28,000)	-	16,000
	F&U Credit information Co., Ltd.	506	3	-	-	509
	Lotte Ventures Corp.	1,000	1,500	(2,500)	-	-
	GMHB Co., Ltd.	100	-	-	-	100
	Myoung Shin Industrial Co., Ltd.	40	30	-	(70)	-
	Fresheasy Co., Ltd.	90	450	-	(540)	-
	Creation Innovation Co., Ltd	-	110	(100)	-	10
	Hana Financial Nineteenth Special Purpose Acquisition Company	-	1,800	-	-	1,800
Subtotal		19,736	30,203	(30,610)	(610)	18,719
Key management	Key management	1,565	2,031	-	-	3,596
Total		230,956	942,144	(915,717)	(609)	256,774

(*1) Deposits/withdrawals arising from operations between related parties are excluded.

(*2) Others include the effect of changes in exchange rate.

51-2-4 Details of significant borrowings from related parties for the years ended December 31, 2022 and 2021 are as follows (Korean won in millions):

<2022>

Classification	Entity	Beginning balance	Increase	Decrease	Others (*)	Ending balance
Associates	Bank for Investment and Development of Vietnam (BIDV)	80,755	1,349,738	(1,422,233)	2,480	10,740

(*) Others include the effect of changes in exchange rate

<2021>

Classification	Entity	Beginning balance	Increase	Decrease	Others (*)	Ending balance
Associates	Bank for Investment and Development of Vietnam (BIDV)	48,513	647,603	(620,511)	5,150	80,755

(*) Others include the effect of changes in exchange rate

51-3 Outstanding receivables and payables with related parties arising from the above transactions as of December 31, 2022 and 2021 are summarized as follows (Korean won in millions):

<December 31, 2022>

Classification	Entity	Loans	Other receivables	Allowance for loan losses	Deposits	Other liabilities
Ultimate parent company	Hana Financial Group (HFG)	-	8,715	-	28,718	672,478
Associates	Bank of Jilin	3,200	2,409	-	1,611	-
	CM International financing leases	61,969	-	49,620	18	-
	Beijing Langzi Asset Management Co., Ltd.	-	-	-	3,601	-
	Hana Equity Partners I, L.P	-	-	-	115	-
	Korea Credit Bureau	40,000	-	16	8,169	-
	Templeton Hana Asset Management Co., Ltd.	-	-	-	10,672	-
	Midan City Development Co., Ltd.	-	-	-	2	-
	Hana - KVIC Unicorn Fund of Funds	-	-	-	3,993	-
	Bank for Investment and Development of Vietnam (BIDV)	6,337	5,394	24	2,045	10,740
	Hana Ventures No. 7 New Technology Business Investment Association	-	-	-	495	-
	SHINJIN INTERNATIONAL CORPORATION	1,444	1	107	-	-
	Sinsa Station area Complex Development PFV Co., Ltd.	9,800	-	9,845	45	-
	Hana-Capstone AI Platform Fund	-	-	-	16,841	-
	Cheongna Medipolis PFV Co., Ltd	-	-	-	2,500	-
	Hana Beyond Finance Fund	-	-	-	42,439	-
Subtotal		122,750	7,804	59,612	92,546	10,740
Joint venture	PT. SINARMAS HANA FINANCE	37,144	47	229	5	-

Classification	Entity	Loans	Other receivables	Allowance for loan losses	Deposits	Other liabilities
Entities under common control	Hana Securities Co., Ltd.	3,239	69,942	100	925,719	151,692
	Hana Card Co., Ltd.	–	15,344	150	309,912	44,938
	Hana Capital Co., Ltd.	–	146	54	506,174	4,701
	Hana Asset Trust Co., Ltd.	–	–	–	179,749	1,968
	Hana Alternative Asset Management Co., Ltd.	–	4,229	–	36,762	1,114
	Hana TI Co., Ltd.	–	211,454	–	5,425	217,978
	Hana Life Insurance Co., Ltd.	–	8,691	–	–	4,671
	Hana Investors Services Company	–	4,090	–	4,190	841
	Hana Ventures Inc.	–	–	–	12,876	35
	Hana F&I Inc	–	1,430	27	40,340	284
	Hana Ventures No. 4 New Technology Business Investment Association	–	–	–	245	–
	Hana Insurance. Co., Ltd.	–	–	–	35	–
	HANA ASSET MANAGEMENT ASIA PTE. LTD.	–	–	–	5,117	–
	Hana Ventures No. 6 New Technology Business Investment Association	–	–	–	249	–
	Finnq Co., Ltd.	–	–	–	53,949	–
Subtotal		3,239	315,326	331	2,080,742	428,222
Other related parties	Gunsan bio-energy Corp	–	–	–	549	–
	Mirae Credit Information Services Corp.	7,000	–	9	2,267	–
	UBS Hana Asset Management Co., Ltd.	–	–	–	18,287	–
	F&U Credit Information Co., Ltd.	–	–	–	1,149	–
	Lotte Ventures Corp.	–	–	–	96	–
	Hana Power Infrastructure No. 1 Private Investment Co., Ltd.	11,116	–	170	4,264	–
	GMHB Co., Ltd.	–	–	–	100	–
	KORAMCO THE ONE REIT	–	1,354	–	–	–
	DangsandongPFV Co., Ltd.	–	–	–	675	–
	Daegu MBC Site Complex Development PFV	94,708	–	1,127	2	–
	Lakebridge Growth First Private Investment Co., Ltd	–	–	–	330	–
	YH Leisure Development Co., Ltd.	112,323	–	172	5,045	–
	Creation Innovation Co., Ltd	–	–	–	70	–
	Hana Ventures No. 5 New Technology Business Investment Association	–	–	–	592	–
	Hana Innovation Venture Scale-Up Fund	–	–	–	10,943	–
	Hana Must Seven Special Purpose Acquisition Company	–	–	–	1,389	–
	Hana Financial Sixteenth Special Purpose Acquisition Company	–	–	–	1,275	–
	Hana Financial Nineteenth Special Purpose Acquisition Company	–	–	–	2,423	–
	People Korea Two Co., Ltd.	–	–	–	47	–
	Hana Financial Twentieth Special Purpose Acquisition Company	–	–	–	778	–
	Gyeonggi Hana Turn around Fund No.2	–	–	–	11,370	–
	Hana Untact Digital Innovation Fund	–	–	–	8,252	–
	Imgok Rental Housing CO., Ltd.	–	–	–	38	–
	Hana Financial Twenty One Special Purpose Acquisition Company	–	–	–	2,572	–
	Choice & Soyern Construction Co., Ltd.	–	–	–	104	–
	Hana Financial Twenty-second Special Purpose	–	–	–	2,007	–

Classification	Entity	Loans	Other receivables	Allowance for loan losses	Deposits	Other liabilities
	Acquisition Company					
	Hana Financial Twenty-third Special Purpose Acquisition Company	-	-	-	1,911	-
	Hana Financial Twenty-fourth Special Purpose Acquisition Company	-	-	-	2,954	-
	Hana Financial Twenty-fifth Special Purpose Acquisition Company	-	-	-	6,536	-
	Eugene Asia Food Tech Fund-1	-	-	-	247	-
Subtotal		225,147	1,354	1,478	86,272	-
Key management	Key management	774	-	-	8,007	-
Total		389,054	333,246	61,650	2,296,290	1,111,440

<December 31, 2021>

Classification	Entity	Loans	Other receivables	Allowance for loan losses	Deposits	Other liabilities
Ultimate parent company	Hana Financial Group (HFG)	-	1,981	-	7,632	526,427
Associates	Bank of Jilin	6,300	11,573	-	3,492	-
	CM International financing leases	63,341	-	35,184	18	-
	Beijing Langzi Asset Management Co., Ltd.	11,161	-	21	13	-
	Hana Equity Partners I, L.P	-	-	-	536	-
	Korea Credit Bureau	-	-	-	109	-
	Templeton Hana Asset Management Co., Ltd.	-	-	-	11,694	-
	Midan City Development Co., Ltd.	-	-	-	2	-
	Company K Startup Winwin Fund	-	-	-	300	-
	Hana - KVIC Unicorn Fund of Funds	-	-	-	3,779	-
	Bank for investment and Development of Vietnam(BIDV)	11,855	3,851	39	1,653	80,755
	Hana Micro Finance., Ltd.	-	-	343	-	-
	Hana Ventures No. 7 New Technology Business Investment Association	-	-	-	581	-
	SHINJIN INTERNATIONAL COPORATION	1,444	1	107	-	-
	Inhee.Co,Ltd	-	-	-	2	-
	Sinsa Station area Complex Development PFV Co., Ltd.	75,500	-	646	92	-
	Hana-Capstone AI Platform Fund	-	-	-	2,129	-
Subtotal		169,601	15,425	36,340	24,400	80,755
Joint venture	PT. SINARMAS HANA FINANCE	32,491	33	163	12	-
Entities under common control	Hana Securities Co., Ltd.	924	177,884	56	707,056	185,734
	Hana Card Co., Ltd.	-	4,465	130	117,056	41,794
	Hana Capital Co., Ltd.	-	446	49	246,566	5,006
	Hana Asset Trust Co., Ltd.	-	-	-	233,773	241
	Hana Alternative Asset Management Co., Ltd.	-	675	-	62,538	1,043
	Hana TI Co., Ltd.	-	238,607	-	5,419	240,058
	Hana Life Insurance Co., Ltd.	-	4,291	-	-	2,664
	Hana Investors Services Company	-	967	-	1,114	810
	Hana Ventures Inc	-	-	-	9,545	3
	Hana Ventures No. 6 new technology business investment association	-	-	-	3,149	-
	Hana F&I Inc	-	338	25	44,961	284

Classification	Entity	Loans	Other receivables	Allowance for loan losses	Deposits	Other liabilities
	Hana Ventures No. 4 new technology business investment association	-	-	-	316	-
	Hana Insurance. Co., Ltd.	-	-	-	44	-
	HANA ASSET MANAGEMENT ASIA PTE. LTD.	-	-	-	8,010	-
Subtotal		924	427,673	260	1,439,547	477,637
Other related parties	Gunsan bio-energy Corp	-	-	-	555	-
	Finnq Co., Ltd.	-	-	-	15,289	-
	Mirae Credit Information Services Corp.	-	-	-	4,631	-
	UBS Hana Asset Management Co., Ltd.	-	-	-	16,328	-
	F&U Credit Information Co., Ltd.	-	-	-	1,266	-
	Smartscore Co., Ltd.	-	-	-	188	-
	Lotte Ventures Corp.	-	-	-	777	-
	Hana Power Infrastructure No. 1 Private Investment Co., Ltd.	13,023	-	239	12,428	-
	GMHB Co., Ltd.	32,500	-	266	100	-
	KOCREF REIT 30	-	1,354	-	-	-
	DangsandongPFV Co., Ltd.	-	-	-	183	-
	Daegu MBC Site Complex Development PFV	85,120	-	946	2,402	-
	Heat Private Equity Fund	-	-	-	1	-
	Lakebridge Growth First Private Investment Co., Ltd	-	-	-	277	-
	YH Leisure Development Co., Ltd.	115,463	-	332	1,788	-
	Creation Innovation Co., Ltd	-	-	-	45	-
	Hana Ventures No. 5 new technology business investment association	-	-	-	661	-
	Hana Innovation Venture Scale-Up Fund	-	-	-	7,786	-
	Hana Must Seven Special Purpose Acquisition Company	-	-	-	1,405	-
	Dowon asset development Co., Ltd.	-	-	-	83	-
	Hana Financial Fourteen Special Purpose Acquisition Company	-	-	-	1,285	-
	Hana Financial Fifteenth Special Purpose Acquisition Company	-	-	-	1,588	-
	Hana Financial Sixteenth Special Purpose Acquisition Company	-	-	-	1,286	-
	Hana Financial Seventeen Special Purpose Acquisition Company	-	-	-	2,535	-
	Hana Financial Nineteenth Special Purpose Acquisition Company	-	-	-	2,496	-
	People Korea Two Co., Ltd.	-	-	-	57	-
	Hana Financial Twenty Special Purpose Acquisition Company	-	-	-	817	-
	Imgok Rental Housing CO., Ltd.	-	-	-	308	-
	HANA FINANCIAL TWENTY-ONE SPECIAL PURPOSE ACQUISITION COMPANY	-	-	-	2,786	-
Subtotal		246,106	1,354	1,783	79,351	-
Key management	Key management	749	-	-	6,766	-
Total		449,871	446,466	38,546	1,557,708	1,084,819

51-4 Significant payment guarantees and collaterals provided to related parties as of December 31, 2022 and 2021 are as follows (Korean won in millions):

<December 31, 2022>

Classification	Entity	Payment guarantees or Collaterals provided	Limit
Associates	Hana Micro Finance., Ltd.	Acceptance and guarantees in foreign currencies	98,849
	Hana-New Deal K-Growth fund	Purchase of securities	65,700
	Taurus Cloud Fund	Purchase of securities	522
	Hana Beyond Finance Fund	Purchase of securities	56,000
	Cheongna Medipolis PFV Co., Ltd.	Purchase of securities	16,628
	Templeton Hana Asset Management Co., Ltd.	Purchase of securities	4,619
	All Together Korea Fund 5	Purchase of securities	990,000
	Defense Technology Innovation Private Investment Trust	Purchase of securities	56,050
Joint venture	PT. SINARMAS HANA FINANCE	Unused loan commitments in foreign currencies	1,688
Entities under common control	Hana Alternative Infra Special Investment Private Trust No.3-1	Purchase of securities	5,761
	Hana F&I Inc	Unused loan commitments in Korean won	140,000
	Hana Card Co., Ltd.	Unused loan commitments in Korean won	500,000
		Credit contribution limit related to payment	40,000
	Hana Capital Co., Ltd.	Unused loan commitments in Korean won	260,000
	Hana Alternative Infra Special Investment Private Trust No.3-4	Purchase of securities	2,632
	Hana Securities Co., Ltd.	Import L/C opened	37
		Unused loan commitments in Korean won	130,000
	Hana Alternative General Private Real Estate Investement Trust No.180	Purchase of securities	114,359
Other related parties	Hana Digital Transformation Fund	Purchase of securities	1,000
	Hana Innovation Venture Scale-Up Fund	Purchase of securities	520
	Daegu MBC Site Complex Development PFV	Unused loan commitments in Korean won	65,292
	Gyeonggi Hana Turn around Fund No.2	Purchase of securities	450
	Hana Untact Digital Innovation Fund	Purchase of securities	450
	Hana K-NewDeal Unicorn Fund	Purchase of securities	10,800

<December 31, 2021>

Classification	Entity	Payment guarantees or Collaterals provided	Limit
Associates	Hana-KVIC Unicorn Fund of Funds	Purchase of securities	25,130
	Hana Micro Finance., Ltd.	Acceptance and guarantees in foreign currencies	104,324
	TossBank Corp.	Purchase of securities	227,273
	All Together Korea Fund 5	Purchase of securities	990,000
	Hana-New Deal K-Growth fund	Purchase of securities	88,200
	Hana-Capstone AI Platform Fund	Purchase of securities	15,000
	Taurus Cloud Fund	Purchase of securities	599
Joint venture	PT. SINARMAS HANA FINANCE	Unused loan commitments in foreign currencies	7,397
Entities under common control	Hana Securities Co., Ltd.	Unused loan commitments in Korean won	130,000
		Import L/C opened	588
		Acceptance and guarantees in foreign currencies	1,488
	Hana Card Co., Ltd.	Unused loan commitments in Korean won	500,000
		Credit contribution limit related to payment	40,000
	Hana Capital Co., Ltd.	Unused loan commitments in Korean won	260,000
	Hana F&I Inc	Unused loan commitments in Korean won	140,000
	Hana Alternative Infra Special Investment Private Trust No.3-1	Purchase of securities	21,465
	Hana Alternative Infra Special Investment Private Trust No.3-2	Purchase of securities	952
	Hana Alternative Infra Special Investment Private Trust No.3-4	Purchase of securities	2,988
Other related parties	GMHB Co., Ltd.	Unused loan commitments in Korean won	6,000
	Hana Digital Transformation Fund	Purchase of securities	1,000
	Hana Innovation Venture Scale-Up Fund	Purchase of securities	1,560
	Smartscore Co., Ltd.	Unused loan commitments in Korean won	7
	Daegu MBC Site Complex Development PFV	Unused loan commitments in Korean won	74,880

51-5 Significant payment guarantees and collaterals provided from related parties as of December 31, 2022 and 2021, are as follows (Korean won in millions):

<December 31, 2022>

Classification	Entity	Payment guarantees or Collaterals provided	Limit
Associates	Bank for Investment and Development of Vietnam (BIDV)	Acceptance and guarantees in foreign currencies	59,306
Entities under common control	Hana Life Insurance Co., Ltd.	Collateral provided	13,525
		Unsettled arrangements (Currency forward)	94,633
	Hana F&I Inc	Collateral provided	271,875
	Hana Card Co., Ltd.	Unsettled arrangements (Interest swap)	300,000
		Unsettled arrangements (Currency forward)	7,812
		Unused loan commitments in Korean won	139,110
	Hana Capital Co., Ltd.	Collateral provided	475,051
	Finnq Co., Ltd.	Collateral provided	50
	Hana Securities Co., Ltd.(*)	Collateral provided	70,000
		Unsettled arrangements (Currency forward)	3,519,325
		Unsettled arrangements (Currency swap)	63,365
		Unsettled arrangements (Stock swap)	72,235

(*) As a swap bank of investment trust to which Hana securities Co., Ltd. is committed to purchase private bonds, the Group is provided with an obligation for additional investment or supplementation of forward exchange or currency swap of investment trust.

<December 31, 2021>

Classification	Entity	Payment guarantees or Collaterals provided	Limit
Associates	Bank for Investment and Development of Vietnam (BIDV)	Acceptance and guarantees in foreign currencies	26,782

Classification	Entity	Payment guarantees or Collaterals provided	Limit
Entities under common control	Hana Securities Co., Ltd.(*)	Collateral provided	70,000
		Unsettled arrangements (Currency forward)	1,471,839
		Unsettled arrangements (Currency swap)	13,084
	Hana Card Co., Ltd.	Collateral provided	1,000
		Unused loan commitments in Korean won	139,728
		Unsettled arrangements (Currency forward)	8,299
	Hana Capital Co., Ltd.	Collateral provided	474,805
	Hana Life Insurance Co., Ltd.	Collateral provided	5,098
		Unsettled arrangements (Currency forward)	87,852
	Hana F&I Inc	Collateral provided	294,424
Other related parties	Finnq Co., Ltd.	Collateral provided	50

(*) As a swap bank of investment trust to which Hana Securities Co., Ltd. is committed to purchase private bonds, the Group is provided with an obligation for additional investment or supplementation of forward exchange or currency swap of investment trust.

51-6 The amount of intangible assets and others acquired by Hana TI Co., Ltd. for the years ended December 31, 2022 and 2021 are ₩10,867 million and ₩8,712 million, respectively.

51-7 The defined benefit plans deposited to the Hana Securities as of December 31, 2022 and 2021 are ₩111,311 million and ₩90,121 million, respectively.

51-8 For the year ended December 31, 2022, the Group purchased land from Hana TI Company Ltd., and the carrying amount of the purchased land was ₩226,530 million.

51-9 Details of compensation for standing directors and executive officers for the years ended December 31, 2022 and 2021 are summarized as follows (Korean won in millions):

Classification	2022	2021
Short-term employee payment	19,986	19,778
Retirement benefit	682	961
Share-based payment	3,297	4,337

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