PRICING SUPPLEMENT

SHINHAN BANK

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

Issue of US$400,000,000 4.500%Tier II Subordinated Notes due 2028
under the U.S.$6,000,000,000
Global Medium Term Note Program

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 LOCAL SECURITIES LAWS. ACCORDINGLY, THE NOTES WILL BE OFFERED AND SOLD ONLY OUTSIDE THE UNITED STATES TO NON-U.S. PERSONS IN RELIANCE ON REGULATION S.

IN CONNECTION WITH THIS ISSUE, THE STABILIZING MANAGER (OR ANY PERSON ACTING ON BEHALF OF THE STABILIZING 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 STABILIZING MANAGER (OR ANY PERSON ACTING ON BEHALF OF THE STABILIZING MANAGER) TO UNDERTAKE STABILIZATION ACTION. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME, AND MUST BE BROUGHT TO AN END AFTER A LIMITED PERIOD. SUCH STABILIZING SHALL BE IN COMPLIANCE WITH ALL APPLICABLE LAWS, REGULATIONS AND RULES.

Joint Bookrunners and Joint Lead Managers

BofA Merrill Lynch — **BNP PARIBAS**
Commerzbank — **Credit Suisse**
HSBC — **Mizuho Securities**

Joint Lead Managers

Shinhan Asia Limited — **Shinhan Investment Corp.**

The date of this pricing supplement is March 19, 2018.

March 19, 2018

SHINHAN BANK

(acting through its principal office in Korea)

Issue of US$400,000,000 4.500%Tier II Subordinated Notes due 2028
under the US$6,000,000,000
Global Medium Term Note Program

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 March 17, 2017, as amended or supplemented from time to time (the "Offering Circular"). This Pricing Supplement is supplemental to 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.

1.	Issuer:		Shinhan Bank, acting through its principal office in Korea
2.	(i)	Series Number:	42
	(ii)	Tranche Number:	1
	(iii)	Re-opening:	No
3.	Specified Currency or Currencies:		U.S. Dollars (US$)
4.	Aggregate Nominal Amount:		
	(i)	Series:	US$400,000,000
	(ii)	Tranche:	US$400,000,000
5.	(i)	Issue Price of Tranche:	99.896% of the Aggregate Nominal Amount
	(ii)	Net Proceeds (after deducting underwriting discounts and commissions but not estimated expenses):	US$397,784,000
	(iii)	Use of Proceeds:	General corporate purposes
6.	(i)	Specified Denominations:	US$200,000 and integral multiples of US$1,000 in excess thereof
	(ii)	Calculation Amount:	US$1,000
7.	(i)	Issue Date:	March 26, 2018
	(ii)	Interest Commencement Date:	March 26, 2018
8.	Maturity Date:		March 26, 2028

9.	Interest Basis:	4.500% Fixed Rate per annum
10.	Redemption/Payment Basis:	Redemption at par
11.	Change of Interest Basis or Redemption/Payment Basis:	None
12.	Put/Call Options:	Not Applicable
13.	Status of the Notes:	Tier II Subordinated
14.	Listing:	Singapore Exchange Securities Trading Limited
15.	Method of Distribution:	Syndicated

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

16.	Fixed Rate Note Provisions:	Applicable
	(i) Rate(s) of Interest:	4.500% per annum payable semi-annually in arrears
	(ii) Interest Payment Date(s)	March 26 and September 26 of each year up to and including the Maturity Date (with the first interest payment date being September 26, 2018)
	(iii) Fixed Coupon Amount(s):	US$22.5 per Calculation Amount
	(iv) Broken Amount(s):	Not Applicable
	(v) Day Count Fraction:	30/360
	(vi) Determination Date(s):	Not Applicable
	(vii) Business Center(s):	Not Applicable
	(viii) Other terms relating to the method of calculating interest for Fixed Rate Notes:	Condition 6(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

PROVISIONS RELATING TO REDEMPTION

21.	Issuer Call:	Not Applicable

22.	Investor Put:	Not Applicable
23.	Final Redemption Amount of each Note:	US$1,000 per Calculation Amount
24.	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 8(e) (*Redemption and Purchase — Early Redemption Amounts*):	US$1,000 per Calculation Amount

GENERAL PROVISIONS APPLICABLE TO THE NOTES

25.	Form of Notes:	Registered Notes The Notes will be registered in the name of The Bank of New York Depository (Nominees) Limited as nominee of The Bank of New York Mellon as common depositary for Euroclear Bank SA/NV ("Euroclear") and Clearstream Banking S.A. ("Clearstream"). The Notes will be settled and held solely through Euroclear and Clearstream in accordance with the rules and operating procedures of Euroclear and Clearstream. For the avoidance of doubt, any provision in the Registered Global Note relating to registration or settlement through The Depository Trust Company is not applicable for the Notes. The foregoing provisions apply to the Notes notwithstanding any provisions in the Registered Global Note to the contrary.
26.	Additional Financial Center(s) or other special provisions relating to Payment Dates:	Not Applicable
27.	Talons for future Coupons or Receipts to be attached to Definitive Bearer Notes (and dates on which such Talons mature):	Not Applicable
28.	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

29.	Details relating to Installment Notes:	Not Applicable
	(i) Installment Amount(s):	Not Applicable
	(ii) Installment Date(s):	Not Applicable
30.	Redenomination applicable:	Redenomination not applicable
31.	Other terms or special conditions:	Not Applicable

DISTRIBUTION

32.	(i) If syndicated, names of Managers:	BNP Paribas Commerzbank Aktiengesellschaft Credit Suisse (Hong Kong) Limited The Hongkong and Shanghai Banking Corporation Limited Merrill Lynch International, LLC Seoul Branch Mizuho Securities Asia Limited *(as Joint Bookrunners and Joint Lead Managers)* Shinhan Asia Limited Shinhan Investment Corp. *(as Joint Lead Managers)*
	(ii) Stabilizing Manager (if any):	BNP Paribas Commerzbank Aktiengesellschaft Credit Suisse (Hong Kong) Limited The Hongkong and Shanghai Banking Corporation Limited Merrill Lynch International, LLC Seoul Branch Mizuho Securities Asia Limited
33.	If non-syndicated, name of relevant Dealer:	Not Applicable
34.	Whether TEFRA D or TEFRA C rules applicable or TEFRA rules not applicable:	TEFRA rules not applicable
35.	Prohibition of Sales to EEA Retail Investors:	Applicable
36.	Additional selling restrictions:	Not Applicable

OPERATIONAL INFORMATION

37.	Any clearing system(s) other than Euroclear and Clearstream and the relevant identification number(s):	Not Applicable

38.	Delivery:	Delivery against payment
39.	In the case of Registered Notes, specify the location of the office of the Registrar if other than New York:	The Bank of New York Mellon SA/NV, Luxembourg Branch Vertigo Building — Polaris 2-4 rue Eugéne Ruppert L-2453 Luxembourg
40.	In the case of Bearer Notes, specify the location of the office of the Principal Paying Agent if other than London:	Not Applicable
41.	Additional Paying Agent(s) (if any):	Not Applicable
42.	Alternate Settlement Rate Determination Agent (if any):	Not Applicable

ISIN:	XS1795263281
Common Code:	179526328

LISTING APPLICATION

This Pricing Supplement comprises the details required to list the issue of Notes described herein pursuant to the listing of the US$6,000,000,000 Global Medium Term Note Program of Shinhan Bank.

OTHER RELATIONSHIPS

Certain affiliates of the Joint Lead Managers have from time to time performed banking and advisory services in the ordinary course of business for the Issuer for which they have received customary fees and expenses. The Joint Lead Managers and certain of their affiliates may, from time to time, engage in transactions with and perform services for this Issuer in the ordinary course of business.

The Joint Lead Managers or certain of their respective affiliates may purchase the Notes and be allocated Notes for asset management and/or proprietary purposes and not with a view to distribution.

RATINGS OF THE NOTES

The Notes are expected to be rated Baal by Moody's Investors Service and BBB+ by Standard & Poor's Rating Services, a division of the McGraw-Hill Companies, Inc. Such ratings do not constitute a recommendation to buy, sell or hold the Notes and may be subject to revision or withdrawal at any time by such rating organizations. Each such rating should be evaluated independently of any other rating of the Notes.

RECENT DEVELOPMENTS

This section provides information that supplements or replaces certain information about the Issuer or the Program under the headings corresponding to the headings below in the Offering Circular. Capitalized terms used in this section or elsewhere in this Pricing Supplement have the meanings given to them in the Offering Circular. If the information in this section differs from the information in the Offering Circular, you should rely on the information in this section.

EXCHANGE RATES

The following supplements information about the Issuer or the Program under the heading corresponding to the heading in the Offering Circular and must be read in conjunction with the Offering Circular.

The following table sets forth, for the periods and dates indicated, certain information concerning the Market Average Exchange Rate in Won per US$1.00. The Market Average Exchange Rate has been highly volatile recently. The Bank expects this volatility to continue in the near future.

Year Ended December 31,	At End of Period	Average[(1)]	High	Low
		(Won per US$1.00)		
2012	1,071.1	1,126.9	1,181.8	1,071.1
2013	1,055.3	1,094.7	1,161.3	1,050.1
2014	1,099.2	1,053.2	1,118.3	1,008.9
2015	1,172.0	1,131.5	1,203.1	1,068.1
2016	1,208.5	1,160.5	1,240.9	1,093.2
2017	1,071.4	1,130.8	1,208.5	1,071.4
October	1,125.0	1,131.6	1,145.7	1,124.7
November	1,082.4	1,105.0	1,121.2	1,082.4
December	1,071.4	1,085.8	1,093.4	1,071.4
2018 (through March 15)	1,065.8	1,072.4	1,094.3	1,061.3
January	1,071.5	1,066.7	1,071.5	1,061.3
February	1,071.0	1,079.6	1,094.3	1,068.0
March (through March 15)	1,065.8	1,072.1	1,081.9	1,064.3

Source: Seoul Money Brokerage Services, Ltd.

Note:

(1) Represents the average of the Market Average Exchange Rate on the trading days of during the relevant period.

RISK FACTORS

The following replaces information about the Issuer or the Program under the heading corresponding to the heading in the Offering Circular.

In addition to other information contained in this offering circular, you should consider carefully the risks described below. These risks are not the only ones that the Bank faces. Additional risks not currently known to the Bank or those which the Bank currently believes are immaterial may also impair its business operations. The Bank's business, financial condition or results of operations could be materially adversely affected by any of these risks.

Risks Relating to the Bank's Business

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

Most of the Bank's assets are located in, and the Bank generates most of its income from, Korea. Accordingly, the Bank's business and profitability are largely dependent on the general economic and social conditions in Korea, including interest rates, inflation, exports, personal expenditures and consumption, unemployment, demand for business products and services, debt service burden of households and businesses, the general availability of credit, the asset value of real estate and securities and other factors affecting the financial well-being of the Bank's corporate and retail customers.

The Korean economy is closely integrated with, and is significantly affected by, developments in the global economy. In light of the ongoing general uncertainty about economic and political conditions in Europe, signs of cooling economy for China and the continuing geopolitical and social instability in various parts of the Middle East, including Iraq, Syria and Yemen, as well as in the former republics of the Soviet Union, including Russia and Ukraine, among others, significant uncertainty remains as to the global economic prospects in general and has adversely affected, and may continue to adversely affect, the Korean economy. In addition, as the Korean economy matures, it is increasingly exposed to the risk of a "scissor effect," namely being pursued by competitors in less advanced economies while not having fully caught up with competitors in advanced economies, which risk is amplified by the fact that Korean economy is heavily dependent on exports. The Korean economy also continues to face other difficulties, including sluggishness in domestic consumption and investment, volatility in the real estate market, rising household debt, potential declines in productivity due to aging demographics and low birth rates, and a rise in youth unemployment. Any future deterioration of the global and Korean economies could adversely affect the Bank's business, financial condition and results of operations.

In particular, difficulties in financial and economic conditions could result in significant deterioration in the quality of the Bank's assets and accumulation of higher provisioning, allowances for loan losses and charge-offs as an increasing number of the Bank's corporate and retail customers declare bankruptcy or insolvency or otherwise face increasing difficulties in meeting their debt obligations. For example, in 2011 and 2012, the continuing slump in the real estate market and the shipbuilding industry led to increased delinquency among the Bank's corporate borrowers in the construction, real estate leasing, shipbuilding and shipping industries, and in certain cases, even insolvency, workouts, recovery proceedings and/or voluntary arrangements with creditors, as was the case for the current and former member companies of the STX Group, Keangnam Enterprises Co., Ltd., Dongbu Steel Co., Ltd., Sambu Construction Co., Ltd. and Hanjin Heavy Industries & Construction Co., Ltd. During the same period, the sustained slump in the real estate market also led to increased delinquency among the Bank's retail borrowers, and in particular, borrowers with collective loans for pre-sale of newly constructed apartment units. Accordingly, the Bank's delinquency ratio (based on delinquency of one or more month and net of charge-offs and loan sales) increased from 0.48%

as of December 31, 2010 to 0.60% as of December 31, 2011 and 0.61% as of December 31, 2012. However, primarily due to a modest rebound in the housing market and the Bank's active efforts to reduce its exposure to such troubled industries and other at-risk borrowers through preemptive risk management policies and increased lending to borrowers with high-quality credit profiles as part of the Bank's strategic initiative to improve its asset quality, the Bank's delinquency ratio decreased to 0.39% as of December 31, 2013 and 0.31% as of December 31, 2014, remained stable at 0.33% as of December 31, 2015, and further decreased to 0.28% as of December 31, 2016 and 0.23% as of December 31, 2017. There is no assurance, however, that the Bank will not experience further loan losses from borrowers in the troubled industries since the quality of loans to such borrowers may further deteriorate due to the continued slump in these industries or for other reasons.

Moreover, as was the case during the global financial crisis of 2008-2009, depending on the nature of the difficulties in the financial markets and general economy, the Bank may be forced to scale back certain of its core lending activities and other operations and/or borrow money at a higher funding cost or face a tightening in the net interest spread, any of which may have a negative impact on its earnings and profitability. Furthermore, while the Bank currently maintains its capital adequacy ratio at a level higher than the required regulatory minimum, there is no guarantee that an even higher capital requirement will not be imposed by the Government in case of a renewed economic crisis. In addition, given the highly integrated nature of financial systems and economic relationships worldwide, there may be other unanticipated systemic or other risks that may not be presently predictable. Any of these risks, if materialized, may have a material adverse effect on the Bank's business, liquidity, financial condition and results of operations.

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

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

The Bank competes principally with other national commercial banks in Korea, but also faces competition from a number of additional banking institutions, including branches and subsidiaries of foreign banks operating in Korea, regional banks, government-owned development banks and Korea's specialized banks, such as Korea Development Bank, the Industrial Bank of Korea and the National Federation of Fisheries Cooperatives, as well as various other types of financial service providers, including savings institutions (such as mutual savings and finance companies, credit unions and credit cooperatives), investment companies (such as securities brokerage firms, merchant banking corporations and asset management companies) and life insurance companies. As of December 31, 2017, Korea had six major nationwide domestic commercial banks (including Citibank Korea Inc. and Standard Chartered Bank Korea Limited, both of which are domestic commercial banks acquired by global financial institutions), six regional commercial banks and branches and subsidiaries of 38 foreign banks. Foreign financial institutions, many of which have greater experiences and resources than the Bank does, may continue to enter the Korean market and compete with the Bank in providing financial products and services either by themselves or in partnership with existing Korean financial institutions.

In the small- and medium-sized enterprise and retail banking segments, which have been the Bank's traditional core businesses, competition is expected to increase further. In recent years, Korean banks, including the Bank, have increasingly focused on stable asset growth based on quality credit, such as corporate borrowers with high credit ratings, loans to "small office, home office" ("**SOHO**") with high levels of collateralization, and mortgage and home equity loans within the limits of the prescribed loan-to-value ratios and debt-to-income ratios. This common shift in focus toward stable growth based on less risky assets has intensified competition as banks compete for the same limited pool of quality credit by engaging in price competition or by other means although the Bank has traditionally focused, and will continue to focus, on enhancing profitability rather than increasing asset size or market share, and has avoided, to the extent practicable, engaging in price competition by way of lowering lending rates. In addition, such competition may result in lower net interest margin and reduced overall profitability, especially if the low interest rate environment were to continue for a significant period of time. Although net interest margin may improve if the base interest rate is increased during 2018, the effect on the Bank's results of operations may be marginal amidst increased volatility of market interest rates and tighter regulations regarding SOHO loans, including the implementation of additional credit review guidelines for individual businesses. Therefore, if competing financial institutions seek to expand market share by lowering their lending rates, the Bank may suffer customer loss, especially among customers who select their lenders principally on the basis of lending rates. In response thereto or for other strategic reasons, the Bank may subsequently lower its lending rates to stay competitive, which could lead to a decrease in its net interest margins and outweigh any potential positive impact on the net interest margin from a general rise in market interest rates. Any future decline in the Bank's customer base or its net interest margins could have an adverse effect on its results of operations and financial condition.

Consolidation among the Bank's rival institutions and the Government's privatization efforts may also add competition in the markets in which the Bank conducts business. A number of significant mergers and acquisitions in the industry have taken place in Korea over the past decade, including the acquisition of Hanmi Bank by an affiliate of Citibank in 2004, Standard Chartered Bank's acquisition of Korea First Bank in 2005, Chohung Bank's merger with Shinhan Bank in 2006, and Hana Financial Group's acquisition of Korea Exchange Bank in 2012 and the resulting merger of Hana Bank and Korea Exchange Bank in September 2015. Moreover, in 2014, pursuant to the implementation of the Government's privatization plan with respect to Woori Finance Holdings (now merged into Woori Bank) and its former subsidiaries, Woori Financial, Woori Asset Management and Woori F&I were acquired by KB Financial Group, Kiwoom Securities and Daishin Securities, respectively, and Woori Investment & Securities, Woori Aviva Life Insurance and Woori FG Savings Bank were acquired by NongHyup Financial Group. In addition, in October 2014, the Government's ownership interest in the holding companies of Kwangju Bank and Kyongnam Bank were acquired by JB Financial Group and BS Financial Group (now BNK Financial Group), respectively. In 2015, the Government decided to sell a 30% to 40% interest in Woori Bank to multiple investors in separate blocks ranging from 4% to 10% each. Since December 2016, Korea Deposit Insurance Corporation has consummated sales transactions with seven institutional investors including Kiwoom Securities, Korea Investment and Securities, Hanwha Life Insurance, Tongyang Life Insurance, Eugene Asset Management, Mirae Asset Global Investments and IMM Private Equity for the sale of an aggregate 29.7% interest in Woori Bank in separate blocks. Any of these developments may place the Bank at a competitive disadvantage and outweigh any potential benefit to the Bank in the form of opportunities to acquire new customers who are displeased with the level of services at the newly reorganized entities or to provide credit facilities to corporate customers who wish to maintain relationships with a wide range of banks in order to diversify their sources of funding. The Bank expects that such consolidation and other structural changes in the financial industry will continue. Other financial institutions may seek to acquire or merge with other entities, and the financial institutions resulting from such consolidation may, by virtue of their increased size and business scope, provide greater competition for the Bank. Increased competition and continuing consolidation may lead to decreased margins, resulting in a material adverse impact on the Bank's future profitability.

Regulatory reforms and the general modernization of business practices in Korea have also led to increased competition among financial institutions in Korea. Since July 2015, the FSC has provided, through the Korea Financial Telecommunications and Clearings Institute, the integrated automatic payment transfer management service, which allows account holders to search for, terminate or modify automatic payments they have set up with financial institutions participating in such service (currently including banks, securities companies and other financial institutions such as The Post Office, Korean Federation of Community Credit Cooperatives, National Credit Union Federation of Korea, Mutual Savings Bank and National Forestry Cooperative Federation). In addition, the FSC began providing the integrated account management service from December 2016, which allows account holders to search for detailed information of their bank accounts opened in banks participating in such service, close small-sum inactive accounts (i.e., accounts with no transaction activity during the previous one year period and with a balance of less than ₩500,000) and transfer the balance in such accounts to other accounts. Moreover, in December 2017, the FSC introduced the "my account at a glance" system," which enables consumers to view their key financial account information online, including information on bank, insurance, mutual finance, loan and card issuance on one page. The "my account at a glance" system is expected to become available on mobile channels and expand its scope of services to include savings bank and securities within 2018. Since their introduction, the integrated automatic payment transfer management and integrated account management services have gained widespread acceptance, evidenced by the fact that, as of September 30, 2017, these services have been used by approximately 17.6 million and 8.0 million users, respectively.

Furthermore, effective March 2016, the FSC introduced the individual savings account ("**ISA**") system, as part of its efforts to lower the regulatory barrier between the banking and securities sectors. The ISA is an integrated account that enables account holders to manage a number of different financial products, including cash deposits, funds and securities investment accounts, from a single account, the income from which will be eligible for tax benefits. Since this new system does not allow an individual to hold multiple ISA accounts, competition among banks and securities firms to retain existing customers and attract new customers is expected to intensify. As the reform of the financial sector continues, competition may become more intense among existing banks, insurance companies, securities companies and other financial organizations, and may lead to significant changes in the current Korean financial market. As a result, the Bank may face difficulties in increasing or retaining its deposits, which in turn may result in an increase in its cost of funding and a decrease in its settlement and remittance service fee revenue.

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

Recently, following the global financial crisis, the Government has subjected Korean financial institutions to stricter regulatory requirements and guidelines in areas of asset quality, capital adequacy, liquidity and residential and other lending practices (including a requirement to maintain a certain ratio of core capital to total risk exposure, which was introduced in January 2018 in order to control excessive leverage), which has had a dampening effect on competition. The FSC implemented the capital requirements of Basel III, whose minimum requirements were phased in sequentially from December 1, 2013 through full implementation by January 1, 2015, based on the guidelines set forth in the amended Regulation on the Supervision of the Banking Business and the Detailed Regulation on the Supervision of the Banking Business. In addition, the FSC is currently implementing the Basel III requirements relating to liquidity coverage ratio and capital conservation buffer, each of which will be fully phased in by January 1, 2019. As of January 1, 2016, the FSC implemented Basel III requirements relating to accumulation of additional capital for systemically important banks and countercyclical capital buffer requirements. Each year, the FSC may designate banks with significant influence (based on size and connectivity with other financial institutions) on the domestic financial system as a domestic systemically important bank and require the accumulation of additional capital in accordance with the highest of: (i) ratio of common equity capital to risk-weighted assets, ranging from 0.0% to 2.0%, depending on the systematic importance evaluation score, (ii) if the bank's holding company is a domestic systemically important bank holding company, the capital ratio corresponding to the additional capital required for the bank holding company under the Financial Holding Company Supervision Regulations, or (iii) if the bank is also a global systemically important bank, as defined by the Basel Committee on Banking Supervision (the "**Basel Committee**"), the capital ratio as required by the Basel Committee. According to the instructions of the FSC, domestic systematically important banks including the Bank are required to maintain an additional capital buffer of 0.25% starting on January 1, 2016, with such buffer to increase by 0.25% annually to 1.00% by January 1, 2019. The FSC may also, upon quarterly review, determine and require banks to accumulate a required level of countercyclical capital buffer within the range of 0% to 2.5% of risk-weighted assets, taking into account factors such as the degree of increase in credit relative to the gross domestic product. However, there is no assurance that these measures will have the effect of curbing competition or that the Government will not reverse or reduce such measures or introduce other deregulatory measures, which may further intensify competition in the Korean financial services industry. For further details on the capital requirements applicable to the Bank, see "*Supervision and Regulation — Principal Regulations Applicable to Banks — Capital Adequacy*".

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

The Bank has significant exposure to small- and medium-sized enterprises, and financial difficulties experienced by such enterprises may result in a deterioration of its asset quality.

One of the Bank's core banking businesses has historically been and continues to be lending to small- and medium-sized enterprises (as defined in "*Business — Business Overview — The Bank's Principal Activities — Corporate Banking Services — Small- and Medium-sized Enterprises Banking*"). The Bank's loans (before allowance for loan losses and deferred loan origination costs and fees) to such enterprises amounted to ₩67,336 billion as of December 31, 2015, ₩71,757 billion as of December 31, 2016 and ₩78,556 billion as of December 31, 2017, representing 32.0%, 32.5% and 33.7%, respectively, of the Bank's total loan portfolio as of such dates.

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

Financial difficulties experienced by small- and medium-sized enterprises as a result of, among other things, recent economic difficulties in Korea and globally and aggressive marketing and intense competition among banks to lend to this segment in recent years, coupled with the Bank's efforts to counter asset quality deterioration through conservative lending policy, have led to a fluctuation in the asset quality of the Bank's loans to this segment. As of December 31, 2015, 2016 and 2017, the Bank's delinquent loans to small- and medium-sized enterprises were ₩308 billion, ₩362 billion and ₩303 billion, respectively, representing delinquency ratios (net of charge-offs and loan sales) of 0.46%, 0.51% and 0.39%, respectively. If the ongoing difficulties in the Korean or global economy were to continue or aggravate, the delinquency ratio of the Bank's loans to small- and medium-sized enterprises may rise.

Of particular concern is the Bank's significant exposure to enterprises in the real estate and leasing and construction industries. As of December 31, 2017, the Bank had outstanding loans (before allowance for loan losses and deferred loan origination costs and fees) to enterprises in the real estate and leasing and construction industries (many of which are small- and medium-sized enterprises) of ₩21,490 billion and ₩2,550 billion, respectively, representing 9.2% and 1.1%, respectively, of the Bank's total loan portfolio as of such date. The Bank also has other exposure to borrowers in these sectors of the Korean economy, including extending guarantees for the benefit of such companies and holding debt and equity securities issued by such companies. In addition, the Bank has exposure to borrowers in the shipbuilding and shipping industries, which have yet to stage a meaningful turnaround.

The enterprises in the real estate development and construction industries in Korea, which are heavily concentrated in the housing market, continue to experience difficulties amid slowing real estate demand despite a moderate recovery in recent years, largely due to a combination of factors including the Government's policy measures to stabilize the real estate market, oversupply of residential property, ongoing economic sluggishness in Korea and globally and the demographic changes in the Korean population. The Bank also has limited exposure to real estate project financing, particularly by construction companies that have built residential units in provinces outside the metropolitan Seoul area, which have experienced a relatively low rate of pre-sales, the proceeds from which the construction companies primarily rely on as a key source for liquidity and cash flow.

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

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

Of the Bank's 10 largest corporate exposures as of December 31, 2017, two were companies for which the Bank was a main creditor bank. All of the 10 companies are or were members of the main debtor groups as identified by the Governor of the FSS, which are largely comprised of *chaebol*s,. As of such date, the total amount of the Bank's exposures to these 10 companies was ₩18,053 billion, or 11.5%, of its total exposures. As of that date, the Bank's single largest outstanding exposure to a main debtor group amounted to ₩4,328 billion, or 2.8%, of its total exposures. See "*Description of Assets and Liabilities — Loan Portfolio — Exposure to Main Debtor Groups*". Largely due to the continued stagnation in the shipbuilding industry, current and former member companies of the STX Group, one of the leading conglomerates in Korea, entered into voluntary arrangements in 2013 with their creditors (including the Bank) to improve their credit situation, and STX Offshore & Shipbuilding and STX Heavy Industries, two of the STX Group's member companies, recently filed for court receivership in May 2016 and July 2016, respectively. Due to stagnation in the construction industry, Keangnam Enterprises Co., Ltd., a large construction company in Korea, also entered into workout proceedings in 2013 and subsequently filed for recovery proceedings in March 2015. Dongbu Steel Co., Ltd. and Sambu Construction Co., Ltd. also experienced significant hardship and entered into workout or recovery proceedings in 2015. Additionally, in October 2015, creditors of Daewoo Shipbuilding & Marine Engineering Co., led by Korea Development Bank, announced a restructuring plan that included cash injection and additional loans totaling ₩4.2 trillion and extensive streamlining measures, and in November 2016, Korea Development Bank agreed to swap ₩1.8 trillion of debt to equity and the Export-Import Bank of Korea agreed to issue ₩1 trillion of perpetual bonds. Amidst continued deterioration of Daewoo Shipbuilding & Marine Engineering Co., Ltd.'s financial conditions, in March 2017, Korea Development Bank and the Export-Import Bank of Korea further agreed to provide an additional ₩2.9 trillion in loans and swap ₩1.6 trillion of debt to equity, provided that other creditors and bondholders agree to certain debt-to-equity swaps and extension of maturities. In January 2016, Hanjin Heavy Industries & Construction Co., Ltd. entered into voluntary restructuring agreements with its creditors due to liquidity shortage in the wake of prolonged industry slowdown. Partly as a result of its active past efforts to reduce exposure to the shipbuilding and construction sectors, the Bank currently has limited exposure to the aforementioned troubled companies. However, if the credit quality of the Bank's exposure to large corporations, including those in the main debtor groups, declines, the Bank may be required to record additional loan loss provisions in respect of loans and impairment losses in respect of securities, which would adversely affect its financial condition, results of operations and capital adequacy. The Bank cannot assure you that the allowances it has established against these exposures will be sufficient to cover all future losses arising from such exposures, especially in the case of a prolonged or renewed economic downturn.

A limited number of the main debtor groups to which the Bank has credit exposure are subject to restructuring programs or are otherwise making significant efforts to improve their financial conditions, such as by obtaining intragroup loans and entering into agreements to further improve their capital structures. There is no assurance that there will not be future restructuring with the Bank's major corporate customers or that such restructuring will not result in significant losses to the Bank with less than full recovery. In addition, if the

Government decides to pursue an aggressive restructuring policy with respect to distressed companies, Korean commercial banks, including the Bank, may face a temporary rise in delinquencies and intensified pressure for additional provisioning. Furthermore, bankruptcies or financial difficulties of large corporations, including chaebol groups, may have the adverse ripple effect of triggering delinquencies and impairment of the Bank's loans to small- and medium-sized enterprises that supply parts or labor to such corporations. If the Bank experiences future losses from its exposure to large corporations, including chaebol groups, it may have a material adverse impact on the Bank's business, financial condition and results of operations.

The asset quality of the Bank's retail loan portfolio may deteriorate.

In recent years, consumer debt, including lending to households and small unincorporated businesses, has continued to increase in Korea. The Bank's portfolio of retail loans is comprised of two principal product types, namely secured retail loans (which are primarily comprised of mortgage and home equity loans secured by real estate) and general purpose loans (which are unsecured loans and tend to carry a higher credit risk). As of December 31, 2017, the Bank's retail loan portfolio (before allowance for loan losses and deferred loan origination costs and fees) was ₩103,724 billion, or 44.6% of its total loans outstanding. As of December 31, 2015, 2016 and 2017, the Bank's non-performing retail loans were ₩148 billion, ₩157 billion and ₩215 billion, respectively, representing non-performing loan ratios (net of charge-offs and loan sales) of 0.16%, 0.16% and 0.21%, respectively.

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

Liquidity, funding management and credit ratings are critical to the Bank's ongoing performance.

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

For example, Basel III includes an international framework for liquidity risk measurement, standards and monitoring, as noted above, including a new minimum liquidity standard, known as the liquidity coverage ratio ("**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 organization's HQLA, divided by (b) its total expected net cash outflows over the next 30 calendar days under stress scenarios. The minimum LCR is 100%. In January 2013, the Basel Committee released a revised formulation of the LCR, one of two quantitative liquidity measures approved in December 2010 as part of Basel III. The Basel Committee extended the timetable for full phase-in of the LCR to the effect that the minimum LCR was set at 60% as of January 1, 2015 and thereafter rises in annual increments of 10% so that the minimum LCR will be 100% as of January 1, 2019. In December 2014, the FSC promulgated regulations to implement the liquidity requirements of Basel III, including raising the minimum LCR to 80% as of January 1, 2015 and thereafter by annual increments of 5% so that the minimum LCR for commercial banks in Korea will be 100% as of January 1, 2019.

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

The Bank also raises funds in capital markets and borrows from other financial institutions, the cost of which depends on market rates and the general availability of credit and the terms of which may limit its ability to pay dividends, make acquisitions or subject itself to other restrictive covenants. While the Bank currently is not facing liquidity difficulties in any material respect, if the Bank is unable to obtain the funding that it needs on terms commercially acceptable to it for an extended period of time for whatever reason, it may not be able to ensure its financial viability, meet regulatory requirements, implement its strategies or compete effectively.

Credit ratings affect the cost and other terms upon which the Bank is able to obtain funding. Domestic and international rating agencies regularly evaluate the Bank, and their ratings of the Bank's long-term debt are based on a number of factors, including its financial strength as well as conditions affecting the financial services industry and the Korean economy in general. The Bank has maintained issuer credit ratings of "Aa3" from Moody's Investors Service since May 2015 (upgraded from A1), "A+" from Standard & Poor's Ratings Services since August 2016 (upgraded from A) and "A" from Fitch Ratings, Inc. since February 2008. However, there can be no assurance that the rating agencies will maintain the Bank's current ratings or outlooks or that the Bank will not experience a downgrade in its credit ratings and outlooks for reasons related to the general Korean economy or reasons specific to the Bank. Any downgrades in the Bank's credit ratings and outlooks will likely increase its cost of funding, limit its access to capital markets and other borrowings, or require it to provide additional credit enhancement in financial transactions, any of which could adversely affect its liquidity, net interest margins and profitability, and in turn, its business, financial condition and results of operations.

Changes in interest rates, foreign exchange rates, bond and equity prices, and other market factors have affected and will continue to affect the Bank's business, results of operation and financial condition.

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

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

Since 2009, Korea, like many other countries, has experienced a low interest rate environment despite some marginal fluctuations, in part due to the Government's policy to stimulate the economy through active rate-lowering measures. Between 2009 and 2014, the base interest rate set by the Bank of Korea remained within the band between 2.00% and 3.25%. In an effort to support Korea's economy in light of the recent slowdown in Korea's growth and uncertain global economic prospects, the Bank of Korea reduced the base interest rate to 1.75% in March 2015, 1.50% in June 2015, and further reduced such rate to the historic low of 1.25% in June 2016. In November 2017, the Bank of Korea raised the base interest rate to 1.50%, marking the first time it has increased the base interest rate since 2011.

Interest rate movements, in terms of magnitude and timing as well as their relative impacts on the Bank's assets and liabilities, have a significant impact on its net interest margin and profitability, particularly with respect to its financial products that are sensitive to such movements. For example, if the interest rates applicable to the Bank's loans (which are recorded as assets) increase at a slower pace or by a thinner margin than the interest rates applicable to its deposits (which are recorded as liabilities), its net interest margin will shrink and its profitability will be negatively affected. In addition, the relative size and composition of its variable rate loans and deposits (as compared to its fixed rate loans and deposits) may also impact its net interest margin. Furthermore, the difference in the average term of the Bank's interest-earning assets (primarily loans) compared to its interest-bearing liabilities (primarily deposits) may also impact the Bank's net interest margin. For example, since the Bank's deposits tends to have longer terms, on average, than those of its loans, the Bank's deposits are on average less sensitive to movements in the base interest rates on which the Bank's deposits and loans tend to be pegged, and therefore, a decrease in the base interest rates tends to decrease the net interest margin of the Bank while an increase in the base interest rates tend to have the opposite effect. While the Bank continually manages its assets and liabilities to minimize its exposure to interest rate volatility, such efforts by the Bank may not mitigate the impact of interest rate volatility in a timely or effective manner, and the Bank's net interest margin, and in turn its financial condition and results of operations, could suffer significantly.

The Bank cannot assure you 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 the Bank's interest income due to the different maturity structure for the Bank's 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 the Bank's funding costs, while reducing loan demand, especially among retail customers. Rising interest rates may therefore require the Bank to re-balance its assets and liabilities in order to minimize the risk of potential mismatches in its asset liability management and to maintain its profitability. In additional, rising interest rates may adversely affect the Korean economy and the financial condition of the Bank's corporate and retail borrowers, which in turn may lead to deterioration of asset quality for its credit portfolio. Since most of the Bank's 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 the Bank's borrowers and may adversely affect their ability to make payments on their outstanding loans.

The Bank is required to maintain its capital ratios above a minimum required level, and the failure to so maintain could result in the suspension of some or all of its operations.

The Bank, like other commercial banks in Korea, is required to maintain specified capital adequacy ratios. For example, since January 1, 2015, the Bank is required to maintain a minimum common equity Tier I capital adequacy ratio of 4.5%, a Tier I capital adequacy ratio of 6.0% and a total capital (BIS) ratio of 8.0%. These ratios measure the respective regulatory capital as a percentage of risk-weighted assets on a consolidated basis and are determined based on guidelines of the FSC. In addition, as further described below, the Bank is also required to maintain a capital conservation buffer and additional capital as a domestic systemically important bank and may be required to maintain a countercyclical capital buffer. As of December 31, 2017, the common equity Tier I capital adequacy ratio, the Tier I capital adequacy ratio and the total capital (BIS) ratio of the Bank on a consolidated basis were 12.83%, 13.24% and 15.59%, respectively.

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

In December 2010, the Basel Committee issued final rules in respect of (i) a global regulatory framework for more resilient banks and banking systems and (ii) an international framework for liquidity risk measurement, standards and monitoring, which together are commonly referred to as "Basel III." Under Basel III, Tier I capital is defined to include common equity Tier I and additional Tier I capital. Common equity Tier I capital is a new category of capital primarily consisting of common stock, capital surplus, retained earnings and other comprehensive income (progressively phased into the capital ratio calculation over several years). The new minimum capital requirements, including the minimum common equity Tier I requirement of 4.5% and additional mandatory capital conservation buffer requirement of 2.5%, are currently being implemented in phases until January 1, 2019. Additional discretionary countercyclical capital buffer requirements are also expected to be phased in, which will range at the discretion of national regulators between 0% and 2.5% of risk-weighted assets. Basel III also introduces a minimum leverage ratio requirement. On December 7, 2017, the Basel Committee finalized several key methodologies for measuring risk-weighted assets. The revisions include a standardized approach for credit risk, standardized approach for operational risk, revisions to the credit valuation adjustment (CVA) risk framework and constraints on the use of internal models. The Basel Committee had also previously finalized a revised standardized model for counterparty credit risk, revisions to the securitization framework and its fundamental review of the trading book, which updates both modeled and standardized approaches for market risk measurement. The revisions also include a capital floor set at 72.5% of total risk-weighted assets based on the revised standardized approaches to limit the extent to which banks can reduce risk-weighted asset levels through the use of internal models.

In order to implement the capital requirements under Basel III in Korea, the Regulation on the Supervision of the Banking Business was amended, effective December 1, 2013. Under the amended Regulation on the Supervision of the Banking Business, effective from January 1, 2015, commercial banks in Korea are required to maintain a minimum common equity Tier I ratio of 4.5%, a minimum Tier I capital ratio of 6.0% and a minimum total capital (BIS) ratio of 8.0%. The Regulation on the Supervision of the Banking Business was further amended on December 26, 2014, to implement the liquidity coverage ratio requirements under

Basel III in increments of 5% annually, from 80% as of January 1, 2015 to 100% as of January 1, 2019. Capital conservation buffer requirements are also being phased in from January 1, 2016 in increments of 0.625% annually, to the effect that commercial banks in Korea will be required to maintain a capital conservation buffer of 2.5% as of January 1, 2019. If a commercial bank fails to maintain such capital conservation buffer requirements, such bank will be subject to certain restrictions relating to its use of income, such as distributing dividends and purchasing treasury stock. As of January 1, 2016, the FSC implemented Basel III requirements relating to accumulation of additional capital for systemically important banks and countercyclical capital buffer requirements. Each year, the FSC may designate banks with significant influence (based on size and connectivity with other financial institutions) on the domestic financial system as a domestic systemically important bank and require the accumulation of additional capital in accordance with the highest of: (i) ratio of common equity capital to risk-weighted assets, ranging from 0.0% to 2.0%, depending on the systematic importance evaluation score, (ii) if the bank's holding company is a domestic systemically important bank holding company, the capital ratio corresponding to the additional capital required for the bank holding company under the Financial Holding Company Supervision Regulations, or (iii) if the bank is also a global systemically important bank, as defined by the Basel Committee, the capital ratio as required by the Basel Committee. Shinhan Financial Group and the Bank were selected as a domestic systemically important bank holding company and domestic systemically important bank, respectively, for 2017. According to the instructions of the FSC, domestic systematically important banks including the Bank are required to maintain an additional capital buffer of 0.25% starting on January 1, 2016, with such buffer to increase by 0.25% annually to 1.00% by January 1, 2019. The FSC may also, upon quarterly review, determine and require banks to accumulate a required level of countercyclical capital buffer within the range of 0% to 2.5% of risk-weighted assets, taking into account factors such as the degree of increase in credit relative to the gross domestic product. Since March 2016, the FSC has maintained countercyclical capital buffer requirements at 0%, and the FSC is expected to maintain the countercyclical capital buffer requirement at 0% for the first quarter of 2018.

The Bank is currently, and has been, in full compliance with Basel III requirements as implemented in Korea since its introduction in December 2013. However, there is no assurance that the Bank will continue to be able to be in compliance with Basel III requirements. New requirements under Basel III may require an increase in the Bank's credit risk capital requirements in the future, which may require the Bank to either improve its asset quality or raise additional capital. In addition, if the Bank's capital adequacy ratios were to fall below the required levels, the FSC might impose penalties ranging from a warning to suspension or revocation of its business licenses. In order to maintain the capital adequacy ratios above the required levels, the Bank may be required to raise additional capital through equity financing, but there is no assurance that it will be able to do so on commercially favorable terms or at all and, even if successful, any such capital raising may have a dilutive effect on the Bank's shareholders with respect to their interest in the Bank.

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

Most of the Bank's mortgage and home equity loans are secured by borrowers' homes, other real estate, other securities and guarantees (which are principally provided by the Government and other financial institutions), and a substantial portion of the Bank's corporate loans are also secured, including by real estate. As of December 31, 2017, the secured portion of the Bank's loans (before allowance for loan losses and deferred loan origination costs and fees) amounted to ₩106,503 billion, or 49.8% of its total loans. There is no assurance that the collateral value will not materially decline in the future. The Bank's general policy for mortgage and home equity loans is to lend up to 30% to 70% of the appraised value of the collateral and to periodically re-appraise such collateral. However, if the real estate market in Korea experiences a downturn, the value of the collateral may fall below the outstanding principal balance of the underlying mortgage loans. Borrowers of such under-collateralized mortgages or loans may be forced to pay back all or a portion of such mortgage loans or, if unable to meet the collateral requirement through such repayment, sell the underlying collateral, which sales may lead to a further decline in the price of real estate in general and set off a chain reaction for other borrowers due to the further decline in the value of collateral. Declines in real estate prices reduce the value of the collateral securing the Bank's mortgage and home equity loans, and such reduction in the value of collateral may result in the Bank's inability to cover the uncollectible portion of its secured loans. A decline in the value of the real estate or other collateral securing the Bank's loans, or its inability to obtain additional collateral in the event of such decline, may result in the deterioration of its asset quality and require the Bank to make additional loan loss provisions. In Korea, foreclosure on collateral generally requires a written petition to a Korean court. Foreclosure procedures in Korea generally take 10 to 14 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. There can be no assurance that the Bank will be able to realize the full value of collateral as a result of, among others, delays in foreclosure proceedings, defects in the perfection of collateral and general declines in collateral value. The Bank's failure to recover the expected value of collateral could expose it to significant losses.

Guarantees received in connection with the Bank's real estate financing may not provide sufficient coverage.

The Bank, alone or together with other financial institutions, provides financing to real estate development projects, which are concentrated largely in the construction of residential complexes. Developers in Korea commonly use project financing to acquire land and pay for related project development costs. As a market practice, lenders in project financing, including the Bank, generally receive from general contractors a performance guarantee for the completion of projects by the developers as well as a payment guarantee for the loans raised by a special purpose financing vehicle established by the developers in order to procure the construction orders, as the developers tend to be small and highly leveraged. As of December 31, 2017, the total outstanding amount of the Bank's real estate project financing-related exposure was ₩1.7 trillion, which represents a decrease over the years as the Bank has actively reduced new exposures in this area in light of the sustained downturn in the Korean real estate market. However, if defaults were to significantly increase under the Bank's existing loans to real estate development projects and the general contractors fail to pay the guaranteed amount necessary to cover the amount of the Bank's financings, this may have an adverse effect on the Bank's business, financial condition and results of operations.

Any deterioration in the asset quality of the Bank's guarantees and acceptances will likely have a material adverse effect on its financial condition and results of operations.

In the normal course of the Bank's banking activities, it makes various commitments and incurs certain contingent liabilities in the form of guarantees and acceptances. Financial guarantees, which are contracts that require the Bank to make specified payments to reimburse the beneficiary of the guarantee for a loss such beneficiary incurs because the debtor in respect of which the guarantee is given fails to make payments when due in accordance with the terms of the relevant debt instrument, are recognized initially at fair value, and such initial fair value is amortized over the life of the financial guarantee. Other guarantees are recorded as off-balance sheet items in the notes to the Bank's financial statements and those guarantees that the Bank has confirmed to make payments are recorded on the statements of financial position. As of December 31, 2017, the Bank had aggregate guarantees and acceptances of ₩12,882 billion, for which it provided allowances for losses of ₩79.8 billion.

If there is significant deterioration in the quality of assets underlying the Bank's guarantees and acceptances, the Bank's allowances may be insufficient to cover actual losses resulting in respect of these liabilities.

The Bank may experience significant losses from its investments and, to a lesser extent, trading activities due to market fluctuations.

The Bank enters into and maintains large investment positions in fixed income products, primarily through its treasury and investment operations. These activities are described in "*Business — Business Overview — Other Banking Services — Treasury*" and "*— Securities Investment and Trading*". The Bank also maintains smaller trading positions, including equity and equity-linked securities and derivative financial instruments, as part of its banking operations. Taking these positions entails making assessments about financial market conditions and trends. The revenues and profits that the Bank derives from many of these positions and related transactions are dependent on market prices, which are beyond the Bank's control. When the Bank owns assets such as debt or equity securities, a decline in market prices, for example, as a result of fluctuating market interest rates or stock market indices, can expose it to trading and valuation losses. If market prices move in a way that the Bank has not anticipated, it may experience losses. In addition, when markets are volatile and subject to rapid changes in price directions, actual market prices may be contrary to the Bank's assessments and lead to lower than anticipated revenues or profits, or even result in losses, with respect to the related transactions and positions.

The Bank may generate losses from its commission- and fee-based business.

The Bank provides, and seeks to expand the offerings of, commission- and fee-based services. Downturns in stock markets typically lead to a decline in the volume of transactions that the Bank executes for its customers and, therefore, a decline in its non-interest revenues. In addition, because the fees that the Bank charges for managing its clients' portfolios are often based on the size of the assets under management, a downturn in the stock market, which has the effect of reducing the value of its clients' portfolios or increasing the amount of withdrawals, also generally reduces the fees the Bank receives from its trust account management and other asset management services. Even in the absence of a market downturn, below-market performance by the Bank's various account services may result in increased withdrawals and reduced cash inflows, which would reduce the revenue it receives from these services. In addition, protracted declines in asset prices can reduce liquidity for assets held by the Bank and lead to material losses if the Bank cannot close out or otherwise dispose of deteriorating positions in a timely way or at commercially reasonable prices.

The Bank may incur losses associated with its counterparty exposures.

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

The Bank's risk management policies and procedures may not be fully effective at all times.

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

Labor unrest may adversely affect the Bank's operations.

As of December 31, 2017, 10,416 employees were members of a labor union, and to date, the Bank has not experienced any significant difficulties in its relationships with its employees. However, any significant labor unrest in the Korean financial industry or other sectors of the Korean economy could adversely affect the Bank's operations, as well as the operations of many of the Bank's customers and their ability to repay their loans, and could affect the financial conditions of Korean companies in general. Such developments would likely have an adverse effect on the Bank's business, financial condition, results of operations and capital adequacy.

The Bank may experience disruptions, delays and other difficulties relating to its information technology systems.

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

The Bank's activities are subject to cyber security risk.

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

For example, in March 2013, the Bank experienced a temporary interruption in providing online financial services due to large-scale cyber-attacks by unidentified sources on the security systems of major broadcasting networks and financial institutions in Korea. The interruption of the Bank's online financial services lasted approximately 90 minutes, after which the Bank's online system resumed without further malfunction. The FSS conducted an investigation into the incident and found that the Bank had not properly maintained its information technology administrator account and vaccine server. As a result, in December 2013, the FSS notified the Bank of an institutional caution (which does not give rise to significant sanctions unlike in the case of repeated institutional warnings), and imposed disciplinary actions against five of the Bank's employees. The Bank does not believe such incident resulted in any material loss or leakage of customer information or other sensitive data.

Major financial institutions in Korea have also fallen victim to large-scale data leakage in the past. In December 2013, it was reported that there was a leakage of personal information of approximately 130,000 customers of Standard Chartered Bank and Citibank in Korea, which leakage was attributed to a third party sub-contractor in the case of Standard Chartered Bank, and an employee in the case of Citibank. In addition, in January 2014, it was reported that there was a leakage of personal information of approximately 100 million customers of NH Card, Lotte Card and KB Card in Korea due to illegal access to such information by an employee of a third party credit information company in the course of developing information technology programs for these three credit card companies.

Other than the cyber security attack in March 2013 as discussed above, the Bank has not experienced any material security breaches in the past, including any similar large scale leakage of customer information. In order to minimize the risk of security breaches related to customer and other proprietary information, the Bank has taken a series of preventive measures such as the adoption and implementation of a best-in-class information security system and reinforcement of internal control measures. The Bank is fully committed to maintaining the highest standards of cyber security and consumer protection measures and upgrading them continually. The Bank has implemented the ISO 27001-certified security management system and has obtained the Information Security Management System certification. The Bank believes that such certification represents third-party validations that the Bank is in compliance with best-in-class international standards on matters of international security. The Bank's security management system continuously monitors for signs of potential cyber-attacks and is designed to provide early warning alerts to enable prompt action by the Bank. The Bank also provides intensive employee training to its information technology staff and other employees on cyber security and has adopted advanced security infrastructure (including through hiring a highly competent team of information security experts) for online financial services such as mandatory website certification and keyboard security functions. In addition, in compliance with applicable regulations, the Bank maintains insurance to cover cyber security breaches up to ₩10 billion. In addition, in light of the growing use of smart phones and other mobile devices to access financial services, the Bank has implemented security measures (including encryption and service terminal monitoring) to provide a secure mobile banking service as well as to prevent illegal leakage or sharing of customer data and otherwise enhance customer privacy.

The Bank is also keenly aware of the litigation and regulatory sanctions risks that may arise from security breaches and is aggressively reinforcing a culture that stresses safety and good custodianship as among its highest priorities. Furthermore, the Bank is actively taking steps to implement preventive and other steps recommended or required by the regulatory authorities in relation to actual and potential financial scams. However, 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 the Bank's best efforts at maintaining the best-in-class cyber security systems, the Bank will not be vulnerable to major cyber security attacks in the future.

The public is developing heightened awareness about the importance of keeping their personal data private, and the financial regulators are placing greater emphasis on data protection by financial service providers. For example, under the Personal Information Protection Act, as last amended in October 2017, financial institutions, as personal information manager, may not collect, store, maintain, utilize or provide resident registration numbers of their customers, unless other laws or regulations specifically request or permit the management of resident registration numbers. Further, under the Use and Protection of Credit Information Act, as last amended in November 2017 with effect from May 2018, a financial institution has a higher duty to protect credit information, meaning information necessary to assess the creditworthiness of the counterparty to financial transactions and other commercial transactions. Such regulations have considerably restricted a financial institution's ability to transfer or provide the information to its affiliate or holding company, and treble damages can be imposed on a financial institution for a leakage of such information. In addition, under the Electronic Financial Transaction Act, as last amended in April 2017 with effect from October 2017, a financial institution is primarily responsible for compensating its customers harmed by the financial institution's cyber security breach, even if the breach is not directly attributable to the financial institution. The Bank maintains an integrated system that closely monitors its customer information to ensure compliance with data protection laws and regulations.

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

Legal claims and regulatory risks arise in the conduct of the Bank's business.

In the ordinary course of the Bank's business, it is subject to regulatory oversight and potential legal and administrative liability risk. The Bank is also subject to a variety of other claims, disputes, legal proceedings and government investigations in Korea and other jurisdictions where it is active. See "*Business — Legal Proceedings and Other Matters*". These types of proceedings may expose the Bank to substantial monetary and/or reputational damages and legal defense costs, injunctive relief, criminal and civil penalties and the potential for regulatory restrictions on its businesses. The outcome of these matters cannot be predicted and they could adversely affect the Bank's future business.

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

Risks Relating to Law, Regulation and Government Policy

The Bank is a heavily regulated entity and operates in a legal and regulatory environment that is subject to change, and violations could result in penalties and other regulatory actions.

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

Upon implementation of the Government-proposed Financial Consumer Protection Act (currently pending at the National Assembly's subcommittee for review of the bill), banks as financial instrument distributors will be subject to heightened investor 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. The Bank may also become subject to other restrictions on its operations as a result of future changes in laws and regulations, including more stringent liquidity and capital requirements under Basel III, which are being adopted in phases in Korea in consideration of, among others, the pace and scope of international adoption of such requirements. Any of these regulatory developments may have a material adverse effect on the Bank's ability to expand operations or adequately manage its risks and liabilities.

In addition, violations of law and regulations could expose the Bank to significant liabilities and sanctions. For example, the FSS conducts periodic audits on the Bank and, from time to time, the Bank has received institutional warnings from the FSS. If the FSS determines as part of such audit or otherwise that the Bank's financial condition is unsound or that the Bank has violated applicable law or regulations, including FSS orders, or if the Bank fails to meet the applicable requisite capital ratio or the capital adequacy ratio, as the case may be, set forth under Korean law, the FSS may ask the FSC to order, among other things, cancellations of authorization, permission or registration of the business, suspensions of a part or all of the business, closures of branch offices, recommendations for dismissal of officers or suspensions of officers from performing their duties, or may order, among other things, institutional warnings, institutional cautions, reprimanding warnings on officers, cautionary warnings on officers or cautions on officers. If any of such measures is imposed on the Bank 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 the Bank's business, financial condition and results of operations.

The FSS conducted a comprehensive audit of the Bank from November to December 2012, and in July 2013 notified the Bank of an institutional caution (which does not give rise to significant sanctions unlike in the case of repeated institutional warnings), imposed disciplinary actions against 65 Bank employees and assessed a fine of ₩87.5 million after finding that the Bank had illegally monitored customer accounts, breached confidentiality with respect to certain financial transactions and violated its obligation to disclose and report to the FSS an investment in an affiliated company of the Bank. Furthermore, in March 2013 the

FSS conducted a special audit of the Bank as to incidents of alleged malfunctioning of the Bank's financial computer network and in December 2013, notified the Bank of an institutional caution and imposed disciplinary actions against five Bank employees after finding that the Bank did not properly maintain its information technology administrator account and vaccine server. From October 2013 to November 2014, the FSS also conducted a series of special audits of the Bank as to incidents of alleged illegal monitoring of customer accounts, and in February 2014, the Prosecutors' Office in Korea also commenced an investigation of the Bank with respect to same. In December 2015, the FSS notified the Bank of an institutional caution and imposed disciplinary actions against two former Bank officers after finding that the Bank had illegally monitored customer accounts, whereas in April 2016, the Prosecutors' Office determined not to prosecute the former officers of the Bank because of insufficient evidence. In addition, the FSS conducted a periodic audit of the Bank from April to May 2015 and notified the Bank of five items requiring management's attention and three items for improvement in June 2016 in connection with such audit. In April 2017, the FSS conducted a management operations review and notified the Bank of 11 items requiring management's attention. In August 2017, the FSS assessed a fine of ₩41.2 million after finding that the Bank did not operate a physically segregated network for devices connected to the network for purposes of operating, developing or monitoring the security of the Bank's information processing system, and the Bank has since paid the fine and corrected the issue.

For further details on the principal laws and regulations applicable to the Bank, see "*Supervision and Regulation*".

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

The Government has encouraged and may in the future encourage targeted lending to certain types of enterprises and individuals in furtherance of government initiatives. The Government, through its regulatory bodies such as the FSC, from time to time announces lending policies to encourage Korean banks and financial institutions, including the Bank, to lend to particular industries, business groups or customer segments, and, in certain cases, has provided lower cost funding through loans made by the Bank of Korea for further lending to specific customer segments. For example, the Government has taken and is taking various initiatives to support small- and medium-sized enterprises and low-income individuals, who were disproportionately affected by the downturn in the Korean and global economy in the late 2000s and have yet to fully recover. As part of these initiatives, the FSS has recently encouraged banks in Korea to increase lending to small- and medium-sized enterprises in order to ease the financial burden on such enterprises amid sluggish economic recovery, and in February 2016, the Bank of Korea announced that it would increase support for loans to small- and medium-sized enterprises by ₩9 trillion in anticipation of growing liquidity difficulties among such enterprises in light of the sustained sluggishness of the general economy and to stimulate trade exports, infrastructure investments and entrepreneurial efforts. The financial regulators have also adopted several measures designed to improve certain lending practices of the commercial banks which practices were perceived as having an unduly prohibitive effect on extending loans to small- to medium-sized enterprises. In addition, as a way of supporting the Government's initiative to assist promising start-ups and venture companies, in February 2015, the financial regulators announced that they would encourage the banks in Korea to increase lending to technology companies in the small- to medium-sized enterprise segment by an annual target of ₩20 trillion and to enhance technology-related credit review capabilities. Pursuant to these initiatives, the total lending to technology companies in the small- to medium-sized enterprise segment, on a cumulative basis, reached ₩32.6 trillion in 2015, ₩58.4 trillion in 2016 and ₩83.9 trillion in 2017. In January 2017, the FSC announced that it would further encourage lending to technology companies with a goal of reaching total lending, on a cumulative basis, of ₩80 trillion by the end of 2017. As of December 31, 2017, the Bank's total lending to technology companies reached, on a cumulative basis, ₩12.3 trillion.

Furthermore, in response to an increasing level of consumer debt and amid concerns over the debt-servicing capacity of retail borrowers if interest rates were to rise, the FSC announced in February 2014 that it plans to increase the proportion of fixed interest rate loans and installment principal repayment-based loans within the total housing loans extended by commercial banks (which loans have historically been, for the most part, variable interest rate loans with the entire principal being repaid at maturity, which is usually rolled over on an annual basis). According to this plan, the target proportion for fixed interest rate loans was set at 20%, 35%, 37.5% and 40% and the target proportion for installment principal repayment-based housing loans was set at 20%, 35%, 40% and 45%, each by the end of 2014, 2015, 2016 and 2017, respectively. Amid concerns about increasing household debt, the target proportion for fixed interest rate loans for 2016, 2017 and 2018 were increased to 40%, 45% and 47.5%, respectively, and the target proportion for installment principal repayment-based housing loans for 2016 and 2017 were increased to 45% and 55%, respectively, and was maintained at 55% for 2018. In addition, an expanded tax deduction limit for interest repayment is granted for loans with maturity of 10 years or more (compared to 15 years or more prior to this plan). The FSC announced that it would examine whether banks meet their targets on an annual basis.

In furtherance of the policy to expand the proportion of fixed rate housing loans, the FSC implemented "Relief Debt Conversion" program from March 24 to March 27, 2015 and from March 30 to April 3, 2015, respectively, under which borrowers of eligible housing loans (namely, loans that have been in existence for one year or more since the original loan date, with no delinquency in the past six months, with principal amounts of ₩500 million or less and for houses valued at ₩900 million or less that are on a floating rate basis and/or an interest payment only basis) might convert such loans to new fixed rate loans in respect of which the borrowers would be required to repay the principal and interest in installment for a term of 10, 15, 20 or 30 years without a grace period, provided that the new loans pass the maximum loan-to-value ratio of 70% (irrespective of the location of the property) and the maximum debt-to-income ratio of 60% (only in respect of apartment units located in the greater Seoul metropolitan area, subject to certain exceptions). The borrowers were allowed to convert the original loans only at the banks that extended such loans. The banks holding the newly converted fixed rate loans are required to sell such loans to Korea Housing Finance Corporation, a government-controlled entity, which will then securitize such loans and issue mortgage-backed securities (backed by such loans) to be purchased by the banks who sold the loans in proportion to the amounts of the loans sold, and the banks will be required to hold such securities for a period of one year, after which the bank can sell or dispose of such securities in the market or otherwise. According to the FSC, under this program, approximately 327,000 borrowers converted loans in the aggregate amount of ₩31.7 trillion to fixed rate loans, of which the Bank accounted for 13.5%. Due in large part to such initiatives, fixed interest rate loans and installment principal repayment-based loans accounted for 44.6% and 49.1%, respectively, of the total housing loans extended by commercial banks in Korea as of September 2017, according to data published by the Government in November 2017. Fixed interest rate and installment principal repayment-based housing loans accounted for 44.9% and 49.1%, respectively, of the housing loans extended by the Bank as of December 31, 2017.

In the event that market interest rates increase from those applicable during this program's implementation in March and April 2015, the Bank may experience valuation or realization losses on the mortgage-backed securities to be held by it. Due to the prevailing interest rate environment and other market conditions, the Bank also may not be able to sell or otherwise dispose of the mortgage backed securities in the market or otherwise in amounts or at prices commercially reasonable to the Bank. In addition, as a result of this program the Bank may incur additional costs from recalibrating its asset portfolio and asset-liability management policy. Any of these developments could adversely affect the Bank's results of operations and financial condition.

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

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

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

For example, to deal with a growing number of non-performing loans in the wake of the global financial crisis of 2008-2009, the Government sponsored the establishment of United Asset Management Company Ltd. ("**UAMCO**") in October 2009 through capital contributions from six major policy and commercial banks, namely the Bank, Kookmin Bank, KEB Hana Bank, Industrial Bank of Korea, Woori Bank and Nonghyup Bank. The Government originally planned to dispose of UAMCO during 2015 and establish a new company that specializes in corporate restructuring, but the Government scrapped such plans and instead decided to reorganize UAMCO and expand its restructuring business. As part of an effort to strengthen its balance sheet, UAMCO received additional capital contributions in May 2016 from two new shareholders, Korea Development Bank and the Export-Import Bank of Korea, and two of its existing shareholders, Woori Bank and Nonghyup Bank. The Bank has committed to contribute ₩175 billion of capital to UAMCO, of which ₩85.5 billion has been contributed to date. As of the date of this offering circular, the Bank held a 14% equity interest in UAMCO, while seven other policy and commercial banks each held an interest ranging from 2% to 14%.

UAMCO seeks to achieve financial improvement of struggling companies through a wide range of restructuring programs, including debt restructuring, capital injection, asset sales, corporate reorganization, workouts and liquidation and bankruptcy proceedings and is the largest purchaser in Korea of non-performing financial assets generally. The Bank sold non-performing assets to UAMCO in the amount of ₩39.1 billion, ₩103.5 billion and ₩118.2 billion in 2015, 2016 and 2017, respectively.

With an enlarged capital base following the recent capital contributions mentioned above, it is expected that UAMCO will play a more active role in the restructuring of the Korean corporate sector. The Government is also considering an amendment of the FSCMA to facilitate the business activities of UAMCO.

If UAMCO is successful in its expanded restructuring activities, it is anticipated that financial institutions including the Bank will be able to further enhance their financial soundness by transferring more non-performing loans to UAMCO rather than directly engaging in the restructuring activities of the troubled borrowers. However, the Bank or other banks may be requested by the Government to make additional capital contributions or loans to UAMCO, which may entail unanticipated costs. Additionally, given the generally poor quality of its non-performing assets, there is no assurance that the Bank will be able to sell such assets held by it to UAMCO on commercially reasonable terms and on a timely basis. Furthermore, there is no assurance that in furtherance of similar or other policy objectives, the Government may not request or otherwise encourage the Bank to provide similar or other investments or provide other financial support for which it is not duly compensated or otherwise take up additional risk that it would not normally have undertaken, which may have an adverse effect on its business, financial condition and results of operations.

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

Real estate comprises the most significant asset for a substantial number of households in Korea, and the movements of the housing price have generally had a significant impact on the direction of 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.

For example, during the early to mid-2000s, the Government adopted several regulatory measures, including in relation to retail banking, to stem a rise in speculation in real estate investments generally and in select areas. Some of the measures undertaken in the past include requiring financial institutions to impose stricter debt-to-income ratio and loan-to-value ratio requirements for mortgage loans for real property located in areas deemed to have engaged in a high level of speculation, raising property tax on real estate transactions for owners of multiple residential units, adopting a ceiling on the sale price of newly constructed housing units and recommending that commercial banks restrain from making further mortgage and home equity lending, among others. In addition, amid a prolonged slump in the housing market in Korea, in April 2013, the Government announced the Real Estate Comprehensive Countermeasure, which provides, among other things, for (i) reduced capital gains tax and (ii) exemption of acquisition tax for first-time homebuyers. In addition, in November 2013, the Government announced a permanent reduction in acquisition tax, with retrospective application from August 2013. Prior to such reduction, acquisition tax was assessed on a differentiated scale based on whether the homebuyer was purchasing a primary home or a secondary home, with the former being assessed an acquisition tax of 2% for the purchase of homes under ₩900 million and 4% for homes exceeding ₩900 million, and the latter being assessed an acquisition tax of 4% regardless of the price of the home. Under the new regulatory structure, the differentiated tax scale for primary homes and secondary homes is eliminated, and all homebuyers are assessed an acquisition tax of 1% for the purchase of homes under ₩600 million, 2% for homes exceeding ₩600 million but less than ₩900 million and 3% for homes exceeding ₩900 million. Furthermore, in February 2014, the FSC announced that it plans to increase the proportion of fixed interest rate loans and installment principal repayment-based loans within the total housing loans extended by commercial banks. See "— *The Government may encourage targeted lending to certain sectors in furtherance of policy objectives, and the Bank may take this factor into account*".

In addition, in order to rationalize the regulations on the housing loans, the FSS provided administrative instructions in July 2014, which have been extended and amended several times, that all financial institutions including banks under the Banking Act are subject to the maximum loan-to-value ratio of 70% (irrespective of the location of the property, subject to certain exceptions) and the maximum debt-to-income ratio of 60% (only in respect of apartment units located in the greater Seoul metropolitan area, subject to certain exceptions). The above administrative instructions are currently replaced by the Regulation on the Supervision of the Banking Business and the Detailed Regulation on the Supervision of the Banking Business reflecting the tightened measures as discussed below. Furthermore, in December 2014, the National Assembly also passed several bills that are designed to stimulate the real estate market. In November 2016, amid concerns about increasing household debt, the Government announced another Real Estate Comprehensive Countermeasure requiring property buyers in Seoul to retain ownership for a longer period of time and increasing down payments to be made on the property. In January 2017, in order to modernize credit review methods and stabilize the management of household debt, the FSC announced the planned introduction of a debt service ratio and a new debt-to-income ratio. The new 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. Debt service ratios reflect principal and interest payments on both the applicable loan and other loans and are expected to be introduced on a trial basis as a self-regulatory reference index beginning on March 26, 2018, with full implementation expected to take place in October 2018. The new debt-to-income ratios will be used as the primary reference index in the evaluation and approval process for mortgage and home equity loans, and debt service ratios, once fully implemented, are expected to be used as a supplementary reference index providing additional limits on mortgage and home equity loans.

On August 2, 2017, the Government unveiled a tighter set of real estate market measures aimed at taming speculation and deterring the rise of housing prices. Pursuant to the measures, beginning August 3, 2017, Seoul, Sejong Special Self-Governing City and Gwacheon were named "overheated speculative districts," with the loan limits of those buying homes there to be tightened to 40% of their property value from 60%. The maximum debt-to-income ratio will be capped at 40% from 50%. Eleven districts in Seoul and Sejong Special Self-Governing City have also been designated "speculative districts" subject to higher taxes and tougher regulations. The August 2, 2017 measures come after President Moon Jae-in administration's first countermeasures, unveiled on June 19, 2017, which were designed to prevent the resale of home purchasing rights of real estate assets in Seoul while tightening the bars for maximum loan-to-value ratio for home buyers to 60% from 70% and maximum debt-to-income ratio to 50% from 60% in the regions designated as "adjustment targeted areas" (comprised of Seoul, Sejong Special Self-Governing City, seven cities in Gyeonggi Province and seven boroughs in Busan Metropolitan City). However, the new lending limits, which became effective on July 3, 2017, failed to halt the surge in housing prices, thus leading to the more stringent measures announced on August 2, 2017. Currently, loan-to-value ratios and new debt-to-income ratios in "overheated speculative districts," "speculative districts," "adjustment targeted areas" and other regions are regulated by the Regulation on the Supervision of the Banking Business and the Detailed Regulation on the Supervision of the Banking Business.

These renewed measures are expected to lead to a decline in the overall volume of home mortgage loans but may result in an increase in long-term deposits loans required for house rentals and lending to borrowers with high credit profiles.

Pursuant to the Regulation on the Supervision of the Banking Business, the Bank must maintain a loan to deposit ratio of no more than 100%. Currently, in calculating the loan to deposit ratio, there is no differentiation between retail loans and corporate loans. However, the Regulation on the Supervision of the Banking Business is expected to be amended during the first quarter of 2018 to provide that, beginning from the second half of 2018, in calculating such loan to deposit ratio, retail loans and corporate loans will be weighed differently, with retail loans subject to a multiple of 115% and corporate loans subject to a multiple of 85%, thereby increasing the impact of retail loans and reducing the impact of corporate loans in calculating such ratio. Additionally, the Detailed Regulation on the Supervision of the Banking Business is also expected to be amended during the first quarter of 2018 to provide for a weighted multiple to be applied to mortgage and home equity loans where the loan-to-value exceeds 60% in determining required minimum total capital (BIS) ratio. Further, the Regulation on the Supervision of the Banking Business is expected to be amended during the second half of 2018 to introduce an additional countercyclical capital buffer requirement that specifically addresses the increase in credit in the retail sector. This is in addition to and separate from the existing general countercyclical capital buffer requirements that take into account the degree of increase in credit generally relative to the gross domestic product. The Detailed Regulation on the Supervision of the Banking Business is also expected to be amended during the second half of 2018 to add "concentration of risk in the retail sector" as an additional criteria when the FSS evaluates the risk management systems of Korean banks.

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

The Bank engages in limited settlement transactions involving Iran which may subject us to legal or reputational risks.

The U.S. Department of the Treasury's Office of Foreign Assets Control ("**OFAC**") administers and enforces certain laws and regulations ("**OFAC Sanctions**") that impose restrictions upon 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 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. Non-U.S. persons can 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. The European Union also enforces certain laws and regulations that impose restrictions upon nationals and entities of, and business conducted in, member states with respect to activities or transactions with certain countries, governments, entities and individuals that are the subject of such laws and regulations. The United Nations Security Council and other governmental entities also impose similar sanctions.

In August 2016, the government of South Korea authorized the Bank to act as a settlement bank for Euro-denominated transactions between South Korean and Iranian businesses. Prior to the granting of this permission, payments for business activities were settled only in Korean Won and the Bank did not participate in such settlements. As of December 31, 2017, the Bank has processed ten such transactions that have resulted in a minimal amount of revenue. The Bank expects that the volume of these transactions and any revenue gained from them, if any, will continue to be minimal for the foreseeable future. The Bank is committed to engaging only in lawful activities and in obeying all relevant OFAC and European Union sanctions but cannot guarantee that actions taken by its employees will not violate such sanctions. Moreover, the relaxation of US and European Union sanctions undertaken pursuant to the Joint Comprehensive Plan of Action ("**JCPOA**") may "snap-back" into place in the event that Iran fails to comply with its commitments under the JCPOA. As such, we cannot predict with a reasonable degree of certainty whether the Bank's Euro-denominated, Iran-related settlement business may become sanctionable. Additionally, changes in U.S. policy regarding Iran may also result in the Bank's dealings with Iran becoming sanctionable. Consequently, the Bank's activities related to Iran subject the Bank to potential legal or reputational risks. Since August 2017, the Bank has ceased processing any such transactions.

The Bank is 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 the Bank, are subject to Korean accounting standards and disclosure requirements, which differ in significant respects from those applicable to banks in certain other countries, including the United States. The Bank's financial statements are prepared in accordance with Korean IFRS, which may differ in certain respects from IFRS applied in other countries. In addition, the Bank is 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 the Bank, 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 less than satisfactory corporate governance practices or disclosure to investors.

You may not be able to enforce a judgment of a foreign court against the Bank.

The Bank is a corporation with limited liability organized under the laws of Korea. All or substantially all of the Bank's directors and officers and other persons named in this offering circular reside in Korea, and all or a substantial portion of the assets of the Bank's directors and officers and other persons named in this offering circular and substantially all of its 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 to enforce against them or the Bank in the United States judgments obtained in United States courts based on the civil liability provisions of the federal securities laws of the United States. There is doubt as to the enforceability in Korea, either in original actions or in actions for enforcement of judgments of United States courts, of civil liabilities predicated on the United States federal securities laws.

Risks Relating to Korea

Unfavorable financial and economic conditions in Korea and globally may have a material adverse impact on the Bank's asset quality, liquidity and financial performance.

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

- continued volatility or deterioration in Korea's credit and capital markets;
- difficulties in the financial sectors in Europe, China and elsewhere and increased sovereign default risks in select countries and the resulting adverse effects on the global financial markets;
- declines in consumer confidence and a slowdown in consumer spending and corporate investments;
- adverse changes or volatility in foreign currency reserve levels, commodity prices (including oil prices), exchange rates (including fluctuation of the U.S. dollar, the Euro or the Yen exchange rates or revaluation of the Chinese Renminbi and the overall impact of the referendum in the United Kingdom in June 2016, in which the majority of voters voted in favor of an exit from the European Union ("Brexit") on the value of the Won), interest rates, inflation rates or stock markets;
- increasing levels of household debt;
- increasing delinquencies and credit defaults by retail and small- and medium-sized enterprise borrowers;
- continuing adverse conditions in the economies of countries and regions that are important export markets for Korea, such as the United States, Europe, Japan and China, or in emerging market economies in Asia or elsewhere, as well as increased uncertainty in the wake of Brexit;
- the economic impact of any pending or future free trade agreements;
- social and labor unrest;
- decreases in the market prices of Korean real estate;
- a decrease in tax revenue and a substantial increase in the Government's expenditure for fiscal stimulus measures, unemployment compensation and other economic and social programs that together, would lead to an increased government budget deficit;
- financial problems or lack of progress in the restructuring of Korean business groups, other large troubled companies, their suppliers or the financial sector;

- loss of investor confidence arising from corporate accounting irregularities and corporate governance issues concerning certain Korean business groups;

- increases in social expenditures to support an aging population in Korea or decreases in economic productivity due to the declining population size in Korea;

- geopolitical uncertainty and risk of further attacks by terrorist groups around the world, including the actions of the so-called "Islamic State";

- the occurrence of severe health epidemics in Korea and other parts of the world, including the recent Ebola, Middle East Respiratory Syndrome (MERS) and Zika virus outbreaks;

- deterioration in economic or diplomatic relations between Korea and its trading partners or allies, including deterioration resulting from territorial or trade disputes or disagreements in foreign policy such as the recent diplomatic tension between Korea and China with respect to the deployment of the Terminal High Altitude Area Defense (THAAD) system in Korea and trade disputes between Korea and the United States with respect to the imposition of anti-dumping duties on Korean steel, washing machines, transformers and solar panels;

- political uncertainty or increasing strife among or within political parties in Korea, and political gridlock within the government or in the legislature, which prevents or disrupts timely and effective policy making;

- hostilities or political or social tensions involving oil-producing countries in the Middle East and North Africa and any material disruption in the global supply of oil or sudden increase in the price of oil;

- political or social tensions involving Russia and any resulting adverse effects on the global supply of oil or the global financial markets;

- the occurrence of natural or man-made disasters in Korea (such as the sinking of the Sewol ferry in April 2014, which significantly dampened consumer sentiment in Korea for months) and other parts of the world, particularly in trading partners of Korea; and

- an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States.

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

Tensions with North Korea could have an adverse effect on the Bank and the price 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, since the death of Kim Jong-il in December 2011, there has been increased uncertainty with respect to the future of North Korea's political leadership and concern regarding its implications for political and economic stability in the region. Although Kim Jong-il's third son, Kim Jong-un has assumed power as his father's designated successor, the long-term outcome of such leadership transition remains uncertain. In February 2017, Kim Jong-eun's half-brother, Kim Jong-nam, was reported to have been assassinated in an international airport in Malaysia.

In addition, there continues to be heightened security tension in the region stemming from North Korea's hostile military and diplomatic actions, including in respect of its nuclear weapons and long-range missile programs. Some examples from recent years include the following:

- North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and conducted three rounds of nuclear tests between October 2006 to February 2013, which increased tensions in the region and elicited strong objections worldwide. On January 6, 2016, North Korea announced that it had successfully conducted its first hydrogen bomb test, hours after international monitors detected a 5.1 magnitude earthquake near a known nuclear testing site in the country. The alleged test followed a statement made in the previous month by Kim Jong-un, who claimed that North Korea had developed a hydrogen bomb. On February 7, 2016, North Korea launched a rocket, claimed by them to be carrying a satellite intended for scientific observation. The launch was widely suspected by the international community to be a cover for testing a long-range missile capable of carrying a nuclear warhead. On February 18, 2016, U.S. President Barack Obama signed into law mandatory sanctions on North Korea to punish it for its recent nuclear and missile tests, human rights violations and cyber crimes. The bill, which marks the first measure by the United States to exclusively target North Korea, is intended to seize the assets of anyone engaging in business related to North Korea's weapons program, and authorizes US$50 million over five years to transmit radio broadcasts into the country and support humanitarian assistance projects. On March 2, 2016, the United Nations Security Council voted unanimously to adopt a resolution to impose sanctions against North Korea, which include inspection of all cargo going to and from North Korea, a ban on all weapons trade and the expulsion of North Korean diplomats who engage in "illicit activities." Also, on March 4, 2016, the European Union announced that it would expand its sanctions on North Korea, adding additional companies and individuals to its list of sanction targets. In September 2016, North Korea announced that it had successfully tested a nuclear warhead that could be mounted on ballistic missiles. In response, the Government condemned the test, and on November 30 2016, the United Nations Security Council unanimously passed a resolution imposing additional sanctions on North Korea including an annual cap on North Korea's exports of coal and a prohibition on exports of non-ferrous metals such as copper, nickel, silver and zinc. In March 2017, North Korea launched four midrange missiles aimed at the U.S. military bases in Japan, which landed off the east coast of the Korean peninsula. The United Nations Security Council condemned the launches and expressed its plan to adopt additional measures against the regime. On April 4, 2017, one day before the first meeting between U.S. President Donald Trump and Chinese President Xi Jinping, North Korea launched a ballistic missile which landed off the east coast of the Korean peninsula. In addition to the United Nations Security Council's condemnation, representatives of the Government and China expressed their plan to impose stronger sanctions on North Korea. On April 15, 2017, North Korea launched another missile which failed when it exploded immediately after liftoff. In response, the Government condemned the launch as a violation of the resolution of the United Nations Security Council and warned that North Korea would have to face punitive consequences if this leads to a future nuclear experiment or launch of an intercontinental ballistic missile. In July 2017, North Korea conducted two intercontinental ballistic missile tests which displayed further development of its long-range ballistic missile capabilities that potentially enable it to target certain areas of the United States as well as other neighboring countries in the Asia-Pacific region. In response, the United Nations Security Council unanimously adopted stronger sanctions against North Korea. In August 2017, North Korea announced its plan to launch four ballistic missiles targeting Guam, resulting in heightened diplomatic tensions between North Korea and the United States. In September 2017, North Korea detonated a sixth nuclear bomb, the most powerful weapon that North Korea has ever tested. Such detonation further heightened diplomatic tensions between North Korea and other nations. Each of the United Nations, the United States and the European Union adopted additional sanctions against North Korea. Spain, Mexico, Peru and Kuwait expelled from their respective territories the ambassadors of North Korea. In November 2017, North Korea conducted a test launch of another intercontinental ballistic missile, which, due to its improved size, power and range of distance, may potentially enable North Korea to target the United States mainland.

- In August 2015, two Korean soldiers were injured in a landmine explosion while on routine patrol of the southern side of the demilitarized zone. Claiming the landmines were set by North Koreans, the Korean army re-initiated its propaganda program toward North Korea utilizing loudspeakers near the demilitarized zone. In retaliation, the North Korean army fired artillery rounds on the loudspeakers, resulting in the highest level of military readiness for both sides. High-ranking officials from North Korea and Korea subsequently met for discussions intending to diffuse military tensions and released a joint statement whereby, among other things, North Korea expressed regret over the landmine explosions that wounded the Korean soldiers.

- From time to time, North Korea has fired short- to medium-range missiles from the coast of the Korean peninsula into the sea. Recently in March 2015, North Korea fired seven surface-to-air missiles into waters off its east coast in apparent protest of annual joint military exercises being held by Korea and the United States.

- In December 2013, Jang Sung-taek, a relative of Kim Jong-un, who was widely speculated to be the second in command after Kim Jong-un, was executed on charges of sedition. There are reports that such development may cause further political and social instability in North Korea and/or adoption of more hostile policies that could engender further friction with North Korea and the rest of the world.

- In April 2013, North Korea blocked Koreans from entering the industrial complex in the border city of Kaesong. In the same month, the United States deployed nuclear-capable carriers in the Korean air and sea space. In September 2013, however, Korea and North Korea reached an agreement and resumed operation of the Kaesong Industrial Complex. In February 2014, the U.S. Congressional Research Service reported that Korea's approach toward the expansion and internationalization of the Kaesong Industrial Complex could conflict with U.S. legislative efforts to expand its sanctions on North Korea. On February 10, 2016, in retaliation of North Korea's recent launch of a long-range rocket, Korea announced that it would halt its operations of the Kaesong Industrial Complex to impede North Korea's utilization of funds from the industrial complex to finance its nuclear and missile programs. In response, North Korea announced on February 11, 2016 that it would expel all Korean employees from the industrial complex and freeze all Korean assets in the complex. All 280 Korean workers present at Kaesong left hours after the announcement by North Korea, and the complex remains closed as of the date of the offering circular.

- In March 2013, North Korea stated that it had entered "a state of war" with Korea, declaring the 1953 armistice invalid, and put its artillery at the highest level of combat readiness to protest the Korea-United States allies' military drills and additional sanctions imposed on North Korea for its missile and nuclear tests.

North Korea's economy also faces severe challenges, including severe inflation and food shortages, which may further aggravate social and political tensions within North Korea. In addition, reunification of Korea and North Korea could occur in the future, which would entail significant economic commitment and expenditure by Korea that may outweigh any resulting economic benefits of reunification.

There can be no assurance that the level of tension on the Korean peninsula will not escalate in the future or that the political regime in North Korea may not suddenly collapse. Any further increase in tension or uncertainty relating to the military, political or economic stability in the Korean peninsula, including a breakdown of diplomatic negotiations over the North Korean nuclear program, occurrence of military hostilities, heightened concerns about the stability of North Korea's political leadership or its actual collapse, a leadership crisis, a breakdown of high-level contacts or accelerated reunification could have a material adverse effect on the Bank's business, financial condition and results of operations, as well as a downgrade in the credit rating of Korea, the Bank or the Notes.

Risks Relating to the Notes

Capitalized 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 issued under the Program may have limited liquidity.

The Notes when issued may constitute a new issue of securities for which there will be no existing trading market. Although the Dealers may make a market in 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 assurance can be given as to the liquidity of, or the development and continuation of an active trading market for, the Notes. If an active trading market for the Notes does not develop or is not maintained, the liquidity and market price of the Notes may be adversely affected. If such a market were to develop, the Notes could trade at prices that may be higher or lower than the price at which the Notes are issued depending on many factors, including, among others:

- prevailing interest rates;
- the Bank's results of operations, financial condition and prospects;
- the rate of exchange between Won and the currency of the Notes;
- political and economic developments in and affecting Korea and other regions;
- the financial condition and stability of the Korean financial and other sectors; and
- the market conditions for similar securities.

The Notes are unsecured obligations, the repayment of which may be jeopardized in certain circumstances.

Because the Notes are unsecured obligations, their repayment may be compromised if:

- the Bank enters into bankruptcy, liquidation, reorganization or other winding-up procedures;
- there is a default in payment under the Bank's future secured indebtedness or other unsecured indebtedness; or
- there is an acceleration of any of the Bank's indebtedness.

If any of these events occurs, the Bank's assets may not be sufficient to pay amounts due on any of 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, which will be subordinated obligations of the Bank. Payments on the Subordinated Notes will be subordinate in right of payment upon the occurrence of a Subordination Event to the prior payment in full of all deposits and other liabilities of the Bank, 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 the Bank's deposit liabilities or the holders of its other unsubordinated liabilities. As of December 31, 2017, all of the Bank's outstanding liabilities (including deposits, borrowings, call money, guarantees and acceptances and other liabilities, but excluding provisions) would rank senior to the Subordinated Notes, except for subordinated debt which would rank *pari passu* with the Subordinated Notes. As of December 31, 2017, the Bank had subordinated debt securities issued in Korean won of ₩3,000 billion and subordinated debt securities issued in foreign currencies of ₩1,446 billion.

Only those events described herein regarding the Bank's bankruptcy or liquidation will permit a holder of a Subordinated Note to accelerate payment of such Subordinated Notes. In such event, the only action the holder may take in Korea against the Bank is to make a claim in the Bank's liquidation or other applicable proceeding. Furthermore, if the Bank's indebtedness were to be accelerated, its assets may be insufficient to repay in full borrowings under all such debt instruments, including 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 Notes will lose all of their investment.

The Subordinated Notes will be subject to loss absorption provisions pursuant to which the Bank 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 certain trigger event tied to the performance and viability of the Bank. A trigger event would be the designation of the Bank as an "insolvent financial institution" pursuant to the Act on Structural Improvement of the Financial Industry of Korea. Such write-off will be in effect on the third business day in Korea from the occurrence of such trigger event.

Under Article 2 of the Act on Structural Improvement of the Financial Industry, an "insolvent financial institution" 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 events and loss absorption features of Tier II 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 the Bank is therefore inherently unpredictable and is subject to factors that are outside the control of the Bank, 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 behavior with respect to the Subordinated Notes may not follow trading behavior associated with other types of securities of the Bank or other issuers. Any indication that the Bank is 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 37 of the Depositor Protection Act, any entity which intends to acquire, merge with, acquire the business of or succeed the rights and obligations under the financial transactions of "insolvent or similar financial institution" (including an "insolvency-threatened financial institution") or a financial holding company which has such financial institution as its subsidiary or its second- or third-tier subsidiary under the Financial Holding Companies Act may apply to the KDIC for the financial assistance, and 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 the Bank) that becomes an insolvent or similar financial institution or a financial holding company which has such financial institution as its subsidiary or its second- or third-tier subsidiary under the Financial Holding Companies Act, where there exists an application for financial assistance under Article 37 of the Depositor Protection Act, or where it is deemed necessary for making acquisition of, merger with, acquisition the business of or succession of the rights and obligations under the financial transactions of such institution smoothly or where 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. An "insolvency-threatened financial institution" is defined under Article 2 of the Depositor Protection Act as a 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, under Article 8 of the Act on Structural Improvement of the Financial Industry, if the financial institution which is in financial trouble but not yet designated as the insolvent 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 securities held or issued by the merged financial institution (such as bonds issued by the Government or local governments or bonds guaranteed by the Government or subordinated notes issued by the merged financial institution), and (iii) a capital injection by the Government of state-owned assets into the merged financial institution.

In light of the size and scale of the Bank and its 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, the Bank 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 the Bank. 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 the Bank 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 the Bank will be sufficient to prevent the occurrence of a trigger event leading to a write-off of the Subordinated Notes.

Pursuant to Condition 9 of the Terms and Conditions of the Notes, the Bank 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 the Bank 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 the Bank's obligations under the Subordinated Notes or the rights of the Subordinated Noteholders.

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 the Bank. 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 9 of the Terms and Conditions of the Notes. Each holder of Subordinated Notes are deemed to have authorized, 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 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 QIBs in reliance on the exemption provided by Rule 144A, 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. In addition, subject to the conditions set forth in the Notes and the Agency Agreement or otherwise specified in the applicable Pricing Supplement, a Note may be transferred only if the principal amount of Notes transferred is at least US$200,000. For a further discussion of the transfer restrictions applicable to the Notes, see "*Subscription and Sale and Transfer and Selling Restrictions*".

CAPITALIZATION AND INDEBTEDNESS

The following replaces information about the Issuer or the Program under the heading corresponding to the heading in the Offering Circular.

The following table shows the Bank's capitalization as of December 31, 2017. Except for the U.S. dollar amounts, this information has been derived from the Bank's audited consolidated financial statements as of and for year ended December 31, 2017 included in this offering circular.

	As of December 31, 2017	
	(in billions of Won)	*(in millions of U.S. dollars)*[(1)]
Liabilities:		
Deposits	₩242,654	US$226,483
Trading liabilities	435	406
Derivative liabilities	2,993	2,793
Borrowings	14,618	13,643
Debentures	25,459	23,764
Liability for defined benefit obligations	4	4
Provisions	259	242
Current tax liabilities	211	197
Deferred tax liabilities	12	11
Other liabilities	15,015	14,014
Total liabilities	₩301,660	US$281,557
Stockholder's equity:		
Capital stock, par value ₩5,000		
Authorized: 2,000,000,000 shares issued and outstanding:		
1,585,615,506 fully paid common shares	₩ 7,928	US$7,400
Hybrid bond	669	624
Capital Surplus	400	373
Retained earnings	14,141	13,199
Accumulated other comprehensive income	(490)	(458)
Non-controlling interests	5	5
Total stockholder's equity	22,653	21,143
Total capitalization[(2)]	₩324,313	US$302,700

Notes:

(1) The U.S. dollar amounts have been translated into Won at ₩1,071.4 to US$1.00, the Market Exchange Rate as announced by Seoul Money Brokerage Services, Ltd. on December 29, 2017.

(2) Represents the sum of total liabilities and stockholder's equity.

SELECTED FINANCIAL INFORMATION

The following supplements information about the Issuer or the Program under the heading corresponding to the heading in the Offering Circular and must be read in conjunction with the Offering Circular.

The following tables set forth the Bank's selected financial data. The selected financial data set forth below as of and for the years ended December 31, 2015, 2016 and 2017 (excluding U.S. dollar amounts) have been derived from the Bank's audited consolidated financial statements and related notes prepared in accordance with Korean IFRS included elsewhere in this offering circular. The selected financial data set forth below should be read in conjunction with the consolidated financial statements and related notes, "*Management's Discussion and Analysis of Financial Condition and Results of Operations*" and other historical financial information included elsewhere in this offering circular.

The consolidated financial statements exclude the trust account management business except money trusts for which the Bank provides guarantees as to principal or as to both principal and interest.

Consolidated Financial Information

	For the Year Ended December 31,			
	2015	2016	2017	
	(in billions of Won)			(in millions of U.S. dollars)[1]
Statements of Comprehensive Income Information				
Interest income	₩ 7,649	₩ 7,696	₩ 8,123	US$7,582
Interest expense	(3,484)	(3,192)	(3,131)	(2,923)
Net interest income	4,165	4,504	4,992	4,659
Fees and commission income	1,050	1,062	1,184	1,105
Fees and commission expense	(196)	(178)	(193)	(180)
Net fees and commission income	854	884	991	925
Dividend income	184	124	101	94
Net trading income (loss)	134	59	(165)	(154)
Net foreign currency transaction gain	75	245	473	441
Net gain on sale of available-for-sale financial assets	422	411	195	183
Net impairment loss on financial assets	(799)	(739)	(659)	(615)
General and administrative expenses	(2,785)	(2,890)	(3,118)	(2,910)
Other operating expenses, net	(516)	(639)	(606)	(566)
Operating income	1,734	1,959	2,204	2,057
Net non-operating income (expenses)	128	61	(47)	(44)
Equity in income of investments in associate	13	9	1	1
Income before income taxes	1,875	2,029	2,158	2,014
Income tax expense	(385)	(88)	(447)	(417)
Income from continuing operations	1,490	1,941	1,711	1,597
Income from discontinued operations	—	—	—	—
Net income for the period	1,490	1,941	1,711	1,597
Items that are or may be reclassified subsequently to profit or loss:				
Foreign currency transaction differences for foreign operations	(2)	2	(186)	(174)
Net change in fair value of available-for-sale financial assets	(241)	(248)	(93)	(87)
Equity in other comprehensive income of associates	6	3	(10)	(9)
Items that will be not reclassified subsequently to profit or loss:				
Remeasurement gain (loss) related to defined benefit plan	(55)	20	74	69
Other comprehensive loss for the period, net of income tax	(292)	(223)	(215)	(201)
Total comprehensive income for the period	₩ 1,198	₩ 1,718	₩ 1,496	US$1,396

Note:

(1) The U.S. dollar amounts have been translated into Won at ₩1,071.4 to US$1.00, the Market Exchange Rate as announced by Seoul Money Brokerage Services, Ltd. on December 29, 2017.

	As of December 31,			
	2015	2016	2017	
	(in billions of Won)			(in millions of U.S. dollars)[1]
Statements of Financial Position Information				
Assets				
Cash and due from banks	₩ 16,891	₩ 14,469	₩ 18,662	US$17,419
Trading assets	9,057	11,271	11,216	10,469
Derivative assets	1,617	2,579	2,604	2,431
Loans	209,651	219,439	231,732	216,289
Available-for-sale financial assets	24,461	27,815	32,496	30,330
Held-to-maturity financial assets	10,105	11,630	14,823	13,835
Property and equipment	2,003	2,044	2,056	1,919
Intangible assets	307	261	298	278
Investments in associates	233	131	100	94
Investment property	766	675	598	558
Assets for defined benefit obligations	—	—	34	32
Current tax assets	7	12	25	23
Deferred tax assets	78	448	407	380
Other assets	9,836	12,077	9,254	8,636
Assets held for sale	4	4	8	7
Total assets	₩285,016	₩302,855	₩324,313	US$302,700
Liabilities				
Financial liabilities designated at fair value through profit or loss	₩ 14	₩ 6	₩ —	US$ —
Deposits	212,975	228,910	242,654	226,483
Trading liabilities	464	486	435	406
Derivative liabilities	1,573	2,785	2,993	2,793
Borrowings	12,998	14,314	14,618	13,643
Debt securities issued	20,021	21,579	25,459	23,764
Liability for defined benefit obligations	155	50	4	4
Provisions	296	307	259	242
Current tax liabilities	40	138	211	197
Deferred tax liabilities	15	10	12	11
Other liabilities	15,622	12,803	15,015	14,014
Total liabilities	₩264,173	₩281,388	₩301,660	US$281,557
Total equity	₩ 20,843	₩ 21,467	₩ 22,653	US$21,143
Total liabilities and equity	₩285,016	₩302,855	₩324,313	US$302,700

Note:

(1) The U.S. dollar amounts have been translated into Won at ₩1,071.4 to US$1.00, the Market Exchange Rate as announced by Seoul Money Brokerage Services, Ltd. on December 29, 2017.

Selected Ratios

Except as otherwise indicated, the following ratios are calculated using the consolidated financial statements of the Bank for the years ended December 31, 2015, 2016 and 2017.

Profitability Ratios

	For the Year Ended December 31,		
	2015	2016	2017
	(in percentages)		
Net income as a percentage of:			
Average total assets[1]	0.55	0.66	0.55
Average stockholders' equity[1]	7.23	9.16	7.67
Net interest spread[2]	1.61	1.62	1.69
Net interest margin[3]	1.70	1.68	1.75
Cost-to-income ratio[4]	59.78	58.75	59.10
Efficiency ratio[5]	83.59	85.10	88.15
Cost-to-average-assets ratio[6]	3.53	3.91	5.11
Equity-to-average-asset ratio	7.63	7.15	7.12

Notes:

(1) Based on the daily average balance of total assets or stockholders' equity. Total assets refer to total assets in the bank accounts.

(2) Net interest spread represents the difference between the yield on average interest-earning assets and cost of average interest-bearing liabilities.

(3) Net interest margin represents the ratio of net interest income to average interest-earning assets.

(4) Calculated as the ratio of general and administrative expenses to the sum of net interest income and net non-interest income (excluding general and administrative expenses).

(5) Efficiency ratio represents the ratio of non-interest expense to the sum of net interest income and non-interest income, a measure of efficiency for banks.

(6) Cost-to-average-assets ratio, a measure of cost of funding used by banks, represents the ratio of non-interest expense to average total assets.

Capital Ratios[1]

	As of December 31,		
	2015	2016	2017
	(in percentages)		
Total capital adequacy (BIS) ratio	14.75	15.70	15.59
Common equity Tier I capital adequacy ratio	11.96	12.85	12.83
Tier I capital adequacy ratio	12.52	13.15	13.24
Tier II capital adequacy ratio	2.24	2.55	2.35

Notes:

(1) Computed on a consolidated basis pursuant to the guidelines set forth in the amended Detailed Regulation on the Supervision of the Banking Business implementing capital requirements of Basel III in Korea. See "*Supervision and Regulation — Principal Regulations Applicable to Banks — Capital Adequacy*".

Asset Quality Ratios

The following asset quality ratios are presented on a separate basis.

	As of December 31,		
	2015	2016	2017
	(in billions of Won, except percentages)		
Substandard and below loans[1]	₩ 1,541	₩ 1,311	₩ 1,154
Substandard and below loans as a percentage of total loans	0.81%	0.66%	0.55%
Substandard and below loans as a percentage of total assets	0.57%	0.43%	0.36%
Precautionary loans as a percentage of total loans[2]	0.43%	0.44%	0.39%
Precautionary and below loans as a percentage of total loans[2]	1.23%	1.10%	0.94%
Precautionary and below loans as a percentage of total assets[2]	0.87%	0.72%	0.61%
Allowance for loan losses as a percentage of substandard and below loans	175.41%	206.09%	244.74%
Allowance for loan losses as a percentage of precautionary and below loans[2]	114.87%	123.84%	142.82%
Allowance for loan losses as a percentage of total loans	1.42%	1.36%	1.34%
Substandard and below credits as a percentage of total credits[3]	0.80%	0.65%	0.55%
Loans in Won as a percentage of deposits in Won	96.75%	97.51%	99.25%

Notes:

(1) Substandard and below loans (other than loans provided from the Bank's trust accounts and confirmed guarantees and acceptances) are defined in accordance with the regulatory guidance in Korea. See "*Supervision and Regulation — Principal Regulations Applicable to Banks*".

(2) As defined by the FSC.

(3) Credits include loans provided from the Bank's trust accounts and confirmed guarantees and acceptances, as well as the total loan portfolio of the Bank's bank accounts.

MANAGEMENT AND EMPLOYEES

The following replaces information about the Issuer or the Program under the heading corresponding to the heading in the Offering Circular.

Management

Board of Directors

The Bank is managed by the Board of Directors of the Bank (the "**Board**"), which is responsible for policy and strategic matters, has the ultimate responsibility for the administration of the affairs of the Bank and oversees the day-to-day operations through several governing bodies. The address for each of the Directors of the Board is: c/o Shinhan Bank, 20, Sejong-Daero 9-Gil, Jung-Gu, Seoul, Korea 04513.

The Board is comprised of one Executive Director, one Director and Standing auditor, one Non-Standing Director and six Outside Directors.

The Executive Directors are elected for a renewable term of up to three years as determined at the general meeting of the Bank's shareholders. Non-Standing Directors and Outside Directors are elected for a renewable term of two years. The Director who is a member of the Audit Committee (as described below) is elected for a renewable term of three years. The Board meets at least once every quarter and additional extraordinary meetings can be convened at the request of the chairman of the Board.

The Board has established four committees to carry out duties for the purpose of supporting the administration of various Board responsibilities: an Audit Committee, a Risk Management Committee, an Executive Recommendation Committee and a Compensation Committee.

The purpose of the Audit Committee is to (i) establish internal audit plans, carry out such plans, evaluate the results, take appropriate follow-up measures and propose appropriate reforms, (ii) evaluate and propose appropriate reforms regarding the comprehensive system of internal controls, (iii) approve the appointment(s) of external auditor(s) and (iv) perform various other functions similar to the foregoing.

The purpose of the Risk Management Committee is to (i) review risk, evaluation and limit policies of the Bank, (ii) review asset liability management and credit and market risk measures, and (iii) regulate asset quality, risk exposure and problem assets.

The purpose of the Executive Recommendation Committee is to nominate and recommend candidates for the President of the Bank, outside directors and members of the audit committee.

The purpose of the Compensation Committee is to evaluate management's performance and fix appropriate executive compensation, including incentives and bonuses.

Executive Directors

As of the date of this offering circular, the Bank had one Executive Director, who is a full-time employee of the Bank and holds the executive position listed below.

Name	Age	Position	Executive Director Since	Date Term Ends
Sung Ho Wi	59	President, Chief Executive Officer and Executive Director	March 7, 2017	March 31, 2019

Sung Ho Wi has been the Bank's President, Chief Executive Officer and Executive Director since March 7, 2017. Mr. Wi previously served as the President of Shinhan Card. Mr. Wi received his B.A. in economics from Korea University.

Director and Standing Auditor

Name	Age	Position	Statutory Auditor Since	Date Term Ends
Chang Eon Heo.............	58	Director and Standing Auditor	January 1, 2018	December 31, 2019

Chang Eon Heo has been the Bank's Director and Standing Auditor since January 1, 2018. Mr. Heo previously served as President of the Financial Security Institute and Deputy Governor and General Manager of Insurance of the Financial Supervisory Service. Mr. Heo received his master's degree in law from Korea University.

Non-Standing Director

As of the date of this Supplemental Offering Circular, the Bank had one Non-Standing Director who is neither a full-time employee of the Bank nor holds an executive position with the Bank but is otherwise affiliated with the Bank**.**

Name	Age	Position	Non-Standing Director Since	Date Term Ends
Young Woong Woo	58	Vice President of Shinhan Financial Group	April 13, 2017	March 31, 2018

Young Woong Woo has been the Bank's Non-Standing Director since April 13, 2017. Mr. Woo is currently the Vice President of Shinhan Financial Group. Mr. Woo previously served as Deputy President and Non-Director Executive Officer of Corporate & Investment Banking Group, Head of the Bank's Investment Banking Division. Mr. Woo received his bachelor's degree in business administration from Busan University and a master's degree in international business administration from Waseda Business School.

Outside Directors

As of the date of this offering circular, the Bank had six Outside Directors who are neither employees of the Bank nor hold executive positions with the Bank nor are otherwise affiliated with the Bank, as listed below.

Name	Age	Position	Director Since	Date Term Ends
Sun Tae Hwang.............	69	Lawyer of Logos (law firm)	March 18, 2015	March 31, 2018
Bon Il Koo.....................	58	Professor of Yonsei University	March 27, 2013	March 31, 2018
Kook Jae Hwang...........	58	Professor of Sogang University	March 18, 2015	March 31, 2018
Hoh In...........................	50	Professor of Korea University Graduate School	March 23, 2016	March 31, 2018
Seoung Woo Lee...........	56	Professor of Dong-A University Law School	May 25, 2016	March 31, 2018
Fukuda Hiroshi..............	68	Director of New Japan Tourism Co., Ltd.	March 18, 2015	March 31, 2018

Bon Il Koo has been an Outside Director since March 27, 2013. Mr. Koo is currently a professor at Yonsei University. Mr. Koo received a B.A. in business administration from Yonsei University and a Ph.D. in financial management from Columbia University.

Sun Tae Hwang has been an Outside Director since March 18, 2015. Mr. Hwang is currently a lawyer at Logos law firm. Mr. Hwang has previously served as the 10th chairman of Korea Legal and Corporation and a chief prosecutor of the Seoul East District Public Prosecutor's Office. Mr. Hwang received an L.L.B. in law from Seoul National University.

Kook Jae Hwang has been an Outside Director since March 18, 2015. Mr. Hwang is currently a professor at Sogang University. Mr. Hwang has previously served as a certified public accountant and a researcher at Samsung Economic Research Laboratory. Mr. Hwang received a doctoral degree in business administration from Syracuse University.

Fukuda Hiroshi has been an Outside Director since March 18, 2015. Mr. Hiroshi is currently a director of Kyowa Create corporation, a director of Kyowa Corporation and New Japan Tourism Corporation. Mr. Hiroshi received his bachelor's degree in economics from Japan University of Economics.

Hoh In has been an Outside Director since March 23, 2016. Mr. In is currently a professor of Korea University Graduate School and is also a member of the Financial Services Commission's Fintech policy advisory committee. Mr. In received his bachelor's degree and master's degree in computer science from Korea University and Korea University Graduate School, respectively, and a Ph.D. in computer science from University of Southern California.

Seoung Woo Lee has been an Outside Director since May 25, 2016. Mr. Lee is currently a professor of Dong-A University Law School. Mr. Lee received his bachelor's degree, master's degree and Ph.D. in law from Seoul National University.

All of the Outside Directors hold positions with companies or organizations other than the Bank (the principal such positions are specified above).

Management

As of the date of this offering circular, the management of the Bank consists of 21 Non-Director Executive Officers.

Non-Director Executive Officers	Age	Department	Executive Officer Since	Date Term Ends
Dong Hwan Lee	58	Group & Global Investment Banking Group	July 6, 2017	December 31, 2018
Byeong Wha Choi	56	Corporate Business Group	January 1, 2014	December 31, 2018
Soon Seog Huh	58	Compliance Department	January 1, 2015	December 31, 2018
Ki Jun Lee	56	Credit Analysis & Assessment Group	January 1, 2015	December 31, 2018
Choon Seok Seo	57	Digital Group	January 1, 2016	December 31, 2018
Young Taek Heo	56	Global Business Group	January 1, 2016	December 31, 2018

Non-Director Executive Officers	Age	Department	Executive Officer Since	Date Term Ends
Sang Don Yoon	57		January 1, 2016	December 31, 2018
Chang Goo Lee	57	Wealth Management Group	January 1, 2016	December 31, 2018
Byeong Cheol Kim	57	Global Markets & Securities Group	January 24, 2018	December 31, 2018
Woo Hyuk Park	56	Management Support Group	January 1, 2017	December 31, 2018
Cheol Soo Joo	54	Institutional Banking Group	January 1, 2017	December 31, 2018
Yun Ju Ko	58	Sales Promotion Group I	January 1, 2017	December 31, 2018
Chang Sung Kim	56	Sales Promotion Group II	January 1, 2017	December 31, 2018
Sung Woo Kim	55	Consumer Brand Group	January 1, 2018	December 31, 2019
Woon Jin Jeong	54	Management Planning Group	January 1, 2018	December 31, 2019
Nae Hoon Lee	53	Trust & Pension Group	January 1, 2018	December 31, 2019
Jae Hee Cho	55	Risk Management Group	January 1, 2016	December 31, 2019
Myong Goo Lee	54	ICT Group	January 1, 2016	December 31, 2019
In Gi Kim	51	Sales Channel Planning Group	January 1, 2018	December 31, 2019
Hyo Ryul Ahn	52	Retail Banking Group	January 1, 2018	December 31, 2019
Ho Wan Seo	52	Information Security Division	January 1, 2018	December 31, 2019

Dong Hwan Lee has been the Bank's Deputy President and Non-Director Executive Officer since July 6, 2017. Mr. Lee previously served as President of Shinhan Data System and Vice President of Shinhan Investment Corp. Mr. Lee received his B.A. in business administration from Yonsei University.

Byeong Hwa Choi has been the Bank's Deputy President and Non-Director Executive Officer since January 1, 2014. Mr. Choi previously served as Head of the Bank's Industry Complex Finance Division and General Manager of the Bank's Corporate Banking Department. Mr. Choi received his B.A. in business administration from Kwangwun University.

Soon Seog Huh has been the Bank's Executive Vice President and Non-Director Executive Officer since January 1, 2015. Mr. Huh previously served as General Manager of the Bank's Institutional Banking Department and General Manager of the Bank's Suwon Branch and Hak-dong Branch. Mr. Huh received his L.L.B. in law from Seoul National University.

Ki Jun Lee has been the Bank's Deputy President and Non-Director Executive Officer since January 1, 2015. Mr. Lee previously served as Head of the Bank's Jungbu Business Division and Head of the Bank's Corporate Restoration Support Division. Mr. Lee received his master's degree in finance from Korea University.

Choon Seok Seo has been the Bank's DeputyPresident and Non-Director Executive Officer since January 1, 2016. Mr. Seo previously served as Head of the Bank's ICT Division and General Manager of the Bank's IT Development Department. Mr. Seo graduated from Duksoo Information Industry High School.

Young Taek Heo has been the Bank's Deputy President and Non-Director Executive Officer since January 1, 2016. Mr. Heo previously served as Head Representative of Shinhan Bank Vietnam and General Manager of the Bank's Global Strategy Department. Mr. Heo received his B.A. in business administration from Korea University.

Sang Don Yoon has been the Bank's Executive Vice President and Non-Director Executive Officer since January 1, 2016. Mr. Yoon previously served as Head of the Bank's Incheon Regional Sales Division and General Manager of the Bank's Incheon Cityhall Branch. Mr. Yoon graduated from Kwangshin Commercial High School.

Chang Goo Lee has been the Bank's Deputy President and Non-Director Executive Officer since January 1, 2016. Mr. Lee previously served as Head of the Bank's Wealth Management Division and General Manager of the Bank's Sungsu-Dong Finance Center. Mr. Lee received his B.A. in accounting from Hanyang University.

Byeong Cheol Kim has been the Bank's Deputy President and Non-Director Executive Officer since January 24, 2018. Mr. Kim previously served as Vice President of Shinhan Investment Corp. and Senior Managing Director of Yuanta Securities. Mr. Kim received his B.A. and master's degree in economics from Seoul National University.

Woo Hyuk Park has been the Bank's Executive Vice President and Non-Director Executive Officer since January 1, 2017. Mr. Park previously served as Head of the Bank's Community Development Division and Head of the Bank's Gyeonggi Dongbu Business Division. Mr. Park received his B.A. in economics from Kyunghee University.

Cheol Soo Joo has been the Bank's Executive Vice President and Non-Director Executive Officer since January 1, 2017. Mr. Joo previously served as Head of the Bank's Large Corporate I Business Division and Head of the Bank's Gangnam II Regional Sales Division. Mr. Joo received his B.A. in business administration from Korea University and his master's degree in business administration from Korea University.

Yun Ju Ko has been the Bank's Executive Vice President and Non-Director Executive Officer since January 1, 2017. Mr. Ko previously served as Head of the Bank's Seocho Business Division and Head of the Bank's Gangwon Business Division. Mr. Ko received his B.A. in economics from Gangwon University.

Chang Sung Kim has been the Bank's Executive Vice President and Non-Director Executive Officer since January 1, 2017. Mr. Kim previously served as Head of the Bank's Gyeonggi Seobu Business Division and General Manager of the Bank's Retail Banking Center. Mr. Kim graduated from Gyeonggi Commerical High School.

Sung Woo Kim has been the Bank's Executive Vice President and Non-Director Executive Officer since January 1, 2018. Mr. Kim previously served as Head of the Bank's Consumer Brand Division and Head of the Bank's Dongbu Business Division. Mr. Kim received his B.A. in business administration from Kyunghee University.

Woon Jin Jeong has been the Bank's Executive Vice President and Non-Director Executive Officer since January 1, 2018. Mr. Jeong previously served as Head of the Bank's Planning & Coordination Department and General Manager of Gangnam Corporate Banking Center. Mr. Jeong received his B.A. in economics from Korea University.

Nae Hoon Lee has been the Bank's Executive Vice President and Non-Director Executive Officer since January 1, 2018. Mr. Lee previously served as Head of the Bank's Trust & Pension Group and Head of the Bank's Nambu Business Division. Mr. Lee received his master's degree in corporate business from Chungang University.

Jae Hee Cho has been the Bank's Managing Director and Non-Director Executive Officer since January 1, 2016. Mr. Cho previously served as General Manager of the Bank's Strategy Planning Department and Risk Management Department, respectively. Mr. Cho received his B.A. in economics from Seoul National University and received a master's degree in financial engineering from Yonsei University.

Myong Goo Lee has been the Bank's Executive Vice President and Non-Director Executive Officer since January 1, 2016. Mr. Lee previously served as Managing Director of the Bank's Information Security Division and General Manager of the Bank's IT Business Development Department and IT Information Development Department, respectively. Mr. Lee graduated from Duksoo Commercial High School.

In Gi Kim has been the Bank's Managing Director and Non-Director Executive Officer since January 1, 2018. Mr. Kim previously served as Head of the Bank's Sales Promotion Department II and General Manager of Gwanggyo Retail Banking Center. Mr. Kim received his B.A. in public administration from Dongguk University.

Hyo Ryul Ahn has been the Bank's Managing Director and Non-Director Executive Officer since January 1, 2018. Mr. Ahn previously served as General Manager of the Bank's Retail Banking Department and Sales Promotion Department. Mr. Ahn received his B.A. in economics from Korea University.

Ho Wan Seo has been the Bank's Managing Director and Non-Director Executive Officer since January 1, 2018. Mr. Seo previously served as General Manager of the Bank's Global IT System Development Department and Shinhan Bank China, respectively. Mr. Seo received his B.A. in electronic data processing from Kyunghee University.

Audit Committee

The Bank has an Audit Committee under the Board. The rights and responsibilities of the Audit Committee include the following: (i) conduct the audit of accounting and business of the Bank, (ii) investigate the agenda and documents to be submitted at general shareholders meetings and state at general shareholders meetings its opinion on whether there exists any violation of laws, regulations or articles of incorporation or remarkable illegality, (iii) demand the convening of extraordinary shareholders meetings, (iv) request reports on business of subsidiaries and if necessary, investigate business or status of properties of subsidiaries, (v) approve the appointment of external auditors and (vi) handle other matters delegated by the Board.

As of the date of this offering circular, the Audit Committee of the Bank consists of the following members.

Name	Age	Position	Audit Committee Member Since	Date Term Ends
Bon Il Koo	58	Member of the Audit Committee; Outside director	March 27, 2013	March 31, 2018
Kook Jae Hwang	58	Member of the Audit Committee; Outside director	March 18, 2015	March 31, 2018
Chang Eon Heo	58	Member of the Audit Committee; Director and Standing Auditor	January 1, 2018	December 31, 2019

Risk Management Committee

The Risk Management Committee currently consists of two Outside Directors, Hoh In and Seoung Woo Lee, and one Non-Standing Director, Young Woong Woo. The committee oversees and makes determinations on significant issues relating to the Bank's comprehensive risk management function. In order to ensure the Bank's stable financial condition and to maximize its risk-adjusted profits, the committee monitors the Bank's overall risk exposure and reviews the Bank's compliance with risk policies and processes. In addition, the committee examines and amends risk and control strategies and policies and the Bank's overall risk management system, evaluates whether each risk is at an adequate level and reviews risk-based capital allocations. The committee holds a regular meeting every quarter.

Executive Recommendation Committee

The Executive Recommendation Committee is comprised of up to five directors, including the President of the Bank, a majority of which must be Outside Directors. The committee currently consists of five directors, namely Bon Il Koo, Kook Jae Hwang, Sun Tae Hwang, Seung Woo Lee and Sung Ho Wi. The committee recommends candidates for the President of the Bank, the Bank's Outside Director positions and the Bank's Audit Committee positions to be nominated at the general meeting of the Bank's shareholders. Resolutions require a majority of votes cast at a meeting of a majority of the members present. However, resolutions require at least two-thirds of the votes of the committee members for the recommendation of candidates for the Bank's Audit Committee positions.

Compensation Committee

The Compensation Committee currently consists of two Outside Directors, Kook Jae Hwang and Hoh In, and one Non-Standing Director, Young Woong Woo. The committee evaluates management's performance and deliberates and decides the compensation of directors, including the performance-related compensation of the Bank's executive officers. The committee holds meetings as necessary.

Remuneration

The aggregate remuneration and benefits in kind granted by the Bank to its directors and executive officers as of December 31, 2017 was ₩2,040 million.

Employees

As of December 31, 2017, the Bank's workforce consisted of 13,207 regular employees and 12,589 contract-based employees of the Bank. As of December 31, 2017, 10,416 employees were members of the Bank's labor union. The Bank maintains a good relationship with its labor union and there has been no material labor dispute in the past three years.

Share Ownership

All of the Bank's share capital is owned by Shinhan Financial Group.

Stock Options

Prior to April 1, 2010, Shinhan Financial Group granted stock options to select members of senior management. On March 14, 2018, the exercise period for all outstanding stock options expired, and there are currently no stock options outstanding.

SUBSCRIPTION AND SALE AND TRANSFER AND SELLING RESTRICTIONS

Selling Restrictions

The following replaces information about the Issuer or the Program under the heading corresponding to the heading in the Offering Circular.

European Economic Area

Unless the final terms (or pricing supplement, as the case may be) in relation to the 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 Program 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 the offering circular as supplemented by the final terms (or pricing supplement, as the case may be) in relation thereto to any retail investor in the European Economic Area. 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 2002/92/EC (as amended, the "Insurance Mediation 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 the Prospectus Directive; and

(b) the expression an "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 the Notes.

If the final terms (or pricing supplement, as the case may be) in relation to the Notes specifies "Prohibition of Sales to EEA Retail Investors" as "Not Applicable", in relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relevant Member State"), with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State no offer of Notes which are the subject of the offering contemplated by the offering circular may be made to the public in that Relevant Member State other than:

(a) to any legal entity which is a "qualified investor" as defined in the Prospectus Directive;

(b) to fewer than 150 natural or legal persons (other than "qualified investors" as defined in the Prospectus Directive), subject to obtaining the prior consent of the relevant dealer or dealers nominated by the Issuer for any such offer; or

(c) in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of Notes shall result in a requirement for the Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Directive or a supplemental prospectus pursuant to Article 16 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer of Notes to the public" in relation to any Notes in any Relevant 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, as the same may be varied in that Relevant Member State by any measure implementing the Prospectus Directive in that Relevant Member State. The expression "Prospectus Directive" means Directive 2003/71/EC (as amended, including by Directive 2010/73/EU), and includes any relevant implementing measure in the Relevant Member State.

The following sections are added under the heading "Subscription and Sale and Transfer and Selling Restrictions — Selling Restrictions" in the Offering Circular.

Switzerland

The 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 the 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 and neither the offering circular nor any other offering or marketing material relating to the Notes may be publicly distributed or otherwise made publicly available in Switzerland.

Republic of Italy

The offering of any Notes has not been registered with the Commissione Nazionale per le Società e la Borsa ("CONSOB") pursuant to Italian securities legislation and, accordingly, each Joint Lead Manager has represented and agreed that it has not offered, sold or delivered, and will not offer, sell or deliver, any Notes in the Republic of Italy in a solicitation to the public, and that sales of Notes in the Republic of Italy shall be effected in accordance with all Italian securities, tax and exchange control and other applicable laws and regulations.

Each Joint Lead Manager has represented and agreed that it will not offer, sell or deliver any Notes or distribute copies of the Offering Memorandum or any other document relating to the Notes in the Republic of Italy except:

(1) to Qualified Investors (investitori qualificati), as defined in Article 100 of Legislative Decree No. 58 of 24 February 1998, as amended ("Decree No. 58") and as defined under Article 34-ter, first paragraph, letter b) of CONSOB Regulation No. 11971 of 14 May 1999, as amended ("CONSOB Regulation No. 11971"); or

(2) in other circumstances where an express exemption from compliance with the public offering restrictions applies, as provided under Article 100 of Decree No. 58 or CONSOB Regulation No. 11971.

Any offer, sale or delivery of any Notes or distribution of copies of this offering circular and any supplement thereto or any other document relating to the Notes in the Republic of Italy must:

(a) be made by an investment firm, bank or financial intermediary permitted to conduct such activities in the Republic of Italy in accordance with Legislative Decree No. 385 of 1 September 1993, as amended (the "Banking Act"), Decree No. 58 and CONSOB Regulation No. 16190 of 29 October 2007 (as amended from time to time) and any other applicable laws and regulations; and

(b) comply with any other applicable laws and regulations or requirement imposed by CONSOB, the Bank of Italy (including the reporting requirements, where applicable, pursuant to Article 129 of the Banking Act and the implementing guidelines of the Bank of Italy, as amended from time to time and/or any other Italian authority.

Please note that in accordance with Article 100-bis of the Consolidated Financial Services Act, where no exemption from the rules on public offerings applies under (1) and (2) above, the subsequent distribution of the Notes on the secondary market in Italy must be made in compliance with the public offer and the prospectus requirement rules provided under the Consolidated Financial Services Act and CONSOB Regulation No. 11971. Failure to comply with such rules may result in the sale of such Notes being declared null and void and in the liability of the intermediary transferring the financial instruments for any damages suffered by the investors.

PRESENTATION OF FINANCIAL INFORMATION

The audited consolidated financial statements of Shinhan Bank as of and for the years ended December 31, 2016 and 2017 included in this Pricing Supplement were prepared and presented in accordance with Korean International Financial Reporting Standards.

RESPONSIBILITY

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

Signed on behalf of the Issuer:

By: ______________________________

Duly authorized signatory
Name: Kun-Il Leem
Title: General Manager of Treasury Department

[Signature page to Pricing Supplement]

APPENDIX A

INDEX TO FINANCIAL STATEMENTS

This Pricing Supplement contains the following financial statements of Shinhan Bank and independent auditor's reports and notes relating thereto:

Audited Consolidated Financial Statements:

Independent Auditors' Report

(Based on a report originally issued in Korean)

The Board of Directors and Stockholder
Shinhan Bank:

We have audited the accompanying consolidated financial statements of Shinhan Bank and its subsidiaries (the "Group"), which comprise the consolidated statements of financial position as of December 31, 2017 and 2016, the consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Korean International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Korean Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements 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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, of the consolidated financial position of the Group as of December 31, 2017 and 2016 and of its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with Korean International Financial Reporting Standards.

Other Matters

The procedures and practices utilized in the Republic of Korea to audit such consolidated financial statements may differ from those generally accepted and applied in other countries.

KPMG Samjong Accounting Corp.
Seoul, Korea
March 7, 2018

This report is effective as of March 7, 2018, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

SHINHAN BANK AND SUBSIDIARIES
Consolidated Statements of Financial Position
As of December 31, 2017 and 2016

(In millions of won)	Notes		December 31, 2017	December 31, 2016
Assets				
Cash and due from banks	4,7,10,41,42	₩	18,662,322	14,469,387
Trading assets	4,8,42,44		11,216,398	11,270,758
Derivative assets	4,9,42,44		2,604,090	2,579,121
Loans	4,10,18,42,44		231,732,156	219,438,681
Available-for-sale financial assets	4,11,18,44		32,495,541	27,814,583
Held-to-maturity financial assets	4,11,18,44		14,822,898	11,630,270
Property and equipment	6,12,17,18		2,055,875	2,043,559
Intangible assets	6,13		298,227	260,566
Investments in associates	14		100,336	130,893
Investment properties	6,15		598,296	675,146
Defined benefit assets	24		34,120	-
Current tax assets	38		24,674	11,769
Deferred tax assets	38		407,344	447,514
Other assets	4,10,16,42,45		9,253,079	12,077,453
Non-current assets held for sale	17		7,534	4,923
Total assets		₩	324,312,890	302,854,623
Liabilities				
Financial liabilities designated at fair value through profit or loss	4,19	₩	-	6,282
Deposits	4,20,42		242,653,744	228,910,092
Trading liabilities	4,21		434,586	485,995
Derivative liabilities	4,9,42,44		2,992,936	2,785,392
Borrowings	4,22,42,44		14,617,562	14,314,329
Debt securities issued	4,23		25,460,427	21,578,430
Defined benefit liabilities	24		3,805	50,103
Provisions	25,40,42		259,323	306,931
Current tax liabilities	38		210,944	137,722
Deferred tax liabilities	38		11,723	9,481
Other liabilities	4,26,42,44,45		15,014,977	12,802,893
Total liabilities			301,660,027	281,387,650
Equity				
Capital stock	27		7,928,078	7,928,078
Hybrid bonds	27		668,938	469,393
Capital surplus	27		403,164	403,164
Capital adjustments	27,38		(3,307)	(64,615)
Accumulated other comprehensive loss	27,38		(490,772)	(276,445)
Retained earnings	27,28		14,141,464	13,000,837
Total equity attributable to equity holder of Shinhan Bank			22,647,565	21,460,412
Non-controlling interests	27		5,298	6,561
Total equity			22,652,863	21,466,973
Total liabilities and equity		₩	324,312,890	302,854,623

See accompanying notes to the consolidated financial statements.

SHINHAN BANK AND SUBSIDIARIES

Consolidated Statements of Comprehensive Income

For the years ended December 31, 2017 and 2016

(In millions of won)	Notes		2017	2016
Interest income		₩	8,123,401	7,696,201
Interest expense			(3,131,350)	(3,192,080)
Net interest income	4,6,29,42,44		4,992,051	4,504,121
Fees and commission income			1,183,874	1,061,620
Fees and commission expense			(192,799)	(177,122)
Net fees and commission income	4,6,30,42,44		991,075	884,498
Dividend income	31,44		100,516	123,559
Net trading gain (loss)	32		(164,898)	58,832
Net foreign currencies transaction gain			472,576	245,153
Net loss on financial instruments designated at fair value through profit or loss	19		(43)	(206)
Net gain on sale of available-for-sale financial assets	11		195,845	411,430
Impairment loss on financial assets	4,10,33,42		(659,387)	(738,536)
General and administrative expenses	34,42		(3,118,057)	(2,889,853)
Net other operating expenses	6,36,42		(605,315)	(640,020)
Operating income			2,204,363	1,958,978
Net non-operating income (expenses)	6,37		(47,922)	61,131
Share of profit of associates	6,14		1,306	8,615
Profit before income tax	6		2,157,747	2,028,724
Income tax expense	6,38		(446,514)	(88,103)
Profit for the year	6,28		1,711,233	1,940,621
Other comprehensive loss for the year:	4,27,38			
Items that are or may be reclassified subsequently to profit or loss				
Foreign currency translation differences for foreign operations			(186,232)	2,081
Unrealized net change in fair value of available-for-sale financial assets			(92,969)	(247,146)
Share of other comprehensive income (loss) of associates			(10,563)	2,834
			(289,764)	(242,231)
Items that will not be reclassified subsequently to profit or loss				
Remeasurements of defined benefit plans			73,879	19,571
Share of other comprehensive income of associates			152	8
			74,031	19,579
Total other comprehensive loss for the year, net of income tax			(215,733)	(222,652)
Total comprehensive income for the year		₩	1,495,500	1,717,969

See accompanying notes to the consolidated financial statements.

SHINHAN BANK AND SUBSIDIARIES

Consolidated Statements of Comprehensive Income (Continued)

For the years ended December 31, 2017 and 2016

(In millions of won, except for earnings per share)	**Notes**		**2017**	**2016**
Profit attributable to:	6			
Equity holder of Shinhan Bank		₩	1,710,992	1,940,256
Non-controlling interests			241	365
Profit for the year		₩	1,711,233	1,940,621
Total comprehensive income attributable to:				
Equity holder of Shinhan Bank		₩	1,496,251	1,723,759
Non-controlling interests			(751)	(5,790)
Total comprehensive income for the year		₩	1,495,500	1,717,969
Earnings per share:	39			
Basic and diluted earnings per share in won		₩	1,060	1,195

See accompanying notes to the consolidated financial statements.

SHINHAN BANK AND SUBSIDIARIES

Consolidated Statements of Changes in Equity

For the year ended December 31, 2016

(In millions of won)		Attributable to equity holder of Shinhan Bank								
		Capital stock	**Hybrid bonds**	**Capital surplus**	**Capital adjustments**	**Accumulated other comprehensive income (loss)**	**Retained earnings**	**Sub-total**	**Non-controlling interests**	**Total**
Balance at January 1, 2016	₩	7,928,078	801,298	403,164	(29,340)	(59,948)	11,787,170	20,830,422	12,351	20,842,773
Total comprehensive income (loss), net of income tax										
Profit for the year		-	-	-	-	-	1,940,256	1,940,256	365	1,940,621
Foreign currency translation differences for foreign operations		-	-	-	-	8,338	-	8,338	(6,257)	2,081
Unrealized net changes in fair values of available-for-sale financial assets		-	-	-	-	(247,146)	-	(247,146)	-	(247,146)
Share of other comprehensive income of associates		-	-	-	-	2,842	-	2,842	-	2,842
Remeasurements of defined benefit plans		-	-	-	-	19,469	-	19,469	102	19,571
Total comprehensive income (loss) for the year		-	-	-	-	(216,497)	1,940,256	1,723,759	(5,790)	1,717,969
Transactions with owners, recognized directly in equity										
Annual dividends to equity holder		-	-	-	-	-	(650,000)	(650,000)	-	(650,000)
Dividends to hybrid bond holders		-	-	-	-	-	(45,691)	(45,691)	-	(45,691)
Redemption of hybrid bonds		-	(331,905)	-	(60,094)	-	-	(391,999)	-	(391,999)
Share-based payment transactions		-	-	-	(2,128)	-	-	(2,128)	-	(2,128)
Capital investment in subsidiaries		-	-	-	(3,951)	-	-	(3,951)	-	(3,951)
Disposal of other capital adjustments		-	-	-	30,898	-	(30,898)	-	-	-
Total transactions with owners		-	(331,905)	-	(35,275)	-	(726,589)	(1,093,769)	-	(1,093,769)
Balance at December 31, 2016	₩	7,928,078	469,393	403,164	(64,615)	(276,445)	13,000,837	21,460,412	6,561	21,466,973

See accompanying notes to the consolidated financial statements.

SHINHAN BANK AND SUBSIDIARIES

Consolidated Statements of Changes in Equity (Continued)

For the year ended December 31, 2017

(In millions of won)		Attributable to equity holder of Shinhan Bank								
		Capital stock	Hybrid bonds	Capital surplus	Capital adjustments	Accumulated other comprehensive income (loss)	Retained earnings	Sub-total	Non-controlling interests	Total
Balance at January 1, 2017	₩	7,928,078	469,393	403,164	(64,615)	(276,445)	13,000,837	21,460,412	6,561	21,466,973
Total comprehensive income (loss), net of income tax										
Profit for the year		-	-	-	-	-	1,710,992	1,710,992	241	1,711,233
Foreign currency translation differences for foreign operations		-	-	-	-	(185,227)	-	(185,227)	(1,005)	(186,232)
Unrealized net changes in fair values of available-for-sale financial assets		-	-	-	-	(92,983)	-	(92,983)	14	(92,969)
Share of other comprehensive loss of associates		-	-	-	-	(9,997)	(414)	(10,411)	-	(10,411)
Remeasurements of defined benefit plans		-	-	-	-	73,880	-	73,880	(1)	73,879
Total comprehensive income (loss) for the year		-	-	-	-	(214,327)	1,710,578	1,496,251	(751)	1,495,500
Transactions with owners, recognized directly in equity										
Annual dividends to equity holder		-	-	-	-	-	(480,000)	(480,000)	-	(480,000)
Dividends to hybrid bond holders		-	-	-	-	-	(29,857)	(29,857)	-	(29,857)
Issuance of hybrid bonds		-	199,545	-	-	-	-	199,545	-	199,545
Share-based payment transactions		-	-	-	1,213	-	-	1,213	-	1,213
Changes in ownership interests in subsidiaries		-	-	-	1	-	-	1	(512)	(511)
Disposal of other capital adjustments		-	-	-	60,094	-	(60,094)	-	-	-
Total transactions with owners		-	199,545	-	61,308	-	(569,951)	(309,098)	(512)	(309,610)
Balance at December 31, 2017	₩	7,928,078	668,938	403,164	(3,307)	(490,772)	14,141,464	22,647,565	5,298	22,652,863

See accompanying notes to the consolidated financial statements.

SHINHAN BANK AND SUBSIDIARIES
Consolidated Statements of Cash Flows
For the years ended December 31, 2017 and 2016

(In millions of won)		**2017**	**2016**
Cash flows from operating activities			
Profit before income tax	₩	2,157,747	2,028,724
Adjustments for:			
Net interest income		(4,992,051)	(4,504,121)
Dividend income		(100,516)	(123,559)
Net loss on financial instruments designated at fair value through profit or loss		-	206
Net non-cash trading loss (gain)		(24,019)	51,669
Net non-cash foreign currencies transaction gain		(207,133)	(14,219)
Net gain on sales of available-for-sale financial assets		(195,845)	(411,430)
Net impairment loss on loans and receivables		481,159	656,433
Net impairment loss on available-for-sale financial assets		178,228	82,103
Non-cash employee benefits		141,360	149,531
Depreciation and amortization		158,954	160,417
Net non-cash other operating expenses (income)		(11,260)	49,447
Share of profit of associates		(1,306)	(8,615)
Net non-cash non-operating expenses (income)		(15,870)	9,507
		(4,588,249)	(3,902,631)
Changes in assets and liabilities:			
Due from banks		(3,878,473)	3,445,119
Trading assets		23,330	(2,218,771)
Derivative assets		3,010,188	1,146,199
Loans		(14,611,563)	(10,310,156)
Other assets		3,109,802	(2,261,259)
Financial liabilities designated at fair value through profit or loss		(6,282)	(7,433)
Deposits		15,072,282	15,317,603
Trading liabilities		(52,591)	(43,734)
Derivative liabilities		(2,981,452)	(1,126,126)
Defined benefit liabilities		(125,561)	(219,788)
Provisions		(16,032)	(18,218)
Other liabilities		1,984,767	(2,903,644)
		1,528,415	799,792
Income tax paid		(331,970)	(287,173)
Interest received		7,989,875	7,805,108
Interest paid		(2,886,843)	(3,156,234)
Dividends received		104,268	154,008
Net cash provided by operating activities		3,973,193	3,441,594

See accompanying notes to the consolidated financial statements.

SHINHAN BANK AND SUBSIDIARIES
Consolidated Statements of Cash Flows (Continued)
For the years ended December 31, 2017 and 2016

(In millions of won)		2017	2016
Cash flows from investing activities			
Proceeds from sale of available-for-sale financial assets	₩	23,462,272	20,517,584
Acquisition of available-for-sale financial assets		(28,581,468)	(23,725,867)
Proceeds from redemption of held-to-maturity financial assets		1,559,419	1,223,646
Acquisition of held-to-maturity financial assets		(4,820,662)	(2,728,536)
Proceeds from sale of property and equipment		10,543	1,438
Acquisition of property and equipment		(84,470)	(79,285)
Proceeds from sale of intangible assets		4,757	1,313
Acquisition of intangible assets		(75,717)	(37,052)
Proceeds from sale of investments in associates		69,257	332
Acquisition of investments in associates		(25,298)	(11,607)
Proceeds from sale of investment properties		3,507	18,075
Acquisition of investment properties		(2,120)	(6,910)
Proceeds from sale of non-current assets held for sale		10,466	2,215
Proceeds from sale of other assets		930,097	868,794
Acquisition of other assets		(914,571)	(824,203)
Acquisition of subsidiaries		83,631	-
Net cash used in investing activities		(8,370,357)	(4,780,063)
Cash flows from financing activities			
Proceeds from borrowings, net		958,927	1,072,852
Proceeds from issuance of debt securities		10,772,423	8,765,677
Repayments of debt securities		(6,302,222)	(6,314,687)
Dividends paid		(511,165)	(703,612)
Issuance of hybrid bonds		199,545	-
Redemption of hybrid bonds		-	(392,000)
Receipts of guarantee deposits for leases		140,454	131,204
Refund of guarantee deposits for leases		(132,265)	(134,377)
Acquisition of non-controlling interests		(3,149)	(10,504)
Net cash provided by financing activities		5,122,548	2,414,553
Effect of exchange rate fluctuations on cash and cash equivalents held		(22,065)	(27,018)
Net increase in cash and cash equivalents		703,319	1,049,066
Cash and cash equivalents at beginning of the year (note 41)		4,627,784	3,578,718
Cash and cash equivalents at end of the year (note 41)	₩	5,331,103	4,627,784

See accompanying notes to the consolidated financial statements.

SHINHAN BANK AND SUBSIDIARIES
Notes to the Consolidated Financial Statements
For the years ended December 31, 2017 and 2016

1. Reporting entity

Shinhan Bank (the "Bank"), the controlling company, is headquartered at 20, Sejong-daero 9-gil, Jung-gu, Seoul, Republic of Korea. Consolidated financial statements for the year presented herein consist of the Bank and subsidiaries (collectively referred to as "the Group"), and equity interests in associates and joint ventures of the Group.

(a) Controlling company

The Bank was established on October 1, 1943 under the name of Chohung Bank, through the merger of Hanseung Bank and Dongil Bank, which were established on February 19, 1897 and August 8, 1906, respectively, to engage in commercial banking and trust operations.

The Bank acquired Chungbuk Bank and Kangwon Bank in 1999, and the former Shinhan Bank on April 1, 2006, and subsequently changed its name to Shinhan Bank. As of December 31, 2017, the Bank has 1,585,615,506 outstanding common shares with par value of ₩7,928,078 million which Shinhan Financial Group Co., Ltd. ("Shinhan Financial Group") owns 100% of those. As of December 31, 2017, the Bank operates through 738 domestic branches, 127 depositary offices, 31 premises and 14 overseas branches.

(b) Subsidiaries included in consolidation

i) Shinhan Asia Ltd.

Shinhan Asia Ltd. ("Shinhan Asia") engages in merchant banking activities in Hong Kong. As of December 31, 2017, Shinhan Asia's capital stock amounted to USD 100 million.

ii) Shinhan Bank America

Shinhan Bank America ("Shinhan America") was established on March 24, 2003 through the merger of Chohung Bank of New York and California Chohung Bank. As of December 31, 2017, Shinhan America's capital stock amounted to USD 123 million.

iii) Shinhan Bank Europe GmbH

Shinhan Bank Europe GmbH ("Shinhan Europe") was established in 1994. As of December 31, 2017, Shinhan Europe's capital stock amounted to EUR 23 million.

iv) Shinhan Khmer Bank PLC

Shinhan Khmer Bank PLC ("Shinhan Khmer") was established on October 15, 2007. As a result of disproportionate rights offering during the year ended December 31, 2017, Shinhan Khmer's capital stock amounted to USD 47.5 million as of December 31, 2017.

v) Shinhan Bank Kazakhstan Limited

Shinhan Bank Kazakhstan Limited ("Shinhan Kazakhstan") was established on December 16, 2008. As of December 31, 2017, Shinhan Kazakhstan's capital stock amounted to KZT 10,029 million.

vi) Shinhan Bank Canada

Shinhan Bank Canada ("Shinhan Canada") was established on March 9, 2009. As of December 31, 2017, Shinhan Canada's capital stock amounted to CAD 80 million.

1. Reporting entity (continued)

(b) Subsidiaries included in consolidation (continued)

vii) Shinhan Bank China Limited

Shinhan Bank China Limited ("Shinhan China") was established on May 12, 2008. As of December 31, 2017, Shinhan China's capital stock amounted to CNY 2,000 million.

viii) Shinhan Bank Japan

Shinhan Bank Japan ("Shinhan Japan") was established on September 14, 2009. As of December 31, 2017, Shinhan Japan's capital stock amounted to JPY 15,000 million.

ix) Shinhan Bank Vietnam Ltd.

Shinhan Bank Vietnam Ltd. ("Shinhan Vietnam") was established on November 16, 2009 and merged with Shinhan Vina Bank on November 28, 2011. As of December 31, 2017, Shinhan Vietnam's capital stock amounted to VND 4,547,100 million.

x) Banco Shinhan de Mexico

Banco Shinhan de Mexico ("Shinhan Mexico") was established on October 12, 2015 for obtaining the authorization of banking business. As a result of the rights offering during the year ended December 31, 2017, Shinhan Mexico's issued capital stock amounted to MXN 1,583 million as of December 31, 2017.

xi) PT Bank Shinhan Indonesia

On November 30, 2015, the Bank acquired 97.76% of voting share and obtained the control of PT Bank Metro Express, which had been established on September 8, 1967 and engaged in the banking business. PT Bank Metro Express was renamed as PT Bank Shinhan Indonesia ("Shinhan Indonesia") in 2016 and merged PT Centratama Nasional Bank, a former subsidiary of the Bank, on December 6, 2016. As a result of the rights offering during the year ended December 31, 2017, the issued capital of Shinhan Indonesia amounted to IDR 944,278 million as of December 31, 2017.

1. Reporting entity (continued)

(b) Subsidiaries included in consolidation (continued)

Details of ownerships in subsidiaries as of December 31, 2017 and 2016 were as follows:

Subsidiaries	Location	Ownership (%)	
		December 31, 2017	December 31, 2016
Shinhan Asia	Hong Kong	99.99	99.99
Shinhan America	U.S.A	100.00	100.00
Shinhan Europe	Germany	100.00	100.00
Shinhan Khmer	Cambodia	97.50	90.00
Shinhan Kazakhstan	Kazakhstan	100.00	100.00
Shinhan Canada	Canada	100.00	100.00
Shinhan China	China	100.00	100.00
Shinhan Japan	Japan	100.00	100.00
Shinhan Vietnam	Vietnam	100.00	100.00
Shinhan Mexico	Mexico	99.99	99.99
Shinhan Indonesia	Indonesia	99.00	98.98

In addition, structured entities included in consolidation as of December 31, 2017 were as follows:

Structured entities	Location	Fiscal period-end (month)
MPC Yulchon Green 1st	Korea	3 / 6 / 9 / 12
MPC Yulchon 2nd	Korea	3 / 6 / 9 / 12
MPC Yulchon 1st	Korea	3 / 6 / 9 / 12
S-Nuri 1st Co., Ltd.	Korea	2 / 4 / 6 / 8 / 10 / 12
Shinhan-S-Russell Co., Ltd.	Korea	3 / 6 / 9 / 12
GPS 4th Ltd.	Korea	3 / 6 / 9 / 12
S-Narae 1st L.L.C	Korea	1 / 4 / 7 / 10
GPS 7th L.L.C	Korea	2 / 5 / 8 / 11
GPS 11th Ltd.	Korea	1 / 4 / 7 / 10
GPS 10th Ltd.	Korea	1 / 4 / 7 / 10
GPS 8th Ltd.	Korea	3 / 6 / 9 / 12
Sunny Financial 1st Co., Ltd.	Korea	2 / 5 / 8 / 11
S-way 5th Co., Ltd.	Korea	10
Sunny Financial 2nd Co., Ltd.	Korea	2 / 5 / 8 / 11
Sunny Financial 9th Co., Ltd.	Korea	1 / 4 / 7 / 10
Sunny More 3rd Co., Ltd.	Korea	1 / 4 / 7 / 10
Sunny More 1st Co., Ltd.	Korea	1 / 4 / 7 / 10
Sunny More 2nd Co., Ltd.	Korea	1 / 4 / 7 / 10
Sunny More 5th Co., Ltd.	Korea	2 / 5 / 8 / 11
Sunny More 7th Co., Ltd.	Korea	3 / 6 / 9 / 12
Sunny More 6th Co., Ltd.	Korea	3 / 6 / 9 / 12
Sunny More 10th Co., Ltd.	Korea	2 / 5 / 8 / 11
CGN YULCHON 2nd Co., Ltd.	Korea	3 / 6 / 9 / 12
Sunny Dream 4th L.L.C	Korea	3 / 6 / 9 / 12
Sunny Dream 7th Co., Ltd.	Korea	10
Sunny Dream 9th L.L.C	Korea	2 / 5 / 8 / 11
Sunny Russell 2nd Co., Ltd.	Korea	2 / 5 / 8 / 11
Sunny Dream 5th Co., Ltd.	Korea	1 / 4 / 7 / 10

1. Reporting entity (continued)

(b) Subsidiaries included in consolidation (continued)

Structured entities	Location	Fiscal period-end (month)
Sunny Russell 3rd L.L.C	Korea	2 / 5 / 8 / 11
Sunny Russell 8th Co., Ltd.	Korea	12
Sunny Russell 7th L.L.C	Korea	3 / 6 / 9 / 12
Sunny Russell 6th Co., Ltd.	Korea	3 / 6 / 9 / 12
S-smart 1st Co., Ltd.	Korea	11
Sunny Russell 1st Co., Ltd.	Korea	2
Sunny Russell 4th L.L.C	Korea	12
S-smart 5th Co., Ltd.	Korea	12
S-smart 6th Co., Ltd.	Korea	3
S-smart 3rd Co., Ltd.	Korea	3
S-dream 10th Co., Ltd.	Korea	12
Sunny Russell 5th Co., Ltd.	Korea	12
Sunny Smart 1st Co., Ltd.	Korea	12
S-smart 9th Co., Ltd.	Korea	12
Sunny Smart 2nd Co., Ltd.	Korea	12
Sunny Smart 8th Co., Ltd.	Korea	12
Tiger Eyes 3rd Co., Ltd.	Korea	12
Sunny Smart 5th Co., Ltd.	Korea	2 / 5 / 8 / 11
Tiger Eyes 1st Co., Ltd.	Korea	1 / 4 / 7 / 10
S-solution 2nd Co., Ltd.	Korea	2 / 5 / 8 / 11
Sunny Smart 10th Co., Ltd.	Korea	2 / 5 / 8 / 11
S-solution 3rd Co., Ltd.	Korea	2 / 5 / 8 / 11
S-solution 4th Co., Ltd.	Korea	3 / 6 / 9 / 12
S-solution 5th Co., Ltd.	Korea	3 / 6 / 9 / 12
S-solution 7th Co., Ltd.	Korea	3 / 6 / 9 / 12
S-solution 8th Co., Ltd.	Korea	1 / 4 / 7 / 10
Shinhan display 1st Co., Ltd.	Korea	1 / 4 / 7 / 10
S-solution 9th Co., Ltd.	Korea	10
SH inno 1st Co., Ltd.	Korea	3 / 6 / 9 / 12
Sunny solution 2nd Co., Ltd.	Korea	11
Sunny smart 3rd Co., Ltd.	Korea	2 / 5 / 8 / 11
Shinhan serveone 1st Co., Ltd.	Korea	2 / 5 / 8 / 11
Sunny Dream 1st Co., Ltd.	Korea	7
Sunny solution 1st Co., Ltd.	Korea	2 / 5 / 8 / 11
Shinhan-Daesung Contents Fund	Korea	12
Development Trust	Korea	12
Non-specified Money Trust	Korea	12
Old-age Living Pension Trust	Korea	12
New-Personal Pension Trust	Korea	12
Personal Pension Trust	Korea	12
Retirement Trust	Korea	12
New Old-age Living Pension Trust	Korea	12
Pension Trust	Korea	12
Household Money Trust (Shinhan)	Korea	12
Corporation Money Trust (Shinhan)	Korea	12
Shinhan BNPP Private Corporate 25th	Korea	1
Shinhan BNPP Private Corporate 18th	Korea	1

1. Reporting entity (continued)

(b) Subsidiaries included in consolidation (continued)

The Group consolidates a structured entity when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to most significantly affect those returns through its power over the structured entity based on the terms in the agreement relating to the establishment of the structured entity. For consolidated structured entities, the Group recognizes non-controlling interests related to the structured entity as liabilities in the consolidated statement of financial position.

As of December 31, 2017, the Group provides Asset Backed Commercial Paper (ABCP) purchase agreement amounting to ₩2,714,407 million to the structured entities described above.

1. Reporting entity (continued)

(b) Subsidiaries included in consolidation (continued)

	Subsidiaries
Newly included subsidiaries during the year ended December 31, 2017	S-smart 1st Co., Ltd.
	Sunny Russell 1st Co., Ltd.
	Sunny Russell 4th L.L.C
	S-smart 5th Co., Ltd.
	S-smart 6th Co., Ltd.
	S-smart 3rd Co., Ltd.
	S-dream 10th Co., Ltd.
	Sunny Russell 5th Co., Ltd.
	Sunny Smart 1st Co., Ltd.
	S-smart 9th Co., Ltd.
	Sunny Smart 2nd Co., Ltd.
	Sunny Smart 8th Co., Ltd.
	Tiger Eyes 3rd Co., Ltd.
	Sunny Smart 5th Co., Ltd.
	Tiger Eyes 1st Co., Ltd.
	S-solution 2nd Co., Ltd.
	Sunny Smart 10th Co., Ltd.
	S-solution 3rd Co., Ltd.
	S-solution 4th Co., Ltd.
	S-solution 5th Co., Ltd.
	S-solution 7th Co., Ltd.
	S-solution 8th Co., Ltd.
	Shinhan display 1st Co., Ltd.
	S-solution 9th Co., Ltd.
	SH inno 1st Co., Ltd.
	Sunny solution 2nd Co., Ltd.
	Sunny smart 3rd Co., Ltd.
	Shinhan serveone 1st Co., Ltd.
	Sunny solution 1st Co., Ltd.
Excluded subsidiaries during the year ended December 31, 2017	AR Plus 2nd
	S-Nuri 9th Co., Ltd.
	Carecamp 1st Ltd.
	Sunny Financial 6th Co., Ltd.
	Sunny Dream 6th Co., Ltd.
	S-Nuri 4th Co., Ltd.
	GPS 5th Ltd.
	GPS 2nd Ltd.
	Sunny More 9th Co., Ltd.

2. Basis of preparation

(a) Statement of compliance

The consolidated financial statements have been prepared in accordance with Korean International Financial Reporting Standards ("K-IFRS"), as prescribed in *the Act on External Audit of Stock Companies.*

(b) Approval of the consolidated financial statements

The consolidated financial statements were authorized for issue by the Board of Directors on February 6, 2018.

(c) Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis except for the following material items in the consolidated statements of financial position:

- derivative financial instruments are measured at fair value
- financial instruments at fair value through profit or loss are measured at fair value
- available-for-sale financial assets are measured at fair value
- share-based payment arrangements are measured at fair value
- recognized financial instruments designated as hedged items in qualifying fair value hedge relationships and adjusted for changes in fair value attributable to the risk being hedged
- liabilities for defined benefit plans are recognized as net of the total present value of defined benefit obligations less the fair value of plan assets.

(d) Functional and presentation currency

The respective financial statements of the Group entities are prepared in the functional currency of the respective operation. These consolidated financial statements are presented in Korean won, which is the Bank's functional currency and the currency of the primary economic environment in which the Group operates. Subsidiaries whose functional currency is not Korean won were as follows:

Functional currency	Subsidiaries
USD	Shinhan Asia, Shinhan America, Shinhan Khmer
EUR	Shinhan Europe
KZT	Shinhan Kazakhstan
CAD	Shinhan Canada
CNY	Shinhan China
JPY	Shinhan Japan
VND	Shinhan Vietnam
MXN	Shinhan Mexico
IDR	Shinhan Indonesia

2. Basis of preparation (continued)

(e) Use of estimates and judgements

The preparation of the consolidated financial statements in conformity with K-IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Information about significant areas of estimation uncertainty and critical judgements in applying accounting policies that have the significant effect on the amount recognized in the consolidated financial statements is described in Note 5.

3. Significant accounting policies

In preparing these consolidated financial statements, the Group has consistently applied the accounting policies as listed below with those applied by the Group in its consolidated financial statements as of and for the year ended December 31, 2016, except for the changes in accounting policies as explained in (a), which are effective for annual periods beginning on or after January 1, 2017.

(a) Changes in accounting policies

i) Amendments to K-IFRS No.1007, *'Statement of Cash Flows'*

The Group applied amendments to K-IFRS No.1007, *'Statement of Cash Flows'*, which are effective for annual periods beginning on or after January 1, 2017. The amendments to K-IFRS No.1007 require changes in liability arising from the financing activities of the Group to be disclosed as follows; fluctuations in financing cash flows, changes in the acquisition or loss of control on subsidiaries or other business, the effect of exchange rate changes, changes in fair value and other changes. The amendments does not have a significant impact on the Group's consolidated financial statements.

ii) Amendments to K-IFRS No.1012, *'Income Taxes'*

The Group applied amendments to K-IFRS No.1012, *'Income Taxes'*, which are effective for annual periods beginning on or after January 1, 2017. Amendments to K-IFRS No.1012 clarify that temporary differences exist when there is a difference between the carrying amount and tax based amount of the debt instruments which are measured at fair value, regardless of the expected recovery method (sale or retention). In assessing future taxable income, the Group shall include assets to be recovered in excess of its carrying amount and exclude the tax deductions resulting from those deductible temporary differences. The amendments does not have a significant impact on the Group's consolidated financial statements.

3. Significant accounting policies (continued)

(b) Basis of consolidation

i) Subsidiaries

Subsidiaries are investees controlled by the Group. The Group controls an investee when it is exposed to, or has rights to, variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases.

If a member of the Group uses accounting policies other than those adopted in the consolidated financial statements for the same transactions and events in similar circumstances, appropriate adjustments are made to its financial statements in preparing the consolidated financial statements.

ii) Structured entity

The Group establishes or invests in various structured entities. A structured entity is an entity designed so that its activities are not governed by way of voting rights. When assessing control of a structured entity, the Group considers factors such as the purpose and the design of the investee; its practical ability to direct the relevant activities of the investee; the nature of its relationship with the investee; and the size of its exposure to the variability of returns of the investee. The Group does not recognize any non-controlling interests as equity in relation to structured entities in the consolidated statements of financial position since the non-controlling interests in these entities are recognized as liabilities of the Group.

iii) Intra-group transactions eliminated on consolidation

Intra-group balances, transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Intra-group losses are recognized as expense if intra-group losses indicate an impairment that requires recognition in the consolidated financial statements.

iv) Non-controlling interests

Non-controlling interests in a subsidiary are accounted for separately from the parent's ownership interests in a subsidiary. Each component of net profit or loss and other comprehensive income is attributed to the owners of the parent and non-controlling interest holders, even when the allocation reduces the non-controlling interests balance below zero.

3. Significant accounting policies (continued)

(c) Business combinations

i) Business combinations

A business combination is accounted for by applying the acquisition method, unless it is a combination involving entities or businesses under common control.

Each identifiable asset and liability is measured at its acquisition-date fair value except for below:

- Leases and insurance contracts are required to be classified on the basis of the contractual terms and other factors
- Only those contingent liabilities assumed in a business combination that are a present obligation and can be measured reliably are recognized
- Deferred tax assets or liabilities are recognized and measured in accordance with K-IFRS No.1012, '*Income Taxes'*
- Employee benefit arrangements are recognized and measured in accordance with K-IFRS No.1019, '*Employee Benefits'*
- Indemnification assets are recognized and measured on the same basis as the indemnified liability or asset
- Reacquired rights are measured in accordance with special provisions
- Liabilities or equity instruments related to share-based payment transactions are measured in accordance with the method in K-IFRS No.1102, '*Share-based Payment'*
- Non-current assets held for sale are measured at fair value less costs to sell in accordance with K-IFRS No.1105, '*Non-current Assets Held for Sale and Discontinued Operations'*

As of the acquisition date, non-controlling interests in the acquiree are measured as the non-controlling interests' proportionate share of the acquiree's identifiable net assets.

The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the acquirer, the liabilities incurred by the acquirer to former owners of the acquiree and the equity interests issued by the acquirer. However, any portion of the acquirer's share-based payment awards exchanged for awards held by the acquiree's employee that is included in consideration transferred in the business combination shall be measured in accordance with the method described above rather than at fair value.

Acquisition-related costs are costs the acquirer incurs to effect a business combination. Those costs include finder's fees; advisory, legal, accounting, valuation and other professional or consulting fees; general administrative costs, including the costs of maintaining an internal acquisitions department; and costs of registering and issuing debt and equity securities. Acquisition-related costs, other than those associated with the issue of debt or equity securities, which are recognized in accordance with K-IFRS No.1032, '*Financial Instruments: Presentation*' and K-IFRS No.1039, '*Financial Instruments: Recognition and Measurement',* are expensed in the periods in which the costs are incurred and the services are received.

3. Significant accounting policies (continued)

(c) Business combinations (continued)

ii) Goodwill

The Group measures goodwill at the acquisition date as:

- the fair value of the consideration transferred; plus
- the recognized amount of any non-controlling interests in the acquiree; plus
- if the business combination is achieved in stages, the fair value of the pre-existing equity interest in the acquiree; less
- the net recognized amount (generally fair value) of the identifiable assets acquired and liabilities assumed.

When the excess is negative, a bargain purchase gain is recognized immediately in profit or loss.

When the Group additionally acquires non-controlling interest, the Group does not recognize goodwill since the transaction is regarded as equity transaction.

As part of its transition to K-IFRS, the Group elected to restate only those business combinations which occurred on or after January 1, 2010 in accordance with K-IFRS. In respect of acquisitions prior to January 1, 2010, goodwill is included on the basis of its deemed cost, which represents the amount recorded under previous Generally Accepted Accounting Principles ("GAAP").

(d) Investments in associates and joint ventures

An associate is an entity in which the Group has significant influence, but not control, over the entity's financial and operating policies. Significant influence is presumed to exist when the Group holds between 20 and 50 percent of the voting power of another entity or when another entity is classified as a subsidiary by *the Banking Act* since the Group holds more than 15% of the voting power of another entity.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

The investment in an associate and a joint venture is initially recognized at cost, and the carrying amount is increased or decreased to recognize the Group's share of the profit or loss and changes in equity of the associate and the joint venture after the date of acquisition. Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Intra-group losses are recognized as expense if intra-group losses indicate an impairment that requires recognition in the consolidated financial statements.

If an associate or a joint venture uses accounting policies different from those of the Group for like transactions and events in similar circumstances, appropriate adjustments are made to its financial statements in applying the equity method.

When the Group's share of losses exceeds its interest in an equity accounted investee, the carrying amount of that interest, including any long-term investments, is reduced to nil and the recognition of further losses is discontinued except to the extent that the Group has an obligation or has to make payments on behalf of the investee for further losses.

3. Significant accounting policies (continued)

(e) Operating segments

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, including revenues and expenses that relate to transactions with any of the Group's other components, whose operating results are reviewed regularly by the chief operating decision maker to make decisions about resources allocated to each segment and assess its performance, and for which discrete financial information is available.

The segment reporting to a chief executive officer includes items directly attributable to a segment as well as those that can be allocated on a reasonable basis. Unallocated items comprise mainly general expenses and income tax assets and liabilities. The Group considers the Chief Executive Officer ("CEO") of the Bank as the chief operating decision maker.

(f) Foreign currencies

i) Foreign currency transactions

Transactions in foreign currencies are translated to the respective functional currencies of Group at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated to the functional currency at the exchange rate at that date. The foreign currency gain or loss on monetary items is the difference between amortized cost in the functional currency at the beginning of the period, adjusted for effective interest and payments during the period, and the amortized cost in foreign currency translated at the exchange rate at the end of the reporting period. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are retranslated to the functional currency at the exchange rate at the date that the fair value was determined. Foreign currency differences arising on retranslation are recognized in profit or loss, except for differences arising on the retranslation of available-for-sale equity instruments, a financial liability designated as a hedging instrument of the net investment in a foreign operation or a qualifying cash flow hedge, which are recognized in other comprehensive income. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

ii) Foreign operations

If the presentation currency of the Group is different from a foreign operation's functional currency, the financial statements of the foreign operation are translated into the presentation currency using the following methods:

The assets and liabilities of foreign operations, whose functional currency is not the currency of a hyperinflationary economy, are translated to presentation currency at exchange rates at the reporting date. The income and expenses of foreign operations are translated to functional currency at exchange rates at the dates of the transactions. Foreign currency differences are recognized in other comprehensive income.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition of that foreign operation are treated as assets and liabilities of the foreign operation and are translated using the exchange rate at the reporting date.

3. Significant accounting policies (continued)

(f) Foreign currencies (continued)

When a foreign operation is disposed of, the relevant amount in the translation is transferred to profit or loss as part of the profit or loss on disposal. On the partial disposal of a subsidiary that includes a foreign operation, the relevant proportion of such cumulative amount is reattributed to non-controlling interest. In any other partial disposal of a foreign operation, the relevant proportion is reclassified to profit or loss.

iii) Net investment in a foreign operation

If the settlement of a monetary item receivable from or payable to a foreign operation is neither planned nor likely in the foreseeable future, then foreign currency differences arising on the item form part of the net investment in the foreign operation and are recognized in other comprehensive income and reclassified from equity to profit or loss on disposal of the net investment.

(g) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with original maturities of three months or less from the acquisition date that are subject to an insignificant risk of changes in their fair value, and are used by the Group in the management of its short-term commitments. Equity instruments are excluded from cash equivalents unless they are, in substance, cash equivalents, for example in the case of preferred shares acquired within a short period of their maturity and with a specified redemption date. However, the Group's account overdraft is included in borrowings.

(h) Non-derivative financial assets

Financial assets are classified into financial assets at fair value through profit or loss, loans and receivables, available-for-sale financial assets and held-to-maturity financial assets. Financial assets are recognized when the Group becomes a party to the contractual provisions of the instrument. In addition, a regular way purchase or sale (a purchase or sale of a financial asset under a contract whose terms require delivery of the asset within the time frame established generally by regulation of convention in the market concerned) is recognized on the trade date.

A financial asset is measured initially at its fair value plus, for an item not at fair value through profit or loss, transaction costs that are directly attributable to its acquisition of the financial asset.

i) Financial assets at fair value through profit or loss

A financial asset is classified as at fair value through profit or loss if it is held for trading or is designated at fair value through profit or loss. Upon initial recognition, transaction costs are recognized in profit or loss when incurred. Financial assets at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss.

ii) Held-to-maturity financial assets

A non-derivative financial asset with a fixed or determinable payment and fixed maturity, for which the Group has the positive intention and ability to hold to maturity, is classified as held-to-maturity investments. Subsequent to initial recognition, held-to-maturity investments are measured at amortized cost using the effective interest method.

3. Significant accounting policies (continued)

(h) Non-derivative financial assets (continued)

iii) Loans and receivables

Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active market. Subsequent to initial recognition, loans and receivables are measured at amortized cost using the effective interest method.

iv) Available-for-sale financial assets

Available-for-sale financial assets are those non-derivative financial assets that are designated as available-for-sale or are not classified as financial assets at fair value through profit or loss, held-to-maturity investments or loans and receivables. Subsequent to initial recognition, they are measured at fair value, which changes in fair value, net of any tax effect, recorded in other comprehensive income in equity. Investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured and derivatives those are linked to and must be settled by delivery of such unquoted equity instruments are measured at cost.

v) Derecognition of financial assets

The Group derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the Group is recognized as a separate asset or liability.

If the Group retains substantially all the risks and rewards of ownership of the transferred financial assets, the Group continues to recognize the transferred financial assets and recognizes financial liabilities for the consideration received.

vi) Offsetting

Financial assets and financial liabilities are offset and the net amount is presented in the consolidated statement of financial position only when the Group currently has a legally enforceable right to set off the recognized amounts, and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

3. Significant accounting policies (continued)

(i) Impairment of financial assets

A financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is objective evidence that it is impaired. A financial asset is impaired if objective evidence indicates that a loss event has occurred after the initial recognition of the asset, and that the loss event had a negative effect on the estimated future cash flows of that asset that can be estimated reliably. However, losses expected as a result of future events, regardless of likelihood, are not recognized.

If any objective evidence of impairment exists, impairment losses should be measured by the following categories of financial assets and recognized in profit of loss.

i) Loans

The Group first assesses whether objective evidence of impairment exists individually for loans that are individually significant, and individually or collectively for financial assets that are not individually significant. If the Group determines that no objective evidence of impairment exists for an individually assessed financial asset, whether significant or not, it includes the asset in a group of financial assets with similar credit risk characteristics and collectively assesses them for impairment. Assets that are individually assessed for impairment and for which an impairment loss is or continues to be recognized are not included in a collective assessment of impairment.

If there is objective evidence that an impairment loss on loans and receivables has been incurred, the amount of the loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows (excluding future credit losses that have not been incurred) discounted at the financial asset's original effective interest rate (i.e., the effective interest rate computed at initial recognition).

If the interest rate of loans is a floating rate, the discount rate used to evaluate impairment is the current effective interest rate defined in the agreement. The present value of estimated future cash flows of secured financial assets is calculated by including cash flows from collateral after deducting costs to acquire and sell the collateral, regardless of probability of realization of such collateral.

In assessing collective impairment, the Group classifies loans, based on credit risk assessment or a credit rating assessment process that takes into account asset type, industry, regional location, collateral type, delinquency and other relative factors.

Future cash flows of loans subject to collective impairment assessment are estimated by using statistical modelling of historical trends of the probability of default, timing of recoveries and the amount of losses incurred, adjusted for management’s judgment as to whether current economic and credit conditions are such that the impairment losses are likely to be greater or less than suggested by historical modelling. In adjusting the future cash flows by historical modelling, the result has to be in line with changes and trends of observable data (e.g., impairment losses of collective assets and unemployment rates, asset prices, commodity prices, payment status and other variables representing the size of impairment losses). Methodologies and assumptions used to estimate future cash flow are reviewed on a regular basis in order to reduce discrepancy between estimated impairment losses and actual loss.

3. Significant accounting policies (continued)

(i) Impairment of financial assets (continued)

Impairment losses are recognized in profit or loss and reflected in an allowance account against loans. When a subsequent event causes the amount of impairment losses to decrease, and the decrease can be related objectively to an event occurring after the impairment is recognized, the decrease in impairment losses is reversed through profit or loss of the period.

ii) Available-for-sale financial assets

When a decline in the fair value of an available-for-sale financial asset has been recognized in other comprehensive income and there is objective evidence that the asset is impaired, the cumulative loss that had been recognized in other comprehensive income is reclassified from equity to profit or loss as a reclassification adjustment even though the financial asset has not been derecognized. Impairment losses recognized in profit or loss for an investment in an equity instrument classified as available-for-sale are not reversed through profit or loss. If, in a subsequent period, the fair value of a debt instrument classified as available-for-sale increases and the increase can be objectively related to an event occurring after the impairment loss is recognized in profit or loss, the impairment loss is reversed, with the amount of the reversal recognized in profit or loss.

iii) Held-to-maturity financial assets

An impairment loss in respect of held-to-maturity financial assets measured at amortized cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the asset's original effective interest rate and is recognized in profit or loss. Interest on the impaired asset continues to be recognized through the unwinding of the discount. When a subsequent event causes the amount of impairment loss to decrease, the decrease in impairment loss is reversed through profit or loss.

3. Significant accounting policies (continued)

(j) Derivative financial instruments

Derivatives are initially recognized at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are accounted for as described below.

i) Hedge Accounting

The Group holds forward exchange contracts, interest rate swaps, currency swaps and other derivative contracts to manage interest rate risk and foreign exchange risk. The Group designated derivatives as hedging instruments to hedge the risk of changes in the fair value of assets, liabilities or firm commitments (a fair value hedge) and foreign currency risk of highly probable forecasted transactions or firm commitments (a cash flow hedge), and foreign currency risk of net investment in foreign operation (net investment hedges).

On initial designation of the hedge, the Group formally documents the relationship between the hedging instrument(s) and hedged item(s), including the risk management objectives and strategy in undertaking the hedge transaction, together with the methods that will be used to assess the effectiveness of the hedging relationship.

ii) Fair value hedges

Changes in the fair value of a derivative hedging instrument designated as a fair value hedge are recognized in profit or loss. The gain or loss from remeasuring the hedging instrument at fair value and the gain or loss on the hedged item attributable to the hedged risk are recognized in profit or loss in the same line item of the consolidated statement of comprehensive income.

The Group discontinues fair value hedge accounting if the hedging instrument expires or is sold, terminated or exercised, or if the hedge no longer meets the criteria for hedge accounting. Any adjustment arising from gain or loss on the hedged item attributable to the hedged risk is amortized to profit or loss from the date the hedge accounting is discontinued.

3. Significant accounting policies (continued)

(j) Derivative financial instruments (continued)

iii) Cash flow hedges

When a derivative is designated as the hedging instrument in a hedge of the variability in cash flows attributable to a particular risk associated with a recognized asset or liability or a highly probable forecasted transaction that could affect profit or loss, the effective portion of changes in the fair value of the derivative is recognized in other comprehensive income and presented in the hedging reserve in equity. The amount recognized in other comprehensive income is removed and included in profit or loss in the same period as the hedged cash flows affect profit or loss under the same line item in the consolidated statements of comprehensive income as the hedged item. Any ineffective portion of changes in the fair value of the derivative is recognized immediately in profit or loss.

If the hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, terminated, exercised, or the designation is revoked, then hedge accounting is discontinued prospectively. The cumulative gain or loss previously recognized in other comprehensive income and presented in the hedging reserve in equity remains there until the forecasted transaction affects profit or loss. When the hedged item is a non-financial asset, the amount recognized in other comprehensive income is transferred to the carrying amount of the asset when the asset is recognized. If the forecasted transaction is no longer expected to occur, then the balance in other comprehensive income is recognized immediately in profit or loss. In other cases the amount recognized in other comprehensive income is transferred to profit or loss in the same period that the hedged item affects profit or loss.

iv) Hedge of net investment

Foreign currency differences arising on the retranslation of a financial liability designated as a hedge of a net investment in a foreign operation are recognized in other comprehensive income to the extent that the hedge is effective. To the extent that the hedge is ineffective, such differences are recognized in profit or loss. When the hedged part of a net investment is disposed of, the relevant amount in the accumulated other comprehensive income is transferred to profit or loss as part of the profit or loss on disposal in accordance with K-IFRS No.1021, *'The Effects of Changes in Foreign Exchange Rates'*.

v) Separable embedded derivatives

Embedded derivatives are separated from the host contract and accounted for separately only if the economic characteristics and risks of the host contract and the embedded derivative are not closely related; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the combined instrument is not measured at fair value through profit or loss. Changes in the fair value of separable embedded derivatives are recognized immediately in profit or loss.

vi) Other derivative financial instruments

Changes in the fair value of other derivative financial instrument not designated as a hedging instrument are recognized immediately in profit or loss.

3. Significant accounting policies (continued)

(k) Property and equipment

Property and equipment are initially measured at cost and after initial recognition. The cost of property and equipment includes expenditures arising directly from the construction or acquisition of the asset, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Property and equipment are carried at cost less accumulated depreciation and accumulated impairment losses. Certain land and buildings are measured at fair value at the date of transition to K-IFRS, which is deemed cost, in accordance with K-IFRS No.1101, *'First-time Adoption of K-IFRS'*. Dividend from relevant revaluation surplus is prohibited in accordance with the resolution of the board of directors.

The Group recognizes in the carrying amount of an item of property and equipment the cost of replacing part of property and equipment when that cost is incurred if it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of those parts that are replaced is derecognized. The costs of the day-to-day servicing of property and equipment are recognized in profit or loss as incurred.

Land is not depreciated. Other property and equipment are depreciated on a straight-line basis over the estimated useful lives, which most closely reflect the expected pattern of consumption of the future economic benefits embodied in the asset. Leased assets under finance leases are depreciated over the shorter of the lease term and their useful lives. The estimated useful lives for the current and comparative periods are as follows:

Descriptions	Useful lives
Buildings	40 years
Other properties	4~5 years

The gain or loss arising from the derecognition of an item of property and equipment, which is included in profit or loss, is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item.

Depreciation methods, useful lives and residual values are reassessed at each fiscal year-end and any adjustment is accounted for as a change in accounting estimate.

(l) Intangible assets

Intangible assets are measured initially at cost and, subsequently, are carried at cost less accumulated amortization and accumulated impairment losses.

Amortization of intangible assets except for goodwill is calculated on a straight-line basis over the estimated useful lives of intangible assets as below from the date that they are available for use. The residual value of intangible assets is zero. However, as there are no foreseeable limits to the periods over which club memberships are expected to be available for use, this intangible asset is determined as having indefinite useful lives and not amortized.

3. Significant accounting policies (continued)

(l) Intangible assets (continued)

Descriptions	Useful lives
Software and capitalized development cost	5 years
Other intangible assets	5 years or contract periods, whichever the shorter

Amortization periods and the amortization methods for intangible assets with finite useful lives are reviewed at the end of each reporting period. The useful lives of intangible assets that are not being amortized are reviewed at the end of each reporting period to determine whether events and circumstances continue to support indefinite useful life assessments for those assets. Changes are accounted for as changes in accounting estimates.

Expenditures on research activities, undertaken with the prospect of gaining new technical knowledge and understanding, are recognized in profit or loss as incurred. Development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Group intends to and has sufficient resources to complete development and to use or sell the asset. Other development expenditures are recognized in profit or loss as incurred.

(m) Investment properties

Investment property is property held either to earn rental income or for capital appreciation or both. An investment property is initially recognized at cost including any directly attributable expenditure. Subsequent to initial recognition, the asset is measured at cost less accumulated depreciation and accumulated impairment losses, if any.

The depreciation method and the estimated useful lives for the current and comparative periods were as follows:

Descriptions	Depreciation method	Useful lives
Buildings	Straight-line	40 years

Subsequent costs are recognized in the carrying amount of investment property at cost or, if appropriate, as separate items if it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the day-to-day servicing are recognized in profit or loss as incurred.

Depreciation methods, useful lives and residual values are reviewed at the end of each reporting date and adjusted, if appropriate. The change is accounted for as changes in accounting estimates.

3. Significant accounting policies (continued)

(n) Leases

The Group classifies and accounts for leases as either a finance or operating lease, depending on the terms. Leases where the Group assumes substantially all of the risks and rewards of ownership are classified as finance leases. All other leases are classified as operating leases.

i) Finance leases

At the commencement of the lease term, the Group recognizes as finance assets and finance liabilities in its consolidated statements of financial position, the lower amount of the fair value of the leased property and the present value of the minimum lease payments, each determined at the inception of the lease. Any initial direct costs are added to the amount recognized as an asset.

Minimum lease payments are apportioned between the finance charge and the reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability. Contingent rents are charged as expenses in the periods in which they are incurred.

The depreciable amount of a leased asset is allocated to each accounting period during the period of expected use on a systematic basis consistent with the depreciation policy the lessee adopts for depreciable assets that are owned. If there is no reasonable certainty that the lessee will obtain ownership by the end of the lease term, the asset is fully depreciated over the shorter of the lease term and its useful life. The Group reviews to determine whether the leased asset may be impaired.

ii) Operating leases

Payments made under operating leases are recognized in profit or loss on a straight-line basis over the period of the lease.

(o) Non-current assets held for sale

Assets, or disposal groups comprising assets and liabilities, that are expected to be recovered primarily through sale rather than through continuing use, are classified as held for sale. In order to be classified as held for sale, the asset (or disposal group) must be available for immediate sale in its present condition and its sale must be highly probable. The assets or disposal group that are classified as assets held for sale are measured at the lower of their carrying amount and fair value less cost to sell.

The Group recognizes an impairment loss for any initial or subsequent write-down of an asset (or disposal group) to fair value less costs to sell, and a gain for any subsequent increase in fair value less costs to sell, up to the cumulative impairment loss previously recognized.

An asset that is classified as held for sale or part of a disposal group classified as held for sale is not depreciated (or amortized).

3. Significant accounting policies (continued)

(p) Impairment of non-financial assets

The carrying amounts of the Group's non-financial assets, other than assets arising from employee benefits, deferred tax assets and non-current assets held for sale, are reviewed at the end of the reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Goodwill and intangible assets that have indefinite useful lives or that are not yet available for use, irrespective of whether there is any indication of impairment, are tested for impairment annually by comparing their recoverable amount to their carrying amount.

The Group estimates the recoverable amount of an individual asset, if it is impossible to measure the individual recoverable amount of an asset, then the Group estimates the recoverable amount of cash-generating unit ("CGU"). A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. The recoverable amount of an asset or a CGU is the greater of its value in use and its fair value less costs to sell. The value in use is estimated by applying a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or the CGU for which estimated future cash flows have not been adjusted, to the estimated future cash flows expected to be generated by the asset or the CGU.

An impairment loss is recognized if the carrying amount of an asset or a CGU exceeds its recoverable amount. Impairment losses are recognized in profit or loss.

Goodwill acquired in a business combination is allocated to each CGU that is expected to benefit from the synergies arising from the goodwill acquired. Any impairment identified at the CGU level will first reduce the carrying value of goodwill and then be used to reduce the carrying amount of the other assets in the CGU on a pro rata basis. Except for impairment losses in respect of goodwill which are never reversed, an impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

3. Significant accounting policies (continued)

(q) Non-derivative financial liabilities

The Group classifies non-derivative financial liabilities into financial liabilities at fair value through profit or loss or other financial liabilities in accordance with the substance of the contractual arrangement and the definitions of financial liabilities. The Group recognizes financial liabilities in the consolidated statement of financial position when the Group becomes a party to the contractual provisions of the financial liability.

i) Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading or designated as such upon initial recognition. Subsequent to initial recognition, financial liabilities at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss. Upon initial recognition, transaction costs that are directly attributable to the acquisition are recognized in profit or loss as incurred.

ii) Other financial liabilities

Non-derivative financial liabilities other than financial liabilities at fair value through profit or loss are classified as other financial liabilities. At the date of initial recognition, other financial liabilities are measured at fair value minus transaction costs that are directly attributable to the acquisition. Subsequent to initial recognition, other financial liabilities are measured at amortized cost using the effective interest method.

The Group derecognizes a financial liability from the consolidated statement of financial position when it is extinguished (i.e. when the obligation specified in the contract is discharged, cancelled or expires).

(r) Equity capital

i) Capital stock

Capital stock is classified as equity. Incremental costs directly attributable to the transaction of stock are deducted from equity, net of any tax effects.

ii) Hybrid bonds

The Group classifies an issued financial instrument, or its component parts, as a financial liability or an equity instrument depending on the substance of the contractual arrangement of such financial instrument. Hybrid bonds where the Group has an unconditional right to avoid delivering cash or another financial asset to settle a contractual obligation are classified as an equity instrument and presented in equity.

iii) Non-controlling interests

Non-controlling interests, which represent the equity in a subsidiary not attributable, directly or indirectly, to a parent's ownership interests, consist of the amount of those non-controlling interests at the date of the original combination calculated in accordance with K-IFRS No.1103, '*Business Combinations*' and the non-controlling interests share of changes in equity since the date of the combination.

3. Significant accounting policies (continued)

(s) Employee benefits

i) Short-term employee benefits

Short-term employee benefits are employee benefits that are due to be settled within 12 months after the end of the period in which the employees render the related service. When an employee has rendered service to the Group during an accounting period, the Group recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service.

ii) Other long-term employee benefits

The Group's net obligation in respect of other long-term employee benefits that are not expected to be settled wholly before 12 months after the end of the annual reporting period in which the employees render the related service, is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. Remeasurements are recognized in profit or loss in the period in which they arise.

iii) Retirement benefits: defined benefit plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Group's net obligation in respect of defined benefit plans is calculated by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value. The fair value of plan assets is deducted. The calculation is performed annually by an independent actuary using the projected unit credit method.

The discount rate is the yield at the reporting date on high-quality corporate bonds that have maturity dates approximating the terms of the Group's obligations and that are denominated in the same currency in which the benefits are expected to be paid. The Group recognizes service cost and net interest on the net defined benefit liability (asset) in profit or loss and remeasurements of the net defined benefit liability (asset) in other comprehensive income.

iv) Retirement benefits: defined contribution plans

The Group recognizes the contribution expense as an account of severance payments in profit or loss in the period according to the defined contribution plans.

v) Termination benefits

Termination benefits are expensed at the earlier of when the Group can no longer withdraw the offer of those benefits and when the Group recognizes costs for a restructuring. If benefits are not expected to be wholly settled within 12 months of the reporting date, then they are discounted.

3. Significant accounting policies (continued)

(t) Share-based payment transactions

The grant date fair value of share-based payment awards granted to employees is recognized as an employee expense, with a corresponding increase in equity, over the period that the employees unconditionally become entitled to the awards. The amount recognized as an expense is adjusted to reflect the number of awards for which the related service and non-market vesting conditions are expected to be met, such that the amount ultimately recognized as an expense is based on the number of awards that do meet the related service and non-market performance conditions at the vesting date. For share-based payment awards with non-vesting conditions, the grant date fair value of the share-based payment is measured to reflect such conditions and there is no true-up for differences between expected and actual outcomes.

The fair value of the amount payable to employees in respect of share appreciation rights, which are settled in cash, is recognized as an expense with a corresponding increase in liabilities, over the period that the employees unconditionally become entitled to payment. The liability is remeasured at each reporting date and at settlement date. Any changes in the fair value of the liability are recognized as personnel expense in profit or loss.

The Group has granted share-based payment based on Shinhan Financial Group's share to the employees. In accordance with a repayment arrangement with Shinhan Financial Group, the Group is required to pay Shinhan Financial Group for the provision of the share-based payments. The Group recognizes the costs as expenses and accrued expenses in liabilities for the service period. When vesting conditions are not satisfied because of death, retirement or dismissal of employees during the specified service period, no amount is recognized for goods or services received on a cumulative basis. Share-based payment arrangements in which the Group has no obligation to settle the share-based payment transaction are accounted for as equity-settled share-based payment transactions, regardless of the repayment arrangement with Shinhan Financial Group.

(u) Provisions

Provisions are recognized when the Group has a present legal or constructive obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

The risks and uncertainties that inevitably surround many events and circumstances are taken into account in reaching the best estimate of a provision. Where the effect of the time value of money is material, provisions are determined at the present value of the expected future cash flows.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimate. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision is reversed.

Provisions shall be used only for expenditures for which the provisions are originally recognized.

3. Significant accounting policies (continued)

(v) Financial guarantee contract

A financial guarantee contract is a contract that requires the Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument. Financial guarantee contracts are recognized initially at their fair value, and the initial fair value is amortized over the life of the financial guarantee contract. The financial guarantee liability is subsequently measured at the higher of the amount of the best estimate of the expenditure required to settle the present obligation at the end of reporting period; and the amount initially recognized less, cumulative amortization recognized on a straight-line basis over the guarantee period. Financial guarantee liabilities are included within other liabilities.

(w) Financial income and expense

i) Interest income and expense

Interest income and expense are recognized in profit or loss using the effective interest method. The effective interest rate is the rate that exactly discounts the estimated future cash payments and receipts through the expected life of the financial asset or liability or, where appropriate, a shorter period to the net carrying amount of the financial asset or liability. When calculating the effective interest rate, the Group estimates cash flows considering all contractual terms of the financial instrument, but does not consider future credit losses. The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate, and all other premiums or discounts. When it is not possible to estimate reliably the cash flows or the expected life of a financial instrument, the Group uses the contractual cash flows over the full contractual term of the financial instrument.

Once a financial asset or a group of similar financial assets has been written down as a result of an impairment loss, interest income is thereafter recognized using the rate of interest used to discount the future cash flows for the purpose of measuring the impairment loss.

ii) Fees and commission

The recognition of revenue for financial service fees depends on the purposes for which the fees are assessed and the basis of accounting for any associated financial instrument.

ⓐ Fees that are an integral part of the effective interest rate of a financial instrument

Such fees are generally treated as an adjustment to the effective interest rate. Such fees may include compensation for activities such as evaluating the borrower's financial condition, evaluating and recording guarantees, collateral and other security arrangements, preparing and processing documents, closing the transaction and the origination fees received on issuing financial liabilities. However, when the financial instrument is measured at fair value with the change in fair value recognized in profit or loss, the fees are recognized as revenue when the instrument is initially recognized.

3. Significant accounting policies (continued)

(w) Financial income and expense (continued)

ⓑ Fees earned as services are provided

Fees and commission income, including investment management fees, sales commission, and account servicing fees, are recognized as the related services are provided. If it is unlikely that a specific lending arrangement will be entered into and the loan commitment is outside the scope of K-IFRS No.1039, *'Financial Instruments: Recognition and Measurement'*, the commitment fee is recognized as revenue on a time proportion basis over the commitment period.

ⓒ Fees that are earned on the execution of a significant act

The fees that are earned on the execution of a significant act including commission on the allotment of shares or other securities to a client, placement fee for arranging a loan between a borrower and an investor and sales commission, are recognized as revenue when the significant act has been completed.

iii) Dividends

Dividends income is recognized when the shareholder's right to receive payment is established. Usually this is the ex-dividend date for equity securities.

(x) Income tax

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

Shinhan Financial Group, the parent company, files its national income tax return with the Korean tax authorities under the consolidated corporate tax system, which allows it to make national income tax payments based on the consolidated profits or losses of the Shinhan Financial Group and its wholly owned domestic subsidiaries including the Group. Deferred taxes are measured based on the future tax benefits expected to be realized in consideration of the expected profits or losses of eligible companies in accordance with the consolidated corporate tax system. Consolidated corporate tax amounts, once determined, are allocated to each of the subsidiaries and are used as a basis for the income taxes to be recorded in their stand-alone financial statements.

The Group recognizes deferred tax liabilities for all taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint ventures, except to the extent that the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. The Group recognizes deferred tax assets for all deductible temporary differences arising from investments in subsidiaries and associates, to the extent that it is probable that the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period to recover or settle the carrying amount of its assets and liabilities.

3. Significant accounting policies (continued)

(x) Income tax (continued)

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and reduced the carrying amount to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized.

Deferred tax assets and liabilities are offset only if there is a legally enforceable right to offset the related current tax liabilities and assets, and they relate to income taxes levied by the same tax authority and they intend to settle current tax liabilities and assets on a net basis.

If any additional income tax expense exists by payment of dividends, the Group recognizes it when the liability relating to the payment is recognized.

(y) Accounting for trust accounts

The Group accounts for trust accounts separately from its bank accounts under *the Financial Investment Services and Capital Markets Act* and thus the trust accounts are not included in the accompanying consolidated financial statements. Borrowings from trust accounts are included in other liabilities. Trust fees and commissions in relation to the service provided to trust accounts by the Group are recognized as fees and commission income.

(z) Earnings per share

The Group presents basic and diluted earnings per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to the ordinary shareholder of the Group by the weighted average number of common shares outstanding during the period, adjusted for own shares held. Diluted EPS is determined by adjusting the profit or loss attributable to ordinary shareholders and the weighted average number of ordinary shares outstanding, adjusted for own shares held, for the effects of all dilutive potential ordinary shares, which comprise share options granted to employees.

(aa) New standards and interpretations not yet adopted

The following new standards, interpretations and amendments to existing standards have been published and are mandatory for the Group for annual period beginning on or after January 1, 2018, and the Group has not early adopted them.

The impacts that application of these new standards will have on the Group's consolidated financial statements were summarized as follows:

i) K-IFRS No.1109, *'Financial Instruments'*

K-IFRS No.1109, published on September 25, 2015, is effective for annual periods beginning on or after January 1, 2018, with earlier adoption permitted. It replaces existing guidance in K-IFRS No.1039, '*Financial Instruments: Recognition and Measurement.*' The Group plans to adopt K-IFRS No.1109 for the year beginning on January 1, 2018 and will recognize the accumulated effect resulting from initial application of K-IFRS No.1109 on the date of initial application, which is January 1, 2018.

K-IFRS No.1109 will generally be applied retrospectively; however the Group plans to take advantage of the exemption allowing it not to restate the comparative information for prior periods with respect to classification and measurement (including impairment) changes. New hedge accounting requirements will generally be applied prospectively except for certain exemptions including the accounting for the time value of options.

3. Significant accounting policies (continued)

(aa) New standards and interpretations not yet adopted (continued)

The key features of the new standard, K-IFRS No.1109, are 1) classification and measurement of financial assets that reflects the business model in which the assets are managed and their cash flow characteristics, 2) impairment methodology that reflects 'expected credit loss' (ECL) model for financial assets, and 3) expanded scope of hedged items and hedging instruments which qualify for hedge accounting and changes in assessment method for effect of hedging relationships.

K-IFRS No.1109 will require the Group to assess the financial impact from application of K-IFRS No.1109 and revise its accounting processes and internal controls related to financial instruments. Actual impact of adopting K-IFRS No.1109 will be dependent on the financial instruments the Group holds and economic conditions at that time as well as accounting policy elections and judgment that it will make in the future.

For the application of K-IFRS No.1109, the Group implemented changes in internal controls and accounting systems relating to financial instruments.

To assess financial impacts from application of K-IFRS No.1109, the Group performed an impact analysis on the 2017 consolidated financial statements based on the status and available information as of December 31, 2017. Expected financial impacts on the Group's consolidated financial statements by the main chapters of K-IFRS No.1109 were summarized as follows:

ⓐ Classification and Measurement of "Financial Assets"

When K-IFRS No.1109 is applied, the Group will classify financial assets to be measured at amortized cost, fair value through other comprehensive income ("FVOCI") or fair value through profit or loss ("FVPL") on the basis of the Group's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets. If a hybrid contract contains a host that is a financial asset, the embedded derivatives shall not be separated from the host, and the hybrid contract as a whole shall be classified as a financial asset.

Business model (*1)	Contractual cash flows that are solely payments of principal and interests	All other cases
For collecting contractual cash flows	At amortized cost (*2)	At FVPL (*3)
For both collecting contractual cash flows and selling financial assets	At FVOCI	
For trading, and others	At FVPL	

(*1) Business model is determined at a level that reflects how groups of financial assets are managed together to achieve a particular business objective.
(*2) The Group may irrevocably designate a financial asset as at FVPL to eliminate or significantly reduce an accounting mismatch.
(*3) The Group may irrevocably designate equity instruments that is not held for trading as at FVOCI.

As there are more stringent requirements for a financial asset to be classified as measured at amortized costs or FVOCI under K-IFRS No.1109 compared to the existing guidance in K-IFRS No.1039, the adoption of K-IFRS No.1109 is expected to potentially increase the portion of financial assets that are measured at FVPL, which would increase the volatility in the Group's profit or loss.

(In millions of won)

3. Significant accounting policies (continued)

(aa) New standards and interpretations not yet adopted (continued)

Expected impacts on the classification and measurements of the non-derivative financial instruments as of December 31, 2017, based on the information from the revised accounting system were as follows:

	Classification under K-IFRS No.1039	Classification under K-IFRS No.1109		Amounts under K-IFRS No.1039(*1)	Amounts under K-IFRS No.1109(*1)
Due from banks	Loans and receivables	Amortized cost	₩	16,926,471	16,926,471
Loans	Loans and receivables	FVPL		605,367	606,439
	Loans and receivables	Amortized cost		232,633,346	232,633,346
Other financial assets	Loans and receivables	Amortized cost		9,107,156	9,107,156
Trading assets (debt securities)	Fair value through profit or loss	FVPL		10,506,358	10,506,358
Trading assets (equity securities)	Fair value through profit or loss	FVPL		520,743	520,743
Trading assets (gold/silver deposits)	Fair value through profit or loss	FVPL		189,297	189,297
Available-for-sale financial assets (debt securities)	Available-for-sale financial assets	FVPL		11,801	11,801
	Available-for-sale financial assets	FVOCI		29,947,367	29,947,367
Available-for-sale financial assets (equity securities)	Available-for-sale financial assets	FVPL		2,074,179	2,077,460
	Available-for-sale financial assets	FVOCI		462,193	462,193
Held-to-maturity financial assets (debt securities)	Held-to-maturity financial assets	Amortized cost		14,822,898	14,822,898
			₩	317,807,176	317,811,529

(*1) Amounts before deferred loan origination costs and fees have been added and allowance for loan loss has been deducted.

Based on the management's impact assessment to date, as of December 31, 2017, loans and receivables amounted to ₩605,367 million and available-for-sale financial assets amounted to ₩2,085,980 million, previously measured at amortized cost, respectively, are expected to be classified as financial assets measured at FVPL upon adoption of K-IFRS No.1109 as of January 1, 2018. As a result, the portion of financial assets measured at FVPL in non-derivative financial assets is expected to increase from 3.53% under K-IFRS No.1039 as of December 31, 2017 to 4.38% under K-IFRS No.1109 as of January 1, 2018, which would increase the volatility in the Group's profit or loss.

3. Significant accounting policies (continued)

(aa) New standards and interpretations not yet adopted (continued)

ⓑ Classification and Measurement of Financial Liabilities

According to K-IFRS No.1109, changes in fair value of the financial liability designated as at FVPL that is attributable to changes in the credit risk shall be presented as other comprehensive income, not recognized in profit or loss. Amounts presented in other comprehensive income shall not be subsequently transferred to profit or loss. However, if recognizing the changes in fair value as other comprehensive income creates or enlarges accounting mismatch, the amounts shall be recognized as profit or loss.

As a portion of the change in fair value which has been recognized in profit or loss under the existing standard, K-IFRS No.1039, will be presented in other comprehensive income under K-IFRS No.1109, profit or loss related to valuation of financial liabilities is expected to decrease.

Based on the management's impact assessment to date, as of December 31, 2017, out of financial liability amounted to ₩301,129,231 million under K-IFRS No.1039, among which no financial liability was expected to be designated as at FVPL upon adoption of K-IFRS No.1109.

ⓒ Impairment

In accordance with the existing standard K-IFRS No.1039, impairment is recognized only if evidence of impairment based on 'incurred loss model' is identified. In accordance with K-IFRS No.1109, the new accounting standard, impairment shall be recognized based on 'expected credit loss impairment model' for debt instruments, lease receivables, contract assets, loan commitments and financial guarantee contracts which are measured at amortized cost or FVOCI.

According to K-IFRS No.1109, a loss allowance shall be measured at the amounts of 12 month expected credit losses or lifetime expected credit losses, by the three stages in the table below depending on the extent of significant increase in credit risk since initial recognition. Hence, an early recognition of credit risk may occur as compared to the ‘incurred loss model’ in the existing standard K-IFRS No.1039.

(In millions of won)

3. Significant accounting policies (continued)

(aa) New standards and interpretations not yet adopted (continued)

Stage	Category	Description
Stage 1	Credit risk has not increased significantly since initial recognition (*1)	12 month expected credit losses: Expected credit loss resulting from potential default of financial instruments occurring over 12 months from the end of reporting period
Stage 2	Credit risk has increased significantly since initial recognition	Lifetime expected credit losses: Expected credit loss resulting from all potential default of financial instruments occurring over the expected life
Stage 3	Credit-impaired financial assets	

(*1) The Group may assume that the credit risk on a financial instrument has not increased significantly since initial recognition if the credit risk is low at the reporting date.

According to K-IFRS No.1109, the Group only recognizes the cumulative changes in lifetime expected credit losses since initial recognition as a loss allowance for financial assets impaired at its initial recognition.

Based on the management's impact assessment to date, as of December 31, 2017, expected impacts on loss allowances based on information from the revised accounting system were as follows:

Classification under K-IFRS No.1039	Classification under K-IFRS No.1109		Loss allowances under K-IFRS No.1039	Loss allowances under K-IFRS No.1109
Loans and receivables				
Due from banks	Amortized cost	₩	14,046	15,051
	FVPL		-	-
Loans	Amortized cost		1,503,242	1,869,815
	FVPL		3,315	-
Other financial assets	Amortized cost		26,252	26,923
	FVPL		-	-
Available-for-sale financial assets				
Debt securities	FVOCI		-	17,098
Held-to-maturity financial assets				
Debt securities	Amortized cost		-	7,585
			1,546,855	1,936,472
Financial guarantee contracts	Financial guarantee contracts		35,436	36,148
Loan commitments and other liabilities for credit	Loan commitments and other liabilities for credit		93,241	86,691
		₩	128,677	122,839

(In millions of won)

3. Significant accounting policies (continued)

(aa) New standards and interpretations not yet adopted (continued)

<Loss allowance>
Expected impact on January 1, 2018

	Stage		Book value: Total amount	Book value: Allowance
Due from banks, loans and other assets	Stage 1	₩	231,855,029	540,694
	Stage 2		25,599,725	681,429
	Stage 3		1,212,219	689,666
			258,666,973	1,911,789
Debt securities	Stage 1		44,865,923	20,513
	Stage 2		37,323	4,170
	Stage 3		-	-
			44,903,246	24,683
		₩	303,570,219	1,936,472

	Stage		Provisions
Off-balance sheet items	Stage 1	₩	99,688
	Stage 2		20,686
	Stage 3		2,465
		₩	122,839

<Capital adequacy ratio>

	K-IFRS No.1039 (A)	K-IFRS No.1109 (B)	Difference (B-A)
Common equity Tier 1 capital ratio	12.83%	12.62%	(-)0.21%
Tier 1 capital ratio	13.24%	13.02%	(-)0.22%
Tier 2 capital ratio	2.35%	2.43%	0.08%
	15.59%	15.45%	(-)0.14%

The application of K-IFRS No. 1109 on impairment requires management judgments, estimates and assumptions, particularly in 1) assessment whether the credit risk of an investment has increased significantly since initial recognition; and 2) incorporating forward-looking information into the measurement of the 'expected credit loss impairment model'.

3. Significant accounting policies (continued)

(aa) New standards and interpretations not yet adopted (continued)

ⓓ Hedge accounting

Although the new standard K-IFRS No.1109 maintains 'Mechanics of hedging accounting' - fair value hedge, cash flow hedge and hedge of a net investment in a foreign operation - as defined in existing standard K-IFRS No.1039, the new standard replaces the complex and rule-based requirements for hedge accounting defined in existing standard K-IFRS No.1039 with a principle-based approach focusing an entity's risk management activities. As a result of the changes, scope of hedged items and hedging instruments are expanded and qualifying criteria for hedge accounting are eased by removing criteria for evaluation of hedge effectiveness and quantitative evaluation (80~125%).

When applying hedge accounting under K-IFRS No.1109, hedge accounting to certain transactions that do not meet the requirements for hedge accounting under the existing standard K-IFRS No.1039 may be applicable, and the volatility of the profit or loss may be reduced.

According to the transitional provisions for hedge accounting, when initially applying K-IFRS No.1109, the Group may adopt as its accounting policy to continue to apply the hedge accounting requirements of the existing standard K-IFRS No.1039.

The Group plans to apply hedge accounting for the transactions that meet the requirements for hedge accounting under K-IFRS No.1109. As of December 31, 2017, there was no applicable transaction for hedge accounting under K-IFRS No.1109 which do not meet the requirements for hedge accounting under the existing standard K-IFRS No.1039.

ii) K-IFRS No.1115, *'Revenue from Contracts with Customers'*

K-IFRS No.1115, published on November 6, 2015, is effective for annual periods beginning on or after January 1, 2018, with earlier application permitted.

It replaces existing revenue recognition standards, including K-IFRS No.1018, '*Revenue'*, K-IFRS No.1011, '*Construction Contracts'*, K-IFRS No.2031, '*Revenue Barter Transactions Involving Advertising Services'*, K-IFRS No.2113, '*Customer Loyalty Programmes'*, K-IFRS No.2115, '*Agreements for the Construction of Real Estate*' and K-IFRS No.2118, '*Transfers of Assets from Customers*'.

The Group plans to apply K-IFRS No.1115 from the annual period beginning on January 1, 2018. The Group will apply K-IFRS No.1115 retrospectively with the cumulative effect of initially applying this standard recognized at the date of initial application, which is January 1, 2018.

The existing standards suggest revenue recognition guidance by type of transactions such as sale of goods, rendering of services, interest revenue, royalty revenue, dividends revenue and construction contracts. However, according to K-IFRS No.1115, all types of contracts recognize revenue through five-step revenue recognition model (① 'Identifying the contract'→ ② 'Identifying performance obligations'→ ③ 'Determining the transaction price'→ ④ 'Allocating the transaction price to performance obligations'→ ⑤ 'Recognizing the revenue by satisfying performance obligations').

The Group launched a task force team and prepared the application of K-IFRS No.1115 from the second half of 2017. As a result of this preparation process, the Group identified changes in accounting policy upon adoption of K-IFRS No.1115 for certain financial instruments. Under K-IFRS No.1115, the Group expects to recognize revenue for those instruments, previously recognized at the time of sale, through the contractual period as the identified performance obligations are satisfied over time.

3. Significant accounting policies (continued)

(aa) New standards and interpretations not yet adopted (continued)

However, as a result of the analysis on the financial impact based on the situation and the available information as of December 31, 2017, the Group does not expect the application of K-IFRS No.1115 will have a material impact on the consolidated financial statements.

iii) K-IFRS No.1116, *'Leases'*

K-IFRS No.1116 replaces existing standards, including K-IFRS No.1017, *'Leases'*, K-IFRS No.2104, *'Determining whether an Arrangement contains a Lease'*, K-IFRS No.2015, *'Operating Leases - Incentives'* and K-IFRS No.2027, *'Evaluating the Substance of Transactions Involving the Legal Form of a Lease'*.

At inception of a contract, an entity shall assess whether the contract is, or contains, a lease. However, as a practical expedient, for the contracts previously identified as leases or not, an entity is not required to reassess whether the contract is, or contains, a lease at the date of initial application.

For a contract that is, or contains, a lease, a lessee or a lessor shall account for each lease component within the contract as a lease separately from non-lease components of the contract.

A lessee shall recognize a right-of-use asset, which indicates an asset that represents a lessee's right to use an underlying asset for the lease term, and a lease liability, which indicates obligation to make lease payments. However, a lessee may elect not to apply the requirements to short-term leases and leases for which the underlying asset is of low value. Also, as a practical expedient, a lessee may elect, by class of underlying asset, not to separate non-lease components from lease components, and instead account for each lease component and any associated non-lease components as a single lease component.

There has not been a material change in the accounting treatments for a lessor from the existing standard K-IFRS No.1017. K-IFRS No.1116 is effective for annual periods beginning on or after January 1, 2019, with earlier application permitted.

iv) Amendments to K-IFRS No.1102, *'Share-based Payment'*

The amendments clarify that a cash-settled share-based payment is measured using the same approach as for equity-settled share-based payments. The amendments also clarify that share-based payment transactions with a net settlement feature for withholding tax obligation shall be classified as an equity-settled share-based payment transaction. The amendments are effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The amendments are not expected to have a significant impact on the Group's consolidated financial statements.

v) Amendments to K-IFRS No.1040, *'Investment Property'*

The amendments clarify that an entity shall transfer a property to, or from, investment property when, and only when, there is a change in use. A change in use occurs when the property meets, or ceases to meet, the definition of investment property and there is evidence of the change in use. The amendments are effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The amendments are not expected to have a significant impact on the Group's consolidated financial statements.

4. Financial risk management

4-1. Credit risk

Credit risk is the risk of financial loss of the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligation, and arises principally from due from banks, the lending process related to loans, investment activities in debt securities and off balance sheet items including loan commitments, etc. Credit risk management is critical to the Group's business activities; thus, the Group carefully manages the credit risk exposure.

(a) Credit risk management

Major policies of the credit risk management are determined by the Risk Policy Committee, which is the Group's executive decision-making body for credit risk management. The Risk Policy Committee is led by the Group's Deputy President and Head of Risk Management Group. The Risk Policy Committee also consists of chief officers from eight different business units. The Credit Review Committee performs credit review evaluations and operates separately from the Risk Policy Committee.

Each business unit is required to implement the Group's risk management policies and procedures. Risk Management Department reviews compliance of business units with agreed exposure limits established by the Risk Policy Committee, including those for selected industries, country risk and product types.

The Group established the authorization structure for the approval and renewal of credit facilities. Authorization limits are allocated to the business unit credit officer. Larger facilities require approval by the Credit Committee. The Group assesses all credit exposures in excess of designated limits, prior to facilities being committed to customers by the business unit concerned. Renewals and review of facilities are subject to the same review process.

The Group is responsible for limiting concentrations of exposures to counterparties, geographies and industries, and by issuers, credit rating band, market liquidity and country.

The Group develops and maintains the risk grading system in order to categorize exposures according to the degree of risk of financial loss faced and to focus management on the attendant risks. The risk grading system is used in determining credit approvals, credit renewals, credit pricing, credit limits, or where impairment provisions may be required against specific credit exposures for existing loans.

Each business unit is responsible for the quality and performance of its credit portfolio and for monitoring and controlling all credit risks in its portfolio, including those subject to central approval. In addition to periodic loan reviews by credit officers, the Group also utilizes an automated monitoring tool which conducts searches for companies with high probability of default. Regular reports on the credit quality of local portfolios are provided to the Credit Administration Department who may require appropriate corrective action to be taken.

(In millions of won)

4. Financial risk management (continued)

4-1. Credit risk (continued)

(b) Maximum exposure to credit risk

The Group's maximum exposure to credit risk without taking account of any collateral held or other credit enhancements as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Due from banks and loans (*1)(*2):			
Banks	₩	9,826,462	10,032,848
Retail:			
Mortgage lending		48,690,383	45,068,588
Others		65,913,610	61,786,832
		114,603,993	106,855,420
Governments		14,125,100	11,482,301
Corporate:			
Large enterprises		32,746,281	31,988,958
Small and medium-sized enterprises		73,184,008	68,047,999
Special finance		4,076,599	3,719,100
Others		465	542
		110,007,353	103,756,599
Credit cards		81,673	17,565
		248,644,581	232,144,733
Trading assets:			
Debt securities		10,506,358	9,229,544
Gold/silver deposits		189,297	247,845
		10,695,655	9,477,389
Derivative assets		2,604,090	2,579,121
Available-for-sale financial assets:			
Debt securities		29,959,169	25,280,758
Held-to-maturity financial assets:			
Debt securities		14,822,898	11,630,270
Other financial assets (*1)(*3)		9,080,904	11,957,522
Off balance sheet items:			
Financial guarantee contracts		3,242,514	3,403,788
Loan commitments and other liabilities for credit		73,790,861	75,287,793
		77,033,375	78,691,581
	₩	392,840,672	371,761,374

(*1) The maximum exposure amounts for due from banks and loans and other financial assets are measured as the amount net of allowances.
(*2) Due from banks and loans were classified as similar credit risk group to be with consistent calculating capital adequacy ratio under New Basel Capital Accord (Basel III).
(*3) Other financial assets comprise accounts receivable, accrued income, guarantee deposits, domestic exchange settlements receivables, suspense receivables, etc.

(In millions of won)

4. Financial risk management (continued)

4-1. Credit risk (continued)

(c) Information related to impairment for due from banks and loans

i) Due from banks and loans as of December 31, 2017 and 2016 were as follows:

		December 31, 2017					
		Banks	Retail	Governments	Corporate	Credit cards	Total
Neither past due nor impaired	₩	9,843,616	114,227,036	14,129,002	110,033,944	80,660	248,314,258
Past due but not impaired		-	451,639	-	176,579	6,925	635,143
Impaired		-	318,741	-	897,009	33	1,215,783
		9,843,616	114,997,416	14,129,002	111,107,532	87,618	250,165,184
Less: allowance		(17,154)	(393,423)	(3,902)	(1,100,179)	(5,945)	(1,520,603)
	₩	9,826,462	114,603,993	14,125,100	110,007,353	81,673	248,644,581

		December 31, 2016					
		Banks	Retail	Governments	Corporate	Credit cards	Total
Neither past due nor impaired	₩	10,056,795	106,625,777	11,484,207	103,714,738	17,739	231,899,256
Past due but not impaired		-	311,869	-	215,304	532	527,705
Impaired		-	250,039	-	939,346	9	1,189,394
		10,056,795	107,187,685	11,484,207	104,869,388	18,280	233,616,355
Less: allowance		(23,947)	(332,265)	(1,906)	(1,112,789)	(715)	(1,471,622)
	₩	10,032,848	106,855,420	11,482,301	103,756,599	17,565	232,144,733

(In millions of won)

4. Financial risk management (continued)

4-1. Credit risk (continued)

(c) Information related to impairment for due from banks and loans (continued)

ii) Credit quality of due from banks and loans that were neither past due nor impaired as of December 31, 2017 and 2016 were as follows:

		December 31, 2017					
		Banks	Retail	Governments	Corporate	Credit cards	Total
Grade 1(*1)	₩	9,838,259	108,181,667	14,129,002	78,894,110	71,233	211,114,271
Grade 2(*1)		5,357	6,045,369	-	31,139,834	9,427	37,199,987
		9,843,616	114,227,036	14,129,002	110,033,944	80,660	248,314,258
Less: allowance		(17,154)	(196,716)	(3,902)	(566,569)	(5,945)	(790,286)
	₩	9,826,462	114,030,320	14,125,100	109,467,375	74,715	247,523,972
Mitigation of credit risk due to collateral(*2)	₩	96,660	74,797,088	-	57,116,428	258	132,010,434

		December 31, 2016					
		Banks	Retail	Governments	Corporate	Credit cards	Total
Grade 1(*1)	₩	10,056,795	101,430,892	11,484,207	71,417,737	14,844	194,404,475
Grade 2(*1)		-	5,194,885	-	32,297,001	2,895	37,494,781
		10,056,795	106,625,777	11,484,207	103,714,738	17,739	231,899,256
Less: allowance		(23,947)	(187,013)	(1,906)	(648,941)	(715)	(862,522)
	₩	10,032,848	106,438,764	11,482,301	103,065,797	17,024	231,036,734
Mitigation of credit risk due to collateral(*2)	₩	34,632	71,888,139	-	53,664,247	148	125,587,166

(*1) Credit quality of due from banks and loans were classified based on the internal credit rating as follows:

Type of borrowers	Grade 1	Grade 2
Banks and Governments	OECD sovereign credit rating of 6 or above (as applied to the nationalities of the banks and governments)	OECD sovereign credit rating of below 6 (as applied to the nationalities of the banks and governments)
Retail	Pool of retail loans with probability of default of less than 2.25%	Pool of retail loans with probability of default of 2.25% or more
Corporate (loans and credit cards)	Internal credit rating of BBB+ or above	Internal credit rating of below BBB+
Credit cards (individuals)	For individual credit card holders, score of 7 or higher in Shinhan Card's internal behavior scoring system	For individual credit card holders, score of below 7 in Shinhan Card's internal behavior scoring system

(*2) The Group holds collateral against due from banks and loans to customers in the form of mortgage interests over property, other registered securities over assets, and guarantees. Estimates of quantification of the extent to which collateral mitigate credit risk are based on the fair value of collateral.

(In millions of won)

4. Financial risk management (continued)

4-1. Credit risk (continued)

(c) Information related to impairment for due from banks and loans (continued)

iii) Aging analysis of due from banks and loans, that were past due but not impaired as of December 31, 2017 and 2016 were as follows:

		December 31, 2017			
		Retail	Corporate	Credit cards	Total
Less than 30 days	₩	344,006	118,520	6,431	468,957
30 days ~ less than 60 days		54,305	30,418	66	84,789
60 days ~ less than 90 days		37,898	15,854	38	53,790
90 days or more		15,430	11,787	390	27,607
		451,639	176,579	6,925	635,143
Less: allowance		(50,863)	(8,219)	-	(59,082)
	₩	400,776	168,360	6,925	576,061
Mitigation of credit risk due to collateral	₩	318,660	89,618	2	408,280

		December 31, 2016			
		Retail	Corporate	Credit cards	Total
Less than 30 days	₩	227,550	155,352	242	383,144
30 days ~ less than 60 days		42,428	41,131	41	83,600
60 days ~ less than 90 days		28,431	15,787	23	44,241
90 days or more		13,460	3,034	226	16,720
		311,869	215,304	532	527,705
Less: allowance		(32,705)	(10,938)	-	(43,643)
	₩	279,164	204,366	532	484,602
Mitigation of credit risk due to collateral	₩	226,591	95,021	1	321,613

iv) Mitigation of credit risk due to the collateral of impaired due from banks and loans, net of allowance, as of December 31, 2017 and 2016 were as follows:

		December 31, 2017			
		Retail	Corporate	Credit cards	Total
Impaired	₩	318,741	897,009	33	1,215,783
Less: allowance		(145,844)	(525,391)	-	(671,235)
	₩	172,897	371,618	33	544,548
Mitigation of credit risk due to collateral	₩	122,150	327,418	-	449,568

		December 31, 2016			
		Retail	Corporate	Credit cards	Total
Impaired	₩	250,039	939,346	9	1,189,394
Less: allowance		(112,547)	(452,910)	-	(565,457)
	₩	137,492	486,436	9	623,937
Mitigation of credit risk due to collateral	₩	96,872	383,667	-	480,539

(In millions of won)

4. Financial risk management (continued)

4-1. Credit risk (continued)

(d) Credit rating

i) Credit ratings of debt securities as of December 31, 2017 and 2016 were as follows:

		December 31, 2017			
		Trading assets	Available-for-sale financial assets	Held-to-maturity financial assets	Total
AAA	₩	3,065,304	21,826,000	13,813,452	38,704,756
AA- to AA+		1,187,091	3,113,596	346,953	4,647,640
A- to A+		3,348,546	2,037,692	130,293	5,516,531
BBB- to BBB+		839,249	1,171,960	166,906	2,178,115
Lower than BBB-		47,981	421,016	177,840	646,837
Unrated		2,018,187	1,388,905	187,454	3,594,546
	₩	10,506,358	29,959,169	14,822,898	55,288,425

		December 31, 2016			
		Trading assets	Available-for-sale financial assets	Held-to-maturity financial assets	Total
AAA	₩	2,829,395	16,576,071	10,490,786	29,896,252
AA- to AA+		808,494	3,616,869	471,502	4,896,865
A- to A+		3,135,329	2,248,558	171,550	5,555,437
BBB- to BBB+		811,787	1,017,426	137,241	1,966,454
Lower than BBB-		25,000	465,177	148,893	639,070
Unrated		1,619,539	1,356,657	210,298	3,186,494
	₩	9,229,544	25,280,758	11,630,270	46,140,572

ii) The credit qualities of debt securities according to the credit ratings by external rating agencies were as follows:

	KIS (*1)	KR (*2)	S&P	Fitch	Moody's
AAA	-	-	AAA	AAA	Aaa
AA- to AA+	AAA	AAA	AA- to AA+	AA- to AA+	Aa3 to Aa1
A- to A+	AA- to AA+	AA- to AA+	A- to A+	A- to A+	A3 to A1
BBB- to BBB+	BBB- to A	BBB- to A	BBB- to BBB+	BBB- to BBB+	Baa3 to Baa1
Lower than BBB-	Lower than BBB-	Lower than BBB-	Lower than BBB-	Lower than BBB-	Lower than Baa3
Unrated	Unrated	Unrated	Unrated	Unrated	Unrated

(*1) KIS: Korea Investors Service
(*2) KR: Korea Ratings

(In millions of won)

4. Financial risk management (continued)

4-1. Credit risk (continued)

(d) Credit rating (continued)

iii) Information related to impairment for debt securities as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Neither past due nor impaired	₩	55,288,425	46,140,572

(e) There are no assets acquired by executing collateral rights as of December 31, 2017. An asset acquired through foreclosures amounting to ₩658 million was classified as non-current assets held for sale as of December 31, 2016.

(f) Concentration by geographic location

An analysis of concentration by geographic location for financial assets including due from banks and loans, net of allowance, as of December 31, 2017 and 2016 were as follows:

		December 31, 2017						
		Korea	U.S.A	Japan	Vietnam	China	Other	Total
Due from banks and loans:								
Banks	₩	2,890,736	1,152,093	268,533	547,462	3,420,224	1,547,414	9,826,462
Retail		109,733,109	345,530	2,695,853	745,705	613,134	470,662	114,603,993
Governments		12,569,884	130,553	388,142	35,786	664,030	336,705	14,125,100
Corporate		97,068,853	2,140,109	2,130,721	1,596,579	2,530,295	4,540,796	110,007,353
Credit cards		3,751	859	60	76,194	18	791	81,673
		222,266,333	3,769,144	5,483,309	3,001,726	7,227,701	6,896,368	248,644,581
Trading assets		10,476,869	-	-	-	29,489	189,297	10,695,655
Available-for-sale financial Assets		27,916,554	447,804	163,652	474,134	510,678	446,347	29,959,169
Held-to-maturity financial Assets		14,273,306	31,988	34,487	237,641	37,096	208,380	14,822,898
	₩	274,933,062	4,248,936	5,681,448	3,713,501	7,804,964	7,740,392	304,122,303

		December 31, 2016						
		Korea	U.S.A	Japan	Vietnam	China	Other	Total
Due from banks and loans:								
Banks	₩	2,790,110	769,669	328,567	460,322	3,933,734	1,750,446	10,032,848
Retail		103,278,915	336,637	2,270,102	294,761	275,900	399,105	106,855,420
Governments		9,505,042	321,516	717,922	109,943	696,051	131,827	11,482,301
Corporate		91,848,742	1,959,566	2,040,149	1,630,144	2,269,651	4,008,347	103,756,599
Credit cards		3,410	1,091	6	13,012	8	38	17,565
		207,426,219	3,388,479	5,356,746	2,508,182	7,175,344	6,289,763	232,144,733
Trading assets		9,209,693	-	-	-	19,851	247,845	9,477,389
Available-for-sale financial assets		23,177,345	414,831	112,381	484,002	588,334	503,865	25,280,758
Held-to-maturity financial assets		11,074,151	33,465	56,196	155,916	166,560	143,982	11,630,270
	₩	250,887,408	3,836,775	5,525,323	3,148,100	7,950,089	7,185,455	278,533,150

(In millions of won)

4. Financial risk management (continued)

4-1. Credit risk (continued)

(g) Concentration by industry sector

An analysis of concentration by industry sector for financial assets including due from banks and loans, net of allowance, as of December 31, 2017 and 2016 were as follows:

		December 31, 2017						
		Finance and insurance	Manu-facturing	Retail and wholesale	Real estate and service	Others	Retail customers	Total
Due from banks and loans:								
Banks	₩	7,610,214	1,592	-	56,744	2,157,912	-	9,826,462
Retail		-	-	-	-	-	114,603,993	114,603,993
Governments		13,192,733	1,314	-	-	931,053	-	14,125,100
Corporate		3,160,611	39,462,251	15,384,000	18,943,931	33,056,560	-	110,007,353
Credit cards		-	-	-	-	-	81,673	81,673
		23,963,558	39,465,157	15,384,000	19,000,675	36,145,525	114,685,666	248,644,581
Trading assets		7,148,494	603,241	1,078,705	93,040	1,772,175	-	10,695,655
Available-for-sale financial assets		20,024,919	1,057,244	164,779	455,014	8,257,213	-	29,959,169
Held-to-maturity financial assets		4,491,644	48,981	-	62,129	10,220,144	-	14,822,898
	₩	55,628,615	41,174,623	16,627,484	19,610,858	56,395,057	114,685,666	304,122,303

		December 31, 2016						
		Finance and insurance	Manu-facturing	Retail and wholesale	Real estate and service	Others	Retail customers	Total
Due from banks and loans:								
Banks	₩	6,986,105	68	-	110,443	2,936,232	-	10,032,848
Retail		-	-	-	-	-	106,855,420	106,855,420
Governments		10,763,475	3,990	-	3,315	711,521	-	11,482,301
Corporate		2,533,061	39,601,460	14,491,117	17,630,180	29,500,781	-	103,756,599
Credit cards		-	-	-	-	-	17,565	17,565
		20,282,641	39,605,518	14,491,117	17,743,938	33,148,534	106,872,985	232,144,733
Trading assets		5,744,893	639,264	921,410	217,794	1,954,028	-	9,477,389
Available-for-sale financial assets		18,939,223	756,134	89,261	367,060	5,129,080	-	25,280,758
Held-to-maturity financial assets		4,183,860	44,915	-	62,881	7,338,614	-	11,630,270
	₩	49,150,617	41,045,831	15,501,788	18,391,673	47,570,256	106,872,985	278,533,150

4. Financial risk management (continued)

4-2. Market risk

Market risk is the risk that changes in market price such as interest rates, equity prices, and foreign exchange rates, etc. will affect the Group's income. Trading position is exposed to the risk such as interest rates, equity prices, foreign exchange rates, etc., and non-trading position is mainly exposed to interest rates. The Group separates and manages its exposure to market risk between trading and non-trading position.

Overall authority for market risk is vested in the Risk Policy Committee. The Risk Management Department is responsible for the development of detailed risk management policies which are subject to review and approval by the Risk Policy Committee and for the day-to-day review of their implementation. The Risk Policy Committee also sets Value at Risk (VaR) limit, damage limit, sensitivity limit, investment limits, position limits, and stress damage limits of each department and desk. The Risk Management Department monitors operation departments and reports regularly to the Risk Policy Committee and the Risk Management Committee.

Before launching a new product from each business unit, the Group is required to perform an objective analysis of the risk evaluation and examination of fair value measurement method from the Risk Management Department or Fair Value Evaluation Committee. The Derivative and Structured Product Risk Review Committee reviews the related risk exposure and investment limit.

(a) Market risk management of trading positions

Trading position includes securities, foreign exchange position, and derivatives which are traded for profits.

Trading data of foreign exchange, stocks, bonds and derivatives from trading positions are tracked and daily risk limits are systematically monitored based on the Group's risk management parameters. Statistical analysis that complements the above risk management process and stress testing is performed regularly in order to manage the impact and loss of rapid economic changes. These risk management processes enable the Group to manage the scale of potential losses within a certain range when a crisis occurs.

i) Measurement method on market risk arising from trading positions

The principal tool used to measure and control market risk exposure within the Group's trading position is VaR. The VaR of a trading position is the estimated loss that will arise on the portfolio over a specified period of time (ten days holding period) from an adverse market movement with a specified probability (confidence level). The Group measures market risk based on 99.9% confidence level by using the VaR model based on historical simulation.

VaR is a commonly used market risk management technique. However, VaR estimates possible losses over a certain period at a particular confidence level using the historical market movement data. The use of historical market movement data as a basis for determining the possible range of future outcome may not always cover all possible scenarios, especially those of an exceptional nature. VaR models assume that a holding period of generally one to ten days is sufficient prior to liquidating the underlying positions, but this may not be the case for certain highly illiquid assets or in situations in which there is severe general market illiquidity.

(In millions of won)

4. Financial risk management (continued)

4-2. Market risk (continued)

(a) Market risk management of trading positions (continued)

The Group directly applies the historical changes in interest rates, equity prices, and foreign exchange rates to current position. The actual outputs are regularly monitored by testing the effectiveness of assumptions, measurements and parameter. The application of this method does not prevent loss from larger market movement that exceeds the acceptable parameter.

VaR limit related to the operation of trading and non-trading portfolio is determined by management annually. VaR is measured at least daily. The quality of VaR model is monitored consistently by examining the VaR results related to trading book.

ii) VaR of trading positions

An analysis of trading position VaR for the years ended December 31, 2017 and 2016 were as follows:

		2017			
		Average	Maximum	Minimum	Year-end
Interest rate risk	₩	38,370	50,206	22,226	25,071
Equity risk		4,051	5,622	3,040	4,675
Foreign currency risk (*1)		43,827	46,108	41,562	41,947
Volatility risk		70	124	43	66
Commodity risk		22	46	-	14
Covariance		(36,397)	(46,003)	(24,840)	(26,367)
	₩	49,943	56,103	42,031	45,406

		2016			
		Average	Maximum	Minimum	Year-end
Interest rate risk	₩	33,246	48,851	18,764	44,447
Equity risk		5,161	5,787	4,815	5,484
Foreign currency risk (*1)		56,089	61,389	53,678	60,088
Volatility risk		149	256	101	221
Commodity risk		13	35	-	21
Covariance		(38,677)	(54,670)	(24,272)	(49,278)
	₩	55,981	61,648	53,086	60,983

(*1) The Group measured foreign currency risk arising from trading positions and non-trading positions.

(In millions of won)

4. Financial risk management (continued)

4-2. Market risk (continued)

(b) Market risk management of non-trading positions

The most critical market risk that arises from non-trading position is the interest rate risk. Accordingly, the Group measures and manages market risk for non-trading position by taking into account effects of interest rate changes on both its net asset value and income. Interest rate risk is the risk of loss from fluctuations in the future cash flows or fair values of financial instruments because of a change in market interest rates.

Interest rate risk is managed principally through monitoring interest rate gaps and by having pre-approved limits for repricing bands. The Risk Policy Committee is the monitoring body for compliance with these limits including establishing policies and setting the limits and is assisted by the Risk Management Department in its day-to-day monitoring activities.

The Group measures and manages interest rate risk by using various analyses such as interest rate gap, duration gap, and NII (Net Interest Income) simulation of each scenario through the ALM system (OFSA). The Group also monitors interest rate VaR, earnings at risk ("EaR"), and gap rate of interest rate by setting the limits on a monthly basis.

i) Measurement method on market risk arising from non-trading positions

The Group measures interest rate VaR by using standard modified duration and interest rate volatility, and interest rate EaR by using impact period by maturity period and interest rate volatility based on a standard methodology provided by the Bank for International Settlements ("BIS").

ii) Interest rate VaR and EaR for non-trading positions

Interest rate VaR and EaR for non-trading positions which were measured by the standard methodology provided by BIS as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Interest rate VaR	₩	429,241	1,088,995
Interest rate EaR		174,262	58,091

(In millions of won)

4. Financial risk management (continued)

4-2. Market risk (continued)

(c) Foreign exchange risk

The Group manages foreign currency risk based on general positions which includes all spot and future foreign currency positions, etc. The Risk Policy Committee oversees the Group's foreign exchange exposure for both trading and non-trading activities by establishing limits for the net foreign currencies open position. The Group's foreign exchange position is centralized at the FX & Derivatives Department. Dealers in the FX & Derivatives Department manage the Group's overall position within the set limits through spot trading, forward contracts, currency options, futures and swaps and foreign exchange swaps. The Group's foreign exchange transactions are mainly conducted in the U.S. dollar (USD), Japanese yen (JPY), euro (EUR) and Chinese yuan (CNY). Other foreign currencies are limitedly traded.

Foreign currency denominated assets and liabilities as of December 31, 2017 and 2016 were as follows:

		December 31, 2017					
		USD	JPY	EUR	CNY	Others	Total
Assets							
Cash and due from banks	₩	2,343,055	955,205	267,008	1,932,502	1,482,475	6,980,245
Trading assets		5,273	-	-	-	189,297	194,570
Derivative assets		59,391	4	766	203	1,455	61,819
Loans		14,461,961	5,739,301	1,196,346	2,774,264	5,059,607	29,231,479
Available-for-sale financial assets		1,855,032	113,239	52,583	395,150	666,486	3,082,490
Held-to-maturity financial assets		78,975	137,100	-	37,096	451,922	705,093
Other financial assets		1,586,395	288,243	154,853	458,166	286,725	2,774,382
		20,390,082	7,233,092	1,671,556	5,597,381	8,137,967	43,030,078
Liabilities							
Deposits		11,998,969	6,286,743	757,326	4,283,274	4,878,846	28,205,158
Trading liabilities		-	-	-	-	434,586	434,586
Derivative liabilities		101,520	195	631	4,734	713	107,793
Borrowings		4,960,709	291,342	231,539	407,678	68,988	5,960,256
Debt securities issued		3,027,696	249,616	31,981	196,380	419,781	3,925,454
Other financial liabilities		2,531,630	208,516	208,527	472,207	276,083	3,696,963
		22,620,524	7,036,412	1,230,004	5,364,273	6,078,997	42,330,210
Net assets (liabilities)		(2,230,442)	196,680	441,552	233,108	2,058,970	699,868
Off-balance sheet items							
Derivative exposures		2,142,130	9,462	(433,642)	81,099	(633,174)	1,165,875
Net position	₩	(88,312)	206,142	7,910	314,207	1,425,796	1,865,743

(In millions of won)

4. Financial risk management (continued)

4-2. Market risk (continued)

(c) Foreign exchange risk (continued)

		December 31, 2016					
		USD	JPY	EUR	CNY	Others	Total
Assets							
Cash and due from banks	₩	1,532,410	1,125,013	208,453	2,692,185	1,129,052	6,687,113
Trading assets		44,678	-	-	-	247,845	292,523
Derivative assets		59,340	515	47	4,088	400	64,390
Loans		15,139,025	5,524,117	1,270,320	2,566,910	4,015,728	28,516,100
Available-for-sale financial assets		1,443,574	68,920	4,178	427,871	669,899	2,614,442
Held-to-maturity financial assets		26,604	187,039	-	166,560	306,729	686,932
Other financial assets		1,696,418	396,875	117,139	376,181	154,564	2,741,177
		19,942,049	7,302,479	1,600,137	6,233,795	6,524,217	41,602,677
Liabilities							
Deposits		10,640,722	5,990,709	606,767	4,418,828	4,002,441	25,659,467
Trading liabilities		-	-	-	-	485,995	485,995
Derivative liabilities		105,380	3,171	100	2,061	295	111,007
Borrowings		4,923,146	524,217	318,600	812,980	147,960	6,726,903
Debt securities issued		3,857,223	103,681	152,112	207,912	34,438	4,355,366
Other financial liabilities		1,981,226	493,286	181,673	558,932	206,966	3,422,083
		21,507,697	7,115,064	1,259,252	6,000,713	4,878,095	40,760,821
Net assets (liabilities)		(1,565,648)	187,415	340,885	233,082	1,646,122	841,856
Off-balance sheet items							
Derivative exposures		2,063,897	(18,166)	(282,241)	88,689	(753,040)	1,099,139
Net position	₩	498,249	169,249	58,644	321,771	893,082	1,940,995

4. Financial risk management (continued)

4-3. Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Risk Policy Committee is responsible for establishing policies and setting the limits related to liquidity risk management. The Risk Management Department evaluates and manages the Group's overall liquidity risk and monitors compliance of all operating subsidiaries and foreign branches with limits on a daily basis.

The Group applies the following basic principles for liquidity risk management:

- raise funding in sufficient amounts at the optimal time and reasonable costs;
- maintain risk at appropriate levels and preemptively manage them through a prescribed risk limit system and an early warning signal detection system;
- secure stable sources of revenue and minimize actual losses by implementing an effective asset-liability management system based on diversified sources of funding with varying maturities;
- monitor and manage daily and intra-daily liquidity positions and risk exposures as to timely payment and settlement of financial obligations due under both normal and crisis situations;
- conduct periodic contingency analysis in anticipation of any potential liquidity crisis and establish and implement emergency plans in case of a crisis actually happening; and
- consider liquidity-related costs, benefits and risks in determining the price of products and services, employee performance evaluations and approval of launching new products and services.

The Group manages its liquidity risk within the limits set on won and foreign currency by using various analysis methods such as liquidity gap, real liquidity gap and loan-deposit ratio through the ALM system and various indices including risk limits, early warning index, and monitoring index.

The following table presents the Group's cash flows of financial assets and financial liabilities. The amounts disclosed in the table are the contractual undiscounted cash flows. Since the effect of the discount is insignificant for the balance with the maturities of less than 12 months, the amount is the same as the book value.

(In millions of won)

4. Financial risk management (continued)

4-3. Liquidity risk (continued)

(a) Contractual maturities for financial instruments

Contractual maturities for financial assets and financial liabilities as of December 31, 2017 and 2016 were as follows:

		December 31, 2017						
		1 month or less	1 month~ 3 months or less	3 months~ 6 months or less	6 months~ 1 year or less	1 year~ 5 years or less	More than 5 years	Total
Assets								
Cash and due from banks	₩	17,692,577	640,029	231,699	131,391	5,008	-	18,700,704
Trading assets		11,216,398	-	-	-	-	-	11,216,398
Derivative assets		2,715,665	285,632	78,501	121,845	346,065	143,032	3,690,740
Loans		19,613,910	27,102,835	36,486,097	56,796,297	64,140,522	54,087,978	258,227,639
Available-for-sale financial assets		31,672,125	-	-	-	-	823,416	32,495,541
Held-to-maturity financial assets		121,160	143,405	202,680	1,372,783	13,567,630	1,050,348	16,458,006
Other financial assets		8,043,587	-	-	1,364	1,104,932	-	9,149,883
	₩	91,075,422	28,171,901	36,998,977	58,423,680	79,164,157	56,104,774	349,938,911
Liabilities								
Deposits	₩	127,474,369	20,940,723	30,674,220	51,094,384	15,745,090	1,895,195	247,823,981
Trading liabilities		434,586	-	-	-	-	-	434,586
Derivative liabilities		2,484,338	38,289	30,028	46,915	164,442	60,717	2,824,729
Borrowings		5,469,114	2,354,580	1,296,828	2,338,371	2,763,308	632,682	14,854,883
Debt securities issued		612,200	2,812,829	2,155,415	6,868,469	12,190,221	2,940,935	27,580,069
Other financial liabilities		14,805,782	-	-	-	129,329	-	14,935,111
	₩	151,280,389	26,146,421	34,156,491	60,348,139	30,992,390	5,529,529	308,453,359

(In millions of won)

4. Financial risk management (continued)

4-3. Liquidity risk (continued)

(a) Contractual maturities for financial instruments (continued)

		December 31, 2016						
		1 month or less	1 month~ 3 months or less	3 months~ 6 months or less	6 months~ 1 year or less	1 year~ 5 years or less	More than 5 years	Total
Assets								
Cash and due from banks	₩	13,018,880	908,479	325,599	227,946	34,830	-	14,515,734
Trading assets		11,270,758	-	-	-	-	-	11,270,758
Derivative assets		2,593,963	43,781	62,792	118,786	270,886	117,375	3,207,583
Loans		20,394,874	25,966,414	35,001,023	51,563,376	58,877,474	50,425,410	242,228,571
Available-for-sale financial assets		26,283,770	-	-	-	-	1,530,813	27,814,583
Held-to-maturity financial assets		125,180	214,884	150,728	1,374,925	9,469,785	1,679,461	13,014,963
Other financial assets		10,887,984	-	-	888	1,126,254	-	12,015,126
	₩	84,575,409	27,133,558	35,540,142	53,285,921	69,779,229	53,753,059	324,067,318
Liabilities								
Financial liabilities designated at fair value through profit or loss	₩	35	-	1,916	-	4,598	-	6,549
Deposits		118,610,459	21,741,507	28,826,207	48,447,733	13,829,012	2,980,713	234,435,631
Trading liabilities		485,995	-	-	-	-	-	485,995
Derivative liabilities		2,479,292	24,418	29,040	27,249	81,619	26,054	2,667,672
Borrowings		5,268,211	1,660,314	1,026,052	2,499,657	3,468,909	604,343	14,527,486
Debt securities issued		622,234	1,811,544	3,115,445	3,930,882	9,958,411	4,028,492	23,467,008
Other financial liabilities		12,558,640	-	-	-	121,155	-	12,679,795
	₩	140,024,866	25,237,783	32,998,660	54,905,521	27,463,704	7,639,602	288,270,136

These amounts include cash flows of principal and interest on financial assets and financial liabilities. The undiscounted cash flows were classified based on the earliest dates for obligated repayment. Trading assets and available-for-sale financial assets except for assets restricted for sale for certain periods were included in the less than 1 month.

(b) Contractual maturities for off balance sheet items

Financial guarantees such as financial guarantee contracts, loan commitments and others provided by the Group are classified based on the earliest date at which the Group should fulfill the obligation under the guarantee when the counterparty requests for the payment.

Off-balance sheet items as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Financial guarantee contracts	₩	3,242,514	3,403,788
Loan commitments and others		73,790,861	75,287,793
	₩	77,033,375	78,691,581

4. Financial risk management (continued)

4-4. Measurement of fair value

The fair value which the Group primarily uses for measurement of financial instruments are the published price quotations in an active market which are based on the market prices or the dealer price quotations of financial instruments traded in an active market where available, which is the best evidence of fair value.

If the market for a financial instrument is not active, fair value is established either by using a valuation technique or independent third-party valuation service. The Group uses diverse valuation techniques under reasonable assumptions which are based on the inputs observable in markets at the end of each reporting period.

Valuation techniques include using the recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models. For example, the fair value for interest swaps is the present value of estimated future cash flows, and fair value for foreign exchange forwards contracts is measured by using the published forward exchange rate at the end of each reporting period.

The Group classifies and discloses fair value of the financial instruments into the following three-level hierarchy:

(i) Level 1: Financial instruments measured at quoted prices from active markets are classified as level 1.
(ii) Level 2: Financial instruments measured using valuation techniques where all significant inputs are observable market data are classified as level 2.
(iii) Level 3: Financial instruments measured using valuation techniques where one or more significant inputs are not based on observable market data are classified as level 3.

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(a) Financial instruments measured at fair value

i) The table below analyzes financial instruments measured at the fair value as of December 31, 2017 and 2016 by the level in the fair value hierarchy into which the fair value measurement is categorized:

		December 31, 2017			
		Level 1	Level 2	Level 3	Total
Financial assets					
Trading assets:					
Debt securities	₩	1,328,512	9,177,846	-	10,506,358
Equity securities		218,969	301,774	-	520,743
Gold/silver deposits		189,297	-	-	189,297
Derivative assets:					
Trading		33	2,585,491	8,343	2,593,867
Hedging		-	8,424	1,799	10,223
Available-for-sale financial assets:					
Debt securities		8,897,634	21,061,535	-	29,959,169
Equity securities		404,623	1,013,679	1,118,070	2,536,372
	₩	11,039,068	34,148,749	1,128,212	46,316,029
Financial liabilities					
Trading liabilities:					
Gold/silver deposits	₩	434,586	-	-	434,586
Derivative liabilities:					
Trading		55	2,468,792	3,574	2,472,421
Hedging		-	95,353	425,162	520,515
	₩	434,641	2,564,145	428,736	3,427,522

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(a) Financial instruments measured at fair value (continued)

i) The table below analyzes financial instruments measured at the fair value as of December 31, 2017 and 2016 by the level in the fair value hierarchy into which the fair value measurement is categorized (continued):

		December 31, 2016			
		Level 1	Level 2	Level 3	Total
Financial assets					
Trading assets:					
Debt securities	₩	1,343,122	7,871,486	14,936	9,229,544
Equity securities		192,929	1,600,440	-	1,793,369
Gold/silver deposits		247,845	-	-	247,845
Derivative assets:					
Trading		-	2,533,182	25,370	2,558,552
Hedging		-	12,904	7,665	20,569
Available-for-sale financial assets:					
Debt securities		6,558,428	18,722,330	-	25,280,758
Equity securities		655,631	746,595	1,131,599	2,533,825
	₩	8,997,955	31,486,937	1,179,570	41,664,462
Financial liabilities					
Financial liabilities designated at fair value through profit or loss:					
Deposits	₩	-	4,277	2,005	6,282
Trading liabilities:					
Gold/silver deposits		485,995	-	-	485,995
Derivative liabilities:					
Trading		-	2,444,794	3,803	2,448,597
Hedging		-	77,668	259,127	336,795
	₩	485,995	2,526,739	264,935	3,277,669

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(a) Financial instruments measured at fair value (continued)

ii) There was no transfer between level 1 and level 2 for the years ended December 31, 2017 and 2016.

iii) Changes in level 3 of the fair value hierarchy

Changes in level 3 of the fair value hierarchy for the years ended December 31, 2017 and 2016 were as follows:

		December 31, 2017				
		Trading assets	Available-for-sale financial assets	Net derivative instruments	Financial liabilities designated at fair value through profit or loss	Total
Beginning balance	₩	14,936	1,131,599	(229,895)	(2,005)	914,635
Total gain or loss:						
Recognized in profit or loss (*1)		-	(149,742)	(191,909)	4	(341,647)
Recognized in other comprehensive loss		-	(10,515)	-	-	(10,515)
Purchases/Issues		-	238,333	2,441	-	240,774
Settlements		(14,936)	(95,035)	741	2,001	(107,229)
Transfers into level 3 (*2)		-	3,430	28	-	3,458
Ending balance	₩	-	1,118,070	(418,594)	-	699,476

		December 31, 2016				
		Trading assets	Available-for-sale financial assets	Net derivative instruments	Financial liabilities designated at fair value through profit or loss	Total
Beginning balance	₩	49,754	913,988	(61,801)	(2,967)	898,974
Total gain or loss:						
Recognized in profit or loss (*1)		139	13,470	(188,240)	(5)	(174,636)
Recognized in other comprehensive loss		-	(65,685)	-	-	(65,685)
Purchases/Issues		-	383,992	(1,163)	-	382,829
Settlements		(34,957)	(108,854)	1,621	967	(141,223)
Transfers into level 3 (*2)		-	-	19,688	-	19,688
Transfers out of level 3 (*2)		-	(5,312)	-	-	(5,312)
Ending balance	₩	14,936	1,131,599	(229,895)	(2,005)	914,635

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(a) Financial instruments measured at fair value (continued)

iii) Changes in level 3 of the fair value hierarchy (continued)

(*1) Gains or losses among the changes in level 3 of the fair value hierarchy and gains or losses related to financial instruments that the Group held as of December 31, 2017 and 2016 are presented in the statement of comprehensive income as follows:

		December 31, 2017		December 31, 2016	
		Gains or losses recognized in profit or loss	Gains or losses recognized in profit or loss for financial instrument held at the end of the year	Gains or losses recognized in profit or loss	Gains or losses recognized in profit or loss for financial instrument held at the end of the year
Net trading loss	₩	(2,996)	(2,996)	(877)	(993)
Net gain (loss) on financial instruments designated at fair value through profit or loss		4	-	(5)	(5)
Net gain on sale of available-for-sale financial assets		1,232	989	22,042	483
Impairment loss on financial assets		(150,974)	(150,974)	(8,572)	(7,914)
Net other operating expenses		(188,913)	(188,913)	(187,224)	(187,224)
	₩	(341,647)	(341,894)	(174,636)	(195,653)

(*2) These financial instruments were transferred into or out of level 3 as the availability of observable market data has changed. The Group recognized transfers between levels of the fair value hierarchy at the end of the reporting period during which the event or the change in circumstances that caused the transfer has occurred.

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(a) Financial instruments measured at fair value (continued)

iv) Valuation techniques and inputs used in measuring fair value of financial instruments

ⓐ Valuation techniques and inputs used in measuring fair value of financial instruments classified as level 2 as of December 31, 2017 and 2016 were as follows:

	December 31, 2017			
	Type of financial instruments	Book value	Valuation techniques	Inputs
Financial assets				
Trading assets	Debt securities	₩ 9,177,846	Discounted cash flow	Discount rate
	Equity securities	301,774	Net asset value	Price of underlying assets
		9,479,620		
Derivative assets	Trading	2,585,491	Option model	Discount rate, foreign exchange rate, volatility, stock price, commodity index, etc.
	Hedging	8,424	Discounted cash flow	
		2,593,915		
Available-for-sale financial assets	Debt securities	21,061,535	Discounted cash flow	Discount rate
	Equity securities	1,013,679	Net asset value	Price of underlying assets
		22,075,214		
		₩ 34,148,749		
Financial liabilities				
Derivative liabilities	Trading	₩ 2,468,792	Option model	Discount rate, foreign exchange rate, volatility, stock price, commodity index, etc.
	Hedging	95,353	Discounted cash flow	
		₩ 2,564,145		

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(a) Financial instruments measured at fair value (continued)

iv) Valuation techniques and inputs used in measuring fair value of financial instruments (continued)

	December 31, 2016			
	Type of financial instruments	Book value	Valuation techniques	Inputs
Financial assets				
Trading assets	Debt securities	₩ 7,871,486	Discounted cash flow	Discount rate
	Equity securities	1,600,440	Net asset value	Price of underlying assets
		9,471,926		
Derivative assets	Trading	2,533,182	Option model	Discount rate, foreign exchange rate, volatility, stock price, commodity index, etc.
	Hedging	12,904	Discounted cash flow	
		2,546,086		
Available-for-sale financial assets	Debt securities	18,722,330	Discounted cash flow	Discount rate
	Equity securities	746,595	Net asset value	Price of underlying assets
		19,468,925		
		₩ 31,486,937		
Financial liabilities				
Financial liabilities designated at fair value through profit or loss	Deposits	₩ 4,277	Option model	Discount rate, volatility, stock price index
Derivative liabilities	Trading	2,444,794	Option model	Discount rate, foreign exchange rate, volatility, stock price, commodity index, etc.
	Hedging	77,668	Discounted cash flow	
		2,522,462		
		₩ 2,526,739		

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(a) Financial instruments measured at fair value (continued)

iv) Valuation techniques and inputs used in measuring fair value (continued)

ⓑ Information about valuation techniques and significant unobservable inputs in measuring financial instruments categorized as level 3 as of December 31, 2017 and 2016 were as follows:

	December 31, 2017					
	Valuation technique	Type of financial instrument		Book value	Significant unobservable input	Range of estimates for unobservable input
Financial assets						
Derivative assets	Option model (*1)	Equity and foreign exchange related	₩	4,846	The volatility of the underlying asset	1.32%~29.53%
					Correlations	0.14%
	Option model (*1)	Interest rates related		5,296	The volatility of the underlying asset	0.42%~0.70%
					Regression coefficient	0.42%~1.65%
					Correlations	42.20%~90.33%
				10,142		
Available-for-sale financial assets	Discounted cash flow	Equity securities		1,118,070	Discount rate	1.98%~20.51%
	Comparable company analysis				Growth rate	0.00%
	Net asset value					
			₩	1,128,212		
Financial liabilities						
Derivative liabilities	Option model (*1)	Equity and foreign exchange related	₩	80	The volatility of the underlying asset	1.32%~26.30%
					Correlations	0.14%
	Option model (*1)	Interest rates related		428,656	The volatility of the underlying asset	0.50%~0.70%
					Regression coefficient	1.65%~2.77%
					Correlations	32.63%~90.33%
			₩	428,736		

(*1) Option models that the Group uses in derivative valuation include Black-Scholes model, Hull-White model, Monte Carlo simulation, etc.

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(a) Financial instruments measured at fair value (continued)

iv) Valuation techniques and inputs used in measuring fair value of financial instruments (continued)

	December 31, 2016					
	Valuation technique	Type of financial instrument		Book value	Significant unobservable input	Range of estimates for unobservable input
Financial assets						
Trading assets	Option model (*1)	Interest rates related	₩	14,936	The volatility of the underlying asset Correlations	36.30% 69.90%
Derivative assets	Option model (*1)	Equity and foreign exchange related		22,723	The volatility of the underlying asset Correlations	13.10%~21.99% (-)19.03%
	Option model (*1)	Interest rates related		10,312	The volatility of the underlying asset Regression coefficient Correlations	0.54%~0.87% 0.02%~2.05% 61.01%
				33,035		
Available-for-sale financial assets	Discounted cash flow Comparable company analysis Net asset value	Equity securities		1,131,599	Discount rate Growth rate	1.73%~18.49% 0.00%
			₩	1,179,570		
Financial liabilities						
Financial liabilities designated at fair value through profit or loss	Option model (*1)	Equity related	₩	2,005	The volatility of the underlying asset Correlations	15.97%~29.44% (-)1.80%~61.10%
Derivative liabilities	Option model (*1)	Equity and foreign exchange related		1,156	The volatility of the underlying asset Correlations	19.90%~33.69% (-)19.03%~61.10%
	Option model (*1)	Interest rates related		261,774	The volatility of the underlying asset Regression coefficient Correlations	0.51%~0.87% 0.02%~3.02% 42.93%~61.01%
				262,930		
			₩	264,935		

(*1) Option models that the Group uses in derivative valuation include Black-Scholes model, Hull-White model, Monte Carlo simulation, etc.

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(a) Financial instruments measured at fair value (continued)

v) Sensitivity to changes in unobservable inputs.

For level 3 fair value measurement, changing one or more of the unobservable inputs used to reasonably possible alternative assumptions would have the following effect on profit (loss), and other comprehensive income (loss) as of December 31, 2017 and 2016 were as follows:

			December 31, 2017			
			Profit (loss) for the year		Other comprehensive income (loss) for the year	
Type of financial instrument			Favorable change	Unfavorable change	Favorable change	Unfavorable change
Derivative assets (*1)	Equity and foreign exchange related	₩	1,238	(846)	-	-
	Interest rates related		278	(326)	-	-
Available-for-sale financial assets (*2)	Equity securities		-	-	16,435	(8,229)
		₩	1,516	(1,172)	16,435	(8,229)
Derivative liabilities (*1)	Equity and foreign exchange related	₩	10	(13)	-	-
	Interest rates related		13,820	(13,280)	-	-
		₩	13,830	(13,293)	-	-

			December 31, 2016			
			Profit (loss) for the year		Other comprehensive income (loss) for the year	
Type of financial instrument			Favorable change	Unfavorable change	Favorable change	Unfavorable change
Derivative assets (*1)	Equity and foreign exchange related	₩	1,652	(1,039)	-	-
	Interest rates related		1,397	(1,488)	-	-
Available-for-sale financial assets (*2)	Equity securities		-	-	12,673	(6,531)
		₩	3,049	(2,527)	12,673	(6,531)
Financial liabilities designated at fair value through profit or loss (*1)	Equity related	₩	1	(1)	-	-
Derivative liabilities (*1)	Equity and foreign exchange related		59	(68)	-	-
	Interest rates related		8,211	(9,424)	-	-
		₩	8,271	(9,493)	-	-

(*1) Based on 10% of increase or decrease in volatility of underlying assets or correlations.
(*2) Based on changes in growth rate (0%~1%) and discount rate (-1%~1%)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(b) Financial instruments measured at amortized cost

i) The method of measuring the fair value of financial instruments measured at amortized cost is as follows:

Type	Measurement methods of fair value
Cash and due from banks	The book value and the fair value for cash are identical and most of deposits are floating interest rate deposits or next day deposits of a short-term instrument. Therefore, the book value for deposits approximates fair value.
Loans	The fair value of loans is measured by discounting the expected cash flows at the market interest rate, credit risk, etc.
Held-to-maturity financial assets	The fair value of held-to-maturity financial assets is determined by applying the lesser of two quoted bond prices provided by two bond pricing agencies as of the latest trading date.
Deposits and borrowings	The book amount and the fair value for demand deposits, cash management account deposits, call money and bonds sold under repurchase agreements as short-term instruments are identical. The fair value of others is measured by discounting the contractual cash flows at the market interest rate that takes into account the residual risk.
Debt securities issued	The fair value of deposits and borrowings is based on the published price quotations in an active market. In case there is no observable market price, it is measured by discounting the contractual cash flow at the market interest rate that takes into account the residual risk.

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(b) Financial instruments measured at amortized cost (continued)

ii) The book value and the fair value of financial instruments measured at amortized cost as of December 31, 2017 and 2016 were as follows (continued):

		December 31, 2017				
		Book value				
		Balance	Unamortized balance	Allowance	Total	Fair value
Assets						
Cash and due from banks:						
Cash	₩	1,749,897	-	-	1,749,897	1,749,897
Due from banks		16,926,471	-	(14,046)	16,912,425	16,912,425
Loans:						
Household loans		103,724,329	361,170	(336,134)	103,749,365	103,425,377
Corporate loans		123,835,486	63,780	(1,150,289)	122,748,977	123,254,416
Public and other loans		2,203,307	1,146	(10,135)	2,194,318	2,202,338
Loans to bank		2,961,877	-	(4,054)	2,957,823	2,948,387
Credit card receivables		87,618	-	(5,945)	81,673	87,355
Held-to-maturity financial assets:						
Government bonds		9,808,234	-	-	9,808,234	9,812,768
Financial institutions bonds		1,224,816	-	-	1,224,816	1,223,340
Corporate bonds and others		3,789,848	-	-	3,789,848	3,786,215
Other financial assets		9,149,590	(42,434)	(26,252)	9,080,904	9,102,615
	₩	275,461,473	383,662	(1,546,855)	274,298,280	274,505,133
Liabilities						
Deposits:						
Demand deposits	₩	101,742,731	-	-	101,742,731	101,742,731
Time deposits		125,787,781	-	-	125,787,781	125,659,179
Negotiable certificates of deposits		7,478,278	-	-	7,478,278	7,517,777
Note discount deposits		3,423,459	-	-	3,423,459	3,423,320
CMA (*1)		4,197,146	-	-	4,197,146	4,197,146
Others		24,349	-	-	24,349	24,349
Borrowings:						
Call money		561,813	-	-	561,813	561,813
Bill sold		13,605	-	-	13,605	13,580
Bonds sold under repurchase agreements		297,599	-	-	297,599	297,599
Borrowings		13,744,713	(168)	-	13,744,545	13,725,468
Debt securities issued:						
Debt securities issued in Korean won		21,587,948	(29,698)	-	21,558,250	21,417,544
Debt securities issued in foreign currencies		3,925,454	(23,277)	-	3,902,177	3,918,403
Other financial liabilities		14,972,891	(2,915)	-	14,969,976	14,942,184
	₩	297,757,767	(56,058)	-	297,701,709	297,441,093

(*1) CMA: Cash management account deposits

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(b) Financial instruments measured at amortized cost (continued)

ii) The book value and the fair value of financial instruments measured at amortized cost as of December 31, 2017 and 2016 were as follows: (continued)

		December 31, 2016				
		Book value				
		Balance	Unamortized balance	Allowance	Total	Fair value
Assets						
Cash and due from banks:						
Cash	₩	1,763,335	-	-	1,763,335	1,763,335
Due from banks		12,721,790	-	(15,738)	12,706,052	12,706,052
Loans:						
Household loans		97,305,741	318,034	(286,220)	97,337,555	98,218,214
Corporate loans		116,475,754	57,587	(1,153,613)	115,379,728	116,028,276
Public and other loans		2,092,423	1,200	(7,683)	2,085,940	2,096,380
Loans to bank		4,625,545	-	(7,653)	4,617,892	4,612,515
Credit card receivables		18,281	-	(715)	17,566	18,202
Held-to-maturity financial assets:						
Government bonds		6,826,115	-	-	6,826,115	7,003,549
Financial institutions bonds		891,397	-	-	891,397	895,570
Corporate bonds and others		3,912,758	-	-	3,912,758	3,939,728
Other financial assets		12,015,126	(31,708)	(25,896)	11,957,522	11,979,492
	₩	258,648,265	345,113	(1,497,518)	257,495,860	259,261,313
Liabilities						
Deposits:						
Demand deposits	₩	92,650,456	-	-	92,650,456	92,650,456
Time deposits		122,858,599	-	-	122,858,599	122,864,014
Negotiable certificates of deposits		6,319,914	-	-	6,319,914	6,343,094
Note discount deposits		4,581,276	-	-	4,581,276	4,581,110
CMA		2,473,048	-	-	2,473,048	2,473,048
Others		26,799	-	-	26,799	26,800
Borrowings:						
Call money		807,268	-	-	807,268	807,268
Bill sold		12,427	-	-	12,427	12,407
Bonds sold under repurchase agreements		578,108	-	-	578,108	578,108
Borrowings		12,917,249	(723)	-	12,916,526	12,933,129
Debt securities issued:						
Debt securities issued in Korean won		17,259,843	(19,599)	-	17,240,244	17,307,246
Debt securities issued in foreign currencies		4,355,366	(17,180)	-	4,338,186	4,345,499
Other financial liabilities		12,708,705	(2,404)	-	12,706,301	12,683,889
	₩	277,549,058	(39,906)	-	277,509,152	277,606,068

(In millions of won)

4. **Financial risk management (continued)**

4-4. **Measurement of fair value (continued)**

(b) The financial instruments measured at amortized cost (continued)

iii) The fair value hierarchy of financial instruments which are not measured at fair value in the consolidated statement of financial position as of December 31, 2017 and 2016 were as follows:

		December 31, 2017			
		Level 1	Level 2	Level 3	Total
Assets					
Cash and due from banks:					
Cash	₩	1,749,897	-	-	1,749,897
Due from banks		-	16,912,425	-	16,912,425
Loans:					
Household loans		-	-	103,425,377	103,425,377
Corporate loans		-	-	123,254,416	123,254,416
Public and other loans		-	-	2,202,338	2,202,338
Loans to bank		-	848,225	2,100,162	2,948,387
Credit card receivables		-	-	87,355	87,355
Held-to-maturity financial assets:					
Government bonds		1,411,506	8,401,262	-	9,812,768
Financial institutions bonds		936,067	287,273	-	1,223,340
Corporate bonds and others		-	3,786,215	-	3,786,215
Other financial assets		-	6,832,567	2,270,048	9,102,615
	₩	4,097,470	37,067,967	233,339,696	274,505,133
Liabilities					
Deposits:					
Demand deposits	₩	-	101,742,731	-	101,742,731
Time deposits		-	-	125,659,179	125,659,179
Negotiable certificates of deposits		-	-	7,517,777	7,517,777
Note discount deposits		-	-	3,423,320	3,423,320
CMA		-	4,197,146	-	4,197,146
Others		-	-	24,349	24,349
Borrowings:					
Call money		-	561,813	-	561,813
Bill sold		-	-	13,580	13,580
Bonds sold under repurchase agreements		-	-	297,599	297,599
Borrowings		-	-	13,725,468	13,725,468
Debt securities issued:					
Debt securities issued in Korean won		-	18,877,627	2,539,917	21,417,544
Debt securities issued in foreign currencies		-	3,918,403	-	3,918,403
Other financial liabilities		-	5,642,142	9,300,042	14,942,184
	₩	-	134,939,862	162,501,231	297,441,093

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(b) The financial instruments measured at amortized cost (continued)

iii) The fair value hierarchy of financial instruments which are not measured at fair value in the consolidated statement of financial position as of December 31, 2017 and 2016 were as follows: (continued)

		December 31, 2016			
		Level 1	Level 2	Level 3	Total
Assets					
Cash and due from banks:					
Cash	₩	1,763,335	-	-	1,763,335
Due from banks		-	12,706,052	-	12,706,052
Loans:					
Household loans		-	-	98,218,214	98,218,214
Corporate loans		-	-	116,028,276	116,028,276
Public and other loans		-	-	2,096,380	2,096,380
Loans to bank		-	2,020,837	2,591,678	4,612,515
Credit card receivables		-	-	18,202	18,202
Held-to-maturity financial assets:					
Government bonds		2,017,133	4,986,416	-	7,003,549
Financial institutions bonds		600,846	294,724	-	895,570
Corporate bonds and others		-	3,939,728	-	3,939,728
Other financial assets		-	9,882,608	2,096,884	11,979,492
	₩	4,381,314	33,830,365	221,049,634	259,261,313
Liabilities					
Deposits:					
Demand deposits	₩	-	92,650,456	-	92,650,456
Time deposits		-	-	122,864,014	122,864,014
Negotiable certificates of deposits		-	-	6,343,094	6,343,094
Note discount deposits		-	-	4,581,110	4,581,110
CMA		-	2,473,048	-	2,473,048
Others		-	-	26,800	26,800
Borrowings:					
Call money		-	807,268	-	807,268
Bill sold		-	-	12,407	12,407
Bonds sold under repurchase agreements		-	-	578,108	578,108
Borrowings		-	-	12,933,129	12,933,129
Debt securities issued:					
Debt securities issued in Korean won		-	14,867,524	2,439,722	17,307,246
Debt securities issued in foreign currencies		-	4,345,499	-	4,345,499
Other financial liabilities		-	4,741,882	7,942,007	12,683,889
	₩	-	119,885,677	157,720,391	277,606,068

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(b) Financial instruments measured at amortized cost (continued)

iv) For financial instruments not measured at fair value in the statement of financial position but for which the fair value is disclosed, valuation techniques and inputs used in measuring fair value of financial instruments classified as level 2 or level 3 as of December 31, 2017 and 2016 were as follows.

	December 31, 2017				
Level	Type of financial instrument		Fair value (*1)	Valuation technique	Inputs
Level 2	Held-to-maturity financial assets	₩	12,474,750		Discount rate
Level 3	Loans		231,069,648	Discounted cash flow	Discount rate, Credit spread, Prepayment rate
	Other financial assets		2,270,048		Discount rate
		₩	245,814,446		
Level 2	Debt securities issued	₩	22,796,030		Discount rate
Level 3	Deposits (*1)		135,627,081		Discount rate
	Borrowings (*1)		8,849,302	Discounted cash flow	Discount rate
	Debt securities issued		2,539,917		Discount rate, Regression coefficient, Correlation coefficient
	Other financial liabilities		9,300,042		Discount rate
		₩	179,112,372		

	December 31, 2016				
Level	Type of financial instrument		Fair value (*1)	Valuation technique	Inputs
Level 2	Held-to-maturity financial assets	₩	9,220,868		Discount rate
Level 3	Loans		218,952,750	Discounted cash flow	Discount rate, Credit spread, Prepayment rate
	Other financial assets		2,096,884		Discount rate
		₩	230,270,502		
Level 2	Debt securities issued	₩	19,123,023		Discount rate
Level 3	Deposits (*1)		133,251,903		Discount rate
	Borrowings (*1)		7,783,129	Discounted cash flow	Discount rate
	Debt securities issued		2,439,722		Discount rate, Regression coefficient, Correlation coefficient
	Other financial liabilities		7,942,007		Discount rate
		₩	170,629,784		

(*1) The amounts, which were not evaluated by the valuation technique, are not included and disclosed because the carrying amount is the reasonable approximation of fair value.

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(c) Deferred day one profit or loss for the years ended December 31, 2017 and 2016 were as follows:

		2017			
		Beginning balance	Deferred	Amortization	nding balance
Financial liabilities designated at fair value through profit or loss	₩	(12)	-	12	-
Equity swap liabilities		12	-	(12)	-

		2016			
		Beginning balance	Deferred	Amortization	Ending balance
Financial liabilities designated at fair value through profit or loss	₩	(39)	-	27	(12)
Equity swap liabilities		38	-	(26)	12

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(d) Classification by category of financial instruments

Financial assets and liabilities were measured at fair value or amortized cost. The financial instruments measured at fair value or amortized costs were measured in accordance with the Group's valuation methodologies, which were described in Note 3.

The carrying amounts of each category of financial instruments as of December 31, 2017 and 2016 were as follows:

		December 31, 2017					
		Financial assets at fair value through profit or loss	Available-for-sale financial assets	Held-to-maturity financial assets	Loans and receivables	Derivatives held for hedging	Total
Assets							
Due from banks	₩	-	-	-	16,912,425	-	16,912,425
Trading assets		11,216,398	-	-	-	-	11,216,398
Derivative assets		2,593,867	-	-	-	10,223	2,604,090
Loans		-	-	-	231,732,156	-	231,732,156
Available-for-sale financial assets		-	32,495,541	-	-	-	32,495,541
Held-to-maturity financial assets		-	-	14,822,898	-	-	14,822,898
Other financial assets		-	-	-	9,080,904	-	9,080,904
	₩	13,810,265	32,495,541	14,822,898	257,725,485	10,223	318,864,412

		Trading liabilities	Financial liabilities measured at amortized cost	Derivatives held for hedging	Total
Liabilities					
Deposits	₩	-	242,653,744	-	242,653,744
Trading liabilities		434,586	-	-	434,586
Derivative liabilities		2,472,421	-	520,515	2,992,936
Borrowings		-	14,617,562	-	14,617,562
Debt securities issued		-	25,460,427	-	25,460,427
Other financial liabilities		-	14,969,976	-	14,969,976
	₩	2,907,007	297,701,709	520,515	301,129,231

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(d) Classification by category of financial instruments (continued)

		December 31, 2016					
		Financial assets at fair value through profit or loss	Available-for-sale financial assets	Held-to-maturity financial assets	Loans and receivables	Derivatives held for hedging	Total
Assets							
Due from banks	₩	-	-	-	12,706,052	-	12,706,052
Trading assets		11,270,758	-	-	-	-	11,270,758
Derivative assets		2,558,552	-	-	-	20,569	2,579,121
Loans		-	-	-	219,438,681	-	219,438,681
Available-for-sale financial assets		-	27,814,583	-	-	-	27,814,583
Held-to-maturity financial assets		-	-	11,630,270	-	-	11,630,270
Other financial assets		-	-	-	11,957,522	-	11,957,522
	₩	13,829,310	27,814,583	11,630,270	244,102,255	20,569	297,396,987

		Trading liabilities	Financial liabilities designated at fair value through profit or loss	Financial liabilities measured at amortized cost	Derivatives held for hedging	Total
Liabilities						
Deposits	₩	-	-	228,910,092	-	228,910,092
Trading liabilities		485,995	-	-	-	485,995
Financial liabilities designated at fair value through profit or loss		-	6,282	-	-	6,282
Derivative liabilities		2,448,597	-	-	336,795	2,785,392
Borrowings		-	-	14,314,329	-	14,314,329
Debt securities issued		-	-	21,578,430	-	21,578,430
Other financial liabilities		-	-	12,706,301	-	12,706,301
	₩	2,934,592	6,282	277,509,152	336,795	280,786,821

(In millions of won)

4. Financial risk management (continued)

4-4. Measurement of fair value (continued)

(e) Financial instruments income and costs by category for the years ended December 31, 2017 and 2016 were as follows:

		2017					
		Interest income (expense)	Fees and commission income (expense)	Impairment loss	Others	Total	Other comprehensive income (loss)
Trading assets	₩	181,653	8,795	-	(136,955)	53,493	-
Available-for-sale financial assets		487,712	-	(178,228)	266,950	576,434	(131,022)
Held-to-maturity financial assets		355,696	-	-	-	355,696	-
Loans and receivables		7,098,340	164,801	(481,159)	40,511	6,822,493	-
Trading liabilities		-	(96)	-	-	(96)	-
Financial liabilities designated at fair value through profit or loss		-	-	-	(43)	(43)	-
Financial liabilities measured at amortized cost		(3,131,350)	(58)	-	194,559	(2,936,849)	90,727
Net derivatives held for hedging		-	-	-	(200,836)	(200,836)	6,626
	₩	4,992,051	173,442	(659,387)	164,186	4,670,292	(33,669)

		2016					
		Interest income (expense)	Fees and commission income (expense)	Impairment loss	Others	Total	Other comprehensive income (loss)
Trading assets	₩	168,205	6,782	-	(10,911)	164,076	-
Available-for-sale financial assets		454,557	-	(82,103)	502,541	874,995	(320,496)
Held-to-maturity financial assets		324,128	-	-	-	324,128	-
Loans and receivables		6,749,311	234,039	(656,433)	20,576	6,347,493	-
Trading liabilities		-	(72)	-	-	(72)	-
Financial liabilities designated at fair value through profit or loss		-	-	-	(206)	(206)	-
Financial liabilities measured at amortized cost		(3,192,080)	(120)	-	240,602	(2,951,598)	(59,168)
Net derivatives held for hedging		-	-	-	(250,133)	(250,133)	4,775
	₩	4,504,121	240,629	(738,536)	502,469	4,508,683	(374,889)

4. Financial risk management (continued)

4-5. Capital risk management

Capital regulations applicable to banks were adopted in 1988, which focused primarily on capital adequacy and asset soundness as a measure of risk. Building upon the initial Basel Capital Accord of 1988, capital regulations were developed to reflect additional risks as well. For the purpose of improving risk management and increasing capital adequacy of banks, capital adequacy standards based on the new Basel Capital Accord (Basel III) was implemented by the Financial Services Commission regulations beginning in December 1, 2013. Under these regulations, all domestic banks including the Group were required to maintain a capital adequacy ratio of 8% or above and report whether the Group meet the capital adequacy ratio to the Financial Services Commission.

Under *the Banking Act*, the capital of a bank is divided into two categories.

(a) Tier 1 capital (Common equity Tier 1 capital + Additional Tier 1 capital)
i) Common equity Tier 1 capital: Common equity Tier 1 capital consists of capital stock, capital surplus, retained earnings (excluding regulatory reserve for loan loss), accumulated other comprehensive income, other disclosed reserves, and non-controlling interests that meet certain criteria.
ii) Additional Tier 1 capital: Additional Tier 1 capital consists of equity instrument that meet certain criteria for perpetual nature of the equity instrument, any related capital surplus, instruments issued by consolidated subsidiaries of the Bank and held by third parties that meet certain criteria.

(b) Tier 2 capital (Supplementary capital)
Tier 2 capital consists of instruments that meet certain criteria for loss absorption in case of liquidation, any related capital surplus, and instruments issued by consolidated subsidiaries of the Bank and held by third parties that meet certain criteria.

The capital adequacy ratio of the Group is calculated by ratios of Tier 1 and Tier 2 capital (less any capital deductions) to risk-weighted assets. Pursuant to Basel III, operational risk, such as inadequate procedures, loss risk by employees, internal systems, occurrence of unexpected events, as well as credit risk and market risk, is taken into account in calculating the risk-weighted assets.

The Group evaluates and manages the capital adequacy ratio pursuant to internally developed standards. It means that the Group assesses whether the level on ratio of available capital to economic capital is sufficient, or not. The Group manages the economic adequacy by the amount of each risk type including credit, market, operation, interest rate, liquidity, concentration, and foreign currency settlement risk, as well as the total amounts of all of those.

(In millions of won)

4. Financial risk management (continued)

4-5. Capital risk management (continued)

Details of capital categories and the capital adequacy ratio of the Group as of December 31, 2017 and 2016 were as follows:

Category		December 31, 2017	December 31, 2016
Capital:			
Common equity Tier 1 capital	₩	20,891,478	19,913,369
Additional Tier 1 capital		669,927	472,121
Tier 1 capital		21,561,405	20,385,490
Tier 2 capital		3,829,348	3,953,215
	₩	25,390,753	24,338,705
Risk-weighted assets			
Credit risk-weighted assets (*1)	₩	146,784,021	139,364,140
Market risk-weighted assets		6,802,866	6,452,075
Operating risk-weighted assets		9,287,919	9,211,163
	₩	162,874,806	155,027,378
Capital adequacy ratio:			
Common equity Tier 1 capital ratio		12.83%	12.85%
Tier 1 capital ratio		13.24%	13.15%
Tier 2 capital ratio		2.35%	2.55%
Total capital ratio		15.59%	15.70%

(*1) Insufficient capital under capital floor is included in credit risk-weighted assets.

Pursuant to related regulations, the Group shall maintain the total capital ratio at 8.0% or above, Tier 1 capital ratio at 6.0% or above and common equity capital ratio at 4.5% or above. In 2016, the minimum regulatory BIS capital requirement to be met by 2019 was raised to 14% due to the enforcement of Basel III capital regulations. This is due to the additions of capital conservation buffer (2.5%), additional capital buffer for Domestic Systemically Important Bank ("D-SIB") (1.0%) and countercyclical capital buffer (2.5%) to the existing minimum capital ratio of 8.0%. Capital conservation buffer and additional capital buffer for D-SIB will be adjusted upwards by 25% per year through 2019 based on transitional arrangements. The addition of countercyclical capital buffer can be used up to a maximum of the buffer rate of 2.5% in a period of excess aggregate credit growth. The minimum regulatory BIS capital ratio to be complied with as of the end of 2017 is 9.75%, which is due to the increases of 1.25% for capital conservation buffer, 0.5% for additional capital buffer for D-SIB, and 0% for countercyclical capital buffer, respectively.

(In millions of won)

4. Financial risk management (continued)

4-6. Transaction as a transfer of financial instrument

(a) Transfers financial assets that were not derecognized

i) Bonds sold under repurchase agreements as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Transferred asset:			
Available-for-sale financial assets	₩	147,562	223,790
Held-to-maturity financial assets		615,352	489,204
	₩	762,914	712,994
Associated liabilities:			
Bonds sold under repurchase agreements	₩	297,599	578,108

ii) Securities loaned as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016	Lender
Government bonds	₩	278,956	40,186	Korea Securities Finance Corp., Korea Securities Depository.
Financial institutions bonds		319,580	260,014	Korea Securities Finance Corp., Korea Securities Depository
	₩	598,536	300,200	

(b) Financial instruments that were qualified for derecognition but under continuing involvement.

There are no financial assets that meets the conditions of derecognition and in which the Group has continuing involvement as of December 31, 2017 and 2016.

(In millions of won)

4. Financial risk management (continued)

4-7. Offsetting financial assets and financial liabilities

Details of financial assets and financial liabilities subject to offsetting, enforceable master netting agreements and similar agreements as of December 31, 2017 and 2016 were as follows:

		December 31, 2017					
		Gross amounts of recognized financial assets and liabilities	Gross amounts of recognized financial assets and liabilities set off in the statement of financial position	Net amounts of financial assets and liabilities presented in the statement of financial position	Related amounts not set off in the statement of financial position		Net amount
					Financial instruments	Cash collateral received	
Financial assets							
Derivative assets (*1)	₩	2,598,157	-	2,598,157	5,488,818	271,805	1,054,938
Other financial assets (*1)		4,217,404	-	4,217,404			
Bonds sold under repurchase agreements related collateral of securities (*2)		434,631	-	434,631	297,599	-	137,032
Bonds purchased under resale agreement (Loans) (*2)		3,421,457	-	3,421,457	3,421,457	-	-
Securities lent (*2)		598,536	-	598,536	598,536	-	-
Domestic exchange settlements receivables (*3)		33,071,878	30,199,944	2,871,934	-	-	2,871,934
Receivables from disposal of securities, etc. (*4)		15,567	1,152	14,415	-	-	14,415
	₩	44,357,630	30,201,096	14,156,534	9,806,410	271,805	4,078,319
Financial liabilities							
Derivative liabilities (*1)	₩	2,954,649	-	2,954,649	5,553,780	-	1,060,514
Other financial liabilities (*1)		3,659,645	-	3,659,645			
Bonds sold under repurchase agreements (Borrowings) (*2)		297,599	-	297,599	297,599	-	-
Domestic exchange settlement payables (*3)		31,883,393	30,199,944	1,683,449	1,683,449	-	-
Payable from purchase of securities, etc. (*4)		1,519	1,152	367	326	-	41
	₩	38,796,805	30,201,096	8,595,709	7,535,154	-	1,060,555

(*1) The Group has certain derivative transactions subject to the ISDA (International Swaps and Derivatives Association) agreement. According to the ISDA agreement, when credit events (e.g. default) of counterparties occur, the net amount after offsetting the amounts obligated by each party is settled.

(*2) Resale and repurchase agreement, securities borrowing and lending agreement are also similar to ISDA agreement with respect to enforceable netting agreements.

(*3) The Group has legally enforceable right to set off and settles financial assets and liabilities on a net basis. Therefore, domestic exchanges settlement receivables (payables) are recorded on a net basis in the consolidated statements of financial position.

(*4) Receivables and payables related to settlement of purchase and disposition of enlisted securities are offset and the net amount is presented in the consolidated statement of financial position because the Group currently has a legally enforceable right to set off the recognized amounts and intends to settle on a net basis. The effect of offsetting due to the establishment of 'Central Counter Party ("CCP") system' is included in the amount.

(In millions of won)

4. Financial risk management (continued)

4-7. Offsetting financial assets and financial liabilities (continued)

		December 31, 2016					
		Gross amounts of recognized financial assets and liabilities	Gross amounts of recognized financial assets and liabilities set off in the statement of financial position	Net amounts of financial assets and liabilities presented in the statement of financial position	Related amounts not set off in the statement of financial position		Net amount
					Financial instruments	Cash collateral received	
Financial assets							
Derivative assets (*1)	₩	2,569,683	-	2,569,683	4,950,273	287,143	1,378,112
Other financial assets (*1)		4,045,845	-	4,045,845			
Bonds sold under repurchase agreements related collateral of securities (*2)		712,994	-	712,994	578,108	-	134,886
Bonds purchased under resale agreement (Loans) (*2)		3,475,156	-	3,475,156	3,475,156	-	-
Securities lent (*2)		300,200	-	300,200	300,200	-	-
Domestic exchange settlements receivables (*3)		30,365,320	24,299,035	6,066,285	-	-	6,066,285
Receivables from disposal of securities, etc. (*4)		1,891	494	1,397	-	-	1,397
	₩	41,471,089	24,299,529	17,171,560	9,303,737	287,143	7,580,680
Financial liabilities							
Derivative liabilities (*1)	₩	2,774,650	-	2,774,650	4,950,273	467,195	1,011,154
Other financial liabilities (*1)		3,653,972	-	3,653,972			
Bonds sold under repurchase agreements (Borrowings) (*2)		578,108	-	578,108	578,108	-	-
Domestic exchange settlement payables (*3)		25,219,267	24,299,035	920,232	920,232	-	-
Payable from purchase of Securities, etc. (*4)		499	494	5	5	-	-
	₩	32,226,496	24,299,529	7,926,967	6,448,618	467,195	1,011,154

(*1) The Group has certain derivative transactions subject to the ISDA (International Swaps and Derivatives Association) agreement. According to the ISDA agreement, when credit events (e.g. default) of counterparties occur, the net amount after offsetting the amounts obligated by each party is settled.

(*2) Resale and repurchase agreement, securities borrowing and lending agreement are also similar to ISDA agreement with respect to enforceable netting agreements.

(*3) The Group has legally enforceable right to set off and settles financial assets and liabilities on a net basis. Therefore, domestic exchanges settlement receivables (payables) are recorded on a net basis in the consolidated statements of financial position.

(*4) Receivables and payables related to settlement of purchase and disposition of enlisted securities are offset and the net amount is presented in the consolidated statement of financial position because the Group currently has a legally enforceable right to set off the recognized amounts and intends to settle on a net basis. The effect of offsetting due to the establishment of 'Central CounterParty ("CCP") system' is included in the amount.

5. Significant estimates and judgments

The preparation of consolidated financial statements requires the application of certain critical estimates and judgments relative to the future. Management's estimated outcomes may differ from actual outcomes. The change in an accounting estimate is recognized prospectively in profit or loss in the period of the change, if the change affects that period only, or the period of the change and future periods, if the change affects both.

(a) Income taxes

The Group is subject to tax laws from various countries. In the normal course of business, there are various types of transactions and different accounting methods that may add uncertainties to the decision of the final income taxes. The Group has recognized current and deferred taxes that reflect tax consequences based on the best estimates in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities. However, actual income taxes in the future may not be identical to the recognized deferred tax assets and liabilities, and this difference can affect current and deferred tax at the period when the final tax effect is determined.

(b) Fair value of financial instruments

The fair values of financial instruments which are not actively traded in the market are determined by using valuation techniques. The Group determines valuation techniques and assumptions based on significant market conditions at the end of each reporting period. Diverse valuation techniques are used to determine the fair value of financial instruments, from generic valuation techniques to internally developed valuation models that incorporate various types of assumptions and variables.

(c) Allowances for loan losses, guarantees and unused loan commitments

The Group determines and recognizes allowances for losses on loans through impairment testing and recognizes a provision for guarantees and unused loan commitments. The accuracy of provisions of credit losses is determined by the methodology and assumptions used for expected cash flows for individually assessed allowances and collectively assessed allowances for groups of loans, guarantees and unused loan commitments.

(d) Defined benefit obligation

The present value of a defined benefit obligation that is measured by actuarial valuation methods uses various assumptions which can change according to various elements. The rate used to discount post-employment benefit obligations is determined by reference to market yields at the end of the reporting period on high quality corporate bonds. The currency and term of the corporate bonds are consistent with the currency and estimated term of the post-employment benefit obligations. Actuarial gains and losses including experience adjustments and the effects of changes in actuarial assumptions are recognized in other comprehensive income. Other significant assumptions related to defined benefit obligations are based on current market situations.

(e) Impairment of available-for-sale equity investments

When there is a significant or prolonged decline in the fair value of an investment in an equity instrument below its original cost, there is objective evidence that available-for-sale equity investments are impaired. In general, the Group considers the decline in the fair value of more than 30% against the original cost as a "significant decline" and the status when the market price for marketable equity less than the carrying amounts of instruments for a six consecutive months as a "prolonged decline".

(In millions of won)

6. Operating segments

(a) The general descriptions of the Group's operating segments as of December 31, 2017 and 2016 were as follows:

The Group has four reportable segments which are strategic business units. Each of these segments is providing different services and managed separately.

Description	Area of business
Retail banking	Loans to or deposits from individual customers, wealth management customers, and institutions such as hospitals, airports and schools.
Corporate banking	Loans to or deposits from corporations, including small or medium sized companies and businesses related to investment banking.
International group	Supervision of overseas subsidiaries and branch operations and other international businesses.
Others	Treasury management, trading of securities and derivatives, administration of bank operations and merchant banking account.

(b) The following table provides information of financial performance of each reportable operating segment for the years ended December 31, 2017 and 2016.

		2017					
		Retail banking	Corporate banking	International group	Others	Consolidation adjustments	Total
Net interest income (expense)	₩	2,823,851	1,418,209	462,686	290,274	(2,969)	4,992,051
Net fees and commission income (expense)		495,188	351,626	89,933	57,133	(2,805)	991,075
Net other expense (*1)		(2,296,934)	(619,909)	(133,484)	(706,532)	(21,904)	(3,778,763)
Operating income (expense)		1,022,105	1,149,926	419,135	(359,125)	(27,678)	2,204,363
Net non-operating income (expenses)		1,774	1,970	1,046	(45,173)	(7,539)	(47,922)
Share of profit of associates		-	-	-	-	1,306	1,306
Profit (loss) before income tax		1,023,879	1,151,896	420,181	(404,298)	(33,911)	2,157,747
Income tax expense		(140,915)	(165,589)	(85,320)	(47,971)	(6,719)	(446,514)
Profit (loss) for the year	₩	882,964	986,307	334,861	(452,269)	(40,630)	1,711,233
Attributable to:							
Equity holder of the Bank	₩	882,964	986,307	334,861	(452,269)	(40,871)	1,710,992
Non-controlling interests		-	-	-	-	241	241
	₩	882,964	986,307	334,861	(452,269)	(40,630)	1,711,233

(*1) Effects of hedging on net investments in foreign operations are included.

(In millions of won)

6. **Operating segments (continued)**

(b) The following table provides information of financial performance of each reportable operating segment for the years ended December 31, 2017 and 2016. (continued)

		2016					
		Retail banking	Corporate banking	International group	Others	Consolidation adjustments	Total
Net interest income (expense)	₩	2,753,459	1,110,564	365,800	274,423	(125)	4,504,121
Net fees and commission income (expense)		517,334	283,403	74,309	11,095	(1,643)	884,498
Net other income (expense) (*1)		(2,512,298)	(642,609)	(251,063)	(41,791)	18,120	(3,429,641)
Operating income		758,495	751,358	189,046	243,727	16,352	1,958,978
Net non-operating income (expenses)		11,448	4,544	(1,179)	71,279	(24,961)	61,131
Share of profit of associates		-	-	-	-	8,615	8,615
Profit before income tax		769,943	755,902	187,867	315,006	6	2,028,724
Income tax expense		(11,840)	(13,198)	(58,135)	(4,912)	(18)	(88,103)
Profit (loss) for the year	₩	758,103	742,704	129,732	310,094	(12)	1,940,621
Attributable to:							
Equity holder of the Bank	₩	758,103	742,704	129,732	310,094	(377)	1,940,256
Non-controlling interests		-	-	-	-	365	365
	₩	758,103	742,704	129,732	310,094	(12)	1,940,621

(*1) Effects of hedging on net investments in foreign operations are included.

(In millions of won)

6. Operating segments (continued)

(c) The following table provides information of net interest income of each reportable operating segment from external consumers and net interest income (expenses) between operating segments for the years ended December 31, 2017 and 2016.

		2017					
		Retail banking	Corporate banking	International group	Others	Consolidation adjustments	Total
Net interest income of each operating segment from external consumers	₩	2,883,406	1,208,508	497,506	402,631	-	4,992,051
Net interest income (expenses) between operating segments		(59,555)	209,701	(34,820)	(112,357)	(2,969)	-

		2016					
		Retail banking	Corporate banking	International group	Others	Consolidation adjustments	Total
Net interest income of each operating segment from external consumers	₩	2,927,414	885,938	394,061	296,708	-	4,504,121
Net interest income (expenses) between operating segments		(173,955)	224,626	(28,261)	(22,285)	(125)	-

(d) Financial information of geographical area

i) The following table provides information of operating income from external consumers by geographical area for the years ended December 31, 2017 and 2016.

		Operating revenue		Operating expenses		Operating income	
		2017	2016	2017	2016	2017	2016
Domestic	₩	20,083,129	15,718,353	18,226,009	14,015,643	1,857,120	1,702,710
Overseas		1,157,064	953,984	809,821	697,716	347,243	256,268
	₩	21,240,193	16,672,337	19,035,830	14,713,359	2,204,363	1,958,978

ii) The following table provides information of non-current assets by geographical area as of December 31, 2017 and 2016.

		December 31, 2017 (*1)	December 31, 2016 (*1)
Domestic	₩	2,767,584	2,836,506
Overseas		184,814	142,765
	₩	2,952,398	2,979,271

(*1) Non-current assets as of December 31, 2017 and 2016 include property and equipment, intangible assets and investment properties.

(In millions of won)

7. Cash and due from banks

(a) Cash and due from banks as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Cash	₩	1,749,897	1,763,335
Deposits in won:			
Reserve deposits		8,503,968	2,718,354
Others		1,869,847	3,767,363
		10,373,815	6,485,717
Deposits in foreign currencies:			
Deposits		4,056,086	3,784,019
Time deposits		2,233,200	2,370,700
Others		263,370	81,354
		6,552,656	6,236,073
Allowance for impairment		(14,046)	(15,738)
	₩	18,662,322	14,469,387

(b) Restricted due from banks as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Deposits in won:			
Reserve deposits	₩	8,503,968	2,718,354
Others		1,841,602	3,754,358
		10,345,570	6,472,712
Deposits in foreign currencies:			
Deposits		741,175	1,013,342
Time deposits		26,517	20,545
Others		4,031	725
		771,723	1,034,612
	₩	11,117,293	7,507,324

(In millions of won)

8. Trading assets

Trading assets as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Debt securities:			
Government bonds	₩	855,848	1,040,648
Financial institution bonds		2,301,848	2,067,814
Corporate bonds		1,483,933	1,291,174
Bills bought		2,677,766	3,016,745
CMA		3,157,475	1,793,312
Other		29,488	19,851
		10,506,358	9,229,544
Equity securities:			
Stocks		83,928	70,097
Beneficiary certificates		436,815	1,723,272
		520,743	1,793,369
Other:			
Gold/silver deposits		189,297	247,845
	₩	11,216,398	11,270,758

(In millions of won)

9. Derivatives

(a) The notional amounts of derivatives as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Foreign currency related			
Over the counter:			
Currency forwards	₩	86,940,859	82,556,281
Currency swaps		29,689,979	27,268,230
Currency options		1,156,619	1,205,825
		117,787,457	111,030,336
Exchange traded:			
Currency futures		48,213	70,093
		117,835,670	111,100,429
Interest rates related			
Over the counter:			
Interest rate swaps		26,310,593	32,028,409
Interest rate options		-	750,000
		26,310,593	32,778,409
Exchange traded:			
Interest rate futures		400,159	346,947
Interest rate swaps (*1)		30,158,662	22,141,755
		30,558,821	22,488,702
		56,869,414	55,267,111
Equity related			
Over the counter:			
Equity swaps		-	6,509
Equity options		426,915	563,454
		426,915	569,963
Exchange traded:			
Equity futures		5,871	2,080
Equity options		27,815	-
		33,686	2,080
		460,601	572,043
Commodity related			
Over the counter:			
Commodity forwards		128,955	193,066
Commodity options		-	539
		128,955	193,605
Hedge			
Fair value hedge:			
Interest rate swaps		7,948,422	7,491,505
Net investment hedge:			
Currency forwards		214,280	241,700
		8,162,702	7,733,205
	₩	183,457,342	174,866,393

(*1) The notional amount of derivatives which is settled in the 'Central Counter Party (CCP)' system.

(In millions of won)

9. Derivatives (continued)

(b) Fair values of derivative instruments as of December 31, 2017 and 2016 were as follows:

		December 31, 2017		December 31, 2016	
		Assets	Liabilities	Assets	Liabilities
Foreign currency related					
Over the counter:					
Currency forwards	₩	1,597,789	1,433,300	1,580,696	1,416,071
Currency swaps		830,658	864,623	705,350	754,387
Currency options		11,601	12,070	11,860	9,422
		2,440,048	2,309,993	2,297,906	2,179,880
Interest rates related					
Over the counter:					
Interest rate swaps		148,685	160,828	249,395	246,508
Interest rate options		-	-	7,154	5,133
		148,685	160,828	256,549	251,641
Equity related					
Over the counter:					
Equity swaps		-	-	44	19
Equity options		4,444	1,545	3,317	4,065
		4,444	1,545	3,361	4,084
Exchange traded:					
Equity options		33	55	-	-
		4,477	1,600	3,361	4,084
Commodity related					
Over the counter:					
Commodity forwards		657	-	715	12,971
Commodity options		-	-	21	21
		657	-	736	12,992
Hedge					
Fair value hedge:					
Interest rate swaps		8,433	518,948	15,185	333,651
Net investment hedge:					
Currency forwards		1,790	1,567	5,384	3,144
		10,223	520,515	20,569	336,795
	₩	2,604,090	2,992,936	2,579,121	2,785,392

(In millions of won)

9. Derivatives (continued)

(c) Gain or loss on valuation of derivatives for the years ended December 31, 2017 and 2016 were as follows:

		2017		2016	
		Gain	Loss	Gain	Loss
Foreign currency related					
Over the counter:					
Currency forwards	₩	1,564,305	1,578,777	1,294,171	1,405,389
Currency swaps		1,289,089	1,215,008	561,504	536,947
Currency options		12,574	6,906	14,383	4,761
		2,865,968	2,800,691	1,870,058	1,947,097
Interest rates related					
Over the counter:					
Interest rate swaps		124,250	136,690	125,087	117,001
Interest rate options		-	-	997	1,618
		124,250	136,690	126,084	118,619
Equity related					
Over the counter:					
Equity swaps		-	-	90	-
Equity options		2,026	1,426	755	2,099
		2,026	1,426	845	2,099
Exchange traded:					
Equity options		65	5	-	-
		2,091	1,431	845	2,099
Commodity related					
Over the counter:					
Commodity forwards		657	-	715	12,971
Commodity options		-	-	5	4
		657	-	720	12,975
Hedge					
Fair value hedge:					
Interest rate swaps		38,958	246,661	15,697	256,069
Net investment hedge:					
Currency forwards		3,580	4,232	-	2,535
		42,538	250,893	15,697	258,604
	₩	3,035,504	3,189,705	2,013,404	2,339,394

(In millions of won)

9. Derivatives (continued)

(d) Gain or loss on fair value hedges for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Hedged items	₩	193,090	237,112
Hedging instruments		(200,836)	(250,133)
	₩	(7,746)	(13,021)

(e) Hedge of net investment in foreign operations

For some of net investments in foreign operations, the hedge accounting is applied. The gain or loss on the hedging instruments which is reflected to overseas operations translation for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Borrowings in foreign currency	₩	82,565	(23,441)
Debt securities issued in foreign currency		8,162	(35,727)
Currency forwards		6,626	4,775
	₩	97,353	(54,393)

10. Loans

(a) Details of loans as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Household loans	₩	103,724,329	97,305,741
Corporate loans		123,835,486	116,475,754
Public and other loans		2,203,307	2,092,423
Loans to banks		2,961,877	4,625,545
Credit card receivables		87,618	18,281
		232,812,617	220,517,744
Deferred loan origination costs and fees		426,096	376,821
		233,238,713	220,894,565
Allowance for impairment		(1,506,557)	(1,455,884)
	₩	231,732,156	219,438,681

(In millions of won)

10. Loans (continued)

(b) Changes in allowance for impairment for the years ended December 31, 2017 and 2016 were as follows:

		2017					
			Loans				
		Due from banks	Household	Corporate	Others	Other assets	Total
Beginning balance	₩	15,738	286,220	1,153,613	16,051	25,896	1,497,518
Provision for (reversal of) allowance		(1,692)	137,754	339,452	5,015	630	481,159
Write-offs		-	(126,906)	(242,739)	(565)	(388)	(370,598)
Effect of discounting		-	-	(17,483)	-	-	(17,483)
Allowance related to loans transferred		-	(2,042)	(58,299)	(402)	-	(60,743)
Recoveries		-	41,108	74,446	35	493	116,082
Others (*1)		-	-	(98,701)	-	(379)	(99,080)
Ending balance	₩	14,046	336,134	1,150,289	20,134	26,252	1,546,855

		2016					
			Loans				
		Due from banks	Household	Corporate	Others	Other assets	Total
Beginning balance	₩	12,836	247,741	1,204,355	18,422	41,750	1,525,104
Provision for (reversal of) allowance		2,902	129,113	542,883	(1,761)	(16,704)	656,433
Write-offs		-	(119,770)	(642,105)	(558)	(582)	(763,015)
Effect of discounting		-	-	(24,167)	-	-	(24,167)
Allowance related to loans transferred		-	(2,731)	(37,703)	(95)	-	(40,529)
Recoveries		-	31,867	114,802	43	1,348	148,060
Others (*1)		-	-	(4,452)	-	84	(4,368)
Ending balance	₩	15,738	286,220	1,153,613	16,051	25,896	1,497,518

(*1) Other changes were due to debt restructuring, debt-equity swap, foreign exchange rate, etc.

(c) Changes in deferred loan origination costs for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Beginning balance	₩	376,821	342,684
Loan origination		214,996	217,907
Amortization		(165,721)	(183,770)
Ending balance	₩	426,096	376,821

(In millions of won)

11. Available-for-sale financial assets and held-to-maturity financial assets

(a) Details of available-for-sale financial assets and held-to-maturity financial assets as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Available-for-sale financial assets:			
Debt securities:			
Government bonds	₩	6,074,937	3,601,179
Financial institutions bonds		15,777,732	15,048,027
Corporate bonds		8,094,699	6,618,509
Others		11,801	13,043
		29,959,169	25,280,758
Equity securities (*1):			
Stocks		600,523	1,032,813
Equity investments		275,653	253,795
Beneficiary certificates		1,660,196	1,207,415
Others		-	39,802
		2,536,372	2,533,825
	₩	32,495,541	27,814,583
Held-to-maturity financial assets:			
Debt securities:			
Government bonds	₩	9,808,234	6,826,115
Financial institutions bonds		1,224,816	891,397
Corporate bonds		3,789,848	3,912,758
	₩	14,822,898	11,630,270

(*1) Equity securities with no quoted market prices in active markets and of which the fair value cannot be measured reliably were recorded at cost of W28,300 million, W26,989 million as of December 31, 2017 and 2016, respectively.

(b) Gain and loss on sale of available-for-sale financial assets for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Gain on sale of available-for-sale financial assets	₩	217,585	439,740
Loss on sale of available-for-sale financial assets		(21,740)	(28,310)
	₩	195,845	411,430

(In millions of won)

12. Property and equipment

(a) Details of property and equipment as of December 31, 2017 and 2016 were as follows:

		December 31, 2017		
		Acquisition cost	Accumulated depreciation	Book value
Land	₩	1,260,239	-	1,260,239
Buildings (*1)		845,742	(240,439)	605,303
Others		1,316,225	(1,125,892)	190,333
	₩	3,422,206	(1,366,331)	2,055,875

(*1) ₩ 666 million of government subsidy was deducted from book value.

		December 31, 2016		
		Acquisition cost	Accumulated depreciation	Book value
Land	₩	1,203,810	-	1,203,810
Buildings (*2)		825,503	(193,978)	631,525
Others		1,370,795	(1,162,571)	208,224
	₩	3,400,108	(1,356,549)	2,043,559

(*2) ₩ 300 million of government subsidy was deducted from book value.

(b) Changes in property and equipment for the years ended December 31, 2017 and 2016 were as follows:

		2017			
		Land	Buildings	Others	Total
Beginning balance	₩	1,203,810	631,525	208,224	2,043,559
Acquisitions (*1)(*2)(*3)		1,460	22,938	62,371	86,769
Disposals and write-offs (*4)		(5,487)	(357)	(2,146)	(7,990)
Depreciation		-	(38,616)	(81,458)	(120,074)
Amounts transferred from (to) investment property		62,456	(5,392)	-	57,064
Amounts transferred to non-current assets held for sale		(1,815)	(3,521)	-	(5,336)
Effects of foreign currency movements		(185)	(1,274)	3,342	1,883
Ending balance	₩	1,260,239	605,303	190,333	2,055,875

(*1) ₩14,285 million transferred from construction-in progress was included.
(*2) ₩1,761 million of provision for the asset retirement related to newly acquired assets was included.
(*3) ₩538 million from acquisition of retail business of ANZ Vietnam was included. (Note 46)
(*4) ₩847 million of write-off was included.

(In millions of won)

12. Property and equipment (continued)

(b) Changes in property and equipment for the years ended December 31, 2017 and 2016 were as follows (continued):

		2016			
		Land	Buildings	Others	Total
Beginning balance	₩	1,145,236	638,619	219,630	2,003,485
Acquisitions (*1)(*2)		-	17,068	79,425	96,493
Disposals and write-offs (*3)		(472)	(217)	(1,944)	(2,633)
Depreciation		-	(29,558)	(91,008)	(120,566)
Amounts transferred from investment properties		58,478	4,443	-	62,921
Amounts transferred from non-current assets held for sale		410	1	-	411
Effects of foreign currency movements		158	1,169	2,121	3,448
Ending balance	₩	1,203,810	631,525	208,224	2,043,559

(*1) ₩15,405 million transferred from construction-in progress was included.
(*2) ₩1,803 million of provision for the asset retirement related to newly acquired assets was included.
(*3) ₩927 million of write-off was included.

(c) Insured assets and liability insurance as of December 31, 2017 were as follows:

Type of insurance	Insured assets		Amount covered	Insurance company
Comprehensive insurance for financial institutions	Cash & securities	₩	20,000	Samsung Fire & Marine Insurance Co., Ltd., etc.
Property insurance	Real estate & movable properties for business purpose		933,239	Samsung Fire & Marine Insurance Co., Ltd., etc.
Burglary insurance	Cash & securities		60,000	Samsung Fire & Marine Insurance Co., Ltd., etc.
Compensation liability insurance for officers	-		50,000	Meritz Fire & Marine Insurance Co., Ltd., etc.
Compensation liability insurance for gas accident	Real estate		500	Meritz Fire & Marine Insurance Co., Ltd.
Compensation liability insurance for personal information protection	-		10,000	Hyundai Marine & Fire Insurance Co., Ltd., etc.
Compensation liability insurance for electronic financial transaction	-		2,000	Lotte Non-Life Insurance Co., Ltd.
Compensation liability insurance for casualty	Real estate		1,000	Samsung Fire & Marine Insurance Co., Ltd.
		₩	1,076,739	

Besides the insurances listed above, the Group also has automobile liability insurance, medical insurance for employees, and casualty insurance for protecting property and employees.

(In millions of won)

13. Intangible assets

(a) Changes in intangible assets for the years ended December 31, 2017 and 2016 were as follows:

		2017					
		Goodwill	Software	Development cost	Memberships	Other	Total
Beginning balance	₩	45,175	60,113	32,162	46,833	76,283	260,566
Acquisitions (*1)(*2)		42,103	13,171	22,904	4,977	39,726	122,881
Disposals		-	-	-	(4,788)	(245)	(5,033)
Amortization (*3)		-	(24,564)	(11,649)	-	(44,237)	(80,450)
Effects of foreign currency movements		-	397	-	(107)	(27)	263
Ending balance	₩	87,278	49,117	43,417	46,915	71,500	298,227

(*1) Goodwill was incurred as a result of acquisition of ANZ Vietnam retail business. (Note 46)
(*2) ₩5,061 million among acquisition cost of other intangible assets was accounted for as accounts payable.
(*3) ₩41,570 million among amortization cost of other intangible assets was included in other operating expenses.

		2016					
		Goodwill	Software	Development cost	Memberships	Other	Total
Beginning balance	₩	45,175	65,971	29,607	47,512	118,401	306,666
Acquisitions (*1)		-	19,720	13,716	788	5,653	39,877
Disposals		-	-	-	(1,344)	(67)	(1,411)
Impairment (*2)		-	-	-	(98)	-	(98)
Amortization (*3)		-	(25,917)	(11,161)	-	(47,779)	(84,857)
Effects of foreign currency movements		-	339	-	(25)	75	389
Ending balance	₩	45,175	60,113	32,162	46,833	76,283	260,566

(*1) ₩2,825 million among acquisition cost of other intangible assets was accounted for as accounts payable.
(*2) Memberships are intangible assets with indefinite useful lives, which consist of golf and resort memberships. The Group recognizes an impairment loss when the carrying amount is less than the quoted price in the relevant markets.
(*3) ₩45,006 million among amortization cost of other intangible assets was included in other operating expenses.

(b) Goodwill

i) The carrying amounts of goodwill allocated to each Cash-Generating Unit ("CGU") as of December 31, 2017 and 2016 were as follows:

CGU		December 31, 2017	December 31, 2016
PT Bank Shinhan Indonesia (*1)	₩	45,175	45,175
Shinhan Bank Vietnam Ltd. (*2)		42,103	
	₩	87,278	45,175

(In millions of won)

13. Intangible assets (continued)

(b) Goodwill (continued)

i) The carrying amounts of goodwill allocated to each Cash-Generating Unit ("CGU") as of December 31, 2017 and 2016 were as follows (continued):

(*1) On December 6, 2016, PT Bank Shinhan Indonesia merged PT Centratama Nasional Bank, a former subsidiary of the Bank. The name of the company after merger is 'PT Bank Shinhan Indonesia.'
(*2) On December 17, 2017, Shinhan Bank Vietnam Ltd. acquired the retail business of ANZ Vietnam in an effort to increase business competitiveness and a synergy effect in the banking business in Vietnam. As of December 31, 2017, management was in the process of performing identification of intangible assets and valuation of identifiable assets and liabilities for allocation of acquisition costs. As a result, goodwill is subject to change by the results of identification of intangible assets and valuation of identifiable assets and liabilities.

ii) Impairment test

The recoverable amounts of CGUs are determined on the basis of value-in-use calculations using discounted cash flow (DCF) model.

Management plans to perform an impairment test on goodwill of Shinhan Bank Vietnam Ltd. in 2018 after the completion of valuation of identifiable assets and liabilities. Impairment test results on goodwill of PT Bank Shinhan Indonesia were as follows:

ⓐ Valuation date and projection period
The recoverable amounts are measured as of June 30, 2017. The projection period used in value-in-use calculations is 9.5 years (July 2017 through December 2026) considering synergy effect of business combinations and the value-in-use after projection period is estimated on the assumption that the future cash flows will increase by perpetuity growth rate for every year.

ⓑ Discount rate and perpetuity growth rate
The discount rate reflects required rate of return and cost of capital regarding risk-free interest rate, market risk premium and the systemic risk of the Group.

The perpetuity growth rate is estimated based on the inflation rate. The details of discount rate and perpetuity growth rate used in measuring CGUs were as follows:

Discount rate	Permanent growth rate
12.20%	3.40%

ⓒ The key assumption of recovering amount of CGUs are rate of consumer price index (CPI) and scale of market and market share of PT Bank Shinhan Indonesia.

iii) The carrying amounts and recoverable amounts of the CGUs to which goodwill has been allocated as of June 30, 2017 were as follows:

		PT Bank Shinhan Indonesia
Recoverable amount	₩	477,187
Carrying amount		428,641
Recoverable amount in excess of carrying amount	₩	48,546

(In millions of won)

14. Investments in associates

(a) Investments in associates as of December 31, 2017 and 2016 were as follows:

Investees	Location	Reporting date	Ownership (%) December 31, 2017	Ownership (%) December 31, 2016
Aju Capital Co., Ltd. (*1)	Korea	-	-	12.85
BNP Paribas Cardif Life Insurance Co., Ltd. (*2)(*3)	Korea	September 30	14.99	14.99
Pohang TechnoPark 2PFV (*1)	Korea	-	-	14.90
Daewontos Co., Ltd. (*4)(*5)	Korea	December 31	36.33	36.33
Inhee Co., Ltd. (*2)(*4)	Korea	September 30	15.36	15.36
DAEGY Electrical Construction Co., Ltd. (*2)(*4)	Korea	September 30	27.45	27.45
YEONWOONG SYSTEM (*4)	Korea	December 31	21.77	21.77
DOODOO LOGITECH (*2)(*4)	Korea	September 30	27.96	27.96
Neoplux Technology Valuation Investment Fund (*2)	Korea	September 30	33.33	33.33
EQP Global Energy Infrastructure Private Equity Fund (*1)	Korea	-	-	22.64
JAEYOUNG SOLUTEC CO., LTD. (*2)(*4)(*6)	Korea	September 30	9.61	10.45
Partners 4th Growth Investment Fund (*2)	Korea	September 30	25.00	25.00
PSA 1st Fintech Private Equity Fund (*1)	Korea	-	-	20.00
KTB Newlake Global Healthcare PEF (*2)	Korea	September 30	20.00	20.00
Jaeyang Industry (*4)(*5)	Korea	March 31	25.90	25.90
Tigris-Aurum Fund1 (*2)	Korea	September 30	27.27	27.27
Treenkid (*7)	Korea	-	-	23.72
Chungyoung INC. (*4)(*5)	Korea	June 30	18.94	18.94
Semantic (*7)	Korea	-	-	19.25
DAEKWANG SEMICONDUCTOR Co., Ltd. (*4)(*5)	Korea	June 30	20.94	20.94
Branbuil Co., Ltd. (*4)(*5)	Korea	December 31	15.53	15.53
Songrim Co., Ltd. (*2)(*4)	Korea	September 30	35.34	-
Taihan Industrial System Co., Ltd. (*2)(*4)	Korea	September 30	28.29	-
ICSF (The Korea's Information Center for Savings & Finance) (*8)	Korea	December 31	32.26	-
Shinhan-Albatross Technology Investment Fund (*8)	Korea	December 31	33.33	-
Loggia (*2)(*4)	Korea	September 30	16.29	-
Quantum-Nvestor Fund No.1 (*2)(*8)	Korea	September 30	16.67	-
Lodestone 1st Private Equity Fund (*2) (*8)	Korea	September 30	17.38	-
Miraeequity-Incus Venture Business Fund No.4 (*2)(*8)	Korea	September 30	23.53	-
LB Technology Fund 1 (*2)(*8)	Korea	September 30	18.52	-
Shinhan-Neoplux Energy Newbiz Fund (*2)(*8)	Korea	September 30	23.33	-

14. Investments in associates (continued)

(a) Investments in associates as of December 31, 2017 and 2016 were as follows (continued):

(*1) These investees were sold and excluded from associates during the year ended December 31, 2017.
(*2) Financial statements as of September 30, 2017 were used for the equity method accounting since the financial statements as of December 31, 2017 were not available. Significant trades and events occurred within the period were properly reflected.
(*3) Although the ownership interest in BNP Paribas Cardif Life Insurance Co., Ltd. was less than 15%, the Group used the equity method accounting as the Group has significant influence over the investee through significant operating transactions.
(*4) The shares of the investees were acquired by debt-equity swap. The Group reclassified available-for-sale financial assets to investments in associates as the reorganization procedures were completed and now the Group can normally exercise its voting rights to the investees.
(*5) The latest financial statements available were used for the equity method accounting since the financial statements as of December 31, 2017 were not available. Significant trades and events occurred within the period were properly reflected.
(*6) Although the ownership interests in JAEYOUNG SOLUTEC CO., LTD. were less than 15%, the Group used the equity method accounting as the investee should consult with the Group when the investee decides major management decision such as dividends, business planning or business transfer.
(*7) The associates were excluded from associates due to filing for bankruptcy during the year ended December 31, 2017.
(*8) The Group newly acquired these associates during the year ended December 31, 2017.

(In millions of won)

14. Investments in associates (continued)

(b) Changes in investments in associates for the years ended December 31, 2017 and 2016 were as follows:

	2017								
Associates	Acquisition cost	Beginning balance	Acquisition (redemption)	Gain (loss) from disposal	Share of profit (loss) of associates	Share of other comprehensive income (loss) of associates	Dividends received	Impairment loss	Ending balance
Aju Capital Co., Ltd.	₩ 36,971	40,836	(62,507)	22,748	438	334	(1,849)	-	-
BNP Paribas Cardif Life Insurance Co., Ltd.	35,279	60,268	-	-	3,663	(11,024)	(255)	-	52,652
Pohang TechnoPark 2PFV	4,470	1,975	(4,470)	2,472	-	23	-	-	-
Daewontos Co., Ltd.	-	-	-	-	-	-	-	-	-
Inhee Co., Ltd.	-	215	-	-	(10)	-	-	-	205
DAEGY Electrical Construction Co., Ltd.	-	128	-	-	(19)	-	-	-	109
YEONWOONG SYSTEM	-	77	-	-	-	-	-	-	77
DOODOO LOGITECH	-	247	-	-	(84)	-	-	-	163
Neoplux Technology Valuation Investment Fund	13,068	7,526	5,400	-	1,564	490	(1,510)	-	13,470
EQP Global Energy Infrastructure Private Equity Fund	280	-	(280)	280	-	-	-	-	-
JAEYOUNG SOLUTEC CO., LTD. (*1)	6,238	5,736	-	-	(2,009)	121	-	-	3,848
Partners 4th Growth Investment Fund	14,100	4,555	9,220	-	(385)	-	-	-	13,390
PSA 1st Fintech Private Equity Fund	2,000	1,965	(2,000)	211	(38)	-	(138)	-	-
KTB Newlake Global Healthcare PEF	162	779	1,134	-	(144)	-	-	-	1,769
Jaeyang Industry	-	-	-	-	-	-	-	-	-
Tigris-Aurum Fund1	1,500	1,481	-	-	(45)	-	-	-	1,436
Treenkid	92	79	-	(79)	-	-	-	-	-
Chungyoung INC.	-	-	-	-	-	-	-	-	-
Semantic	249	249	-	213	(462)	-	-	-	-
DAEKWANG SEMICON DUCTOR Co., Ltd.	4,776	4,777	-	-	(952)	-	-	-	3,825
Branbuil Co., Ltd.	183	-	-	-	-	-	-	-	-
Songrim Co., Ltd.	11	-	11	-	37	-	-	-	48
Taihan Industrial System Co., Ltd.	-	-	-	-	-	-	-	-	-
ICSF(The Korea's Information Center for Savings & Finance)	300	-	300	-	-	-	-	(144)	156
Shinhan-Albatross Technology Investment Fund	2,000	-	2,000	-	(218)	-	-	-	1,782
Loggia	37	-	37	-	(11)	-	-	-	26
Quantum-Nvestor Fund No.1	1,000	-	1,000	-	(7)	-	-	-	993

(In millions of won)

14. Investments in associates (continued)

(b) Changes in investments in associates for the years ended December 31, 2017 and 2016 were as follows: (continued)

		2017								
Associates		Acquisition cost	Beginning balance	Acquisition (redemption)	Gain (loss) from disposal	Share of profit (loss) of associates	Share of other comprehensive income (loss) of associates	Dividends received	Impairment loss	Ending balance
Lodestone 1st Private Equity Fund		2,000	-	2,000	-	(8)	(1)	-	-	1,991
Miraeequity-Incus Venture Business Fund No.4		2,000	-	2,000	-	(4)	-	-	-	1,996
LB Technology Fund 1		1,000	-	1,000	-	-	-	-	-	1,000
Shinhan-Neoplux Energy Newbiz Fund		1,400	-	1,400	-	-	-	-	-	1,400
	₩	129,116	130,893	(43,755)	25,845	1,306	(10,057)	(3,752)	(144)	100,336

(*1) The market value of the investments in associates was ₩6,826 million as of December 28, 2017 based on the quoted market price.

(In millions of won)

14. Investments in associates (continued)

(b) Changes in investments in associates for the years ended December 31, 2017 and 2016 were as follows:

		2016							
Associates		Acquisition cost	Beginning balance	Acquisition (redemption)	Gain from disposal	Share of profit (loss) of associates	Share of other comprehensive income (loss) of associates	Dividends received	Ending balance
Aju Capital Co., Ltd. (*1)	₩	36,971	34,444	-	-	9,038	(58)	(2,588)	40,836
BNP Paribas Cardif Life Insurance Co., Ltd.		35,279	57,356	-	-	(2,516)	5,428	-	60,268
UAMCO., Ltd.		85,050	125,822	(102,775)	909	2,882	123	(26,961)	-
Pohang TechnoPark 2PFV		4,470	1,976	-	-	(1)	-	-	1,975
Daewontos Co., Ltd.		-	-	-	-	-	-	-	-
Inhee Co., Ltd.		-	254	-	-	(39)	-	-	215
DAEGY Electrical Construction., Ltd.		-	149	-	-	(21)	-	-	128
Kukdong Engineering & Construction Co., Ltd.		9,092	-	-	3,478	-	(3,478)	-	-
YEONWOONG SYSTEM		-	106	-	-	(29)	-	-	77
DOODOO LOGITECH		-	384	-	-	(137)	-	-	247
Neoplux Technology Valuation Investment Fund		7,668	1,993	5,668	-	765	-	(900)	7,526
EQP Global Energy Infrastructure Private Equity Fund		280	-	105	-	(105)	-	-	-
JAEYOUNG SOLUTEC CO., LTD. (*2)		6,238	6,238	-	-	(504)	2	-	5,736
Partners 4th Growth Investment Fund		4,880	1,800	3,080	-	(325)	-	-	4,555
PSA 1st Fintech Private Equity Fund		2,000	2,000	-	-	(35)	-	-	1,965
KTB Newlake Global Healthcare PEF		162	-	922	-	(143)	-	-	779
Jaeyang Industry		-	-	-	-	-	-	-	-
Tigris-Aurum Fund1		1,500	-	1,500	-	(19)	-	-	1,481
Treenkid		92	-	92	-	(13)	-	-	79
Chungyoung INC.		-	-	-	-	-	-	-	-
Semantic		249	-	249	-	-	-	-	249
DAEKWANG SEMICON DUCTOR Co., Ltd.		4,776	-	4,777	-	-	-	-	4,777
Branbuil Co., Ltd.		183	-	183	-	(183)	-	-	-
	₩	198,890	232,522	(86,199)	4,387	8,615	2,017	(30,449)	130,893

(*1) The market value of the investments in associates was ₩51,543 million as of December 29, 2016 based on the quoted market price.
(*2) The market value of the investments in associates was ₩10,466 million as of December 29, 2016 based on the quoted market price.

(In millions of won)

14. Investments in associates (continued)

(c) The condensed financial statements of associates as of December 31, 2017 and 2016 were as follows:

	December 31, 2017					
Associates	Assets	Liabilities	Operating revenue	Profit (loss) for the year	Other comprehensive income (loss)	Total comprehensive income (loss)
BNP Paribas Cardif Life Insurance Co., Ltd.	₩ 4,133,674	3,781,688	78,010	24,230	(73,495)	(49,265)
Daewontos Co., Ltd.	400	2,492	-	-	-	-
Inhee Co., Ltd.	10,019	8,678	4,685	(62)	-	(62)
DAEGY Electrical Construction Co., Ltd.	590	193	17	(57)	-	(57)
YEONWOONG SYSTEM	498	147	39	1	-	1
DOODOO LOGITECH	624	39	339	(271)	-	(271)
Neoplux Technology Valuation Investment Fund	40,692	283	5,895	4,691	1,471	6,162
JAEYOUNG SOLUTEC CO., LTD.	157,009	137,916	142,228	(22,756)	2,764	(19,992)
Partners 4th Growth Investment Fund	53,944	383	137	(1,540)	-	(1,540)
KTB Newlake Global Healthcare PEF	8,796	517	-	(719)	-	(719)
Jaeyang Industry	2,146	4,717	-	-	-	-
Tigris-Aurum Fund1	5,308	42	-	(165)	-	(165)
Chungyoung INC.	3,292	8,392	5,568	(693)	-	(693)
DAEKWANG SEMICON DUCTOR Co., Ltd.	29,069	10,806	13,929	(4,549)	-	(4,549)
Branbuil Co., Ltd.	1,944	2,451	-	-	-	-
Songrim Co., Ltd.	4,854	4,718	5,485	106	-	106
Taihan Industrial System Co., Ltd.	13,226	14,820	25,306	(1,112)	-	(1,112)
ICSF (The Korea's Information Center for Savings & Finance)	484	1	322	(20)	-	(20)
Shinhan-Albatross Technology Investment	5,527	182	37	(655)	-	(655)
Loggia	1,208	1,046	955	(68)	-	(68)
Quantum-Nvestor Fund No.1	5,989	31	2	(42)	-	(42)
Lodestone 1st Private Equity Fund	11,456	-	37	(46)	(8)	(54)
Miraeequity-Incus Venture Business Fund No.4	8,500	15	-	(15)	-	(15)
LB Technology Fund 1	5,400	-	-	-	-	-
Shinhan-Neoplux Energy Newbiz Fund	6,000	-	-	-	-	-
	₩ 4,510,649	3,979,557	282,991	(3,742)	(69,268)	(73,010)

(In millions of won)

14. **Investments in associates (continued)**

(c) The condensed financial statements of associates as of December 31, 2017 and 2016 were as follows: (continued)

	December 31, 2016					
Associates	Assets	Liabilities	Operating revenue	Profit (loss) for the year	Other comprehensive income (loss)	Total comprehensive income (loss)
Aju Capital Co., Ltd.	₩ 6,543,737	5,744,415	757,345	70,598	(458)	70,140
BNP Paribas Cardif Life Insurance Co., Ltd.	4,182,208	3,779,257	144,583	(16,706)	36,189	19,483
Pohang TechnoPark 2PFV	14,660	1,401	-	(4)	-	(4)
Daewontos Co., Ltd.	399	2,492	517	(624)	-	(624)
Inhee Co., Ltd.	10,713	9,310	3,135	(253)	-	(253)
DAEGY Electrical Construction., Ltd.	659	191	-	(76)	-	(76)
YEONWOONG SYSTEM	497	146	25	(135)	-	(135)
DOODOO LOGITECH	891	6	213	(609)	-	(609)
Neoplux Technology Valuation Investment Fund	22,577	-	3,441	2,295	-	2,295
EQP Global Energy Infrastructure Private Equity Fund	1	1,376	-	(1,842)	-	(1,842)
JAEYOUNG SOLUTEC CO.,LTD.	155,368	120,184	137,920	(7,095)	(614)	(7,709)
Partners 4th Growth Investment Fund	18,479	258	113	(1,300)	-	(1,300)
PSA 1st Fintech Private Equity Fund	9,825	-	-	(175)	-	(175)
KTB Newlake Global Healthcare PEF	3,805	478	-	(716)	-	(716)
Jaeyang Industry	2,146	4,717	212	(69)	-	(69)
Tigris-Aurum Fund1	5,431	-	-	(69)	-	(69)
Treenkid	1,193	859	325	(54)	-	(54)
Chungyoung INC.	2,341	6,753	-	-	-	-
Semantic	3,098	1,804	-	-	-	-
DAEKWANG SEMICON DUCTOR Co., Ltd.	35,204	12,392	-	-	-	-
Branbuil Co., Ltd.	2,177	2,870	-	-	-	-
	₩ 11,015,409	9,688,909	1,047,829	43,166	35,117	78,283

(In millions of won)

14. Investments in associates (continued)

(d) The reconciliation of associates' financial information presented to the carrying amount of the Group's interest in the associates as of December 31, 2017 and 2016 were as follows:

		December 31, 2017					
Associates		Net assets (A)	Proportion of ownership interest (B)	(A) x (B)	Unrealized income and expenses	Other adjustments	Carrying amount
BNP Paribas Cardif Life Insurance Co., Ltd.	₩	351,986	14.99%	52,798	(146)	-	52,652
Daewontos Co., Ltd. (*1)		(2,092)	36.33%	(760)	-	760	-
Inhee Co., Ltd.		1,341	15.36%	205	-	-	205
DAEGY Electrical Construction Co., Ltd.		397	27.45%	109	-	-	109
YEONWOONG SYSTEM		351	21.77%	77	-	-	77
DOODOO LOGITECH		585	27.96%	163	-	-	163
Neoplux Technology Valuation Investment Fund		40,409	33.33%	13,470	-	-	13,470
JAEYOUNG SOLUTEC CO., LTD. (*2)		17,484	9.61%	1,679	-	2,169	3,848
Partners 4th Growth Investment Fund		53,561	25.00%	13,390	-	-	13,390
KTB Newlake Global Healthcare PEF (*3)		8,279	20.00%	1,656	-	113	1,769
Jaeyang Industry (*4)		(2,571)	25.90%	(666)	-	666	-
Tigris-Aurum Fund1		5,266	27.27%	1,436	-	-	1,436
Chungyoung INC. (*4)		(5,100)	18.94%	(966)	-	966	-
DAEKWANG SEMICON DUCTOR Co., Ltd.		18,263	20.94%	3,825	-	-	3,825
Branbuil Co., Ltd. (*3)		(507)	15.53%	(79)	-	79	-
Songrim Co., Ltd.		136	35.34%	48	-	-	48
Taihan Industrial System Co., Ltd. (*3)		(1,594)	28.29%	(451)	-	451	-
ICSF (The Korea's Information Center for Savings & Finance)		483	32.26%	156	-	-	156
Shinhan-Albatross Technology Investment Fund		5,345	33.33%	1,782	-	-	1,782
Loggia		162	16.29%	26	-	-	26
Quantum-Nvestor Fund No.1		5,958	16.67%	993	-	-	993
Lodestone 1st Private Equity Fund		11,456	17.38%	1,991	-	-	1,991
Miraeequity-Incus Venture Business Fund No.4		8,485	23.53%	1,996	-	-	1,996
LB Technology Fund 1		5,400	18.52%	1,000	-	-	1,000
Shinhan-Neoplux Energy Newbiz Fund		6,000	23.33%	1,400	-	-	1,400
	₩	529,483		95,278	(146)	5,204	100,336

14. Investments in associates (continued)

(d) The reconciliation of associates financial information presented to the carrying amount of the Group's interest in the associates as of December 31, 2017 and 2016 were as follows: (continued)

(*1) Other adjustments represent the unrecognized share of accumulated losses resulting from the Group's discontinuing the use of the equity method since its interest has been reduced to zero by the accumulated losses of the investee.
(*2) Net assets do not include non-controlling interests. Other adjustments represent the difference between the cost of the investment and the Group's share in the net fair value of the investee's identifiable assets and liabilities on acquisition of the investment.
(*3) Other adjustments represent the difference between the cost of the investment and the Group's share in the net fair value of the investee's identifiable assets and liabilities on acquisition of the investment.
(*4) Other adjustments represent the difference between the cost of the investment and the Group's share in the net fair value of the investee's identifiable net assets on acquisition of the investment as well as the unrecognized share of accumulated losses resulting from the Group's discontinuing the use of the equity method since its interest has been reduced to zero by the accumulated losses of the investee.

(In millions of won)

14. Investments in associates (continued)

(d) The reconciliation of associates financial information presented to the carrying amount of the Group's interest in the associates as of December 31, 2017 and 2016 were as follows: (continued)

		December 31, 2016					
Associates		Net assets (A)	Proportion of ownership interest (B)	(A) x (B)	Unrealized income and expenses	Other adjustments	Carrying amount
Aju Capital Co., Ltd. (*1)	₩	749,882	12.85%	96,365	-	(55,529)	40,836
BNP Paribas Cardif Life Insurance Co., Ltd.		402,951	14.99%	60,443	(175)	-	60,268
Pohang TechnoPark 2PFV		13,260	14.90%	1,975	-	-	1,975
Daewontos Co., Ltd. (*2)		(2,092)	36.33%	(760)	-	760	-
Inhee Co., Ltd.		1,403	15.36%	215	-	-	215
DAEGY Electrical Construction., Ltd.		468	27.45%	128	-	-	128
YEONWOONG SYSTEM		351	21.77%	77	-	-	77
DOODOO LOGITECH		885	27.96%	247	-	-	247
Neoplux Technology Valuation Investment Fund		22,577	33.33%	7,526	-	-	7,526
EQP Global Energy Infrastructure Private Equity Fund (*2)		(1,375)	22.64%	(311)	-	311	-
JAEYOUNG SOLUTEC CO., LTD. (*3)		34,147	10.45%	3,567	-	2,169	5,736
Partners 4th Growth Investment Fund		18,221	25.00%	4,555	-	-	4,555
PSA 1st Fintech Private Equity Fund		9,825	20.00%	1,965	-	-	1,965
KTB Newlake Global Healthcare PEF (*4)		3,327	20.00%	666	-	113	779
Jaeyang Industry (*5)		(2,571)	25.90%	(666)	-	666	-
Tigris-Aurum Fund1		5,431	27.27%	1,481	-	-	1,481
Treenkid		334	23.72%	79	-	-	79
Chungyoung INC. (*4)		(4,412)	18.94%	(836)	-	836	-
Semantic		1,294	19.25%	249	-	-	249
DAEKWANG SEMICON DUCTOR Co., Ltd.		22,812	20.94%	4,777	-	-	4,777
Branbuil Co., Ltd. (*4)		(693)	15.53%	(108)	-	108	-
	₩	1,276,025		181,634	(175)	(50,566)	130,893

(*1) Net assets do not include non-controlling interests. Other adjustments represent cumulative impairment losses recognized in prior periods.
(*2) Other adjustments represent the unrecognized share of losses of an associate because the Group has stopped recognizing its share of losses of associate as the balance of the investment has been reduced to zero.
(*3) Net assets do not include non-controlling interests. Other adjustments represent the difference between the cost of the investment and the Group's share in the net fair value of the investee's identifiable assets and liabilities on acquisition of the investment.

(In millions of won)

14. Investments in associates (continued)

(d) The reconciliation of associates financial information presented to the carrying amount of the Group's interest in the associates as of December 31, 2017 and 2016 were as follows: (continued)

(*4) Other adjustments represent the difference between the cost of the investment and the Group's share in the net fair value of the investee's identifiable assets and liabilities on acquisition of the investment.

(*5) Other adjustments represent the difference between the cost of the investment and the Group's share in the net fair value of the investee's identifiable net assets on acquisition of the investment as well as the unrecognized share of accumulated losses resulting from the Group's discontinuing the use of the equity method since its interest has been reduced to zero by the accumulated losses of the investee.

(e) The unrecognized share of loss on investments in associates for the years ended December 31, 2017 and 2016 were as follows:

		December 31, 2017	
		Unrecognized share of income loss	Accumulated unrecognized share of loss
Daewontos Co., Ltd.	₩	-	(760)
Jaeyang Industry		-	(18)
Chungyoung INC.		(130)	(130)
	₩	(130)	(908)

		December 31, 2016	
		Unrecognized share of income loss	Accumulated unrecognized share of loss
Daewontos Co., Ltd.	₩	(226)	(760)
EQP Global Energy Infrastructure Private Equity Fund		(311)	(311)
Jaeyang Industry		(18)	(18)
	₩	(555)	(1,089)

(In millions of won)

15. Investment properties

(a) Investment properties as of December 31, 2017 and 2016 were as follows:

		December 31, 2017		
		Acquisition cost	Accumulated depreciation	Book value
Land	₩	435,722	-	435,722
Buildings		223,216	(60,642)	162,574
	₩	658,938	(60,642)	598,296

		December 31, 2016		
		Acquisition cost	Accumulated depreciation	Book value
Land	₩	506,638	-	506,638
Buildings		229,345	(60,837)	168,508
	₩	735,983	(60,837)	675,146

(b) Fair value of investment properties as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Investment properties (*1)	₩	686,811	773,511

(*1) Fair value of investment properties is estimated based on the recent market transactions and certain significant unobservable inputs. Accordingly, fair value of investment properties is classified as level 3.

(c) Income and expenses on investment properties for the years ended December 31, 2017 and 2016 were as follows

		2017	2016
Rental income	₩	25,169	23,185
Direct operating expenses for investment properties that generate rental income		5,600	5,798

(In millions of won)

16. Other assets

Other assets as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Unsettled trades and accounts receivable	₩	4,120,125	3,984,874
Domestic exchange settlement receivables		2,871,934	6,066,285
Guarantee deposits		1,024,763	1,040,801
Accrued income		1,051,311	837,531
Prepaid expense		99,179	62,819
Suspense payments		60,032	53,756
Sundry assets		92,178	86,839
Others		2,243	2,152
Present value discount		(42,434)	(31,708)
Allowance for impairment		(26,252)	(25,896)
	₩	9,253,079	12,077,453

17. Non-current assets held for sale

(a) Non-current assets held for sale as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Property and equipment	₩	7,534	4,923

The Group classified property and equipment which are highly expected to be sold within one year from December 31, 2017, as non-current assets held for sale.

(b) The cumulative income or loss recognized in other comprehensive income

There were no cumulative income or loss recognized in other comprehensive income relating to non-current assets held for sale as of December 31, 2017 and 2016.

(In millions of won)

18. Pledged assets

(a) Assets pledged as collateral as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Loans	₩	99,158	76,232
Securities (*1):			
Available-for-sale financial assets		595,373	1,225,722
Held-to-maturity financial assets		10,346,611	7,824,930
		10,941,984	9,050,652
Property and equipment (*2)		5,592	6,525
	₩	11,046,734	9,133,409

(*1) The carrying amounts of assets pledged as collateral that the transferees had the right to sell or repledge regardless of the Group's default as of December 31, 2017 and 2016 were ₩909,195 million and ₩1,209,161 million, respectively.
(*2) The amounts were based on the notification amount of pledge.

(b) The fair value of collateral held that the Group has the right to sell or repledge regardless of pledger's default as of December 31, 2017 and 2016 were as follows:

		December 31, 2017		December 31, 2016	
		Collateral held	Collateral sold or repledged	Collateral held	Collateral sold or repledged
Securities	₩	3,749,516	-	3,749,791	-

(In millions of won)

19. Financial liabilities designated at fair value through profit or loss

(a) Financial liabilities designated at fair value through profit or loss as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Deposits (*1)(*2)(*3)	₩	-	6,282

(*1) The Group has designated compound financial instruments involved the embedded derivatives at fair value through profit or loss in accordance with K-IFRS No.1039, *'Financial Instruments: Recognition and* Measurement'.
(*2) The carrying value of financial liabilities designated fair value through profit or loss was estimated by using option valuation model adopted by the Group.
(*3) There is no profit or loss recognized by the Group related to its own credit risk adjustments for the years ended December 31, 2017 and 2016.

(b) Contractual amounts due at maturity and carrying amounts of financial liabilities designated at fair value through profit or loss as of December 31, 2017 and 2016 were as follows:

		December 31, 2017		
		Contractual amount due at maturity	Carrying amounts	Difference
Deposits	₩	-	-	-

		December 31, 2016		
		Contractual amount due at maturity	Carrying amounts	Difference
Deposits	₩	6,247	6,282	(35)

(c) Net loss on financial liabilities designated at fair value through profit or loss for the years ended December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Deposits:			
Loss on valuation	₩	-	(97)
Loss on transaction		(43)	(109)
	₩	(43)	(206)

(In millions of won)

20. Deposits

Deposits as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Demand deposits:			
Korean won	₩	89,453,125	81,617,492
Foreign currencies		12,289,606	11,032,964
		101,742,731	92,650,456
Time deposits:			
Korean won		112,021,376	110,106,106
Foreign currencies		13,945,457	12,790,861
Gain on fair value hedge		(179,053)	(38,368)
		125,787,780	122,858,599
Negotiable certificates of deposits		7,478,278	6,319,914
Note discount deposits		3,423,459	4,581,276
CMA		4,197,146	2,473,048
Others		24,350	26,799
	₩	242,653,744	228,910,092

21. Trading liabilities

Trading liabilities as of December 31, 2017 and 2016 were as follows:

	December 31, 2017			December 31, 2016		
	Interest rate (%)		Amount	Interest rate (%)		Amount
Gold/silver deposits	-	₩	434,586	-	₩	485,995

(In millions of won)

22. Borrowings

Borrowings as of December 31, 2017 and 2016 were as follows:

	December 31, 2017		December 31, 2016	
	Interest rate (%)	Amount	Interest rate (%)	Amount
Call money:				
Korean won	-	₩ -	1.08~1.23	₩ 394,400
Foreign currencies	0.00~6.20	561,813	0.35~10.00	412,868
		561,813		807,268
Bill sold	0.65~1.63	13,605	0.65~1.52	12,427
Bonds sold under repurchase agreements:				
Korean won	0.00	903	0.80	8,152
Foreign currencies	1.69~6.00	296,696	1.42~6.29	569,956
		297,599		578,108
Borrowings in Korean won:				
Borrowings from Bank of Korea	0.50~0.75	2,873,706	0.50~0.75	2,621,345
Others	0.00~4.25	5,769,260	0.00~4.30	4,551,825
		8,642,966		7,173,170
Borrowings in foreign currencies:				
Overdraft due to banks	0.00	128,634	0.00	152,589
Borrowings from banks	0.24~9.25	3,737,367	0.24~3.95	3,678,949
Sub-lease	0.00~2.15	240,380	0.00~1.72	470,176
Others	1.45~7.90	995,366	1.02~1.18	1,442,365
		5,101,747		5,744,079
Deferred origination costs		(168)		(723)
		₩ 14,617,562		₩ 14,314,329

(In millions of won)

23. Debt securities issued

Debt securities issued as of December 31, 2017 and 2016 were as follows:

	December 31, 2017			December 31, 2016		
	Interest rate (%)		Amount	Interest rate (%)		Amount
Debt securities issued in Korean won:						
Debt securities issued	0.00~8.00	₩	18,861,594	0.00~8.00	₩	13,905,995
Subordinated debt securities issued	2.20~4.60		3,000,400	2.20~4.60		3,501,056
Loss on fair value hedges			(274,046)			(147,208)
Discount on debt securities issued			(29,698)			(19,599)
			21,558,250			17,240,244
Debt securities issued in foreign currencies:						
Debt securities issued	0.00~4.20		2,504,859	0.03~4.38		3,176,276
Subordinated debt securities issued	3.75~3.88		1,446,390	3.88		1,189,067
Loss on fair value hedges			(25,795)			(9,977)
Discount on debt securities issued			(23,277)			(17,180)
			3,902,177			4,338,186
		₩	25,460,427		₩	21,578,430

(In millions of won)

24. Defined benefit liabilities (assets)

(a) Defined benefit plan assets and liabilities

The Group provides a defined benefit plan for qualified employees. Plan assets are managed by trust companies, funds, and other similar companies that are subject to local regulations and each country's business environment.

Defined benefit plan assets and liabilities as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Present value of defined benefit obligations	₩	1,263,698	1,258,473
Fair value of plan assets		(1,294,013)	(1,208,370)
Defined benefit liabilities (assets)	₩	(30,315)	50,103
Defined benefit assets		(34,120)	-
Defined benefit liabilities		3,805	50,103

(b) Changes in the present value of defined benefit obligations for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Beginning balance	₩	1,258,473	1,173,709
Current service cost		128,079	136,566
Interest expense		40,998	37,947
Remeasurements (*1)(*2)		(106,466)	(39,969)
Effects of foreign currency movements		67	24
Benefits paid by the plan		(65,624)	(52,196)
Others		5,361	2,392
Past service cost		2,810	-
Ending balance	₩	1,263,698	1,258,473

(*1) Remeasurements for the years ended December 31, 2017 consist of ₩4,929 million of actuarial loss arising from changes in demographic assumptions, ₩78,228 million of actuarial gain arising from changes in financial assumptions and ₩33,167 million of actuarial gain arising from changes in experience adjustments, respectively.
(*2) Remeasurements for the years ended December 31, 2017 consist of ₩4,634 million of actuarial loss arising from changes in demographic assumptions, ₩8,347 million of actuarial gain arising from changes in financial assumptions and ₩36,256 million of actuarial gain arising from changes in experience adjustments, respectively.

(c) Changes in the fair value of plan assets for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Beginning balance	₩	1,208,370	1,018,940
Interest income		41,085	34,033
Remeasurements		(21,188)	(14,376)
Contributions paid into the plan		120,000	210,300
Benefits paid by the plan		(54,254)	(40,527)
Ending balance	₩	1,294,013	1,208,370

(In millions of won)

24. Defined benefit liabilities (assets) (continued)

(d) The amount of major categories of the fair value of plan assets as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Deposits	₩	1,275,313	1,180,374
Others		18,700	27,996
	₩	1,294,013	1,208,370

(e) Actuarial assumptions as of December 31, 2017 and 2016 were as follows:

	December 31, 2017	December 31, 2016	Descriptions
Discount rate	3.92%	3.4%	AA0 Corporate bond yields
Future salary increasing rate	2.63% + Upgrade rate	2.92%+ Upgrade rate	Average for last 5 years

(f) Sensitivity analysis

Sensitivity analysis of the present value fluctuations of defined benefit obligations as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	
		Change in present value when the factor rises by 100 basis points	Change in present value when the factor falls by 100 basis points
Discount rate	₩	(109,556)	126,150
Future salary increasing rate		126,712	(111,975)

		December 31, 2016	
		Change in present value when the factor rises by 100 basis points	Change in present value when the factor falls by 100 basis points
Discount rate	₩	(121,194)	141,533
Future salary increasing rate		140,935	(122,933)

(g) The weighted average durations of defined benefit obligations as of December 31, 2017 and 2016 were 9.33 years and 10.44 years, respectively.

(In millions of won)

25. Provisions

(a) Changes in provisions for the years ended December 31, 2017 and 2016 were as follows:

		2017					
		Asset retirement	Litigation	Unused credit	Guarantee	Others	Total
Beginning balance	₩	36,098	12,044	94,985	78,499	85,305	306,931
Provision (reversal)		(4,853)	423	1,739	2,084	(20,222)	(20,829)
Provision used		(2,132)	-	-	-	(21,464)	(23,596)
Foreign exchange movements		-	(617)	(3,483)	(4,458)	(52)	(8,610)
Others (*1)		1,761	-	-	3,666	-	5,427
Ending balance	₩	30,874	11,850	93,241	79,791	43,567	259,323

		2016					
		Asset retirement	Litigation	Unused credit	Guarantee	Others	Total
Beginning balance	₩	33,934	19,576	101,096	80,289	61,193	296,088
Provision (reversal)		2,255	(7,897)	(6,747)	4,222	40,155	31,988
Provision used		(1,894)	-	-	-	(16,103)	(17,997)
Foreign exchange movements		-	365	636	993	60	2,054
Others (*1)		1,803	-	-	(7,005)	-	(5,202)
Ending balance	₩	36,098	12,044	94,985	78,499	85,305	306,931

(*1) Other changes were due to originations and maturities of financial guarantees recognized initially at their fair value, effect of discount rate change and acquisition cost of new leased properties relating to asset retirement.

(b) Asset retirement obligation liabilities represent the estimated cost to restore the existing leased properties which were discounted to the present value using the appropriate discount rate at the end of the reporting period. Disbursements of such costs were expected to incur at the end of the lease contract. Such costs were reasonably estimated using the average lease period and the average restoration expenses. The average lease period was calculated based on the past ten-year historical data of the expired leases. The average restoration expense was calculated based on the actual costs incurred for the past three years using the three-year average inflation rate.

(In millions of won)

26. Other liabilities

Other liabilities as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Accounts payable	₩	4,162,381	3,938,413
Borrowing from trust account		4,052,608	3,443,287
Accrued expenses		2,444,803	2,333,120
Liability incurred by agency relationship		935,016	799,462
Domestic exchange settlement payables		1,683,449	920,232
Account for agency business of other institutions		600,774	494,278
Security deposits received		602,613	374,932
Foreign exchange settlement payables		223,436	226,920
Suspense payable		77,495	44,882
Unearned income		87,953	80,744
Withholding value-added tax and other taxes		88,222	61,073
Dividend payable		1,367	1,309
Sundry liabilities		57,773	86,645
Present value discount		(2,913)	(2,404)
	₩	15,014,977	12,802,893

(In millions of won)

27. Equity

(a) Equity as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Capital stock:			
Common stock	₩	7,928,078	7,928,078
Other equity instruments:			
Hybrid bonds		668,938	469,393
Capital surplus:			
Share premium		398,080	398,080
Others		5,084	5,084
		403,164	403,164
Capital adjustments:			
Stock options		782	(887)
Others		(4,089)	(63,728)
		(3,307)	(64,615)
Accumulated other comprehensive loss:			
Net change in fair value of available-for-sale financial assets		46,841	139,824
Share of other comprehensive income of associates, net		6,586	16,583
Foreign currency translation differences for foreign operations		(337,163)	(151,936)
Remeasurements of defined benefit plans		(207,036)	(280,916)
		(490,772)	(276,445)
Retained earnings:			
Legal reserve (*1)		1,675,077	1,497,370
Voluntary reserve (*2)		10,065,795	9,064,867
Other reserve (*3)		99,681	87,029
Unappropriated retained earnings (*4)		2,300,911	2,351,571
		14,141,464	13,000,837
Non-controlling interests		5,298	6,561
	₩	22,652,863	21,466,973

(*1) According to *the Article 40 of the Banking Act*, the Bank is required to appropriate an amount equal to a minimum of 10% of cash dividends paid for each accounting period as a legal reserve, until such reserve equals 100% of issued capital. The legal reserve is only available to reduce accumulated deficit or transfer to capital stock.

(*2) The amounts include regulatory reserve for loan loss based on separate financial statements of ₩1,754,773 million and ₩1,706,925 million as of December 31, 2017 and 2016, respectively. The amounts also include asset revaluation surplus of ₩355,898 million as of December 31, 2017 and 2016, respectively.

(*3) Other reserve was established according to the laws applicable to some oversea branches and it may be used only to reduce their deficit.

(*4) The amounts include difference between the regulatory reserve for loan loss based on separate financial statement and the regulatory reserve for loan loss based on consolidated financial statement of ₩26,074 million and ₩34,200 million as of December 31, 2017 and 2016, respectively. Provision for regulatory reserve for loan losses are ₩113,956 million and ₩47,566 million for the years ended December 31, 2017 and 2016, respectively.

(In millions of won, except for share data)

27. Equity (continued)

(b) Capital stock

Capital stock of the Bank as of December 31, 2017 and 2016 were as follows:

	December 31, 2017	December 31, 2016
Number of authorized shares	2,000,000,000 shares	2,000,000,000 shares
Par value per share in won	₩5,000	₩5,000
Number of issued shares outstanding	1,585,615,506 shares	1,585,615,506 shares

(c) Hybrid bonds

Hybrid bonds as of December 31, 2017 and 2016 were as follows:

			Book value		
Date of issuance	Date of maturity		December 31, 2017	December 31, 2016	Interest rate (%)
Hybrid bonds issued in Korean won:					
March 21, 2008	March 21, 2038	₩	119,878	119,878	7.30
March 25, 2008	March 25, 2038		49,947	49,947	7.30
June 7, 2013	June 7, 2043		299,568	299,568	4.63
June 29, 2017	Perpetual bond		129,701	-	3.33
June 29, 2017	Perpetual bond		69,844	-	3.81
		₩	668,938	469,393	
Dividends on hybrid bond holders		₩	29,857	45,691	
Weighted average interest rate (%)			5.23	6.45	

The above hybrid bonds are subject to early redemption option after five years or ten years from the date of issuance, and the maturity can be extended under the same condition at the maturity date. In addition, if no dividend is paid for common shares, the agreed interest is also not paid.

(In millions of won)

27. Equity (continued)

(d) Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2017 and 2016 were as follows:

		2017				
		Net change in fair value of available-for-sale financial assets	Share of other comprehensive income (loss) of associates, net	Foreign currency translation differences for foreign operations	Remeasurements of defined benefit plans	Total
Beginning balance	₩	139,824	16,583	(151,936)	(280,916)	(276,445)
Change due to fair value		(44,185)	-	-	-	(44,185)
Change due to other comprehensive income of associates		-	(10,043)	-	-	(10,043)
Change due to impairment		38,383	-	-	-	38,383
Change due to disposal		(119,348)	(14)	-	-	(119,362)
Effect of hedge accounting		1,241	-	97,353	-	98,594
Effect of foreign currency movements		(7,113)	-	(267,693)	-	(274,806)
Remeasurements of defined benefit plans		-	-	-	84,994	84,994
Amounts transferred from retained earnings			414	-	-	414
Effect of tax		38,039	(354)	(14,887)	(11,114)	11,684
Ending balance	₩	46,841	6,586	(337,163)	(207,036)	(490,772)

		2016				
		Net change in fair value of available-for-sale financial assets	Share of other comprehensive income of associates, net	Foreign currency translation differences for foreign operations	Remeasurements of defined benefit plans	Total
Beginning balance	₩	386,970	13,741	(160,274)	(300,385)	(59,948)
Change due to fair value		(83,447)	-	-	-	(83,447)
Change due to other comprehensive income of associates		-	2,016	-	-	2,016
Change due to impairment		26,259	-	-	-	26,259
Change due to disposal		(265,357)	-	-	-	(265,357)
Effect of hedge accounting		2,289	-	(54,393)	-	(52,104)
Effect of foreign currency movements		(240)	-	49,119	-	48,879
Remeasurements of defined benefit plans		-	-	-	25,593	25,593
Effect of tax		73,350	826	13,612	(6,124)	81,664
Ending balance	₩	139,824	16,583	(151,936)	(280,916)	(276,445)

(In millions of won, except for par value per share and dividend per share)

27. Equity (continued)

(e) Statements of appropriation of retained earnings for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
		Expected date of approval: March 21, 2018	Date of approval: March 22, 2017
Unappropriated retained earnings:			
Balance at beginning of year	₩	-	-
Interest on hybrid bond		(29,857)	(45,691)
Profit for the year		1,607,761	1,777,072
		1,577,904	1,731,381
Transfer from reserves:			
Voluntary reserve		7,676,276	6,723,196
Regulatory reserve for loan loss		-	-
		7,676,276	6,723,196
		9,254,180	8,454,577
Appropriation of retained earnings:			
Legal reserve		160,776	177,707
Regulatory reserve for loan loss		87,882	47,848
Other reserve		12,377	12,652
Voluntary reserves		8,453,145	7,676,276
Redemption of hybrid bond		-	60,094
Dividends on common stock		540,000	480,000
(Dividend per share in won: 2017 ₩340.56 (6.81%) 2016 ₩302.72 (6.05%))			
		9,254,180	8,454,577
Unappropriated retained earnings to be carried over to subsequent year	₩	-	-

These statements of appropriation of retained earnings were based on the separate financial statements of the Bank.

(f) Dividends

Dividends of common stock for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Number of issued shares outstanding		1,585,615,506	1,585,615,506
Par value per share in won	₩	5,000	5,000
Dividend rate per share		6.81%	6.05%
Dividend per share in won	₩	340.56	302.72

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(In millions of won, except for earnings per share)

27. Equity (continued)

(g) Dividends payout ratio

Dividends payout ratio for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Dividends	₩	540,000	480,000
Profit for the year (*1)		1,710,992	1,940,256
Dividends payout ratio to profit for the year		31.56%	24.74%
Profit for the year adjusted for regulatory reserve (*1)		1,597,036	1,892,690
Dividends pay out ratio to profit for the year adjusted for regulatory reserve for loan loss		33.81%	25.36%

(*1) Profit for the year and profit for the year adjusted for regulatory reserve for loan loss were the amount attributable to equity holder of the Group.

28. Regulatory reserve for loan loss

The Group should calculate and disclose regulatory reserve for loan loss, in accordance with *the Article 29-1 and 29-2 of Regulation on Supervision of Banking Business.*

(a) The regulatory reserve for loan loss as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Regulatory reserve for loan loss		1,788,691	1,741,125
Provision for regulatory reserve for loan loss		113,956	47,566
	₩	1,902,647	1,788,691

(b) Profit for the year adjusted for regulatory reserve for loan loss and earnings per share adjusted for regulatory reserve for loan loss for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Provision for regulatory reserve for loan loss	₩	113,956	47,566
Profit for the year adjusted for regulatory reserve for loan loss		1,597,277	1,893,055
Earnings per share adjusted for regulatory reserve in won	₩	989	1,165

(In millions of won)

29. Net interest income

(a) Net interest income for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Interest income:			
Cash and due from banks	₩	89,829	73,921
Trading assets		181,653	168,205
Available-for-sale financial assets		487,712	454,557
Held-to-maturity financial assets		355,696	324,128
Loans		6,948,483	6,581,065
Others		60,028	94,325
		8,123,401	7,696,201
Interest expense:			
Deposits		(2,411,147)	(2,516,627)
Borrowings		(207,404)	(162,393)
Debt securities issued		(490,006)	(470,765)
Others		(22,793)	(42,295)
		(3,131,350)	(3,192,080)
Net interest income	₩	4,992,051	4,504,121

(b) Interest income recognized on impaired financial assets for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Interest income	₩	16,371	24,167

(In millions of won)

30. Net fees and commission income

Net fees and commission income for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Fees and commission income:			
Credit placement fees	₩	55,124	69,953
Commission received as electronic charge receipt		141,646	136,180
Brokerage fees		107,773	90,547
Commission received as agency		324,489	308,596
Investment banking fees		53,621	47,348
Commission received in foreign exchange activities		179,567	164,680
Asset management fees from trust accounts		166,189	98,406
Guarantee fees		60,825	60,279
Others		94,640	85,631
		1,183,874	1,061,620
Fees and commission expense:			
Credit-related fees		(34,105)	(30,037)
Brand-related fees		(32,757)	(32,883)
Service-related fees		(17,450)	(14,573)
Trading and brokerage fees		(8,040)	(7,539)
Commission paid in foreign exchange activities		(32,258)	(29,899)
Others		(68,189)	(62,191)
		(192,799)	(177,122)
Net fees and commission income	₩	991,075	884,498

31. Dividend income

Dividend income for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Trading assets	₩	27,942	28,957
Available-for-sale financial assets		72,574	94,602
	₩	100,516	123,559

(In millions of won)

32. Net trading gain (loss)

Net trading gain (loss) for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Trading assets and trading liabilities			
Debt:			
Gain on valuation of debt securities	₩	1,577	3,044
Gain on sale of debt securities		15,214	28,977
Loss on valuation of debt securities		(36,934)	(34,816)
Loss on sale of debt securities		(19,779)	(23,403)
		(39,922)	(26,198)
Equity:			
Gain on valuation of equity securities		6,689	14,848
Gain on sale of equity securities		23,385	27,440
Loss on valuation of equity securities		(7,509)	(3,504)
Loss on sale of equity securities		(13,056)	(16,851)
		9,509	21,933
Gold/silver:			
Gain on valuation of gold/silver deposits		6,735	18,336
Gain on sale of gold/silver deposits		2,834	4,397
Loss on valuation of gold/silver deposits		(693)	(61,321)
Loss on sale of gold/silver deposits		(395)	(1,808)
		8,481	(40,396)
		(21,932)	(44,661)
Derivatives			
Foreign currency related:			
Gain on valuation and transaction		7,424,307	4,911,654
Loss on valuation and transaction		(7,617,205)	(4,898,751)
		(192,898)	12,903
Interest rates related:			
Gain on valuation and transaction		486,280	497,453
Loss on valuation and transaction		(455,420)	(479,927)
		30,860	17,526
Equity related:			
Gain on valuation and transaction		7,326	50,601
Loss on valuation and transaction		(8,722)	(7,912)
		(1,396)	42,689
Commodity related:			
Gain on valuation and transaction		24,855	55,694
Loss on valuation and transaction		(4,387)	(25,319)
		20,468	30,375
		(142,966)	103,493
Net trading gain (loss)	₩	(164,898)	58,832

(In millions of won)

33. Impairment loss on financial assets

Impairment loss on financial assets for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Impairment loss:			
Loans and other financial assets	₩	481,159	656,433
Available-for-sale financial assets		178,228	82,103
	₩	659,387	738,536

34. General and administrative expenses

General and administrative expenses for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Employee benefits:			
Short and long term employee benefits	₩	1,635,147	1,538,465
Post-employee defined benefits		130,802	140,480
Post-employee defined contributions		133	102
Termination benefits		224,033	94,478
		1,990,115	1,773,525
Amortization:			
Depreciation		120,074	120,566
Amortization of intangible assets		38,880	39,851
		158,954	160,417
Other general and administrative: expenses:			
Employee fringe benefits		116,395	112,189
Rent		256,233	258,277
Service contract expenses		234,418	219,709
Taxes and dues		76,187	75,334
Advertising		60,338	57,394
Electronic data processing expenses		56,954	56,903
Others		168,463	176,105
		968,988	955,911
	₩	3,118,057	2,889,853

(In millions of won, except for exercise price and fair value)

35. Share-based payments

(a) Stock options as of December 31, 2017 were as follows:

	4th grant	5th grant	6th grant	7th grant
Grant date	March 30, 2005	March 21, 2006	March 20, 2007	March 19, 2008
Exercise price in won (*1)	₩28,006	₩38,829	₩54,560	₩49,053
Number of shares granted	1,903,200	2,157,600	715,500	332,850
Contractual exercise period	2017.05.18 ~ 2018.08.30	2017.05.18 ~ 2019.08.21	2017.05.18 ~ 2020.08.19	2017.5.18 ~ 2021.5.17 2017.9.18 ~ 2021.9.17
Changes in number of shares granted:	-	-	-	-
Outstanding at December 31, 2016	93,426	101,963	50,513	26,233
Exercised	90,926	99,463	-	-
Outstanding at December 31, 2017 (*2)	2,500	2,500	50,513	26,233
Fair value in won: (*3)	21,394	10,571	3,154	Expiration date 2021.5.17 : 5,401 Expiration date 2021.9.17 : 5,536

(*1) As of December 31, 2017, the granted shares are fully vested, and the weighted-average exercise price of 81,746 options outstanding was ₩51,500.
(*2) As of December 31, 2017, 4,759 rights of exercise for 7th grant are suspended.
(*3) As of December 31, 2017, suspended grants are evaluated based on the intrinsic value, which is the difference between the closing price of Shinhan Financial Group and the exercise price.

(b) Equity-settled share-based payments

i) Equity-settled share-based payments as of December 31, 2017 were as follows:

	Contents	
Grant year	2010 ~ 2013	2014~
Type (*1)	Equity-settled share-based payment	Equity-settled share-based payment
Service period	Upon appointment and promotion since April 1, 2010 (Within 3 years from grant date)	Upon appointment and promotion since January 1, 2014 (Within 1 year from grant date)
Performance conditions (*2)	Increase rate of stock price and achievement of target ROE	Increase rate of stock price and achievement of target ROE

(*1) The Group granted shares of Shinhan Financial Group. According to the commitment, the amount that the Group must pay to the Shinhan Financial Group was recognized in liabilities, and the difference between the amount recognized in liabilities and the compensation cost based on equity-settled share-based payments was recognized in equity.
(*2) ROE: Return on equity

(In millions of won, except for fair value and share data)

35. Share-based payments (continued)

(b) Equity-settled share-based payments (continued)

ii) Granted shares and the fair value of grant date as of December 31, 2017 were as follows:

Grant date	Grant shares	Fair value (*1) (in won)	Estimated shares (*2)
April 1, 2010	306,400	45,150	10,471
January 1, 2013	183,100	40,050	1,166
May 27, 2013	14,500	40,250	631
August 1, 2013	4,400	41,250	284
January 1, 2014	109,800	47,300	102,471
February 8, 2014	5,400	44,300	4,484
April 1, 2014	4,800	47,000	3,340
October 15, 2014	2,400	47,150	465
January 1, 2015	159,000	44,500	143,482
March 18, 2015	16,800	42,650	12,103
April 10, 2015	2,300	40,350	1,526
May 1, 2015	2,300	46,000	1,406
May 22, 2015	5,300	42,800	2,966
May 27, 2015	2,300	40,200	1,259
August 1, 2015	2,300	41,900	918
August 24, 2015	2,300	40,250	749
January 1, 2016	221,900	39,000	204,554
January 1, 2017	231,400	45,300	180,634
January 23, 2017	2,700	45,600	2,333
March 7, 2017	17,400	46,950	13,156
March 24, 2017	8,100	49,000	5,772
June 1, 2017	2,700	49,250	1,455
July 5, 2017	2,700	49,550	1,224
July 6, 2017	2,700	49,200	1,217
	1,313,000		698,066

(*1) The fair value per share was evaluated based on the closing price of Shinhan Financial Group at each grant date. As of December 31, 2017, the fair value per share data evaluated by Shinhan Financial Group amounted to ₩49,400.

(*2) Grant shares at grant date were adjusted pursuant to increase rate of stock price (33.4% to 2013, 20.0% after 2014) and achievement of target ROE (66.6% to 2013, 80.0% after 2014) based on standard quantity applicable to the days of service among specified period of service, which allows for the determination of acquired quantity at the end of the operation period.

(In millions of won)

35. Share-based payments (continued)

(c) Stock compensation costs calculated for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Compensation costs recorded for the year	₩	10,748	17,577

(d) Accrued expenses of the stock compensation costs and residual compensation costs as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Accrued expenses	₩	30,773	27,942

(In millions of won)

36. Net other operating expenses

Net other operating expenses for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Other operating income			
Gain on sale of assets:			
Loans	₩	48,759	28,314
Written-off loans		116	3,044
		48,875	31,358
Others:			
Gain on hedge activity from hedged items		249,223	270,662
Gain on hedge activity from hedging instruments		83,288	33,753
Reversal of allowance for acceptances and guarantee		-	6,780
Reversal of other allowance		24,652	14,569
Others		23,197	20,187
		380,360	345,951
		429,235	377,309
Other operating expense			
Loss on sale of assets:			
Loans		(8,365)	(10,783)
Others:			
Loss on hedge activity from hedged items		(56,133)	(33,550)
Loss on hedge activity from hedging instruments		(284,124)	(283,885)
Provision for allowance for acceptances and guarantee		(2,084)	(11,003)
Reversal of (provision for) other allowance		(1,739)	(42,334)
Contribution to fund		(244,431)	(244,661)
Deposit insurance fee		(291,750)	(274,881)
Others		(145,924)	(116,232)
		(1,026,185)	(1,006,546)
		(1,034,550)	(1,017,329)
Net other operating expenses	₩	(605,315)	(640,020)

(In millions of won)

37. Net non-operating income

Net non-operating income for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Non-operating income			
Gain on sale of assets:			
Property and equipment	₩	4,430	298
Intangible assets		514	51
Investment property		7	1,438
Non-current assets held for sale		22,920	821
Assets not used for business purpose		126	3
		27,997	2,611
Investments in associates:			
Gain from disposition		7,983	5,177
Others:			
Rental income on investment property		25,169	23,185
Others		47,743	81,751
		72,912	104,936
		108,892	112,724
Non-operating expenses			
Loss on sale of assets:			
Property and equipment		(1,030)	(566)
Intangible assets		(790)	(149)
Investment properties		(1,325)	(248)
Non-current assets held for sale		(349)	-
Assets not used for business purpose		(11)	(78)
		(3,505)	(1,041)
Investments in associates:			
Impairment loss		(144)	-
Loss on disposal		(79)	(17)
		(223)	(17)
Others:			
Investment properties depreciation		(10,521)	(15,356)
Donations		(121,577)	(13,334)
Impairment losses on property and equipment		-	(7)
Impairment losses on intangible asset		-	(98)
Others		(20,988)	(21,740)
		(153,086)	(50,535)
		(156,814)	(51,593)
Net non-operating income (expenses)	₩	(47,922)	61,131

(In millions of won)

38. Income tax expense

(a) The components of income tax expense of the Group for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Current income tax expense	₩	394,651	378,526
Deferred taxes arising from changes in temporary differences		56,577	(36,362)
Deferred taxes arising from utilization of expired unused tax losses		(15,818)	(336,468)
Tax adjustment charged or credited directly to equity		11,104	82,407
Income tax expense	₩	446,514	88,103

(b) The income tax expense calculated by applying statutory tax rates to the Group's taxable income differs from the actual tax expense in the consolidated statements of income for the years ended December 31, 2017 and 2016 for the following reasons:

		2017	2016
Profit before income tax	₩	2,157,747	2,028,724
Statutory tax rate		24.20%	24.20%
Income tax expense at statutory tax rates		521,713	490,489
Adjustments:			
Non-taxable income		(8,143)	(26,128)
Non-deductible expense		10,425	11,619
Decrease resulting from consolidated corporate tax system		(25,756)	(25,216)
Utilization of expired unused tax losses		-	(336,468)
Income tax refund		(27,235)	(22,316)
Impact of tax rate change		(46,848)	-
Others		22,358	(3,877)
Income tax expense	₩	446,514	88,103
Effective tax rate(*1)		20.69%	4.34%

(*1) As of December 31, 2015, the Group had not previously recognized the deferred tax asset relating to the expired unused tax losses as the utilization of the expired unused tax losses had been assessed remote. However, based on the new tax interpretation issued by Korea National Tax Service which allows utilization of expired unused tax losses against extinguishment of deposit liabilities and the recent tax refund during year ended December 31, 2016, the Group recognized the deferred tax asset after factoring in future taxable profits and the expected future extinguishment of deposit and insurance liabilities.

(In millions of won)

38. Income tax expense (continued)

(c) Changes in temporary differences and deferred tax assets (liabilities) for the years ended December 31, 2017 and 2016 were as follows:

		2017				
		Beginning balance	Decreases	Increases	Ending balance	Deferred tax assets (liabilities) (*1)
Accrued income	₩	(343,790)	(343,790)	(479,275)	(479,275)	(131,801)
Accounts receivable		(36,089)	(36,089)	(60,062)	(60,062)	(16,517)
Trading assets		(56,431)	(59,629)	(53,124)	(49,926)	(13,730)
Available-for-sale financial assets		789,164	463,300	503,661	829,525	228,119
Investments in associates and subsidiaries(*2)		(217,184)	(217,184)	(400,935)	(400,935)	(110,257)
Deferred loan origination costs and fees		(378,933)	(378,933)	(427,937)	(427,937)	(117,683)
Revaluation and depreciation on property and equipment		(458,788)	(5,717)	3,739	(449,332)	(123,146)
Derivative liabilities		(141,875)	(152,868)	(143,207)	(132,214)	(36,359)
Deposits		75,051	17,938	44,355	101,468	27,904
Accrued expenses		299,584	300,935	427,352	426,001	117,150
Defined benefit obligations		1,133,301	54,254	63,630	1,142,677	314,236
Plan assets		(988,597)	(54,253)	(245,904)	(1,180,248)	(324,568)
Other provisions		228,432	228,432	179,532	179,532	49,371
Allowance for guarantees and acceptance		78,499	78,499	79,791	79,791	21,942
Allowance for advanced depreciation		(179,438)	(45)	-	(179,393)	(49,333)
Allowance for expensing depreciation		(2,155)	(232)	-	(1,923)	(529)
Deemed dividends		5,513	-	13,658	19,171	5,272
Net change in fair value of available-for-sale financial assets		(190,018)	(190,018)	(58,996)	(58,996)	(12,156)
Donation payables		35,717	35,717	39,429	39,429	10,843
Allowance and bad debt		318,993	318,993	70,748	70,748	23,533
Compensation expenses associated with stock option		2,344	2,266	359	437	120
Fictitious dividends		4,026	19	53	4,060	1,117
Others		154,613	(40,242)	486	195,341	50,371
		131,939	21,353	(442,647)	(332,061)	(86,101)
Expired unused tax losses						
Appropriation by extinctive prescription of deposit		1,390,362	109,323	-	1,281,039	352,286
Temporary differences not qualified for deferred tax assets or liabilities:						
Investments in associates and Subsidiaries (*2)		(280,957)	-	(189,711)	(470,668)	(129,436)
	₩	1,803,258	130,676	(252,936)	1,419,646	395,621

(*1) Deferred tax assets of overseas subsidiaries have decreased by ₩1,653 million due to foreign currency exchange rate changes.
(*2) The effect of income taxes by the valuation of equity method was reasonably estimated based on the both plausibility and the applicable amount of deferred income tax belonging to each associate investee.

(In millions of won)

38. Income tax expense (continued)

(c) Changes in temporary differences and deferred tax assets (liabilities) for the years ended December 31, 2017 and 2016 were as follows: (continued)

		2016				
		Beginning balance	Decreases	Increases	Ending balance	Deferred tax assets (liabilities) (*1)
Accrued income	₩	(352,041)	(352,041)	(343,790)	(343,790)	(83,197)
Accounts receivable		(45,943)	(45,943)	(36,089)	(36,089)	(8,734)
Trading assets		(117,749)	(117,749)	(56,431)	(56,431)	(13,656)
Available-for-sale financial assets		1,145,851	545,921	189,234	789,164	190,978
Investments in associates and subsidiaries (*2)		(104,035)	(104,035)	(217,184)	(217,184)	(52,558)
Deferred loan origination costs and fees		(344,697)	(344,697)	(378,933)	(378,933)	(91,702)
Revaluation and depreciation on property and equipment		(483,906)	(6,985)	18,133	(458,788)	(111,161)
Derivative liabilities		(121,775)	(79,169)	(99,269)	(141,875)	(34,334)
Deposits		63,688	(3,782)	7,581	75,051	18,162
Accrued expenses		257,820	245,813	287,577	299,584	72,499
Defined benefit obligations		1,041,404	40,526	132,423	1,133,301	274,259
Plan assets		(1,018,940)	(40,527)	(10,184)	(988,597)	(239,241)
Other provisions		215,799	215,799	228,432	228,432	55,280
Allowance for guarantees and acceptance		80,290	80,290	78,499	78,499	18,997
Allowance for advanced depreciation		(179,485)	(47)	-	(179,438)	(45,977)
Allowance for expensing depreciation		(2,387)	(232)	-	(2,155)	(521)
Deemed dividends		5,513	-	-	5,513	1,334
Net change in fair value of available-for-sale financial assets		(510,514)	(510,514)	(190,018)	(190,018)	(50,194)
Donation payables		44,134	44,134	35,717	35,717	8,644
Allowance and bad debt		286,635	286,635	318,993	318,993	85,739
Compensation expenses associated with stock option		1,230	1,152	2,266	2,344	567
Fictitious dividends		3,913	21	134	4,026	974
Others		227,132	193,424	120,905	154,613	37,415
		91,937	47,994	87,996	131,939	33,573
Expired unused tax losses						
Appropriation by extinctive prescription of deposit		-	30,806	1,421,168	1,390,362	336,468
Temporary differences not qualified for deferred tax assets or liabilities:						
Investments in associates and Subsidiaries (*2)		(146,133)	-	(134,824)	(280,957)	(67,992)
	₩	238,070	78,800	1,643,988	1,803,258	438,033

(*1) Deferred tax assets of overseas subsidiaries have increased by ₩1,954 million due to foreign currency exchange rate changes.
(*2) The effect of income taxes by the valuation of equity method was reasonably estimated based on the both plausibility and the applicable amount of deferred income tax belonging to each associate investee.

(In millions of won)

38. Income tax expense (continued)

(d) Changes in tax effects that were directly charged or credited to equity for the years ended December 31, 2017 and 2016 were as follows:

		December 31, 2017		December 31, 2016		
		Amount before tax	Tax effects	Amount before tax	Tax effects	Changes in tax effects
Net change in fair value of available-for-sale financial assets	₩	58,996	(12,155)	190,018	(50,194)	38,039
Share of other comprehensive income (loss) of associates		6,749	(163)	16,392	191	(354)
Foreign currency translation differences for foreign operations		(311,258)	(25,905)	(140,918)	(11,018)	(14,887)
Remeasurements of defined benefit obligations		(285,698)	78,662	(370,692)	89,776	(11,114)
Other (stock option)		1,079	(297)	(1,170)	283	(580)
	₩	(530,132)	40,142	(306,370)	29,038	11,104

		December 31, 2016		December 31, 2015		
		Amount before tax	Tax effects	Amount before tax	Tax effects	Changes in tax effects
Net change in fair value of available-for-sale financial assets	₩	190,018	(50,194)	510,514	(123,544)	73,350
Share of other comprehensive income (loss) of associates		16,392	191	14,376	(635)	826
Foreign currency translation differences for foreign operations		(140,918)	(11,018)	(135,644)	(24,630)	13,612
Remeasurements of defined benefit obligations		(370,692)	89,776	(396,286)	95,901	(6,125)
Other (stock option)		(1,170)	283	1,904	(461)	744
	₩	(306,370)	29,038	(5,136)	(53,369)	82,407

(e) The current tax assets and liabilities as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Current tax assets:			
Income taxes paid	₩	24,674	11,769
Current tax liabilities:			
Payable due to consolidated tax system	₩	179,364	122,866
Income taxes payables		31,580	14,856
	₩	210,944	137,722

(In millions of won)

38. Income tax expense (continued)

(f) The deferred tax assets (liabilities) and current tax assets (liabilities) presented on a gross basis prior to any offsetting as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Deferred tax assets	₩	2,138,001	1,858,502
Deferred tax liabilities		1,742,380	1,420,469
Current tax assets		240,817	182,653
Current tax liabilities		427,087	308,606

39. Earnings per share

(a) Earnings per share for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Profit for the year	₩	1,710,992	1,940,256
Less: dividends on hybrid bonds		(29,857)	(45,691)
Profit available for common stock	₩	1,681,135	1,894,565
Weighted average number of common shares outstanding		1,585,615,506 shares	1,585,615,506 shares
Basic and diluted earnings per share in won		1,060	1,195

Considering that the Group had no dilutive potential common shares and that stock options were not included in the calculation of diluted earnings per share because they were anti-dilutive for the reporting periods presented, diluted earnings per share equal to basic earnings per share for the years ended December 31, 2017 and 2016.

(b) Weighted average number of common shares outstanding as of December 31, 2017 and 2016 were as follows:

	2017	2016
Number of common shares outstanding	1,585,615,506 shares	1,585,615,506 shares
Weight	365/365	366/366
Weighted average number of common shares outstanding	1,585,615,506 shares	1,585,615,506 shares

(In millions of won)

40. Commitments and contingencies

(a) Guarantees, acceptances and credit commitments as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Guarantees:			
Guarantee outstanding	₩	7,590,785	9,304,497
Contingent guarantees		3,254,846	2,995,307
	₩	10,845,631	12,299,804
Commitments to extend credit:			
Loan commitments in Korean won	₩	53,338,916	53,470,641
Loan commitments in foreign currencies		18,992,870	20,464,116
ABS and ABCP purchase commitments (*1)		1,950,543	2,060,089
Others		1,456,976	1,350,937
	₩	75,739,305	77,345,783
Endorsed bills:			
Secured endorsed bills	₩	85,456	32,187
Unsecured endorsed bills		7,810,788	8,822,654
	₩	7,896,244	8,854,841
Loans sold with repurchase agreement	₩	2,099	2,099

(b) Provision for acceptances and guarantees

Allowance for acceptances and guarantees, as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Guarantees outstanding	₩	7,590,785	9,304,497
Contingent guarantees		3,254,846	2,995,307
ABS and ABCP purchase commitments (*1)		1,950,543	2,060,089
Secured endorsed bills		85,456	32,187
	₩	12,881,630	14,392,080
Allowance for acceptances and guarantees	₩	79,791	78,499
Ratio (%)		0.62	0.55

(*1) ABS: Asset Backed Securities, ABCP: Asset Backed Commercial Papers

(In millions of won)

40. Commitments and contingencies (continued)

(c) Legal contingencies

Pending litigations in which the Group was involved as a defendant as of December 31, 2017 were as follows:

Case	Number of claim		Claim amount	Description
Lehman Brothers Special Financing Inc. (LBSF)	1	₩	12,857	A plaintiff, Lehman Brothers Special Financing Inc. (LBSF), has claimed against the Bank to return the CDO investments which had been returned to the Bank after the bankruptcy of themselves for the reason that it had been against the US bankruptcy law. Although the Bank proceeded arbitrating procedures with LBSF and verbally agreed to settle, the defendants including the Bank won at the first trial and therefore refused to make payment for the previously verbally agreed upon settlement. As a result, another claim for the verbal agreement fulfillment action was brought by LBSF, and the Bank lost in the first trial and the appeal is ongoing as of December 31, 2017.
Demands on stock return	1		7,500	The Medison stock sales contract previously made between the plaintiff and PEF was discharged or cancelled. The plaintiff has been demanding to return the Medison stocks based on the invalidity of the stock sales contract as well as the invalidity of option contracts and revised option contracts stated in the stock sales contract. The Bank won the first trial and the plaintiff appealed, but the appeal was rejected by the court on October 26, 2017.
Claim for damage	1		6,893	According to the asset custody contract, the plaintiffs filed a lawsuit against the Bank, claiming for compensation for a fire damage occurred on a property of the real estate investment company for which the Bank provides the custodian service. In the first trial in 2015 and the second trial in 2017, the court ruled partially in favor of the plaintiff. However, the conclusions of the first and the second trial differ from each other and the third trial is currently ongoing.
Others	122		62,756	It includes various cases, such as compensation for loss claim. The Bank recognizes provisions based on the progress of relevant lawsuit.
	125	₩	90,006	

As of December 31, 2017, the Group recorded a provision of ₩11,850 million for litigation for certain of the above lawsuits. Additional losses may be incurred from these legal actions besides the current provision established by the Group, but the amount of loss is not expected to have a material adverse effect on the Group’s consolidated financial position or results of operations.

(In millions of won)

40. Commitments and contingencies (continued)

(d) Maturity structure of minimum lease payments

The future minimum lease payments under non-cancellable operating leases were payable as of December 31, 2017 and 2016 were as follows:

		December 31, 2017			
		Within 1 year	1~5 years	Over 5 years	Total
Minimum lease payments	₩	239,105	320,861	32,739	592,705

		December 31, 2016			
		Within 1 year	1~5 years	Over 5 years	Total
Minimum lease payments	₩	169,055	155,618	3,720	328,393

41. Statements of cash flows

(a) Cash and cash equivalents reported in the accompanying consolidated statements of cash flows as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Cash	₩	1,749,897	1,763,335
Reserve deposits		8,503,968	2,718,354
Other deposits		8,408,457	9,987,698
Cash and due from banks		18,662,322	14,469,387
Less: Restricted due from banks		(11,103,030)	(7,491,447)
Less: Due with original maturities of more than three months		(2,228,189)	(2,350,156)
	₩	5,331,103	4,627,784

(b) Significant non-cash activities for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Dividend payable of hybrid bonds	W	1,367	1,309
Debt-equity swap		32,530	32,229
Accounts payable for purchase of intangible assets		5,061	2,825

(c) Changes in liabilities resulting from financing activities for the year ended December 31, 2017 were as follows:

		Borrowings	Debt securities issued	Total
Beginning balance	₩	14,314,329	21,578,430	35,892,759
Change in cash flows		958,927	4,470,201	5,429,128
Amortization		802	3,196	3,998
Foreign currencies transaction gain		(656,496)	(448,744)	(1,105,240)
Change in fair value of hedged items		-	(142,656)	(142,656)
Ending balance	₩	14,617,562	25,460,427	40,077,989

(In millions of won)

42. Related party transactions

(a) Significant balances with the related parties as of December 31, 2017 and 2016 were as follows:

Related Party	Account		December 31, 2017	December 31, 2016
The parent company				
Shinhan Financial Group	Other assets	₩	934	-
	Deposits		3	42
	Other liabilities		222,867	166,191
Entities under common control				
Shinhan Card Co., Ltd.	Derivative assets		785	4,365
	Other assets		2,248	2,097
	Deposits		7,263	86,658
	Derivative liabilities		2,539	119
	Provisions		47	48
	Other liabilities		23,106	19,881
Shinhan Life Insurance	Derivative assets		1,558	40,604
	Other assets		11	7
	Deposits		6,379	9,526
	Derivative liabilities		44,928	369
	Provisions		4	4
	Other liabilities		15,184	13,913
Shinhan Investment Corp.	Cash and due from banks		3,461	725
	Derivative assets		3,954	53,546
	Loans		14,984	-
	Allowance for loan loss		(4)	-
	Other assets		18,240	18,823
	Deposits		272,064	252,707
	Derivative liabilities		39,302	4,354
	Provisions		34	33
	Other liabilities		39,010	34,423
Shinhan Capital Co., Ltd.	Deposits		754	457
	Borrowings		10,000	13,000
	Provisions		14	10
	Other liabilities		12,799	9,670
Jeju Bank	Loans		2,658	2,903
	Allowance for loan loss		(1)	(1)
	Other assets		1	6
	Deposits		22,376	3,530
	Other liabilities		2,475	1,604
Shinhan Credit Information Co., Ltd.	Deposits		6,059	7,836
	Other liabilities		1,719	1,119
Shinhan Private Equity, Inc.	Deposits		168	12

(In millions of won)

42. Related party transactions (continued)

(a) Significant balances with the related parties as of December 31, 2017 and 2016 were as follows: (continued)

Related party	Account		December 31, 2017	December 31, 2016
Entities under common control (continued)				
Shinhan Data System	Deposits	₩	11,135	3,940
	Other liabilities		6,544	6,658
Shinhan Savings Bank	Other liabilities		8,987	8,987
Shinhan Aitas	Deposits		9,381	20,296
	Other liabilities		41	42
Shinhan BNP Paribas AMC	Deposits		117,149	42,549
	Other liabilities		1,512	821
Shinhan BNPP Global Multi Asset Security Trust	Other assets		1	-
Shinhan REITs Management	Deposits		71	-
Investments in associates and entities under common control				
BNP Paribas Cardif General Insurance	Deposits		221	13
Dream High Fun III	Deposits		3	1
Aju Capital Co., Ltd. (*1)	Trading assets		-	49,990
	Loans		-	210,000
	Allowance for loan loss		-	(611)
	Deposits		-	692
	Provisions		-	73
BNP Paribas Cardif Life	Other assets		9,760	-
Insurance Co., Ltd.	Deposits		446	353
	Provisions		2	1
Pohang TechnoPark 2PFV (*1)	Deposits		-	14,658
Midas Dong-A Snowball Venture Fund	Deposits		220	427
IBKS-Shinhan Creative Economy New Technology Fund	Deposits		78	1,751
EQP Global Energy Infrastructure Private (*1)	Deposits		-	1
JAEYOUNG SOLUTEC	Loans		14,847	14,356
Co., Ltd.	Allowance for loan loss		(123)	(69)
	Deposits		2,659	7,638
	Provisions		4	7
Partners 4th Growth Investment Fund	Deposits		2,076	2,160

(In millions of won)

42. Related party transactions (continued)

(a) Significant balances with the related parties as of December 31, 2017 and 2016 were as follows: (continued)

Related party	Account		December 31, 2017	December 31, 2016
Investments in associates and entities under common control (continued)				
Credian Health Care Private Equity Fund II	Deposits	₩	26	7
Snowball Venture Fund II	Deposits		239	242
IBKS-Shinhan Creative Economy New Technology Fund II	Deposits		76	179
PSA FINTECH Private I (*1)	Deposits		-	525
YIUM The 3rd Private Investment Joint Stock Company	Deposits		65	80
Branbuil Co., Ltd.	Loans		-	15
	Deposits		55	28
KTB Newlake Global Healthcare PEF	Deposits		465	-
	Provisions		13	-
Taihan Industrial System Co., Ltd.	Deposits		100	-
ICSF(The Korea's Information Center for Savings & Finance)	Deposits		4	-
Key management personnel				
	Loans		2,828	936
	Allowance for loan loss		(3)	(1)
	Provisions		1	1

(*1) These investees were sold and excluded from associates during the year ended December 31, 2017.

(In millions of won)

42. Related party transactions (continued)

(b) Significant transactions with the related parties for the years ended December 31, 2017 and 2016

Related Party	Account		2017	2016
The parent company				
Shinhan Financial Group	Other operating income	₩	2,228	2,011
	Interest expense		(228)	(1,751)
	Fees and commission expense		(29,779)	(29,893)
Entities under common control				
Shinhan Card Co., Ltd.	Interest income		1,868	417
	Fees and commission income		187,385	180,127
	Gain related to derivatives		2,694	7,317
	Other operating income		2,092	1,726
	Interest expense		(528)	(251)
	Fees and commission expense		(177)	(325)
	Loss related to derivatives		(5,111)	(5,986)
	Other operating expense		(3,064)	(1,982)
Shinhan Investment Corp.	Interest income		466	796
	Fees and commission income		5,167	4,517
	Gain related to derivatives		10,037	59,157
	Other operating income		4,637	4,431
	Interest expense		(1,499)	(1,317)
	Reversal of (provision for) allowance		(3)	83
	Loss related to derivatives		(98,769)	(13,564)
	Other operating expense		(785)	(1,171)
Shinhan Life Insurance	Interest income		47	45
	Fees and commission income		7,513	6,688
	Gain related to derivatives		7,117	45,570
	Other operating income		1,470	1,400
	Interest expense		(264)	(315)
	Loss related to derivatives		(109,882)	(9,531)
	Other operating expense		(843)	(557)
Shinhan Capital Co., Ltd.	Other operating income		314	302
	Interest expense		(241)	(150)
	Fees and commission expense		(10)	(14)
	Other operating expense		(4)	-
Jeju Bank	Interest income		3	43
	Other operating income		44	230
	Interest expense		(45)	(33)
	Reversal of allowance		-	1
	Other operating expense		-	(11)

(In millions of won)

42. Related party transactions (continued)

(b) Significant transactions with the related parties for the years ended December 31, 2017 and 2016 were as follows: (continued)

Related Party	Account		2017	2016
Entities under common control (continued)				
Shinhan Credit Information	Fees and commission income	₩	3	2
Co., Ltd.	Other operating income		76	67
	Interest expense		(94)	(126)
	Fees and commission expense		(4,645)	(4,895)
Shinhan Private Equity, Inc.	Other operating income		-	8
	Reversal of allowance		-	16
Shinhan BNP Paribas AMC	Fees and commission income		-	42
	Other operating income		52	52
	Interest expense		(1,187)	(747)
	Fees and commission expense		(2,250)	(2,243)
	Reversal of allowance		16	-
Shinhan Data System	Other operating income		134	119
	Interest expense		(168)	(142)
	Other operating expense		(34,629)	(31,281)
Shinhan Savings Bank	Fees and commission income		796	481
	Other operating income		175	116
	Interest expense		(120)	(60)
Shinhan Aitas	Fees and commission income		31	28
	Other operating income		5	49
	Interest expense		(71)	(153)
Shinhan BNPP Global Multi Asset Security Trust	Fees and commission income		5	2
Investments in associates and entities under common control				
Aju Capital Co., Ltd. (*1)	Interest income		-	7,332
	Fees and commission income		-	72
	Interest expense		-	(2)
	provision for allowance		-	(146)
	Other operating expense		-	(18)
BNP Paribas Cardif Life	Fees and commission income		3,246	2,583
Insurance Co., Ltd.	Other operating expense		(1)	(1)

(In millions of won)

42. Related party transactions (continued)

(b) Significant transactions with the related parties for the years ended December 31, 2017 and 2016 were as follows: (continued)

Related Party	Account		2017	2016
Investments in associates and entities under common control (continued)				
Pohang TechnoPark2PFV(*1)	Interest expense	₩	-	(15)
BNP Paribas Cardif General Insurance	Fees and commission income		2	2
IBKS-Shinhan Creative Economy New Technology Fund	Interest expense		(2)	(1)
Midas Dong-A Snowball Venture Fund	Interest expense		(3)	(4)
JAEYOUNG SOLUTEC	Interest income		654	671
CO.,LTD.	Fees and commission income		1	1
	Other operating income		3	7
	Reversal of (provision for) allowance		(55)	90
	Interest expense		(4)	(21)
Partners 4th Growth Investment Fund	Interest expense		(16)	(2)
Albatross Growth Fund (*2)	Interest expense		-	(6)
PSA FINTECH Private I (*1)	Interest expense		-	(5)
Branbuil CO.,LTD.	Fees and commission income		2	1
Shinhan-Albatross Technology Investment Fund	Interest expense		(21)	-
Snowball Venture Fund II	Interest expense		-	(1)
Treenkid (*3)	Interest income		-	3
Semantic (*3)	Interest income		-	15
KTB Newlake Global Healthcare PEF	Interest income		10	-
Taihan Industrial System Co., Ltd.	Fees and commission income		2	-
Key management personnel				
	Interest income		94	35

(*1) These investees were sold and excluded from associates during the year ended December 31, 2017.
(*2) Albatross Growth Fund was excluded from associates of entities under common control of associates during the year ended December 31, 2017.
(*3) Treenkid and Semantic were excluded from associates due to filing for bankruptcy during the year ended December 31, 2017.

(In millions of won)

42. Related party transactions (continued)

(c) Details of transactions with key management for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Short and long term employee benefits	₩	8,916	7,770
Post-employment benefits		298	327
Share-based payment transactions		4,655	4,447
	₩	13,869	12,544

(In millions of won)

42. Related party transactions (continued)

(d) The guarantees provided between the related parties as of December 31, 2017 and 2016 were as follows:

		Amount of guarantees		
Guaranteed parties		December 31, 2017	December 31, 2016	Account
Shinhan Card Co., Ltd.	₩	500,000	500,000	Unused credit
Shinhan Investment Corp.		-	6,043	Performance guarantees
		218,166	181,000	Unused credit
Shinhan Life Insurance		50,000	50,000	Unused credit
Shinhan Capital Co., Ltd.		70,000	50,000	Unused credit
Shinhan BNP Paribas AMC		53,484	104,008	Security underwriting commitment
Aju Capital Co., Ltd. (*1)		-	50,000	Unused credit
BNP Paribas Cardif Life Insurance Co., Ltd.		10,000	10,000	Unused credit
KTB Newlake Global Healthcare PEF		700	-	Unused credit
Neoplux Technology Valuation Investment Fund		6,000	12,000	Security underwriting commitment
JAEYOUNG SOLUTEC CO., LTD.		109	600	Unused credit
		429	483	Import letter of credit
	₩	908,888	964,134	

(*1) Aju Capital Co., Ltd. was sold and excluded from associates during the year ended December 31, 2017.

(e) Details of collaterals provided to the related parties as of December 31, 2017 and 2016 were as follows:

				December 31, 2017		December 31, 2016	
	Related party	Pledged assets		Carrying amount	Amounts collateralized	Carrying amount	Amounts collateralized
Entities under common control	Shinhan Investment Corp.	Securities	₩	178,780	51,499	235,084	43,799
	Shinhan Life Insurance	Securities		10,271	10,271	21,963	10,310
			₩	189,051	61,770	257,047	54,109

(In millions of won)

42. Related party transactions (continued)

(f) Details of collaterals provided by the related parties as of December 31, 2017 and 2016 were as follows:

	Related party	Pledged assets		December 31, 2017	December 31, 2016
Entities under common control	Shinhan Investment Corp.	Deposits	₩	135,700	112,011
		Real estate		91,974	91,974
	Jeju Bank	Government bonds		20,000	20,000
	Shinhan Life Insurance	Government bonds		7,170	7,518
	Shinhan Credit Information Co., Ltd.	Deposits		180	210
Investments in associates	Aju Capital Co., Ltd. (*1)	Beneficiary certificate		-	160,000
	BNP Paribas Cardif Life Insurance Co., Ltd.	Government bonds		11,666	13,699
	Treenkid (*2)	Real estate		-	200
	JAEYOUNG SOLUTEC. CO.,LTD.	Real estate		20,814	20,814
		Korea Trade Insurance corporation guarantee		7,037	7,037
			₩	294,541	433,463

(*1) Aju Capital Co., Ltd. was sold and excluded from associates during the year ended December 31, 2017.
(*2) Treenkid was excluded from associates due to filing for bankruptcy during the year ended December 31, 2017.

(In millions of won)

43. Investments in subsidiaries

(a) Condensed statements of financial positions for the Bank and its subsidiaries as of December 31, 2017 and 2016 were as follows:

		2017			2016		
		Total assets	Total liabilities	Total equity	Total assets	Total liabilities	Total equity
Shinhan Bank	₩	302,936,552	280,748,048	22,188,504	282,819,576	261,858,830	20,960,746
Shinhan America		1,431,268	1,263,477	167,791	1,443,057	1,263,893	179,164
Shinhan Canada		586,627	520,390	66,237	493,736	427,823	65,913
Shinhan Europe		603,810	522,745	81,065	495,306	417,345	77,961
Shinhan China		5,192,164	4,822,109	370,055	5,861,287	5,480,614	380,673
Shinhan Asia		546,377	339,948	206,429	476,735	257,202	219,533
Shinhan Kazakhstan		97,596	55,896	41,700	81,659	37,409	44,250
Shinhan Khmer		202,162	129,095	73,067	163,563	118,219	45,344
Shinhan Japan		6,163,835	5,728,776	435,059	6,106,195	5,702,025	404,170
Shinhan Vietnam (*1)		3,674,864	3,140,775	534,089	2,926,241	2,405,067	521,174
Shinhan Mexico		80,425	485	79,940	34,680	369	34,311
Shinhan Indonesia (*1)		683,316	324,426	358,890	400,127	186,513	213,614
Structured entities		7,577,627	7,567,521	10,106	6,943,817	6,945,661	(1,844)

(*1) Fair value adjustment at the time of business combination was applied.

(In millions of won)

43. Investments in subsidiaries (continued)

(b) Condensed statements of comprehensive income for the Bank and its subsidiaries for the years ended December 31, 2017 and 2016 were as follows:

	2017			2016		
	Operating income	Profit (loss) for the year	Total comprehensive income (loss)	Operating income	Profit (loss) for the year	Total comprehensive income (loss)
Shinhan Bank	₩ 20,380,963	1,607,761	1,536,857	15,839,813	1,777,072	1,582,484
Shinhan America	64,897	9,472	(11,374)	56,921	9,858	14,740
Shinhan Canada	18,055	3,497	324	14,100	(769)	1,296
Shinhan Europe	13,332	2,227	3,104	13,861	1,754	953
Shinhan China	284,447	21,875	(10,618)	230,131	8,145	(17,295)
Shinhan Asia	25,643	13,813	(13,104)	19,721	11,950	13,591
Shinhan Kazakhstan	8,620	2,030	(2,550)	6,724	1,364	3,138
Shinhan Khmer	11,758	3,593	(3,399)	10,197	5,680	7,109
Shinhan Japan	176,392	68,872	30,889	171,099	48,396	69,389
Shinhan Vietnam (*1)	194,137	45,395	12,916	148,766	48,630	57,645
Shinhan Mexico	2,026	(2,986)	(5,003)	1,405	(1,784)	(7,229)
Shinhan Indonesia (*1)	42,112	8,590	(28,801)	24,444	235	6,334
Structured entities	208,978	23,540	27,829	221,192	(2,642)	2,526

(*1) Fair value adjustment at the time of business combination was applied.

44. Interests in unconsolidated structured entities

(a) The nature and extent of interests in unconsolidated structured entities

The Group involved in assets-backed securitization, structured financing, beneficiary certificates and other structured entities and characteristics of these structured entities are as follows:

	Description
Assets-backed securitization	Securitization vehicles are established to buy assets from originators and issue asset-backed securities in order to facilitate the originators' funding activities and enhance their financial soundness. The Group is involved in the securitization vehicles by purchasing (or committing to purchase) the asset-backed securities issued and/or providing other forms of credit enhancement. The Group does not consolidate a securitization vehicle if (i) the Group is unable to make or approve decisions as to the modification of the terms and conditions of the securities issued by such vehicle or disposal of such vehicles' assets, (ii) (even if the Group is able to do so) if the Group does not have the exclusive or primary power to do so, or (iii) if the Group does not have exposure, or right, to a significant amount of variable returns from such entity due to the purchase (or commitment to purchase) of asset-backed securities issued or subordinated obligations or by providing other forms of credit support.
Structured financing	Structured entities for project financing are established to raise funds and invest in a specific project such as M&A (Mergers and Acquisitions), BTL (Build-Transfer-Lease), shipping finance, etc. The Group is involved in the structured entities by originating loans, investing in equity, or providing credit enhancement
Investment fund	Investment fund is a type of financial instrument where investment funds raise funds from the general public to invest in a group of assets such as stocks or bonds and distribute their income and capital gains to their investors. The Group is involved in investment fund by investing in various investment funds.

(In millions of won)

44. Interests in unconsolidated structured entities (continued)

(a) The nature and extent of interests in unconsolidated structured entities (continued)

i) The size of unconsolidated structured entities as of December 31, 2017 and 2016 were as follows:

		December 31, 2017			
		Assets-backed securitization	Structured financing	Investment fund	Total
Total assets	₩	84,536,825	44,287,001	40,337,712	169,161,538

		December 31, 2016			
		Assets-backed securitization	Structured financing	Investment fund	Total
Total assets	₩	60,869,229	32,231,488	11,262,929	104,363,646

ii) Income and expenses from unconsolidated structured entities for the years ended December 31, 2017 and 2016 were as follows:

		2017			
		Assets-backed securitization	Structured financing	Investment fund	Total
Income					
Interest income	₩	105,569	79,951	1,912	187,432
Fees and commission income		10,353	14,314	12,449	37,116
Dividend income		-	4,285	24,467	28,752
Other		23	3,382	129	3,534
	₩	115,945	101,932	38,957	256,834
Expenses	₩	24	130,554	11,261	141,839

		2016			
		Assets-backed securitization	Structured financing	Investment fund	Total
Income					
Interest income	₩	88,830	92,706	4,163	185,699
Fees and commission income		9,504	16,421	110	26,035
Dividend income		-	4,323	42,055	46,378
Other		267	4,941	67	5,275
	₩	98,601	118,391	46,395	263,387
Expenses	₩	67	9	26,402	26,478

(In millions of won)

44. Interests in unconsolidated structured entities (continued)

(b) Nature of risk associated with interests in unconsolidated structured entities

i) The carrying amounts of the assets and liabilities recognized relating to its interests in unconsolidated structured entities as of December 31, 2017 and 2016 were as follows:

		December 31, 2017			
		Assets-backed securitization	Structured financing	Investment fund	Total
Assets:					
Loans	₩	172,319	2,793,380	52,600	3,018,299
Trading assets		3,168,191	-	-	3,168,191
Derivative assets		14,218	-	-	14,218
Available-for-sale financial assets		1,352,955	80,618	1,755,477	3,189,050
Held-to-maturity financial assets		2,491,933	-	-	2,491,933
Others		-	-	1,013	1,013
	₩	7,199,616	2,873,998	1,809,090	11,882,704
Liabilities:					
Derivative liabilities	₩	4,448	-	-	4,448

		December 31, 2016			
		Assets-backed securitization	Structured financing	Investment fund	Total
Assets:					
Loans	₩	180,611	2,777,119	76,661	3,034,391
Trading assets		2,051,332	29,966	30,121	2,111,419
Derivative assets		19,144	-	-	19,144
Available-for-sale financial assets		1,994,025	196,758	1,356,365	3,547,148
Held-to-maturity financial assets		2,381,934	-	-	2,381,934
Others		12,327	21,017	2,010	35,354
	₩	6,639,373	3,024,860	1,465,157	11,129,390
Liabilities:					
Derivative liabilities	₩	137	-	-	137
Borrowings		-	1,318	-	1,318
	₩	137	1,318	-	1,455

(In millions of won)

44. Interests in unconsolidated structured entities (continued)

(b) Nature of risk associated with interests in unconsolidated structured entities (continued)

ii) Exposure to risk relating to interests in unconsolidated structured entities as of December 31, 2017 and 2016 were as follows:

		December 31, 2017			
		Assets-backed securitization	Structured financing	Investment fund	Total
Assets owned	₩	7,199,616	2,873,998	1,809,090	11,882,704
Purchase commitments		1,331,035	-	35,684	1,366,719
Providing unused credit		529,566	81,547	31,987	643,100
	₩	9,060,217	2,955,545	1,876,761	13,892,523

		December 31, 2016			
		Assets-backed securitization	Structured financing	Investment fund	Total
Assets owned	₩	6,639,373	3,024,860	1,465,156	11,129,389
Purchase commitments		1,048,282	30,000	-	1,078,282
Providing unused credit		977,383	123,810	47,246	1,148,439
Guarantees		-	10,559	-	10,559
	₩	8,665,038	3,189,229	1,512,402	13,366,669

(In millions of won)

45. Information of trust business

(a) Total assets with trust business as of December 31, 2017 and 2016 and operating revenue for the years ended December 31, 2017 and 2016 were as follows:

		Total assets		Operating revenue	
		December 31, 2017	December 31, 2016	2017	2016
Consolidated	₩	4,471,457	4,314,473	112,528	139,767
Unconsolidated		46,014,514	40,743,814	929,899	530,690
	₩	50,485,971	45,058,287	1,042,427	670,457

(b) Significant balances with trust business as of December 31, 2017 and 2016 were as follows:

		December 31, 2017	December 31, 2016
Borrowings from trust accounts	₩	4,052,608	3,443,287
Accrued revenues from asset management fee from trust accounts		28,795	30,485
Accrued interest expenses		824	782

(c) Significant transactions with trust business for the years ended December 31, 2017 and 2016 were as follows:

		2017	2016
Asset management fee from trust accounts	₩	166,189	98,406
Termination fee		3,415	87
Interest on borrowings from trust accounts		37,869	35,877

(In millions of won)

46. Business Combination

On December 17, 2017, the Group acquired the retail business of ANZ Vietnam to increase business competitiveness and a synergy effect in the banking business in Vietnam.

Goodwill amounted ₩42,103 million arising from the acquisition was resulting from the synergy effect of business combination between the Group and the acquired retail business, as well as the acquired customer base.

(a) The transfer price of the ANZ retail business and the acquired assets and liabilities at acquisition date were as follows:

		Amounts
Transfer price :		
Cash	₩	(75,480)
Amounts recognized as identifiable assets and liabilities : (*1)		
Cash and due from banks		8,151
Loans		301,766
Other current assets		9,269
Property and equipment		538
Deposits		(436,285)
Other current liabilities		(1,022)
		(117,583)
Goodwill	₩	42,103
Direct costs related to acquisition (*2)	₩	5,380

(*1) As of December 31, 2017, management was in the process of identification of intangible assets and valuation of identifiable assets and liabilities for allocation of acquisition costs. Thus, goodwill is subject to change by the results of identification of intangible assets and valuation of identifiable assets and liabilities.

(*2) In relation to the business combination, legal fee and due diligence fee amounted to ₩1,336 million and payments of value-added tax to Vietnam tax authorities amounted to ₩4,494 million, which were included in the general and administrative expenses in the consolidated statements of comprehensive income for the year ended December 31, 2017.

(b) The acquisition of ANZ Vietnam was conducted through acquisition of the assets and liabilities of the retail business segment, not by acquisition of interests of a legal entity. Since the Group was not provided with the financial information of acquired business segments for the year ended December 31, 2017 from the acquiree, the Group determined that disclosure of operating revenue and net income of retail business since the acquisition date and the financial impacts of combined entity as if the acquisition date had been as of the beginning of the year is impracticable.