

Consolidated Financial Statements

December 31, 2016 and 2015

(With Independent Auditors' Report Thereon)

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#### **Independent Auditors' Report**

(Based on a report originally issued in Korean)

The Board of Directors and Stockholder Shinhan Bank:

Report on the Consolidated Financial Statements

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, 2016 and 2015, 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, 2016 and 2015 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 Matter
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, 2017
This report is effective as of March 7, 2017, 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.

## **Consolidated Statements of Financial Position**

As of December 31, 2016 and 2015

(In millions of won)	Notes		December 31, 2016	December 31, 2015
Assets				
Cash and due from banks	4,7,10,40,41	W	14,469,387	16,891,386
Trading assets	4,8,41,43		11,270,758	9,056,812
Derivative assets	4,9,41,43		2,579,121	1,617,518
Loans	4,10,17,41,43		219,438,681	209,651,483
Available-for-sale financial assets	4,11,17,43		27,814,583	24,460,599
Held-to-maturity financial assets	4,11,17,43		11,630,270	10,105,051
Property and equipment	6,12,17		2,043,559	2,003,485
Intangible assets	6,13		260,566	306,666
Investments in associates	14		130,893	232,522
Investment properties	6,15		675,146	765,606
Current tax assets	37		11,769	7,409
Deferred tax assets	37		447,514	77,728
Other assets	4,10,16,41,44		12,077,453	9,835,923
Non-current assets held for sale			4,923	3,630
Total assets		W	302,854,623	285,015,818
Liabilities				
Financial liabilities designated at				
fair value through profit or loss	4,18	W	6,282	13,509
Deposits	4,19,41	<del>**</del>	228,910,092	212,975,192
Trading liabilities	4,19,41		485,995	463,766
Derivative liabilities	4,9,41,43		2,785,392	1,573,432
Borrowings	4,9,41,43		14,314,329	12,998,479
Debt securities issued	4,22		21,578,430	20,020,550
Liability for defined benefit	4,22		21,378,430	20,020,330
obligations	23		50,103	154,769
Provisions	24,39,41		306,931	296,088
Current tax liabilities				40,029
Deferred tax liabilities	37,41 37		137,722 9,481	
Other liabilities			· · · · · · · · · · · · · · · · · · ·	14,879
	4,25,41,43,44	_	12,802,893	15,622,352
Total liabilities			281,387,650	264,173,045
Equity				
Capital stock	26		7,928,078	7,928,078
Hybrid bonds	26		469,392	801,298
Capital surplus	26		403,164	403,164
Capital adjustments Accumulated other comprehensive	26		(64,614)	(29,340)
loss	26,37		(276,445)	(59,948)
Retained earnings	26,27		13,000,837	11,787,170
Total equity attributable to equity			01.150.115	20.020.122
holder of Shinhan Bank			21,460,412	20,830,422
Non-controlling interests	26	_	6,561	12,351
Total equity			21,466,973	20,842,773
Total liabilities and equity		₩ <u></u> _	302,854,623	285,015,818

## **Consolidated Statements of Comprehensive Income** For the years ended December 31, 2016 and 2015

(In millions of won)	Notes	-	2016	2015
Interest income		W	7,696,201	7,649,492
Interest expense		**	(3,192,080)	(3,484,777)
Net interest income	4,6,28,41,43	-	4,504,121	4,164,715
Face and commission in com-			1.061.620	1 050 296
Fees and commission income			1,061,620	1,050,286 (196,423)
Fees and commission expense  Net fees and commission income	4 6 20 41 42	-	(177,122)	
Net fees and commission income	4,6,29,41,43	-	884,498	853,863
Dividend income	30,43		123,559	184,101
Net trading gain	31		58,832	134,421
Net foreign currencies transactions gain Loss on financial instruments designated at fair value			245,153	75,053
through profit or loss	18		(206)	(16)
Net gain on sale of available-for-sale financial assets	11		411,430	422,279
Impairment loss on financial assets	4,10,32,41		(738,536)	(799,415)
General and administrative expenses	33,41		(2,889,853)	(2,785,435)
Net other operating expenses	6, 35,41		(640,020)	(515,840)
Operating income	,	_	1,958,978	1,733,726
Non aparating income not	6, 36		61,131	127 045
Non-operating income, net	0, 30	-	01,131	127,945
Equity in income of investments in associates	6,14	_	8,615	13,399
Profit before income tax			2,028,724	1,875,070
Income tax expense	6,37		(88,103)	(385,082)
Profit for the year	6,27	-	1,940,621	1,489,988
·	,	-		
Other comprehensive income: Items that are or may be reclassified	4,26			
subsequently to profit or loss				
Foreign currency translation differences for foreign operations			2,081	(2,521)
Unrealized net change in fair value of available-for-sale			,	· · · · · ·
financial assets			(247,146)	(240,864)
Equity in other comprehensive income of associates		_	2,834	6,228
			(242,231)	(237,157)
Items that will not be reclassified subsequently to profit or loss				
Defined benefit plan actuarial loss			19,571	(54,645)
Equity in other comprehensive income (loss) of			O	(225)
associates		-	19,579	(54,870)
Total other comprehensive loss for the year, net of			19,379	, , ,
income tax		-	(222,652)	(292,027)
Total comprehensive income for the year		w .	1,717,969	1,197,961

## **Consolidated Statements of Comprehensive Income (continued)** For the years ended December 31, 2016 and 2015

(In millions of won, except for earning per share)	Notes		2016	2015
Profit attributable to:	6			
Equity holder of Shinhan Bank		W	1,940,256	1,489,654
Non-controlling interests			365	334
Profit for the year		W	1,940,621	1,489,988
Total comprehensive income attributable to:				
Equity holder of Shinhan Bank		W	1,723,759	1,192,307
Non-controlling interests			(5,790)	5,654
Total comprehensive income for the year		W	1,717,969	1,197,961
Earnings per share:	38			
Basic and diluted earnings per share in won		<b>W</b>	1,195	903

# **Consolidated Statements of Changes in Equity** For the year ended December 31, 2015

		Attributable to equity holder of Shinhan Bank								
(In millions of won)		Capital stock	Hybrid bonds	Capital surplus	Capital adjustments	Accumulated other comprehensive income	Retained earnings	Subtotal	Non- controlling interests	Total equity
Balance at January 1, 2015	W	7,928,078	1,100,250	403,164	(842)	237,399	10,805,574	20,473,623	3,277	20,476,900
Total comprehensive income (loss), net of income tax				,						, ,
Profit for the year		-	-	-	-	-	1,489,654	1,489,654	334	1,489,988
Foreign currency translation differences for foreign operations		-	-	-	-	(7,841)	-	(7,841)	5,320	(2,521)
Unrealized net changes in fair values of available-for-sale financial assets Equity in other comprehensive income of		-	-	-	-	(240,864)	-	(240,864)	-	(240,864)
associates Defined benefit plan actuarial loss		-	-	-	-	6,003 (54,645)	-	6,003 (54,645)	-	6,003 (54,645)
Total comprehensive income (loss) for the Year				-	-	(297,347)	1,489,654	1,192,307	5,654	1,197,961
Transactions with owners, recognized directly in equity										
Annual dividends to equity holders		-	-	_	-	-	(450,000)	(450,000)	-	(450,000)
Dividend to hybrid bond holders		-	-	_	-	_	(57,158)	(57,158)	-	(57,158)
Redemption of hybrid bonds		-	(298,952)	_	(30,898)	_	-	(329,850)	-	(329,850)
Share-based payment transactions		-	_	_	1,500	_	-	1,500	-	1,500
Other		-	-	_	900	_	(900)	-	-	-
Total transactions with owners			(298,952)	_	(28,498)		(508,058)	(835,508)		(835,508)
Balance at December 31, 2015	W	7,928,078	801,298	403,164	(29,340)	(59,948)	11,787,170	20,830,422	8,931	20,839,353

# **Consolidated Statements of Changes in Equity** For the year ended December 31, 2016

	Attributable to equity holder of Shinhan Bank									
(In millions of won)		Capital stock	Hybrid bonds	Capital surplus	Capital adjustments	Accumulated other comprehensive income	Retained earnings	Subtotal	Non- controlling interests	Total equity
Balance at January 1, 2016										
(Before adjustments)		7,928,078	801,298	403,164	(29,340)	(59,948)	11,787,170	20,830,422	8,931	20,839,353
Adjustments due to business									3,420	3,420
combination (note 45) Balance at January 1, 2016									3,420	3,420
(After adjustments)	W	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				,	(=>)= :=)	(5,4,5,10)				
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)
Equity in other comprehensive income of associates  Defined benefit plan actuarial loss		-	-	-	-	2,842 19,469	-	2,842 19,469	102	2,842 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 holders		-	-	-	_	-	(650,000)	(650,000)	-	(650,000)
Dividend to hybrid bond holders		-	-	-	_	-	(45,691)	(45,691)	-	(45,691)
Redemption of hybrid bonds		-	(331,906)	-	(60,094)	-	_	(392,000)	-	(392,000)
Share-based payment transactions		-	-	-	(2,128)	-	_	(2,128)	-	(2,128)
Capital investment of subsidiary		_	_	_	(3,950)	_	_	(3,950)	_	(3,950)
Other		_	_	-	30,898	_	(30,898)	-	_	-
Total transactions with owners		_	(331,906)	_	(35,274)		(726,589)	(1,093,769)		(1,093,769)
Balance at December 31, 2016	W	7,928,078	469,392	403,164	(64,614)	(276,445)		21,460,412	6,561	21,466,973

## **Consolidated Statements of Cash Flows**

For the years ended December 31, 2016 and 2015

(In millions of won)	_	2016	2015
Cook flows from anaroting activities			
Cash flows from operating activities Profit before income tax	W	2 029 724	1 975 070
	₩	2,028,724	1,875,070
Adjustments for:		(4.504.121)	(4 164 715)
Net interest income		(4,504,121)	(4,164,715)
Dividend income		(123,559)	(184,101)
Net gain or loss on financial instruments designated at fair value		206	(05)
through profit or loss		206	(95)
Non-cash trading loss (gain), net		51,669	(54,706)
Non-cash foreign currencies transaction loss (gain), net		(14,219)	84,640
Net gain on sales of available-for-sale financial assets		(411,430)	(422,279)
Net impairment loss on financial assets		656,433	592,845
Net impairment loss on other financial assets		82,103	206,570
Non-cash employee benefits		149,531	134,465
Depreciation and amortization		160,417	165,381
Non-cash other operating loss (income), net		49,447	(74,827)
Share of profit of associates		(8,615)	(13,399)
Non-cash non-operating expenses, net	_	9,507	15,189
	_	(3,902,631)	(3,715,032)
Changes in assets and liabilities:			
Due from banks		3,445,119	(1,706,862)
Trading assets		(2,218,771)	(746,002)
Derivative assets		1,146,199	890,191
Loans		(10,310,156)	(21,318,857)
Other assets		(2,261,259)	(1,755,738)
Financial liabilities designated at fair value through profit of	r		
loss		(7,433)	7,464
Deposits		15,317,603	22,711,569
Trading liabilities		(43,734)	59,749
Derivative liabilities		(1,126,126)	(965,843)
Liability for defined benefit obligations		(219,788)	(292,930)
Provisions		(18,218)	(13,108)
Other liabilities		(2,903,644)	2,166,342
	_	799,792	(964,025)
Income toy paid		(207 172)	(408,194)
Income tax paid		(287,173)	7,662,357
Interest received		7,805,108	
Interest paid		(3,156,234)	(3,661,561)
Dividends received	_	154,008	185,949
Net cash provided by (used in) operating activities	_	3,441,594	974,564

## **Consolidated Statements of Cash Flows (continued)** For the years ended December 31, 2016 and 2015

(In millions of won)		2016	2015
Cook flows from investing activities			
Cash flows from investing activities Proceeds from sale of available-for-sale financial assets	₩	20,517,584	21,368,695
Acquisitions of available-for-sale financial assets	<del>***</del>	(23,725,867)	(23,502,156)
Proceeds from held-to-maturity financial assets		1,223,646	1,691,705
Acquisitions of held-to-maturity financial assets		(2,728,536)	(3,771,041)
Proceeds from sale of property and equipment		1,438	3,537
Acquisitions of property and equipment		(79,285)	(102,583)
Proceeds from sale of intangible assets		1,313	819
Acquisitions of intangible assets		(37,052)	(95,596)
Proceeds from sale of investments in associates		332	(93,390)
Acquisitions of investments in associates		(11,607)	(5,974)
Proceeds from sale of investment properties		18,075	6,725
Acquisitions of investment properties		(6,910)	(10,296)
Proceeds from sale of non-current assets held for sale		2,215	2,950
Receipts of refund of guarantee deposits paid		868,794	664,775
Payment of guarantee deposits		(824,203)	(571,819)
Acquisitions of subsidiaries		(024,203)	(151,934)
Net cash provided by (used in) investing activities		(4,780,063)	(4,472,193)
rect cash provided by (used in) investing activities		(4,760,003)	(4,472,193)
Cash flows from financing activities			
Proceeds from (repayments of) borrowings, net		1,072,852	(6,432)
Proceeds from issuance of debt securities		8,765,677	9,980,618
Repayments of debt securities		(6,314,687)	(6,600,652)
Dividends paid		(703,612)	(512,863)
Redemption of hybrid bonds		(392,000)	(329,850)
Receipts of guarantee deposits for lease		131,204	98,633
Refund of guarantee deposits for lease		(134,377)	(94,326)
Acquisition of external shareholder's equity		(10,504)	
Net cash provided by financing activities		2,414,553	2,535,128
Effect of exchange rate fluctuations on cash and cash			
equivalents held		(27,018)	5,015
Net increase(decrease) in cash and cash equivalents		1,049,066	(957,486)
		2.570.710	4.526.204
Cash and cash equivalents at January 1 (note 40)		3,578,718	4,536,204
Cash and cash equivalents at December 31 (note 40)	w <u></u>	4,627,784	3,578,718

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 1. Reporting entity

Information regarding Shinhan Bank (the "Bank"), the controlling company, and its subsidiaries included in consolidation (collectively the "Group") are summarized as follows:

Shinhan Bank, Ltd. (the "Bank"), the controlling company, has its headquarters at 20, Sejong-daero 9-gil, Jung-gu, Seoul, Republic of Korea. Consolidated financial statements for the year ended December 31, 2016 consist of equity interests in the subsidiaries and affiliates (collectively referred to as "the Group"), associates and joint ventures of the Group.

### (a) Controlling company

The Bank was established through the merger of Hansung 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 in April 1, 2006, and subsequently changed its name to Shinhan Bank. As of December 31, 2016, the Bank has 1,585,615,506 outstanding common shares with par value of \(\pi\)7,928,078 million which Shinhan Financial Group Co., Ltd. ("Shinhan Financial Group") owns 100% of them. As of December 31, 2016, the Bank operates through 762 domestic branches, 109 depositary offices, 23 premises and 14 overseas branches.

#### (b) Subsidiaries included in consolidation

#### i) Shinhan Asia Ltd.

Shinhan Asia Limited ("Shinhan Asia") engages in merchant banking activities in Hong Kong. As of December 31, 2016, Shinhan Asia's capital stock amounted to US \$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, 2016, Shinhan America's capital stock amounted to US \$123 million.

## iii) Shinhan Bank Europe GmbH

Shinhan Bank Europe GmbH ("Shinhan Europe") was established in 1994. As of December 31, 2016, Shinhan Europe's capital stock amounted to EUR 23 million.

#### iv) Shinhan Khmer Bank

Shinhan Khmer Bank ("Shinhan Khmer") was established on October 15, 2007. As of December 31, 2016, Shinhan Khmer's capital stock amounted to US \$20 million.

#### v) Shinhan Kazakhstan Bank

Shinhan Kazakhstan Bank ("Shinhan Kazakhstan") was established on December 16, 2008. As of December 31, 2016, Shinhan Kazakhstan's capital stock amounted to KZT 10,029 million.

#### vi) Shinhan Bank China Limited

Shinhan Bank China Limited ("Shinhan China") was established on May 12, 2008. As of December 31, 2016, Shinhan China's capital stock amounted to CNY 2,000 million.

#### 1. Reporting entity (continued)

(b) Subsidiaries included in consolidation (continued)

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### vii) Shinhan Bank Canada

Shinhan Bank Canada ("Shinhan Canada") was established on March 9, 2009. As of December 31, 2016, Shinhan Canada's capital stock amounted to CAD 80 million.

#### viii) Shinhan Bank Japan

Shinhan Bank Japan ("Shinhan Japan") was established on September 14, 2009. As of December 31, 2016, Shinhan Japan's capital stock amounted to JPY 15,000 million.

#### ix) Shinhan Bank Vietnam

Shinhan Bank Vietnam ("Shinhan Vietnam") was established on November 16, 2009 and merged with Shinhan Vina Bank on November 28, 2011. As of December 31, 2016, Shinhan Vietnam's capital stock amounted to VND 4,547,100 million.

#### x) Shinhan Bank Mexico

Shinhan Bank Mexico ("Shinhan Mexico") was established in 2016 for obtaining the authorization of banking business. As of December 31, Shinhan Mexico's issued capitals were amounted to MXN 655 million. Shinhan Mexico has executed 1,000-for-1 stock split, changing the face value from MXN 1,000 to MXN 1, during the current year.

#### xi) PT Bank Shinhan Indonesia

PT Bank Shinhan Indonesia ("Shinhan Indonesia") was established on September 8, 1967. The Group acquired 97.76% of voting share and obtained control of Shinhan Indonesia in 2015. On December 6, 2016, the merger between Shinhan Bank Indonesia and PT Centratama Nasional Bank in the Group occurred and the name of the company is Shinhan Bank Indonesia. As a result of unequal rights offering after the merger, as of December 31, 2016, Shinhan Indonesia's issued capitals were amounted to IDR 490,087 million.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

### 1. Reporting entity (continued)

(b) Subsidiaries included in consolidation (continued)

Details of ownerships in subsidiaries as of December 31, 2016 and 2015 were as follows:

	Ownership (%)				
Investee	Country	December 31, 2016	December 31, 2015		
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	90.00	90.00		
Shinhan Kazakhstan	Kazakhstan	100.00	100.00		
Shinhan China	China	100.00	100.00		
Shinhan Canada	Canada	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		
PT Bank Shinhan Indonesia(*)	Indonesia	98.98	97.76		
PT Centratama Nasional Bank(*)	Indonesia	-	75.00		

<sup>(\*)</sup> There has been a merge on December 6, 2016 between PT Bank Shinhan Indonesia and PT Centratama National Bank Corporation within the consolidated entity and the company name is 'PT Bank Shinhan Indonesia'.

In addition, structured entities included in consolidation as of December 31, 2016 were as follows:

Structured entities         Country         (month)           MPC Yulchon Green 1st         Korea         3 / 6 / 9 / 12           AR Plus 2nd         Korea         2           MPC Yulchon 2nd         Korea         3 / 6 / 9 / 12           MPC Yulchon 1st         Korea         3 / 6 / 9 / 12           S-Nuri 1st L.L.C         Korea         2 / 4 / 6 / 8 / 10 / 12           S-Nuri 9th L.L.C         Korea         2 / 5 / 8 / 11           S-Nuri 9th L.L.C         Korea         1 / 4 / 7 / 10           Shinhan-S-Russell Co., Ltd.         Korea         3 / 6 / 9 / 12           GPS 2nd Ltd.         Korea         3 / 6 / 9 / 12           GPS 2nd Ltd.         Korea         1 / 2           GPS 2nd Ltd.         Korea         1 / 4 / 7 / 10           GPS 3th Ltd.         Korea         3 / 6 / 9 / 12           GPS 5th Ltd.         Korea         1 / 4 / 7 / 10           GPS 7th L.L.C         Korea         2 / 5 / 8 / 11           Carecamp 1st Ltd.         Korea         2 / 5 / 8 / 11           Carecamp 1st Ltd.         Korea         1 / 4 / 7 / 10           GPS 1th Ltd.         Korea         1 / 4 / 7 / 10           GPS 8th Ltd.         Korea         2 / 5 / 8 / 11           S-way			Fiscal period-end
AR Plus 2nd       Korea       2         MPC Yulchon 2nd       Korea       3/6/9/12         MPC Yulchon 1st       Korea       3/6/9/12         S-Nuri 1st L.L.C       Korea       2/4/6/8/10/12         S-Nuri 4th L.L.C       Korea       2/5/8/11         S-Nuri 9th L.L.C       Korea       1/4/7/10         Shinhan-S-Russell Co., Ltd.       Korea       3/6/9/12         GPS 2nd Ltd.       Korea       12         GPS 2nd Ltd.       Korea       1/4/7/10         S-Narae 1th L.L.C       Korea       1/4/7/10         GPS 5th Ltd.       Korea       1/4/7/10         S-Narae 1th L.L.C       Korea       2/5/8/11         Carecamp 1st Ltd.       Korea       2/5/8/11         Carecamp 1st Ltd.       Korea       1/4/7/10         GPS 11th Ltd.       Korea       1/4/7/10         GPS 8th Ltd.       Korea       2/5/8/11         S-way 5th Co., Ltd.       Korea       2/5/8/11         S-way 5th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 2nd Co., Ltd.       Korea       2/5/8/11         Sunny Financial 9th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 6th Co., Ltd.       Korea       1/4/7/10	Structured entities	Country	(month)
MPC Yulchon 2nd         Korea         3/6/9/12           MPC Yulchon 1st         Korea         3/6/9/12           S-Nuri 1st L.L.C         Korea         2/4/6/8/10/12           S-Nuri 4th L.L.C         Korea         2/5/8/11           S-Nuri 9th L.L.C         Korea         1/4/7/10           Shinhan-S-Russell Co., Ltd.         Korea         3/6/9/12           GPS 2nd Ltd.         Korea         12           GPS 2nd Ltd.         Korea         1/4/7/10           GPS 4th Ltd.         Korea         1/4/7/10           S-Narae 1th L.L.C         Korea         1/4/7/10           GPS 7th L.L.C         Korea         2/5/8/11           Carecamp 1st Ltd.         Korea         2           GPS 11th Ltd.         Korea         1/4/7/10           GPS 8th Ltd.         Korea         1/4/7/10           GPS 8th Ltd.         Korea         2/5/8/11           S-way 5th Co., Ltd.         Korea         1/6/9/12           S-way 5th Co., Ltd.         Korea         1/6/9/12           Sunny Financial 2nd Co., Ltd.         Korea         1/4/7/10           Sunny Financial 9th Co., Ltd.         Korea         1/4/7/10           Sunny Financial 6th Co., Ltd.         Korea         1/4/7/	MPC Yulchon Green 1st	Korea	3/6/9/12
MPC Yulchon 1st         Korea         3/6/9/12           S-Nuri 1st L.L.C         Korea         2/4/6/8/10/12           S-Nuri 4th L.L.C         Korea         2/5/8/11           S-Nuri 9th L.L.C         Korea         1/4/7/10           Shinhan-S-Russell Co., Ltd.         Korea         3/6/9/12           GPS 2nd Ltd.         Korea         12           GPS 4th Ltd.         Korea         3/6/9/12           GPS 5th Ltd.         Korea         1/4/7/10           S-Narae 1th L.L.C         Korea         1/4/7/10           GPS 7th L.L.C         Korea         2/5/8/11           Carecamp 1st Ltd.         Korea         2/5/8/11           GPS 11th Ltd.         Korea         1/4/7/10           GPS 3th Ltd.         Korea         2/5/8/11           S-way 5th Co., Ltd.         Korea         1/4/7/10           Sunny Financial 2nd Co., Ltd.         Korea         1/4/7/10           Sunny Financial 9th Co., Ltd.         Korea         1/4/7/10           Sunny Financial 6th Co., Ltd.         Korea         1/4/7/10<	AR Plus 2nd	Korea	2
S-Nuri 1st L.L.C       Korea       2/4/6/8/10/12         S-Nuri 4th L.L.C       Korea       2/5/8/11         S-Nuri 9th L.L.C       Korea       1/4/7/10         Shinhan-S-Russell Co., Ltd.       Korea       3/6/9/12         GPS 2nd Ltd.       Korea       12         GPS 4th Ltd.       Korea       3/6/9/12         GPS 5th Ltd.       Korea       1/4/7/10         S-Narae 1th L.L.C       Korea       1/4/7/10         GPS 7th L.L.C       Korea       2/5/8/11         Carecamp 1st Ltd.       Korea       2         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       1/4/7/10         Sunny Financial 2nd Co., Ltd.       Korea       1/4/7/10         Sunny Financial 9th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 6th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 6th Co., Ltd.       Korea       1/4/7/10	MPC Yulchon 2nd	Korea	3 / 6 / 9 / 12
S-Nuri 4th L.L.C       Korea       2/5/8/11         S-Nuri 9th L.L.C       Korea       1/4/7/10         Shinhan-S-Russell Co., Ltd.       Korea       3/6/9/12         GPS 2nd Ltd.       Korea       12         GPS 4th Ltd.       Korea       1/4/7/10         GPS 5th Ltd.       Korea       1/4/7/10         S-Narae 1th L.L.C       Korea       1/4/7/10         GPS 7th L.L.C       Korea       2/5/8/11         Carecamp 1st Ltd.       Korea       2         GPS 11th Ltd.       Korea       1/4/7/10         GPS 8th 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       1/4/7/10         Sunny Financial 2nd Co., Ltd.       Korea       1/4/7/10         Sunny Financial 9th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 6th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 6th Co., Ltd.       Korea       1/4/7/10	MPC Yulchon 1st	Korea	3 / 6 / 9 / 12
S-Nuri 9th L.L.C       Korea       1/4/7/10         Shinhan-S-Russell Co., Ltd.       Korea       3/6/9/12         GPS 2nd Ltd.       Korea       12         GPS 4th Ltd.       Korea       3/6/9/12         GPS 5th Ltd.       Korea       1/4/7/10         S-Narae 1th L.L.C       Korea       1/4/7/10         GPS 7th L.L.C       Korea       2/5/8/11         Carecamp 1st Ltd.       Korea       2         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       1/4/7/10         Sunny Financial 2nd Co., Ltd.       Korea       2/5/8/11         Sunny Financial 9th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 6th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 6th Co., Ltd.       Korea       1/4/7/10	S-Nuri 1st L.L.C	Korea	2/4/6/8/10/12
Shinhan-S-Russell Co., Ltd.       Korea       3/6/9/12         GPS 2nd Ltd.       Korea       12         GPS 4th Ltd.       Korea       3/6/9/12         GPS 5th Ltd.       Korea       1/4/7/10         S-Narae 1th L.L.C       Korea       1/4/7/10         GPS 7th L.L.C       Korea       2/5/8/11         Carecamp 1st Ltd.       Korea       1/4/7/10         GPS 11th Ltd.       Korea       1/4/7/10         GPS 10th Ltd.       Korea       3/6/9/12         Sunny Financial 1st Co., Ltd.       Korea       2/5/8/11         S-way 5th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 2nd Co., Ltd.       Korea       2/5/8/11         Sunny Financial 9th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 6th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 6th Co., Ltd.       Korea       1/4/7/10	S-Nuri 4th L.L.C	Korea	2/5/8/11
GPS 2nd Ltd.       Korea       12         GPS 4th Ltd.       Korea       3/6/9/12         GPS 5th Ltd.       Korea       1/4/7/10         S-Narae 1th L.L.C       Korea       1/4/7/10         GPS 7th L.L.C       Korea       2/5/8/11         Carecamp 1st Ltd.       Korea       2         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       1/0         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 Financial 6th Co., Ltd.       Korea       1/4/7/10	S-Nuri 9th L.L.C	Korea	1 / 4 / 7 / 10
GPS 4th Ltd.       Korea       3/6/9/12         GPS 5th Ltd.       Korea       1/4/7/10         S-Narae 1th L.L.C       Korea       1/4/7/10         GPS 7th L.L.C       Korea       2/5/8/11         Carecamp 1st Ltd.       Korea       2         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       2/5/8/11         Sunny Financial 2nd Co., Ltd.       Korea       1/4/7/10         Sunny Financial 9th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 6th Co., Ltd.       Korea       1/4/7/10         Sunny Financial 6th Co., Ltd.       Korea       1/4/7/10	Shinhan-S-Russell Co., Ltd.	Korea	3 / 6 / 9 / 12
GPS 5th Ltd.       Korea       1/4/7/10         S-Narae 1th L.L.C       Korea       1/4/7/10         GPS 7th L.L.C       Korea       2/5/8/11         Carecamp 1st Ltd.       Korea       2         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 Financial 6th Co., Ltd.       Korea       1/4/7/10	GPS 2nd Ltd.	Korea	12
S-Narae 1th L.L.C       Korea       1/4/7/10         GPS 7th L.L.C       Korea       2/5/8/11         Carecamp 1st Ltd.       Korea       2         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 Financial 6th Co., Ltd.       Korea       1/4/7/10	GPS 4th Ltd.	Korea	3/6/9/12
GPS 7th L.L.C       Korea       2/5/8/11         Carecamp 1st Ltd.       Korea       2         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 Financial 6th Co., Ltd.       Korea       1/4/7/10	GPS 5th Ltd.	Korea	1 / 4 / 7 / 10
Carecamp 1st Ltd.       Korea       2         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 Financial 6th Co., Ltd.       Korea       1/4/7/10	S-Narae 1th L.L.C	Korea	1 / 4 / 7 / 10
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 Financial 6th Co., Ltd.       Korea       1/4/7/10	GPS 7th L.L.C	Korea	2/5/8/11
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 Financial 6th Co., Ltd.       Korea       1/4/7/10	Carecamp 1st Ltd.	Korea	2
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 Financial 6th Co., Ltd.       Korea       1/4/7/10	GPS 11th Ltd.	Korea	1 / 4 / 7 / 10
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 Financial 6th Co., Ltd.       Korea       1/4/7/10	GPS 10th Ltd.	Korea	1 / 4 / 7 / 10
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 Financial 6th Co., Ltd.       Korea       1/4/7/10	GPS 8th Ltd.	Korea	3/6/9/12
Sunny Financial 2nd Co., Ltd.Korea2/5/8/11Sunny Financial 9th Co., Ltd.Korea1/4/7/10Sunny more 3rd Co., Ltd.Korea1/4/7/10Sunny Financial 6th Co., Ltd.Korea1/4/7/10	Sunny Financial 1st Co., Ltd.	Korea	2/5/8/11
Sunny Financial 9th Co., Ltd.Korea1/4/7/10Sunny more 3rd Co., Ltd.Korea1/4/7/10Sunny Financial 6th Co., Ltd.Korea1/4/7/10	S-way 5th Co., Ltd.	Korea	10
Sunny more 3rd Co., Ltd. Korea 1/4/7/10 Sunny Financial 6th Co., Ltd. Korea 1/4/7/10	Sunny Financial 2nd Co., Ltd.	Korea	2/5/8/11
Sunny Financial 6th Co., Ltd. Korea 1/4/7/10	Sunny Financial 9th Co., Ltd.	Korea	1 / 4 / 7 / 10
, a care and a care	Sunny more 3rd Co., Ltd.	Korea	1 / 4 / 7 / 10
Sunny more 1st Co., Ltd. Korea 1/4/7/10	Sunny Financial 6th Co., Ltd.	Korea	1 / 4 / 7 / 10
	Sunny more 1st Co., Ltd.	Korea	1 / 4 / 7 / 10

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

### 1. Reporting entity (continued)

		Fiscal period-end
Structured entities	Country	(month)
Sunny more 2nd Co., Ltd.	Korea	1 / 4 / 7 / 10
Sunny more 5th Co., Ltd.	Korea	2/5/8/11
Sunny more 6th Co., Ltd.	Korea	3 / 6 / 9 / 12
Sunny more 7th Co., Ltd.	Korea	3/6/9/12
CGN YULCHON 2nd	Korea	3 / 6 / 9 / 12
Sunny more 10th Co., Ltd.	Korea	2/5/8/11
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 dream 6th Co., Ltd.	Korea	9
Sunny russell 2nd Co., Ltd.	Korea	2/5/8/11
Sunny dream 5th Co., Ltd.	Korea	1 / 4 / 7 / 10
Sunny russell 3rd L.L.C.	Korea	2/5/8/12
Sunny dream 1st Co., Ltd.	Korea	7
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
Sunny more 9th Co., Ltd.	Korea	3/6/9/12
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 25 <sup>th</sup>	Korea	1
Shinhan BNPP Private Corporate 18 <sup>th</sup>	Korea	1

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.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

## 1. Reporting entity (continued)

(b) Subsidiaries included in consolidation (continued)

	Entities
Newly included subsidiaries	Sunny Financial 1st Co., Ltd.
for the year ended December 31, 2016	S-way 5th Co., Ltd.
	Sunny Financial 2nd Co., Ltd.
	Sunny Financial 9th Co., Ltd.
	Sunny more 3rd Co., Ltd.
	Sunny Financial 6th Co., Ltd.
	Sunny more 1st Co., Ltd.
	Sunny more 2nd Co., Ltd.
	Sunny more 5th Co., Ltd.
	Sunny more 6th Co., Ltd.
	Sunny more 7th Co., Ltd.
	CGN YULCHON 2nd
	Sunny more 10th Co., Ltd.
	Sunny dream 4th L.L.C
	Sunny dream 7th Co., Ltd.
	Sunny dream 9th L.L.C
	Sunny dream 6th Co., Ltd.
	Sunny more 9th Co., Ltd.
	Sunny russell 2nd Co., Ltd.
	Sunny dream 5th Co., Ltd.
	Sunny russell 3rd L.L.C.
	Sunny dream 1st Co., Ltd.
	Sunny russell 8th Co., Ltd.
	Sunny russell 7th L.L.C
	Sunny russell 6th Co., Ltd.
Excluded subsidiaries	Shinhan-Daesung Contents Fund Shinhan BNPP Very Good High Dividend
for the year ended December 31, 2016(*)	S Dream 5th Co., Ltd
	S-way 2nd Co., Ltd.
	AETAS DRIVE FIRST Co., L.L.C
	Household Money Trust(Chohung)
	Installment Money Trust for Purpose(Chohung)
	Installment Money Trust for Purpose(Shinhan)
	Corporation Money Trust(Chohung)
	Heungkuk Rainbow Private Securities Investment Trust T-41th
	Dongbu All Together Private Investment Trust Fund 9 <sup>th</sup>
	Hyundai Heritage Private Securities Investment Trust SH-3 <sup>rd</sup>
	Samsung Partner Private Securities No.6[Trust]

<sup>(\*)</sup> The Group excluded subsidiaries due to loss of control mainly by termination of the ABCP purchase agreement and disposal of beneficiary certificate.

## 2. Basis of preparation

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

### (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 Audits of Corporations in the Republic of Korea.

#### (b) Approval of the consolidated financial statements

The consolidated financial statements were authorized for issue by the Board of Directors on February 7, 2017.

#### (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

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	Subsidiary	
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	PT Bank Shinhan Indonesia	

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

## 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.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies

The accounting policies applied by the Group in these consolidated financial statements are the same as those applied by the Group in its consolidated financial statements as of and for the year ended December 31, 2015.

#### (a) 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 in the consolidated statements of financial position since the Group's 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 interests holders, even when the allocation reduces the non-controlling interests balance below zero.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (b) 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, are expensed in the periods in which the costs are incurred and the services are received. The costs to issue debt or equity securities are recognized in accordance with K-IFRS No.1032, 'Financial Instruments: Presentation' and K-IFRS No.1039, 'Financial Instruments: Recognition and Measurement'.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (b) 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, 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 GAAP.

#### (c) 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.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (d) 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 CEO as the chief operating decision maker.

#### (e) Foreign currencies

#### i) Foreign currency transactions

Transactions in foreign currencies are translated to the respective functional currencies of Group entities 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 is 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.

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.

## 3. Significant accounting policies (continued)

#### (e) Foreign currencies (continued)

#### iii) Net investment in a foreign operation

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

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.

#### (f) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with original maturities of three months or less. 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.

#### (g) 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 place concerned) is recognized on the trade date are 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.

#### 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.

#### 3. Significant accounting policies (continued)

#### (g) Non-derivative financial assets (continued)

#### 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

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

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.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (h) 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.

#### 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.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (h) 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.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (i) Derivative financial instruments

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

#### i) Hedge Accounting

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

On initial designation of the hedge, the Group formally documents the relationship between the hedging instrument(s) and hedged item(s), including the risk management objectives and strategy in undertaking the hedge transaction, 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 for a derivative hedging instrument and the gain or loss on the hedged item attributable to the hedged risk are recognized in profit or loss in the same line item of the 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.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (i) 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.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (j) 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'*. 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 were 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.

#### (k) 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 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.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

## 3. Significant accounting policies (continued)

De	escriptions	Useful lives
Software and capitalized develop	oment cost	5 years
Other intangible assets		5 years or contract periods, whichever the shorter
the end of each reporting period. at the end of each reporting period	The useful lives of intangible assets	ets with finite useful lives are reviewed at that are not being amortized are reviewed coumstances continue to support indefinite changes in accounting estimates.
understanding, are recognized in development costs can be measure future economic benefits are pro	profit or loss as incurred. Develop red reliably, the product or process bable, and the Group intends to a	of gaining new technical knowledge and oment expenditures are capitalized only it is technically and commercially feasible and has sufficient resources to complete ditures are recognized in profit or loss as
(l) Investment properties		
investment property is initially re	cognized at cost including any direc	or for capital appreciation or both. Artly attributable expenditure. Subsequent depreciation and accumulated impairment
The depreciation method and the	estimated useful lives for the current a	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.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (m) 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.

#### (n) 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 in accordance with K-IFRS No.1036, 'Impairment of Assets'.

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).

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (o) 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 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 reflect current market assessments of the time value of money and the risks specific to the asset or 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 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.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (p) 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).

#### (q) Equity capital

#### i) Capital stock

Capital stock is classified as equity. Incremental costs directly attributable to the transaction of stock are recognized as a deduction 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.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (r) Employee benefits

#### i) Short-term employee benefits

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

#### ii) Other long-term employee benefits

The Group's net obligation in respect of other long-term employee benefits that are not expected to be settled wholly before twelve 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 remeasurement 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.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (s) 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.

#### (t) Provisions

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

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.

Provision shall be used only for expenditures for which the provision is originally recognized.

#### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (u) Financial guarantee contract

A financial guarantee contract is a contract that requires the Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument. Financial guarantee contracts are recognized initially at their fair value, and the initial fair value is amortized over the life of the financial guarantee contract. 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.

#### (v) 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.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (v) Financial income and expense (continued)

## (b) Fees that are 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

Dividend income is recognized when the right to receive income is established. Usually this is the ex-dividend date for equity securities.

## (w) 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.

A deferred tax asset is recognized for unused tax losses, tax credits and deductible temporary differences, to the extent that it is probable that future taxable profits will be available against which they can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

#### (x) Accounting for trust accounts

The Group accounts for trust accounts separately from its group 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 commissions income.

#### (y) 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 Bank 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.

## (z) 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 periods beginning on or after January 1, 2016, and the Group has not early adopted them.

Management is in the process of evaluating the potential impact of the amendments on the Group's consolidated financial statements.

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

K-IFRS 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 1039, Financial Instruments: Recognition and Measurement. The Bank plans to adopt K-IFRS 1109 for the year beginning after January 1, 2018.

K-IFRS 1109 will generally be applied retrospectively; however the Bank 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.

Key features of the new standard, K-IFRS 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 1109 will require the Bank to assess the financial impact from application of K-IFRS 1109 and revise its accounting processes and internal controls related to financial instruments. Actual impact of adopting K-IFRS 1109 will be dependent on the financial instruments the Bank holds and economic conditions at that time as well as accounting policy elections and judgment that it will make in the future.

The Bank has not initiated any changes in internal controls processes or accounting processing systems, and has not performed an assessment of the impact resulting from the application of K-IFRS 1109.

## 3. Significant accounting policies (continued)

(z) New standards and interpretations not yet adopted

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

The Bank is currently performing a detailed assessment of the impact resulting from the application of K-IFRS 1109, and expects to disclose additional quantitative information in the notes to the financial statements for the year ending December 31, 2017 after completion of its assessment by September 30, 2017. Expected impacts on the consolidated financial statements are generally categorized as follows:

# (a) Classification and measurement of financial assets

Under K-IFRS 1109, financial assets are classified into three principal categories; measured at amortized cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL) based on the business model in which assets are managed and their cash flow characteristics, as detailed in the below table.

Under K-IFRS 1109, derivatives embedded in hybrid contracts where the host is a financial asset are not bifurcated. Instead, the hybrid financial instrument as a whole is assessed for classification.

Business model	Contractual cash flows are solely payments of principal and interests	All other cases
To collect contractual cash flows	At amortized cost(*1)	
Both to collect contractual cash flows and sell financial assets	At FVOCI	FVTPL(*2)
For trading, and others	At FVOCI	

<sup>(\*1)</sup> The Bank may irrevocably designate as at FVTPL to eliminate or significantly reduce an accounting mismatch.

As there are additional requirements for a financial asset to be classified as measured at amortized costs or FVOCI under K-IFRS 1109 compared to the existing guidance in K-IFRS 1039, the adoption of K-IFRS 1109 would potentially increase the proportion of financial assets that are measured at FVTPL, increasing volatility in the Bank's profit or loss.

Under K-IFRS 1109, a financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL: 1) the asset is held within a business model whose objective is to hold assets to collect contractual cash flows; and 2) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Under K-IFRS 1109, a financial asset is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL: 1) the asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and 2) the contractual terms of the financial asset give rise on specified dates to cash flow that are solely payments of principal and interest on the principal amount outstanding.

Under K-IFRS 1109, on initial recognition of equity investment that is not held for trading, the Bank may irrevocably elect to present subsequent changes in fair value in OCI, and will not reclassify(recycle) the those items in OCI to profit or loss subsequently.

<sup>(\*2)</sup> The Bank may irrevocably designate equity investments that is not held for trading as at FVOCI.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

## (z) New standards and interpretations not yet adopted

Under K-IFRS 1109, a financial asset is measured at FVTPL if the contractual terms of the financial asset give rise to specified dates to cash flows that are not solely payments of principal and interest on the principal amount outstanding, the debt instrument is held within a business model whose objective is to sell the asset, or the equity instruments that are not elected to be designated as measured at FVOCI.

#### (b) Classification and measurement of financial liabilities

Under K-IFRS 1109, the amount of change in the fair value attributable to the changes in the credit risk of the financial liabilities is presented in OCI, not recognized in profit or loss, and the OCI amount will not be reclassified (recycled) to profit or loss. However, if doing so creates or increase an accounting mismatch, the amount of change in the fair value is recognized in profit or loss.

As a portion of fair value change which was recognized in profit or loss under the existing standard, K-IFRS 1039, will be presented in OCI under K-IFRS 1109, profit or loss related to valuation of financial liabilities is likely to decrease.

#### © Impairment: Financial assets and contract assets

K-IFRS 1109 replaces the 'incurred loss' model in the existing standard with a forward-looking 'expected credit loss' (ECL) model for debt instruments, lease receivables, contractual assets, loan commitments, financial guarantee contracts.

Under K-IFRS 1109, impairment losses are likely to be recognized earlier than using the incurred loss model under the existing guidance in K-IFRS 1039 as loss allowances will be measured on either of the 12-month or lifetime ECL based on the extent of increase in credit risk since inception as shown in the below table.

	Classification	Loss allowances		
Stage 1	Credit risk has not increased significantly since the initial recognition	12-month ECL: ECLs that resulted from possible default events within the 12 months after the reporting date		
Stage 2	Credit risk has increase significantly since the intial recognition	Lifetime ECL: ECL that resulted from all possible default events over the expected life of a financial instrument		
Stage 3	Credit-impaired	-		

Under K-IFRS 1109, financial assets of which the credit was impaired at the initial recognition, cumulative changes in lifetime ECL since the initial recognition are recognized as loss allowances.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 3. Significant accounting policies (continued)

(z) New standards and interpretations not yet adopted

#### (d) Hedge accounting

K-IFRS 1109 retains the mechanics of hedge accounting (fair value hedge, cash flow hedge, hedging on net investment in a foreign operation) which was defined in the existing guidance in K-IFRS 1109, but provides principle-based and less complex guidance in hedging which focuses on the risk management activities. More hedged items and hedging instruments would qualify for hedge accounting, more qualitative and forward-looking approach will be taken to assessing hedge effectiveness, and qualitative threshold (80~120%) is removed under K-IFRS 1109.

Certain transactions which were not qualified for hedge accounting under the existing standard will be likely to quality for hedge accounting under K-IFRS 1109, decreasing volatility in the Bank's profits or loss.

When initially applying K-IFRS 1109, the Bank may choose as its accounting policy to continue to apply the hedge accounting requirements of K-IFRS 1039.

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

K-IFRS No.1115, published in January 2016, establishes a comprehensive framework for determining whether, how much and when revenue is recognized. It replaces existing revenue recognition guidance, including K-IFRS No.1018, 'Revenue', K-IFRS No.1011, 'Construction Contracts' and K-IFRS No.2113, 'Customer Loyalty Programmes'. K-IFRS No.1115 is effective for annual reporting periods beginning on or after January 1, 2018, with early adoption permitted.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 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 Credit Policy Committee, which is the Group's executive decision-making body for credit risk management. The Credit Policy Committee is led by the Group's Deputy President and Head of Risk Management Group. The Credit 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 Credit 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 Credit 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.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

## 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, 2016 and 2015 were as follows:

	_	December 31, 2016	December 31, 2015
Due from banks and loans(*1,2):			
Banks Retail:	₩	10,032,848	9,266,841
Mortgage lending		45,068,588	44,937,977
Other		61,786,832	54,408,820
		106,855,420	99,346,797
Government		11,482,301	16,394,736
Corporate:		, ,	, ,
Large companies		31,988,958	31,255,834
Small and medium enterprises		68,047,999	64,888,159
Special finance		3,719,100	3,467,796
Other		542	981
		103,756,599	99,612,770
Card		17,565	20,745
		232,144,733	224,641,889
Trading assets:			
Debt securities		9,229,544	8,097,168
Gold/Silver deposits		247,845	149,220
		9,477,389	8,246,388
Derivative assets		2,579,121	1,617,518
Available-for-sale financial assets:			
Debt securities		25,280,758	22,026,203
Held-to-maturity financial assets:			
Debt securities		11,630,270	10,105,051
Other financial assets(*1,3)		11,957,522	9,702,482
Off balance sheet items:			
Financial guarantee contracts		3,403,788	3,656,213
Loan commitments and other liabilities for			
credit		75,287,793	76,224,534
		78,691,581	79,880,747
	₩ <u></u>	371,761,374	356,220,278

<sup>(\*1)</sup> The maximum exposure amounts for due from banks and loans and other financial assets are measured as the amount net of allowances.

<sup>(\*2)</sup> 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).

<sup>(\*3)</sup> Other financial assets comprise accounts receivable, accrued income, guarantee deposits, domestic exchange settlements receivables, suspense receivables, etc.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

# 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, 2016 and 2015 were as follows:

	-		December 31, 2016					
	-	Banks	Retail	Government	Corporate	Card	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)	
	W	10,032,848	106,855,420	11,482,301	103,756,599	17,565	232,144,733	

			December 31, 2015					
		Banks	Retail	Government	Corporate	Card	Total	
Neither past due nor impaired	₩	9,292,002	99,081,333	16,397,262	99,583,625	20,817	224,375,039	
Past due but not impaired		-	320,023	_	130,271	477	450,771	
Impaired			238,041		1,061,379	13	1,299,433	
		9,292,002	99,639,397	16,397,262	100,775,275	21,307	226,125,243	
Less: allowance		(25,161)	(292,600)	(2,526)	(1,162,505)	(562)	(1,483,354)	
	₩	9,266,841	99,346,797	16,394,736	99,612,770	20,745	224,641,889	

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

## 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, 2016 and 2015 were as follows:

		December 31, 2016					
		Banks	Retail	Government	Corporate	Card	Total
Grade 1(*1)	W	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)	W	34,632	71,888,139	-	53,664,247	148	125,587,166
		December 31, 2015					
		Banks	Retail	Government	Corporate	Card	Total
Grade 1(*1)	W	9,292,002	94,338,232	16,397,262	65,810,495	18,446	185,856,437
Grade 2(*1)		-	4,743,101	-	33,773,130	2,371	38,518,602
	_	9,292,002	99,081,333	16,397,262	99,583,625	20,817	224,375,039
Less: allowance		(25,161)	(161,329)	(2,526)	(660,374)	(562)	(849,952)
	₩	9,266,841	98,920,004	16,394,736	98,923,251	20,255	223,525,087
Mitigation of credit	-						
risk due to collateral(*2)	W	1,051	65,068,356	-	52,691,005	85	117,760,497

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

Type of Borrower	Grade 1	Grade 2
Banks and	Organization for Economic Co-operation	OECD sovereign credit rating of below 6 (as
governments	and Development (OECD) sovereign credit	applied to the nationality of the banks and
	rating of 6 or above (as applied to the	governments)
	nationality of the banks and governments)	
Retail	Pool of retail loans with probability of	Pool of retail loans with probability of
	default of less than 2.25%	default of 2.25% or more
Corporations	Internal credit rating of BBB+ or above	Internal credit rating of below BBB+
Credit cards	For individual card holders, score of 7 or	For individual card holders, score of below
	higher in Shinhan Card's internal behavior	7 in Shinhan Card's internal behavior
	scoring system	scoring system
	For corporate cardholders, same as corporate	For corporate cardholders, same as corporate
	loans	loans

(\*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.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

## 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, 2016 and 2015 were as follows:

		December 31, 2016				
		Retail	Corporate	Card	Total	
Within 30 days	W	227,550	155,352	242	383,144	
30~60 days		42,428	41,131	41	83,600	
60~90 days		28,431	15,787	23	44,241	
More than 90 days		13,460	3,034	226	16,720	
		311,869	215,304	532	527,705	
Less: allowance		(32,705)	(10,938)	-	(43,643)	
	W	279,164	204,366	532	484,602	
Mitigation of credit risk due to						
collateral	₩	226,591	95,021	1	321,613	
		December 31, 2015				
		Retail	Corporate	Card	Total	
Within 30 days	W	238,761	89,203	182	328,146	
30~60 days		45,338	19,586	43	64,967	
60~90 days		24,076	8,518	34	32,628	
More than 90 days		11,848	12,964	218	25,030	
		320,023	130,271	477	450,771	
Less: allowance		(29,708)	(8,947)	-	(38,655)	
	W	290,315	121,324	477	412,116	
Mitigation of credit risk due to						
collateral	W	240,999	50,338	1	291,338	

iv) Mitigation of credit risk due to the collateral of impaired due from banks and loans as of December 31, 2016 and 2015 were as follows:

		December 31, 2016					
	_	Retail	Corporate	Card	Total		
Impaired	W	250,039	939,346	9	1,189,394		
Less: allowance		(112,547)	(452,910)	-	(565,457)		
	W	137,492	486,436	9	623,937		
Mitigation of credit risk due to collateral	₩	96,872	383,667	-	480,539		
		December 31, 2015					
		Retail	Corporate	Card	Total		
Impaired	W	238,041	1,061,379	13	1,299,433		
Less: allowance		(101,563)	(493,184)	<u> </u>	(594,747)		
	W	136.478	568.195	13	704,686		
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## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

## 4. Financial risk management (continued)

# 4-1. Credit risk (continued)

# (d) Credit rating

i) Credit rating of debt securities as of December 31, 2016 and 2015 were as follows:

			Decembe	er 31, 2016	
	_		Available-for-sale	Held-to-maturity	
	_	Trading assets	financial assets	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
	W	9,229,544	25,280,758	11,630,270	46,140,572
	_	December 31, 2015			
	_		Available-for-sale	Held-to-maturity	
	_	Trading assets	financial assets	financial assets	Total
AAA	W	2,191,647	16,680,379	9,118,585	27,990,611
AA- to AA+		1,146,951	1,555,147	425,682	3,127,780
A- to A+		2,505,680	1,837,268	369,117	4,712,065
BBB- to BBB+		596,975	716,343	-	1,313,318

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

419,080

817,986

22,026,203

68,672

122,995

10,105,051

563,668

2,520,980

40,228,422

75,916

1,579,999

8,097,168

	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	Lower than	Lower than	Lower than	Lower than
Lower man bbb-	BBB-	BBB-	BBB-	BBB-	Baa3
Unrated	Unrated	Unrated	Unrated	Unrated	Unrated

(\*1) KIS: Korea Investors Service

(\*2) KR: Korea Ratings

Lower than BBB-

Unrated

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

## 4. Financial risk management (continued)

## 4-1. Credit risk (continued)

- (d) Credit rating (continued)
  - iii) Credit status of debt securities as of December 31, 2016 and 2015 were as follows:

	_	December 31, 2016	December 31, 2015
Neither past due nor impaired	W	46,140,572	40,228,422
Impaired		-	<u> </u>
	W	46,140,572	40,228,422

- (e) Assets acquired through foreclosures amounting to \$\fomathbf{W}658\$ million, \$\fomathbf{W}705\$ million were classified as non-current assets held for sale as of December 31, 2016 and 2015, respectively.
- (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, 2016 and 2015 were as follows:

			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		
Government		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		
Card		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 Held-to-maturity financial		23,177,345	414,831	112,381	484,002	588,334	503,865	25,280,758		
assets		11,074,151	33,465	56,196	155,916	166,560	143,982	11,630,270		
	W	250,887,408	3,836,775	5,525,323	3,148,100	7,950,089	7,185,455	278,533,150		
		December 31, 2015								
	•	Korea	U.S.A	Japan	Vietnam	China	Other	Total		
Due from banks and loans:	•									
Banks	W	2,928,555	378,445	268,279	340,933	3,803,683	1,546,946	9,266,841		
Retail		97,197,341	291,392	1,313,049	117,797	98,175	329,043	99,346,797		
Government		14,802,420	294,332	550,439	67,251	438,214	242,080	16,394,736		
Corporate		88,805,122	1,539,268	1,722,262	1,398,081	2,436,301	3,711,736	99,612,770		
Card		11,928	1,044	3	7,734	7	29	20,745		
		203,745,366	2,504,481	3,854,032	1,931,796	6,776,380	5,829,834	224,641,889		
Trading assets		8,097,168	-	-	-	-	149,220	8,246,388		
Available-for-sale financial assets Held-to-maturity financial		21,002,919	190,884	89,433	418,865	46,545	277,557	22,026,203		
assets		9,826,888	23,465	26,770	73,226	148,258	6,444	10,105,051		
	W	242,672,341	2,718,830	3,970,235	2,423,887	6,971,183	6,263,055	265,019,531		

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

## 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, 2016 and 2015 were as follows:

		December 31, 2016								
		Finance and	Manu-	Retail and	Real estate		Retail			
		insurance	facturing	wholesale	and service	Others	customers	Total		
Due from banks and loans:								_		
Banks	W	6,986,105	68	-	110,443	2,936,232	-	10,032,848		
Retail		-	-	-	-	-	106,855,420	106,855,420		
Government		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		
Card			<u> </u>		<u> </u>	_	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		
	W	49,150,617	41,045,831	15,501,788	18,391,673	47,570,256	106,872,985	278,533,150		
					· · ·					
				De	ecember 31, 2015					
		Finance and	Manu-	Retail and	Real estate		Retail			
		insurance	facturing	wholesale	and service	Others	customers	Total		
Due from banks and loans:								_		
Banks	W	6,661,574	-	-	67,609	2,537,658	-	9,266,841		
Retail		-	-	-	-	-	99,346,797	99,346,797		
Government		15,515,686	-	-	-	879,050	-	16,394,736		
Corporate		2,196,351	37,990,569	13,753,184	17,213,766	28,458,900	-	99,612,770		
Card			-	<u> </u>	-	<u> </u>	20,745	20,745		
		24,373,611	37,990,569	13,753,184	17,281,375	31,875,608	99,367,542	224,641,889		
Trading assets		5,140,234	402,271	530,298	241,718	1,931,867		8,246,388		
Available-for-sale financial										
assets		16,894,445	682,557	60,612	198,201	4,190,388	-	22,026,203		
Held-to-maturity financial										
assets		3,600,524	66,283		73,578	6,364,666		10,105,051		
	₩	50,008,814	39,141,680	14,344,094	17,794,872	44,362,529	99,367,542	265,019,531		

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 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, 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 Group's Asset & Liability Management Committee ("ALM Committee"). The Risk Management Department is responsible for the development of detailed risk management policies which are subject to review and approval by the ALM Committee and for the day-to-day review of their implementation. The ALM 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 ALM 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 position

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.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 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 position

An analysis of trading position VaR for the years ended December 31, 2016 and 2015 were as follows:

		2016								
		Average	Maximum	Minimum	Year end					
Interest rate risk	W	33,246	48,851	18,764	44,447					
Equity risk		5,161	5,787	4,815	5,484					
Foreign currency risk(*)		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)					
	<del>W</del> _	55,981	61,648	53,086	60,983					

		2015								
	<u> </u>	Average	Maximum	Minimum	Year end					
Interest rate risk	W	37,341	43,746	33,849	35,976					
Equity risk		8,258	9,049	6,995	7,056					
Foreign currency risk(*)		45,102	54,459	36,549	44,475					
Volatility risk		355	550	262	262					
Commodity risk		5	21	-	3					
Covariance		(35,789)	(45,895)	(25,953)	(30,699)					
	₩ _	55,272	61,930	51,702	57,073					

<sup>(\*)</sup> The Group measured foreign currency risk arising from trading position and non-trading position.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 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 ALM 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.

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

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.

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 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, 2016 and 2015 were as follows:

	_	December 31, 2016	December 31,2015	
Interest rate VaR	W	1,088,995	938,790	
Interest rate EaR		58.091	185.254	

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

## 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 ALM 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 narrowly traded.

Foreign currency denominated assets and liabilities as of December 31, 2016 and 2015 were as follows:

		December 31, 2016									
	-	USD	JPY	EUR	CNY	Other	Total				
Assets	-										
Cash and due from banks	W	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											
Derivative exposures	_	2,063,897	(18,166)	(282,241)	88,689	(753,040)	1,099,139				
Net position	W	498,249	169,249	58,644	321,771	893,082	1,940,995				

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

# 4. Financial risk management (continued)

# 4-2. Market risk (continued)

(c) Foreign exchange risk (continued)

		December 31, 2015										
	-	USD	JPY	EUR	CNY	Other	Total					
Assets	_											
Cash and due from banks	₩	1,689,209	1,063,720	128,339	1,840,422	842,198	5,563,888					
Trading assets		-	-	-	-	149,220	149,220					
Derivative assets		76,151	8,009	2,596	3,989	129	90,874					
Loans		14,544,718	4,460,935	1,150,044	2,881,059	2,943,028	25,979,784					
Available-for-sale financial												
assets		1,067,423	65,075	16,979	5,441	594,535	1,749,453					
Held-to-maturity financial												
assets		43	143,529	-	148,258	83,892	375,722					
Other financial assets	_	2,226,985	268,276	126,115	654,230	183,754	3,459,360					
		19,604,529	6,009,544	1,424,073	5,533,399	4,796,756	37,368,301					
	_											
Liabilities												
Deposits		8,354,417	5,294,863	452,006	3,535,629	2,560,067	20,196,982					
Trading liabilities		-	-	-	-	453,605	453,605					
Derivative liabilities		58,210	636	260	2,260	77	61,443					
Borrowings		5,675,943	179,299	390,562	717,309	311,926	7,275,039					
Debt securities issued		3,131,783	291,603	153,664	216,660	144,381	3,938,091					
Other financial liabilities	_	2,362,636	211,698	336,225	827,811	314,265	4,052,635					
	_	19,582,989	5,978,099	1,332,717	5,299,669	3,784,321	35,977,795					
Net assets (liabilities)		21,540	31,445	91,356	233,730	1,012,435	1,390,506					
Off-balance												
Derivative exposures	_	737,265	103,134	(56,193)	101,979	(362,963)	523,222					
Net position	W	758,805	134,579	35,163	335,709	649,472	1,913,728					

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 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 ALM 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 not important for the balance with the maturities of less than 12 months, the amount is the same as the book value.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

# 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, 2016 and 2015 were as follows:

		December 31, 2016							
	_	Less than	1~3	3~6	6 months~	1 5 212000	More than		
	_	1 month	months	months	1 year	1~5 years	5 years	Total	
Assets	_			_					
Cash and due from banks	W	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	<u>-</u>	<u>-</u>	<u> </u>	1,127,142		12,015,126	
	W	84,575,409	27,133,558	35,540,142	53,285,033	69,780,117	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	_	12,558,637				121,158		12,679,795	
	W	140,024,863	25,237,783	32,998,660	54,905,521	27,463,707	7,639,602	288,270,136	

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

## 4. Financial risk management (continued)

# 4-3. Liquidity risk (continued)

(a) Contractual maturities for financial instruments (continued)

		December 31, 2015								
	_	Less than	1~3	3~6	6 months~	1~5 years	More than			
	_	1 month	months	months	1 year	13 years	5 years	Total		
Assets										
Cash and due from banks	W	15,731,618	742,946	298,047	120,519	29,538	-	16,922,668		
Trading assets		9,056,812	-	-	-	-	-	9,056,812		
Derivative assets		1,608,964	200,356	63,397	79,454	138,195	42,056	2,132,422		
Loans		19,678,457	24,477,482	32,524,431	49,278,674	54,805,352	51,224,025	231,988,421		
Available-for-sale financial										
assets		23,587,340	-	-	-	-	873,259	24,460,599		
Held-to-maturity financial										
assets		39,106	135,278	391,036	756,853	8,298,757	1,869,644	11,490,674		
Other financial assets	_	6,304,826	<u> </u>	<u>-</u>	<u> </u>	3,480,967	<u>-</u>	9,785,793		
	₩	76,007,123	25,556,062	33,276,911	50,235,500	66,752,809	54,008,984	305,837,389		
Liabilities	_									
Financial liabilities										
designated at fair value										
through profit or loss	₩	-	-	491	-	13,675	-	14,166		
Deposits		105,483,803	21,593,511	25,805,879	50,371,099	13,210,241	3,366,244	219,830,777		
Trading liabilities		463,766	-	-	-	-	-	463,766		
Derivative liabilities		1,465,665	22,756	16,357	28,301	59,384	30,157	1,622,620		
Borrowings		3,629,220	2,037,321	1,213,117	2,097,626	3,698,846	543,234	13,219,364		
Debt securities issued		344,047	1,564,023	1,602,688	5,528,306	9,857,636	2,964,351	21,861,051		
Other financial liabilities	_	15,300,954	<u> </u>		<u> </u>	124,327		15,425,281		
	W	126,687,455	25,217,611	28,638,532	58,025,332	26,964,109	6,903,986	272,437,025		

- (\*1) These amounts include cash flows of principal and interest on financial assets and financial liabilities.
- (\*2) The undiscounted cash flows were classified based on the earliest dates for obligation 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 items as of December 31, 2016 and 2015 were as follows:

	I	December 31, 2016	December 31, 2015
Financial guarantee contracts	W	3,403,788	3,656,213
Loan commitments and others		75,287,793	76,224,534
	W	78,691,581	79,880,747

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015

#### 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.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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, 2016 and 2015 by the level in the fair value hierarchy into which the fair value measurement is categorized:

Financial assets         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         2,558,525           Hedging         -         12,904         7,665         20,569           Available-for-sale financial assets:         -         12,904         7,665         20,569           Available-for-sale financial assets:         -         12,904         7,665         20,569           Equity securities         6,558,428         18,722,330         -         25,280,758           Equity securities         8,997,955         31,486,937         1,131,599         2,533,825           Financial liabilities         -         4,277         2,005         6,282           Trading liabilities           Gold/Silver deposits         485,9		_	December 31, 2016						
Trading assets:         ₩         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:         247,845         -         -         247,845           Derivative assets:         -         2,533,182         25,370         2,558,552         1,2904         7,665         20,569           Available-for-sale financial assets:         -         12,904         7,665         20,569           Available-for-sale financial assets:         6,558,428         18,722,330         -         25,280,758           Equity securities         655,631         746,595         1,131,599         2,533,825           Financial liabilities         *         8,997,955         31,486,937         1,179,570         41,664,462           Financial liabilities           Financial liabilities:         *         *         4,277         2,005         6,282           Trading liabilities:         *         *         -         4,277         2,005         6,282           Trading liabilities:         *         -         - <th></th> <th></th> <th>Level 1</th> <th>Level 2</th> <th>Level 3</th> <th>Total</th>			Level 1	Level 2	Level 3	Total			
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:         247,845         -         -         247,845           Derivative assets:         -         2,533,182         25,370         2,558,552           Hedging         -         12,904         7,665         20,569           Available-for-sale financial assets:         -         12,904         7,665         20,569           Available-for-sale financial assets:         -         6,558,428         18,722,330         -         25,280,758           Equity securities         655,631         746,595         1,131,599         2,533,825           Financial liabilities         *         8,997,955         31,486,937         1,179,570         41,664,462           Financial liabilities           Deposits         ₩         -         4,277         2,005         6,282           Trading liabilities:         485,995         -         -         -         485,995           Derivative liabilities:	Financial assets								
Equity securities       192,929       1,600,440       -       1,793,369         Gold/Silver deposits       247,845       -       -       247,845         Derivative assets:       3247,845       -       -       247,845         Trading       -       2,533,182       25,370       2,558,552         Hedging       -       12,904       7,665       20,569         Available-for-sale financial assets:       -       12,904       7,665       20,569         Available-for-sale financial assets:       -       12,904       7,665       20,569         Available-for-sale financial assets:       -       25,280,758         Equity securities       6,558,428       18,722,330       -       25,280,758         Equity securities       655,631       746,595       1,131,599       2,533,825         Financial liabilities       *       8,997,955       31,486,937       1,179,570       41,664,462         Financial liabilities         Deposits       *       -       4,277       2,005       6,282         Trading liabilities:       *       -       -       485,995       -       -       -       485,995         Derivative liabilities:       *	Trading assets:								
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:       8       18,722,330       -       25,280,758         Debt securities       6,558,428       18,722,330       -       25,280,758         Equity securities       655,631       746,595       1,131,599       2,533,825         Financial liabilities       8,997,955       31,486,937       1,179,570       41,664,462         Financial liabilities designated at fair value through profit or loss:         Deposits       ₩       -       4,277       2,005       6,282         Trading liabilities:       485,995       -       -       485,995         Derivative liabilities:       -       -       -       485,995         Derivative liabilities:       -       -       -       485,995         Trading       -       2,444,794       3,803       2,448,597         Hedging       -       77,668       259,127       336,795	Debt securities	W	1,343,122	7,871,486	14,936	9,229,544			
Derivative assets:         Trading       -       2,533,182       25,370       2,558,552         Hedging       -       12,904       7,665       20,569         Available-for-sale financial assets:       8       12,904       7,665       20,569         Debt securities       6,558,428       18,722,330       -       25,280,758         Equity securities       655,631       746,595       1,131,599       2,533,825         Financial liabilities       8,997,955       31,486,937       1,179,570       41,664,462         Financial liabilities designated at fair value through profit or loss:         Deposits       ₩       -       4,277       2,005       6,282         Trading liabilities:       485,995       -       -       485,995         Derivative liabilities:       -       -       485,995         Derivative liabilities:       -       -       2,444,794       3,803       2,448,597         Hedging       -       2,444,794       3,803       2,448,597         Hedging       -       77,668       259,127       336,795	Equity securities		192,929	1,600,440	-	1,793,369			
Trading Hedging         -         2,533,182         25,370         2,558,552           Available-for-sale financial assets:         -         12,904         7,665         20,569           Available-for-sale financial assets:         -         25,280,758           Debt securities         6,558,428         18,722,330         -         25,280,758           Equity securities         655,631         746,595         1,131,599         2,533,825           Financial liabilities         ***         8,997,955         31,486,937         1,179,570         41,664,462           Financial liabilities designated at fair value through profit or loss:           Deposits         ***         **         4,277         2,005         6,282           Trading liabilities:         **         **         -         485,995         -         -         485,995           Derivative liabilities:         **         -         2,444,794         3,803         2,448,597           Hedging         **         2,444,794         3,803         2,448,597           Hedging         **         77,668         259,127         336,795	Gold/Silver deposits		247,845	-	-	247,845			
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         Financial liabilities         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:       -       2,444,794       3,803       2,448,597         Hedging       -       2,444,794       3,803       2,448,597         1       3,6795       -       -       3,803       2,448,597	Derivative assets:								
Available-for-sale financial assets:       6,558,428       18,722,330       - 25,280,758         Equity securities       655,631       746,595       1,131,599       2,533,825         Financial liabilities       8,997,955       31,486,937       1,179,570       41,664,462         Financial liabilities designated at fair value through profit or loss:         Deposits       Ψ       - 4,277       2,005       6,282         Trading liabilities:       Gold/Silver deposits       485,995       485,995         Derivative liabilities:       - 2,444,794       3,803       2,448,597         Hedging       - 77,668       259,127       336,795	Trading		-	2,533,182	25,370	2,558,552			
Debt securities       6,558,428       18,722,330       - 25,280,758         Equity securities       655,631       746,595       1,131,599       2,533,825         W       8,997,955       31,486,937       1,179,570       41,664,462         Financial liabilities         Financial liabilities         Financial liabilities         Deposits         Deposits       ₩       - 4,277       2,005       6,282         Trading liabilities:         Gold/Silver deposits       485,995       485,995         Derivative liabilities:       - 2,444,794       3,803       2,448,597         Hedging       - 77,668       259,127       336,795	Hedging		-	12,904	7,665	20,569			
Equity securities       655,631       746,595       1,131,599       2,533,825         W       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:       485,995       -       -       -       485,995         Derivative liabilities:       -       2,444,794       3,803       2,448,597         Hedging       -       77,668       259,127       336,795	Available-for-sale financial assets:								
W         8,997,955         31,486,937         1,179,570         41,664,462           Financial liabilities           Financial liabilities designated at fair value through profit or loss:         V         -         4,277         2,005         6,282           Deposits         V         -         485,995         -         -         485,995           Derivative liabilities:         Trading         -         2,444,794         3,803         2,448,597           Hedging         -         77,668         259,127         336,795	Debt securities		6,558,428	18,722,330	-	25,280,758			
Financial liabilities         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:       -       2,444,794       3,803       2,448,597         Hedging       -       77,668       259,127       336,795	Equity securities		655,631	746,595	1,131,599	2,533,825			
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:       -       2,444,794       3,803       2,448,597         Hedging       -       77,668       259,127       336,795		W	8,997,955	31,486,937	1,179,570	41,664,462			
value through profit or loss:       W       -       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		_							
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									
Trading liabilities:       485,995       -       -       485,995         Derivative liabilities:       -       2,444,794       3,803       2,448,597         Trading       -       77,668       259,127       336,795	~ ·	W	_	4,277	2,005	6,282			
Gold/Silver deposits       485,995       -       -       485,995         Derivative liabilities:       -       2,444,794       3,803       2,448,597         Hedging       -       77,668       259,127       336,795	•			,	•	,			
Trading       -       2,444,794       3,803       2,448,597         Hedging       -       77,668       259,127       336,795	•		485,995	-	-	485,995			
Hedging - 77,668 259,127 336,795	Derivative liabilities:								
	Trading		-	2,444,794	3,803	2,448,597			
₩ 485,995 2,526,739 264,935 3,277,669	Hedging		-	77,668	259,127	336,795			
		W	485,995	2,526,739	264,935	3,277,669			

# 4. Financial risk management (continued)

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

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

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

		December 31, 2015					
		Level 1	Level 2	Level 3	Total		
Financial assets		_			_		
Trading assets:							
Debt securities	W	1,121,057	6,926,357	49,754	8,097,168		
Equity securities		110,147	700,277	-	810,424		
Gold/Silver deposits		149,220	_	-	149,220		
Derivative assets:							
Trading		-	1,554,306	7,689	1,561,995		
Hedging		-	27,625	27,898	55,523		
Available-for-sale financial assets:							
Debt securities		7,903,323	14,122,880	-	22,026,203		
Equity securities		1,098,069	422,339	913,988	2,434,396		
	W	10,381,816	23,753,784	999,329	35,134,929		
Financial liabilities							
Financial liabilities designated at fair							
value through profit or loss:							
Deposits	W	_	10,542	2,967	13,509		
Trading liabilities:							
Securities sold		10,161	_	-	10,161		
Gold/Silver deposits		453,605	-	-	453,605		
Derivative liabilities:							
Trading		-	1,441,241	5,416	1,446,657		
Hedging		_	34,803	91,972	126,775		
	W	463,766	1,486,586	100,355	2,050,707		
	_			_			

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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, 2016 and 2015.
  - 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, 2016 and 2015 were as follows:

				2016		
		Trading assets	Available-for- sale financial ass ets	Net derivative instruments	Financial liabilities designated at fair value through profit or loss	Total
Beginning balance	W	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 income		_	(65,685)	_	_	(65,685)
Purchases		_	383,992	(1,163)	-	382,829
Settlements		(34,957)	(108,854)	1,621	967	(141,223)
Transfers out of level 3(*2)		-	-	19,688	-	19,688
Transfers into level 3(*2)		-	(5,312)	-	-	(5,312)
Ending balance	W	14,936	1,131,599	(229,895)	(2,005)	914,635
			Available-for-	2015	Financial liabilities designated at fair value	
		Trading assets	sale financial assets	Net derivative instruments	through profit or loss	Total
Beginning balance Total gain or loss: Recognized in profit or	₩	-	1,079,981	44,513	(3,085)	1,121,409
loss(*1) Recognized in other		(246)	59,561	(89,761)	6	(30,440)
comprehensive income		-	(85,337)	-	-	(85,337)
Purchases/Issue		50,000	216,251	2,050	(179)	268,122
Settlements		-	(292,969)	(18,542)	291	(311,220)
Transfers into level 3(*2)		-	1,397	-	-	1,397
Transfers out of level 3(*2)		<u>-</u>	(64,896)	(61)		(64,957)
Ending balance	W	49,754	913,988	(61,801)	(2,967)	898,974

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

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

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

- (a) Financial instruments measured at fair value (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 Bank held as of December 31, 2016 and 2015 are presented in the statement of comprehensive income as follows:

		20	16	2015			
			Gains or losses recognized in profit or loss for financial		Gains or losses recognized in profit or loss for financial		
		Gains or losses recognized in profit or loss	instrument held at the end of the year	Gains or losses recognized in profit or loss	instrument held at the end of the year		
Net trading income	W	(877)	(993)	(368)	(368)		
Gain on financial instruments designated at fair value		(5)	(5)	4	6		
through profit or loss		(5)	(5)	6	0		
Net gain on sale of available -for-sale financial assets		22,042	483	123,215	-		
Impairment loss on financial assets		(8,572)	(7,914)	(63,654)	(61,007)		
Net other operating expenses		(187,224)	(187,224)	(89,639)	(89,639)		
	W	(174,636)	(195,653)	(30,440)	(151,008)		

(\*2) These financial instruments were transferred into or out of level 3 as the availability of observable market data has changed. The Bank 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.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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
  - (a) Valuation techniques and inputs used in measuring fair value of financial instruments classified as level 2 as of December 31, 2016 and 2015 were as follows:

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

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 4. Financial risk management (continued)

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

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

	December 31, 2015								
	Type of financial instruments		Book value	Valuation techniques	Inputs				
Financial assets									
Trading assets	Debt securities	₩	6,926,357	Discounted cash flow	Discount rate				
	Equity securities		700,277 7,626,634	Net asset value	Price of underlying assets				
Derivative assets	Trading Hedging		1,554,306 27,625 1,581,931	Option model Discounted cash flow	Discount rate, foreign exchange rate, volatility, stock price, commodity index, etc.				
Available-for-sale financial assets	Debt securities	•	14,122,880	Discounted cash flow	Discount rate				
	Equity securities	W	422,339 14,545,219 23,753,784	Net asset value	Price of underlying assets				
Financial liabilities		•	- , ,						
Financial liabilities designated at fair value through profit or loss	Deposits	₩	10,542	Option model	Discount rate, volatility, stock price index, etc.				
Derivative liabilities	Trading Hedging		1,441,241 34,803 1,476,044	Option model Discounted cash flow	Discount rate, foreign exchange rate, volatility, stock price, commodity index, etc.				
		W	1,486,586						

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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)
  - (b) Information about valuation techniques and significant unobservable inputs in measuring financial instruments categorized as level 3 as of December 31, 2016 and 2015 were as follows:

	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(*)	Interest rates related	W	14,936	The volatility of the underlying asset Correlations	36.30% 69.90%			
Derivative assets	Option model(*)	Equity and foreign exchange related		22,723	The volatility of the underlying asset Correlations	13.10%~21.99%			
	Option model(*)	Interest rates related		10,312	The volatility of the underlying asset Regression coefficient	0.54%~0.87% 0.02%~2.05%			
Available-for-sale financial assets	Discounted cash flow	Equity securities	₩	33,035 1,131,599 1,179,570	Correlations  Discount rate  Growth rate	61.01% 1.73%~18.49% 0.00%			
Financial liabilities	Option model(*)	Equity related	₩	2,005	The volatility of the underlying asset  Correlations	15.97%~29.44% (-)1.80%~61.10%			
	Option model(*)	Equity and foreign exchange related		1,156	The volatility of the underlying asset Correlations	19.90%~33.69%			
	Option model(*)	Interest rates related	W.	262,930		(-)19.03%~61.10% 0.51%~0.87% 0.02%~3.02% 42.93%~61.01%			
			₩	264,935					

(\*) Option model that the Bank uses in derivative valuation includes Black-Scholes model, Hull-White model, Monte Carlo simulation, etc.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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)

	December 31, 2015									
	Valuation technique	Type of financial instrument		Book value	Significant unobservable input	Range of estimates for unobservable input				
Financial assets Trading assets	Option model(*)	Interest rates related		49,754	The volatility of the underlying asset	24.90%				
Derivative assets	Option model(*)	Equity and foreign exchange related	₩	2,346	Correlations The volatility of the underlying asset	75.25% 6.75%~34.62%				
	Option model(*)	Interest rates related		33,241	Correlations The volatility of the underlying asset Regression	0.87% 0.44%~0.65% 0.02%~2.05%				
				35,587	coefficient Correlations	49.53%~94.60%				
Available-for-sale financial assets	Discounted cash flow	Equity securities	₩	913,988	Discount rate Growth rate	1.72%~20.65% 0.00%~2.50%				
Financial liabilities										
Financial liabilities designated at	Option model(*)	Equity related	₩	2,967	The volatility of the underlying asset Correlations	22.20%~28.48%				
fair value through profit or loss					Correlations	15.43%~52.70%				
Derivative Liabilities	Option model(*)	Equity and foreign exchange related		64	The volatility of the underlying asset	10.20%~34.62%				
	0 1.1/*\	Ŧ.,		07.004	Correlations	0.87~52.70%				
	Option model(*)	Interest rates related		97,324	The volatility of the underlying asset	0.16%~0.65%				
					Regression coefficient	0.02%~2.04%				
				07.200	Correlations	31.38%~94.60%				
			W	97,388						

<sup>(\*)</sup> Option model that the Bank uses in derivative valuation includes Black-Scholes model, Hull-White model, Monte Carlo simulation, etc.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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 or loss, or other comprehensive income as of December 31, 2016 and 2015 were as follows:

			December 31, 2016						
		_	Profit for	the year	Other comprehensive income				
		_	Favorable	Unfavorable	Favorable	Unfavorable			
Type of financia	al instrument		change	change	change	change			
Trading assets(*1)	Interest rates related	₩	-		-				
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)			
		W	3,409	(2,527)	12,673	(6,531)			
Financial liabilities designated at fair value through		_							
profit or loss(*1)	Equity related	W	1	(1)	-	-			
Derivative liabilities(*1)	Equity and foreign								
	exchange related		59	(68)	-	-			
	Interest rates related		8,211	(9,424)	-	-			
		W	8,271	(9,493)	-	-			

		_	December 31, 2015						
		_	Profit for	the year	Other comprehe	ensive income			
		_	Favorable	Unfavorable	Favorable	Unfavorable			
Type of financia	al instrument		change	change	change	change			
Trading assets(*1)	Interest rates related	W	11	(45)	-				
Derivative assets(*1)	Equity and foreign								
	exchange related		1,118	(719)	-	-			
	Interest rates related		1,293	(5,100)	-	-			
Available-for-sale									
financial assets(*2)	Equity securities		-	-	24,001	(6,839)			
		W	2,422	(5,864)	24,001	(6,839)			
Financial liabilities designated at fair value through		=							
profit or loss(*1)	Equity related	W	4	(4)	-	-			
Derivative liabilities(*1)	Equity and foreign								
	exchange related		11	(9)	-	-			
	Interest rates related		4,218	(14,421)	-	-			
		W	4,233	(14,434)	-	-			
		_							

<sup>(\*1)</sup> Based on 10% of increase or decrease in volatility of underlying assets or correlation

<sup>(\*2)</sup> Based on changes in growth rate  $(0\%\sim1\%)$  and discount rate  $(-1\%\sim1\%)$ 

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 4. Financial risk management (continued)

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

- (b) The 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 and call money 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.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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)
  - ii) The book value and the fair value of financial instruments measured at amortized cost as of December 31, 2016 and 2015 were as follows:

			Book va	alue		
	_		Unamortized		•	
	_	Balance	balance	Allowance	Total	Fair value
Assets						
Cash and due from banks:						
Cash	W	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
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
	W	258,648,265	345,113	(1,497,518)	257,495,860	259,261,313
Liabilities	_	1				
Deposits:						
Demand deposits	W	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:		20,777			20,777	20,000
Call money		807,268	_	_	807,268	807,268
Bill sold		12,427	_	_	12,427	12,407
Bonds sold under repurchase		12,727	_	_	12,427	12,407
agreements		578,108	0		578,108	578,108
Borrowings		12,917,249	(723)	_	12,916,526	12,933,129
Due to Bank of Korea in		12,917,249	(123)	-	12,910,320	12,933,129
foreign currency						
Debt securities issued:		-	-	-	-	-
Debt securities issued in won		17,259,843	(10.500)	_	17,240,244	17,307,246
		17,239,843	(19,599)	-	17,240,244	17,307,240
Debt securities issued in		1 255 266	(17.100)		4 220 107	4 245 400
foreign currency Other financial liabilities		4,355,366	(17,180)	-	4,338,186	4,345,499
Other linancial liabilities	,,, <u> </u>	12,708,705	(2,404)		12,706,301	12,683,889
	₩_	277,549,058	(39,906)		277,509,152	277,606,068

<sup>(\*)</sup> CMA: Cash management account deposits

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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)

			Book va	lue		
	_		Unamortized			
		Balance	balance	Allowance	Total	Fair value
Assets						
Cash and due from banks:						
Cash	W	1,900,980	-	-	1,900,980	1,900,980
Due from banks		15,003,242	-	(12,836)	14,990,406	14,990,406
Loans:						
Household loans		90,426,301	292,165	(247,741)	90,470,725	91,752,196
Corporate loans		113,635,229	48,343	(1,204,355)	112,479,217	113,455,688
Public and other loans		2,129,768	2,176	(7,961)	2,123,983	2,132,915
Loans to bank		4,566,712	· -	(9,899)	4,556,813	4,568,637
Card receivables		21,307	_	(562)	20,745	20,745
Held-to-maturity financial assets:		ŕ		` ,	,	,
Government bonds		5,731,934	_	_	5,731,934	6,007,460
Financial institutions bonds		524,855	_	_	524,855	534,186
Corporate bonds and others		3,848,262	_	_	3,848,262	3,917,994
Other financial assets		9,785,793	(41,561)	(41,750)	9,702,482	9,735,470
	W	247,574,383	301,123	(1,525,104)	246,350,402	249,016,677
Liabilities	_	.,,		( , , - ,	-,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Deposits:						
Demand deposits	W	82,731,920	_	_	82,731,920	82,731,920
Time deposits	• • • • • • • • • • • • • • • • • • • •	120,562,491	_	_	120,562,491	120,772,773
Negotiable certificates of deposits		4,351,326	_	_	4,351,326	4,368,540
Note discount deposits		3,018,551	_	_	3,018,551	3,018,428
CMA(*)		2,280,816	_	_	2,280,816	2,280,816
Others		30,088	_	_	30,088	30,092
Borrowings:		30,000			50,000	30,072
Call money		268,114	_	_	268,114	268,114
Bill sold		24,245	_	_	24,245	24,198
Bonds sold under repurchase		24,243	_	_	27,273	24,170
agreements		518,574	_	_	518,574	518,574
Borrowings		12,117,420	(1,684)		12,115,736	12,158,679
Due to Bank of Korea in		12,117,420	(1,004)	_	12,113,730	12,130,077
foreign currency		71,810			71,810	71,840
Debt securities issued:		71,010	_	_	71,010	71,040
Debt securities issued in won		16,125,059	(31,794)		16,093,265	16,384,034
Debt securities issued in Wolf		10,125,059	(31,794)	-	10,075,205	10,364,034
foreign currency		3,938,091	(10,806)	_	3,927,285	3,970,791
Other financial liabilities		15,460,006	(2,651)	-	15,457,355	15,435,380
Onici illialiciai naullues	w -			<del>-</del> -		
	₩	261,498,511	(46,935)	-	261,451,576	262,034,179

<sup>(\*)</sup> CMA: Cash management account deposits

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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, 2016 and 2015 were as follows:

			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		-	2 020 027	2,096,380	2,096,380
Loans to bank		-	2,020,837	2,591,678	4,612,515
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		000,040	3,939,728	_	3,939,728
Other financial assets		-	9,882,608	2,096,884	11,979,492
Other infancial assets		4 201 214			
	₩ <u></u>	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
Due to Bank of Korea in foreign currency		-	-	12,933,129	12,933,129
Debt securities issued:		-	-	-	-
Debt securities issued in won		_	14,867,524	2,439,722	17,307,246
Debt securities issued in foreign currency		_	4,345,499	-, .5>,	4,345,499
Other financial liabilities		-	4,741,882	7,942,007	12,683,889
	W	-	119,885,677	157,720,391	277,606,068
	_				

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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)

Part   Part			December 31, 2015			
Cash and due from banks:         W         1,900,980         -         -         1,900,980           Due from banks         -         14,990,406         -         14,990,406           Loans:         -         14,990,406         -         14,990,406           Household loans         -         -         91,752,196         91,752,196           Corporate loans         -         -         113,455,688         113,455,688         113,455,688         113,455,688         113,455,688         113,455,688         113,455,688         113,455,688         113,455,688         103,455,688         190,452,196         2,990,677         4,568,637         2,132,915         2,032,915         2,032,915         2,013,291         2,013,291         2,013,291         2,074,577         4,568,637         2,074,578         2,074,578         2,074,565         2,074,578         2,074,578         2,074,578         2,074,566         2,074,578         2,074,566         3,074,606         3,018,466         3,018,468         3,018,468         3,018,468         3,018,748         2,075,555         9,735,470         4,000,607         3,018,428         3,019,679         2,000,655         9,735,470         4,000,607         2,000,655         9,735,470         4,000,607         2,000,655         9,735,470         2,000,			Level 1	Level 2	Level 3	Total
Cash Due from banks         W 1,900,980         - 14,990,406         - 14,990,406           Loans:         14,990,406         - 14,990,406         - 14,990,406           Household loans         - 3 - 13,990,88         19,752,196         91,752,196         20,721,96           Corporate loans         - 3 - 15,77,960         2,990,677         4,568,637         2 - 20,745         20,745           Loans to bank         - 3 - 15,77,960         2,990,677         4,568,637         2 - 20,745         20,745           Held-to-maturity financial assets:         - 3,875,868         - 20,745         20,745           Held-to-maturity financial assets         2,131,592         3,875,868         - 6,007,460           Financial institutions bonds         102,921         431,265         - 534,186           Corporate bonds and others         - 2,313,939         2,124,17876         249,016,677           Corporate bonds and others         - 7,669,815         2,065,655         9,735,470           Other financial assets         - 7,669,815         2,065,655         9,735,470           Deposits         - 82,731,920         - 82,731,920         - 82,731,920           Time deposits         - 82,731,920         - 82,731,920         - 82,731,920         - 82,731,920         - 82,731,920	Assets				_	_
Due from banks         -         14,990,406         -         14,990,406           Loans:         Household loans         -         -         91,752,196         91,752,196         91,752,196         P0,752,196	Cash and due from banks:					
Household loans	Cash	W	1,900,980	-	_	1,900,980
Household loans          91,752,196         91,752,196           Corporate loans          113,455,688         113,455,688         113,455,688         113,455,688         113,455,688         113,455,688         12,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,137,920         2,0745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,686,637         20,745         45,18,19         24,19,10         43,12,65         24,118,19         24,19,10         24,19,10         24,19,10         24,19,10         24,19,12         24,19,12         24,19,12	Due from banks		-	14,990,406	-	14,990,406
Corporate loans         -         -         113,455,688         Public and other loans         -         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,132,915         2,131,592         2,137,796         2,990,677         4,568,637         20,745         4         4,686,875         20,745         4         4,686,875         20,745         4         4,686,875         20,745         4         6,607,460         6         6,007,460         6         6,007,460         6         6,007,460         6         6,007,460         6         6,007,460         6         6,007,460         6         7,669,410         6         7,676,418         6         7,007,400         6         7,007,400         7,009,419         4         2         3,917,994         4         2         3,917,994         4         2         2,917,900         2         3,917,994         4         2         2,917,900         2         3,917,994         2         2         2,917,900         2         2,917,900         2         2,917,900         2         3,917,900         2         2         2,917,900         2 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td></t<>						
Public and other loans         -         -         2,132,915         2,132,915         2,132,915         2,132,915         2,090,677         4,568,637         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0746         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745         2,0745			-	-		
Loans to bank Card receivables         -         1,577,960         2,990,677         4,568,637           Card receivables         -         -         20,745         20,745           Held-to-maturity financial assets:         2,131,592         3,875,868         -         6,007,460           Financial institutions bonds         102,921         431,265         -         534,186           Corporate bonds and others         -         7,669,815         2,065,655         9,735,470           Other financial assets         -         7,669,815         2,065,655         9,735,470           Liabilities         -         82,731,920         21,417,876         249,016,677           Liabilities         -         82,731,920         -         82,731,920           Time deposits         -         82,731,920         -         82,731,920           Time deposits         -         120,772,773			-	-		
Card receivables         -         -         20,745         20,745           Held-to-maturity financial assets:         Government bonds         2,131,592         3,875,868         -         6,007,460           Financial institutions bonds         102,921         431,265         -         534,186           Corporate bonds and others         -         3,917,994         -         3,917,994           Other financial assets         -         7,669,815         2,065,655         9,735,470           Deposits:         -         7,669,815         2,065,655         9,735,470           Liabilities           Deposits:           Demand deposits         ¥         82,731,920         -         82,731,920           Time deposits         *         82,731,920         -         82,731,920           Time deposits         *         120,772,773         120,772,773         120,772,773         Negotiable certificates of deposits         *         4,368,540         4,368,540         4,368,540         Note discount deposits         *         2,280,816         *         2,280,816         *         2,280,816         *         2,280,816         *         2,280,816         *         2,280,816         *         2,280,816 <td< td=""><td></td><td></td><td>-</td><td>-</td><td></td><td></td></td<>			-	-		
Held-to-maturity financial assets:   Government bonds			-	1,577,960		
Government bonds         2,131,592         3,875,868         -         6,007,460           Financial institutions bonds         102,921         431,265         -         534,186           Corporate bonds and others         -         3,917,994         -         3,917,994           Other financial assets         -         7,669,815         2,065,655         9,735,470           W 4,135,493         32,463,308         212,417,876         249,016,677           Liabilities           Deposits           Demand deposits         W         -         82,731,920         -         82,731,920           Time deposits         W         -         82,731,920         -         82,731,920           Time deposits         -         -         120,772,773         120,772,773         120,772,773         120,772,773         Note discount deposits         -         -         4,368,540         4,368,540         4,368,540         Note discount deposits         -         2,280,816         -         2,280,816         Others         2,280,816         -         2,280,816         Others         2,280,816         -         2,280,816         Others         -         2,280,816         -         2,280,816<			-	-	20,745	20,745
Financial institutions bonds         102,921         431,265         -         534,186           Corporate bonds and others         -         3,917,994         -         3,917,994           Other financial assets         -         7,669,815         2,065,655         9,735,470           W         4,135,493         32,463,308         212,417,876         249,016,677           Liabilities           Deposits           Demand deposits         W         -         82,731,920         -         82,731,920           Time deposits         -         -         -         120,772,773         120,772,773           Negotiable certificates of deposits         -         -         -         4,368,540         4,368,540           Note discount deposits         -         -         -         3,018,428         3,018,428           CMA         -         2,280,816         -         2,280,816           Others         -         2,280,816         -         2,280,816           Others         -         2,280,816         -         3,092         30,092           Borrowings:         -         2,280,816         -         2,280,816         -         2,280,816         <			2 121 502	2.075.070		6.007.460
Corporate bonds and others         . 3,917,994         . 3,917,994           Other financial assets         . 7,669,815         2,065,655         9,735,470           Liabilities           Deposits:           Demand deposits         ₩         . 82,731,920         . 82,731,920           Time deposits				, ,	-	
Other financial assets         -         7,669,815         2,065,655         9,735,470           Liabilities           Deposits:           Demand deposits         ₩         -         82,731,920         -         82,731,920           Time deposits         -         -         120,772,773         120,772,773           Negotiable certificates of deposits         -         -         4,368,540         4,368,540           Note discount deposits         -         -         4,368,540         4,368,540           Note discount deposits         -         -         3,018,428         3,018,428           CMA         -         2,280,816         -         2,280,816           Others         -         268,114         -         268,114           Bill sold         -         268,114         -         268,114           Borrowings         -         -         518,574         518,574           Borrowings         - </td <td></td> <td></td> <td>102,921</td> <td></td> <td>-</td> <td></td>			102,921		-	
Liabilities         W         4,135,493         32,463,308         212,417,876         249,016,677           Liabilities           Deposits:           Demand deposits         W         -         82,731,920         -         82,731,920           Time deposits         -         -         -         120,772,773         120,772,773           Negotiable certificates of deposits         -         -         -         4,368,540         4,368,540           Note discount deposits         -         -         -         3,018,428         3,018,428           CMA         -         2,280,816         -         2,280,816           Others         -         2,280,816         -         2,280,816           Others         -         268,114         -         268,114           Bill sold         -         268,114         -         268,114           Bill sold under repurchase agreements         -         -         24,198         24,198           Borrowings         -         -         518,574         518,574           Borrowings         -         -         71,840         71,840           Debt securities issued:         -         14,021,64	-		-		2.065.655	
Liabilities           Deposits:         Begin and deposits         ₩         -         82,731,920         -         82,731,920           Time deposits         -         -         -         120,772,773         120,772,773           Negotiable certificates of deposits         -         -         -         4,368,540         4,368,540           Note discount deposits         -         -         -         3,018,428         3,018,428           CMA         -         2,280,816         -         2,280,816           Others         -         -         -         30,092         30,092           Borrowings:         -         -         -         268,114         -         268,114           Bill sold         -         -         268,114         -         268,114           Bill sold under repurchase agreements         -         -         24,198         24,198           Borrowings         -         -         12,158,679         12,158,679           Due to Bank of Korea in foreign currency         -         -         71,840         71,840           Debt securities issued:         -         14,021,649         2,362,385         16,384,034           Debt securities	Other financial assets					
Deposits:         ₩         -         82,731,920         -         82,731,920           Time deposits         -         -         -         120,772,773         120,772,773           Negotiable certificates of deposits         -         -         -         4,368,540         4,368,540           Note discount deposits         -         -         -         3,018,428         3,018,428           CMA         -         2,280,816         -         2,280,816           Others         -         -         -         30,092         30,092           Borrowings:         -         -         268,114         -         268,114           Bill sold         -         -         24,198         24,198           Bonds sold under repurchase agreements         -         -         24,198         24,198           Borrowings         -         -         12,158,679         12,158,679           Due to Bank of Korea in foreign currency         -         -         71,840         71,840           Debt securities issued:         -         14,021,649         2,362,385         16,384,034           Debt securities issued in foreign currency         -         3,970,791         -         3,970,791		₩ <u></u>	4,135,493	32,463,308	212,417,876	249,016,677
Demand deposits         ₩         -         82,731,920         -         82,731,920           Time deposits         -         -         -         120,772,773         120,772,773           Negotiable certificates of deposits         -         -         -         4,368,540         4,368,540           Note discount deposits         -         -         -         3,018,428         3,018,428           CMA         -         2,280,816         -         2,280,816           Others         -         -         -         30,092         30,092           Borrowings:         -         -         268,114         -         268,114           Bill sold         -         -         268,114         -         268,114           Bill sold under repurchase agreements         -         -         24,198         24,198           Borrowings         -         -         518,574         518,574           Borrowings         -         -         71,840         71,840           Debt securities issued:         -         -         71,840         71,840           Debt securities issued in won         -         14,021,649         2,362,385         16,384,034           Debt secu	Liabilities					
Time deposits       -       -       120,772,773       120,772,773         Negotiable certificates of deposits       -       -       4,368,540       4,368,540         Note discount deposits       -       -       3,018,428       3,018,428         CMA       -       2,280,816       -       2,280,816         Others       -       -       30,092       30,092         Borrowings:       -       -       268,114       -       268,114         Bill sold       -       -       24,198       24,198         Bonds sold under repurchase agreements       -       -       24,198       24,198         Borrowings       -       -       12,158,679       12,158,679         Due to Bank of Korea in foreign currency       -       -       71,840       71,840         Debt securities issued:       -       -       14,021,649       2,362,385       16,384,034         Debt securities issued in won       -       14,021,649       2,362,385       16,384,034         Debt securities issued in foreign currency       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	Deposits:					
Time deposits       -       -       120,772,773       120,772,773         Negotiable certificates of deposits       -       -       4,368,540       4,368,540         Note discount deposits       -       -       3,018,428       3,018,428         CMA       -       2,280,816       -       2,280,816         Others       -       -       30,092       30,092         Borrowings:       -       -       268,114       -       268,114         Bill sold       -       -       24,198       24,198         Bonds sold under repurchase agreements       -       -       24,198       24,198         Borrowings       -       -       12,158,679       12,158,679         Due to Bank of Korea in foreign currency       -       -       71,840       71,840         Debt securities issued:       -       14,021,649       2,362,385       16,384,034         Debt securities issued in foreign currency       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	Demand deposits	₩	-	82,731,920	_	82,731,920
Negotiable certificates of deposits       -       -       4,368,540       4,368,540         Note discount deposits       -       -       3,018,428       3,018,428         CMA       -       2,280,816       -       2,280,816         Others       -       -       30,092       30,092         Borrowings:       -       -       268,114       -       268,114         Bill sold       -       -       24,198       24,198         Bonds sold under repurchase agreements       -       -       24,198       24,198         Borrowings       -       -       12,158,679       12,158,679         Due to Bank of Korea in foreign currency       -       -       71,840       71,840         Debt securities issued:       -       14,021,649       2,362,385       16,384,034         Debt securities issued in foreign currency       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	Time deposits		_	-	120,772,773	
Note discount deposits	Negotiable certificates of					
Note discount deposits       -       -       3,018,428       3,018,428         CMA       -       2,280,816       -       2,280,816         Others       -       -       30,092       30,092         Borrowings:       -       -       268,114       -       268,114         Bill sold       -       -       24,198       24,198         Bonds sold under repurchase agreements       -       -       518,574       518,574         Borrowings       -       -       -       12,158,679       12,158,679         Due to Bank of Korea in foreign currency       -       -       71,840       71,840         Debt securities issued:       -       14,021,649       2,362,385       16,384,034         Debt securities issued in won       -       14,021,649       2,362,385       16,384,034         Debt securities issued in foreign currency       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	deposits		-	-	4,368,540	4,368,540
CMA       -       2,280,816       -       2,280,816         Others       -       -       -       30,092       30,092         Borrowings:       -       -       268,114       -       268,114         Bill sold       -       -       -       24,198       24,198         Bonds sold under repurchase agreements       -       -       -       518,574       518,574         Borrowings       -       -       -       12,158,679       12,158,679         Due to Bank of Korea in foreign currency       -       -       71,840       71,840         Debt securities issued:       -       -       14,021,649       2,362,385       16,384,034         Debt securities issued in won       -       14,021,649       2,362,385       16,384,034         Debt securities issued in foreign currency       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	Note discount deposits		_	_		
Others       -       -       30,092       30,092         Borrowings:       -       268,114       -       268,114         Bill sold       -       -       24,198       24,198         Bonds sold under repurchase agreements       -       -       518,574       518,574         Borrowings       -       -       -       12,158,679       12,158,679         Due to Bank of Korea in foreign currency       -       -       71,840       71,840         Debt securities issued:       -       14,021,649       2,362,385       16,384,034         Debt securities issued in won       -       14,021,649       2,362,385       16,384,034         Debt securities issued in foreign currency       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	CMA		_	2.280.816	<u>-</u>	
Borrowings:       -       268,114       -       268,114         Bill sold       -       -       24,198       24,198         Bonds sold under repurchase agreements       -       -       518,574       518,574         Borrowings       -       -       -       12,158,679       12,158,679         Due to Bank of Korea in foreign currency       -       -       71,840       71,840         Debt securities issued:       -       14,021,649       2,362,385       16,384,034         Debt securities issued in foreign currency       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	Others		_	-	30.092	
Call money       -       268,114       -       268,114         Bill sold       -       -       -       24,198       24,198         Bonds sold under repurchase agreements       -       -       -       518,574       518,574         Borrowings       -       -       -       12,158,679       12,158,679       12,158,679       12,158,679       12,158,679       12,158,679       12,158,679       14,021,649       2,362,385       16,384,034       <	Borrowings:				2 3,43 =	2 4,42 =
Bill sold       -       -       24,198       24,198         Bonds sold under repurchase agreements       -       -       518,574       518,574         Borrowings       -       -       12,158,679       12,158,679         Due to Bank of Korea in foreign currency       -       -       71,840       71,840         Debt securities issued:       -       14,021,649       2,362,385       16,384,034         Debt securities issued in won       -       14,021,649       2,362,385       16,384,034         Debt securities issued in foreign currency       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	9		_	268.114	_	268.114
Bonds sold under repurchase agreements       -       -       518,574       518,574         Borrowings       -       -       12,158,679       12,158,679         Due to Bank of Korea in foreign currency       -       -       71,840       71,840         Debt securities issued:       -       14,021,649       2,362,385       16,384,034         Debt securities issued in won       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	Bill sold		_		24 198	
Borrowings       -       -       12,158,679       12,158,679         Due to Bank of Korea in foreign currency       -       -       71,840       71,840         Debt securities issued:       -       14,021,649       2,362,385       16,384,034         Debt securities issued in won       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	Bonds sold under repurchase agreements		_	_		
Due to Bank of Korea in foreign currency       -       -       71,840       71,840         Debt securities issued:       -       14,021,649       2,362,385       16,384,034         Debt securities issued in won       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	· · · · · · · · · · · · · · · · · · ·					
Debt securities issued:       -       14,021,649       2,362,385       16,384,034         Debt securities issued in won       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	9		-	-		
Debt securities issued in won       -       14,021,649       2,362,385       16,384,034         Debt securities issued in foreign currency       -       3,970,791       -       3,970,791         Other financial liabilities       -       7,488,937       7,946,443       15,435,380	-		-	-	/1,840	/1,840
Debt securities issued in foreign currency - 3,970,791 - 3,970,791 Other financial liabilities - 7,488,937 7,946,443 15,435,380				14.001.640	2 2 4 2 2 2 5	16001001
Other financial liabilities         -         7,488,937         7,946,443         15,435,380			-		2,362,385	
7,700,737 7,770,773 13,735,300			-		-	
W - 110.762.227 151.271.052 262.024.170	Other financial liabilities		<u>-</u>	7,488,937	7,946,443	15,435,380
T10,702,227 131,271,932 202,034,179		<b>W</b>		110,762,227	151,271,952	262,034,179

<sup>(\*)</sup> CMA: Cash management account deposits

# 4. Financial risk management (continued)

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

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

- (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, 2016 and 2015 were as follows.

			Dece	ember 31, 2016	
	Туре		Fair value(*)	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
		W	230,270,502		
Level 2	Debt securities issued	W	19,123,023		Discount rate
Level 3	Deposits Borrowing Debt securities issued		133,251,903 7,783,129	Discounted cash flow	Discount rate Discount rate Discount rate, Regression coefficient, Correlation
			2,439,722		coefficient
	Other financial liabilities	w _	7,942,007 170,629,784		Discount rate
			Dece	ember 31, 2015	
	Туре		Fair value(*)	Valuation technique	Inputs
Level 2	Held-to-maturity financial assets	- ₩	8,225,127		Discount rate
Level 3	Loans		210,352,221	Discounted cash flow	Discount rate, Credit spread, Prepayment rate
	Other financial assets	w -	2,065,655 220,643,003		Discount rate
Level 2	Debt securities issued	w	17,992,440		Discount rate
Level 3	Deposits Borrowing Debt securities issued		127,455,894 7,611,260 2,362,385	Discounted cash flow	Discount rate Discount rate Discount rate, Regression coefficient, Correlation coefficient
	Other financial liabilities	w _	7,946,443 163,368,422		Discount rate

<sup>(\*)</sup> Valuation techniques and inputs are not included and disclosed when the carrying amount is a reasonable approximation of fair value.

# 4. Financial risk management (continued)

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

(c) Deferred day one gain or loss for the years ended December 31, 2016 and 2015 were as follows:

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

	_	Beginning balance	Deferred	Amortization	nding balance
Financial liabilities designated at fair value through profit or loss	W	(39)	-	27	(12)
Equity swap liabilities		38	-	(26)	12
	_		201	15	
		Beginning			Ending
		balance	Deferred	Amortization	balance
Financial liabilities designated at	_	_			·
fair value through profit or loss	₩	(64)	(8)	33	(39)
Equity swap liabilities		63	-	(25)	38

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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, 2016 and 2015 were as follows:

	_					1, 2016		
		Financial assets at fair value through profit or loss		Held-t maturi financ asset	ity ial	Loans and receivables	Derivatives held for hedging	Total
Assets								
Due from banks	W	-	-		-	12,706,052	-	12,706,052
Trading assets		11,270,758	-		-	-	-	11,270,758
Derivatives		2,558,552	-		-	-	20,569	2,579,121
Loans		-	-		-	219,438,681	-	219,438,681
Available-for-sale financial assets Held-to-maturity		-	27,814,583		-	-	-	27,814,583
financial assets Other financial		-	-	11,630	),270	-	-	11,630,270
assets	_					11,957,522		11,957,522
	W	13,829,310	27,814,583	11,630	),270	244,102,255	20,569	297,396,987
		Trading liabilities	Financial liab designated a value throu profit or lo	ilities t fair ıgh	I l me	31, 2016 Financial iabilities easured at ortized cost	Derivatives Held for hedging	Total
Liabilities								
Deposits Trading liabilities Financial liabilities designated at fair value through profit	₩	485,99	- 5	-		228,910,092	-	228,910,092 485,995
or loss			-	6,282		-	-	6,282
Derivatives		2,448,59	7	-		-	336,795	2,785,392
Borrowings Debt securities issued Other financial			-	-		14,314,329 21,578,430	-	14,314,329 21,578,430
liabilities			-	_		12,706,301	-	12,706,301
	W	2,934,59	2	6,282		277,509,152	336,795	280,786,821

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 4. Financial risk management (continued)

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

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

				Decem	ıber 3	1, 2015		
		Financial assets at fair value through profit or loss	Available-for- sale financial assets	Held-to maturit financi assets	ty al	Loans and receivables	Derivatives held for hedging	Total
Assets								
Due from banks	₩	-	-		-	14,990,406	-	14,990,406
Trading assets		9,056,812	-		-	-	-	9,056,812
Derivatives		1,561,995	-		-	-	55,523	1,617,518
Loans Available-for-sale		-	-		-	209,651,483	-	209,651,483
financial assets Held-to-maturity		-	24,460,599		-	-	-	24,460,599
financial assets Other financial		-	-	10,105,	,051	-	-	10,105,051
assets	_					9,702,482		9,702,482
	W	10,618,807	24,460,599	10,105,	,051	234,344,371	55,523	279,584,351
		Trading liabilities	Financial liab designated a value throu profit or lo	oilities t fair ugh	F li me	31, 2015 Financial iabilities easured at ortized cost	Derivatives held for hedging	Total
Liabilities								_
Deposits	¥	L	-	-		212,975,192	-	212,975,192
Trading liabilities Financial liabilities designated at fair value through profit		463,76	6	-		-	-	463,766
or loss			-	13,509		-	-	13,509
Derivatives		1,446,65	7	-		-	126,775	1,573,432
Borrowings Debt securities issued			-	-		12,998,479 20,020,550	-	12,998,479 20,020,550
Other financial liabilities			-	-		15,457,355	-	15,457,355
	₩	1,910,42	3	13,509		261,451,576	126,775	263,502,283
		•						

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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, 2016 and 2015 were as follows:

Fees and

2016

		Interest income (expense)	Fees and commission income (expense)	Impairment loss	Others	Total	Other comprehensive income
Financial assets at fair value through profit or loss Available-for-sale financial	₩	168,205	6,782		(10,911)	164,076	-
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	(2,951,358)	(59,168)
Net derivatives held for hedging		-	-	-	(250,133)	(250,133)	4,775
	W	4,504,121	241,013	(738,536)	502,469	4,509,067	(374,889)
		Interest	Fees and commission income		015		Other
		Interest income (expense)		Impairment loss	Others	Total	Other comprehensive income
Financial assets at fair value through profit or loss	W	income	commission income	Impairment		Total 338,480	comprehensive
through profit or loss Available-for-sale financial assets	₩	income (expense)	commission income (expense)	Impairment	Others		comprehensive
through profit or loss Available-for-sale financial	₩	income (expense) 162,624	commission income (expense)	Impairment loss	Others 170,001	338,480	comprehensive income
through profit or loss Available-for-sale financial assets Held-to-maturity financial	₩	income (expense) 162,624 485,026	commission income (expense)	Impairment loss	Others 170,001	338,480 847,964	comprehensive income
through profit or loss Available-for-sale financial assets Held-to-maturity financial assets Loans and receivables Trading liabilities Financial liabilities designated	₩	income (expense) 162,624 485,026 318,940	commission income (expense) 5,855	Impairment loss - (206,570)	Others 170,001 569,508	338,480 847,964 318,940	comprehensive income
through profit or loss Available-for-sale financial assets Held-to-maturity financial assets Loans and receivables Trading liabilities Financial liabilities designated at fair value through profit or loss	₩	income (expense) 162,624 485,026 318,940	commission income (expense) 5,855	Impairment loss - (206,570)	Others 170,001 569,508	338,480 847,964 318,940 6,358,934	comprehensive income
through profit or loss Available-for-sale financial assets Held-to-maturity financial assets Loans and receivables Trading liabilities Financial liabilities designated at fair value through profit or loss Financial liabilities measured at amortized cost	W	income (expense) 162,624 485,026 318,940	commission income (expense) 5,855	Impairment loss - (206,570)	Others 170,001 569,508 - 98,054	338,480 847,964 318,940 6,358,934 (6)	comprehensive income
through profit or loss Available-for-sale financial assets Held-to-maturity financial assets Loans and receivables Trading liabilities Financial liabilities designated at fair value through profit or loss Financial liabilities measured	₩	income (expense) 162,624 485,026 318,940 6,682,902	commission income (expense)  5,855	Impairment loss - (206,570)	Others  170,001  569,508  - 98,054 - (16)	338,480 847,964 318,940 6,358,934 (6)	comprehensive income  (317,763)

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 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% 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 Group 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 Group 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. Economic capital is totalled taking into account in type of the risk (credit, market, operation, interest rate, liquidity and concentration).

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015
Capital:			
Common equity Tier 1 capital	W	19,913,369	17,324,193
Additional Tier 1 capital		472,121	805,603
Tier 1 capital		20,385,490	18,129,796
Tier 2 capital		3,953,215	3,240,443
	₩ _	24,338,705	21,370,239
Total risk-weighted assets	₩	155,027,378	144,843,681
Capital adequacy ratio:			
Common equity Tier 1 capital ratio		12.85%	11.96%
Tier 1 capital adequacy ratio		13.15%	12.52%
Tier 2 capital adequacy ratio		2.55%	2.24%
Total capital ratio	_	15.70%	14.75%

The Group maintains the total capital ratio of 8% or above, Tier 1 capital ratio of 6% or above, and common equity capital ratio of 4.5% or above as described in the above table.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 4. Financial risk management (continued)

## 4-6. The 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, 2016 and 2015 were as follows:

	_	December 31, 2016	December 31, 2015
Transferred asset:	_		
Available-for-sale financial assets	W	223,790	140,380
Held-to-maturity financial assets		489,204	497,786
	W	712,994	638,166
Associated liabilities:	=		
Bonds sold under repurchase agreements	W	578,108	518,574

ii) Securities loaned as of December 31, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015	Lender
Government bonds	₩	40,186	29,788	Korea Securities Finance Corp.
Financial institutions bonds		260,014	130,019	Korea Securities Finance Corp., Korea Securities Depository
	W	300,200	159,807	

(b) Qualify for derecognition and continuing involvement in financial assets

There are no financial assets that meets the conditions of derecognition and in which the Group has continuing involvement as of December 31, 2016 and 2015

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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, 2016 and 2015 were as follows:

		December 31, 2016						
	_	Gross	Gross amounts of recognized financial assets and	Net amounts of financial assets and liabilities	Related amounts the statement	of financial		
	_	amounts of recognized financial assets and liabilities	liabilities set off in the statement of financial position	presented in the statement of financial position	Financial instruments	Cash collateral received	Net amount	
Financial assets								
Derivative assets(*1)	W	2,569,683	-	2,569,683	4,950,273	287,143	1,378,112	
Other financial assets(*1) Bonds sold under repurchase agreements related collateral		4,045,845	-	4,045,845	4,930,273	267,143	1,376,112	
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) Receivables from disposal of		30,365,320	24,299,035	6,066,285	-	-	6,066,285	
securities, etc.(*4)	_	1,891	494	1,397			1,396	
	W	41,471,089	24,299,529	17,171,560	9,303,737	287,143	7,580,679	
Financial liabilities								
Derivative liabilities(*1)	W	2,774,650	-	2,774,650	4,950,273	467,195	1,011,154	
Other financial liabilities(*1) Bonds sold under repurchase		3,653,972	-	3,653,972	4,230,273	407,173	1,011,134	
agreements Borrowings)(*2)		578,108	-	578,108	578,108	-	-	
Securities sold Domestic exchange		-	-	-	-	-	-	
settlement payables(*3) Payable from purchase of		25,219,267	24,299,035	920,232	920,232	-	-	
securities, etc.(*4)	_	499	494	5	5			
	W	32,226,496	24,299,529	7,926,967	6,448,618	467,195	1,011,154	

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 4. Financial risk management (continued)

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

	December 31, 2015						
	_	Gross	Gross amounts of recognized financial assets and	Net amounts of financial assets and liabilities presented in	Related amount in the statement positi		
	_	amounts of recognized financial assets and liabilities	liabilities set off in the statement of financial position	statement of financial position	Financial instruments	Cash collateral received	Net amount
Financial assets							
Derivative assets(*1)	₩	1,603,275	-	1,603,275	6,182,907	_	885,031
Other financial assets(*1) Bonds sold under repurchase agreements related collateral of securities(*2) Bonds purchased under resale		5,464,663 638,166	-	5,464,663 638,166	518,574	-	119,592
agreement (Loans)(*2)		5,279,170	_	5,279,170	5,279,170	_	_
Securities lent(*2)		159,807	_	159,807	159,807	_	_
Domestic exchange settlements receivables(*3) Receivables from disposal		27,204,105	24,896,522	2,307,583	-	-	2,307,583
of securities, etc.(*4)	_	2,117	523	1,594			1,594
	W	40,351,303	24,897,045	15,454,258	12,140,458		3,313,800
Financial liabilities							
Derivative liabilities(*1)	W	1,566,718	-	1,566,718	6,205,671	_	506,161
Other financial liabilities(*1) Bonds sold under repurchase		5,145,114	-	5,145,114	0,203,071		300,101
agreements Borrowings)(*2)		518,574	-	518,574	518,574	-	-
Securities sold		10,161	-	10,161	10,161	-	-
Domestic exchange settlement payables(*3) Payable from purchase of		27,022,554	24,896,522	2,126,032	2,126,032	-	-
securities, etc.(*4)	_	575	523	52	47		5
	W	34,263,696	24,897,045	9,366,651	8,860,485		506,166

- (\*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, all derivative agreements are terminated and set off.
- (\*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.

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

#### 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. Accordingly, the Group considers the decline in the fair value of more than 30% against the original cost as "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".

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 6. Operating segments

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

The Group has 4 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.
Other	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 operating segment for the years ended December 31, 2016 and 2015.

				2010	6		
				International		Consolidation	
		Retail	Corporate	group	Other	adjustments	Total
Net interest income	₩	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)(*)	)	(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
Non-operating income							
(expenses), net		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 for the year	₩	758,103	742,704	129,732	310,094	(12)	1,940,621
Attributable to:			_		_		
Equity holder of the Bank	W	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

<sup>(\*)</sup> Net other income (expense) includes the effect of hedging on net investment in a foreign operation.

## 6. Operating segments (continued)

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

(b) The following table provides information of financial performance of each operating segment for the years ended December 31, 2016 and 2015. (continued)

				201	5		
			Corporate	International		Consolidation	
		Retail	and treasury	group	Other	adjustments	Total
Net interest income	₩	2,542,203	1,000,832	331,075	302,709	(12,104)	4,164,715
Net fees and commission							
income (expense)		538,758	277,769	64,178	(24,228)	(2,614)	853,863
Net other income (expense)(*)		(2,545,247)	(653,123)	(216,216)	111,909	17,825	(3,284,852)
Operating income		535,714	625,478	179,037	390,390	3,107	1,733,726
Non-operating income							
(expenses), net		46,337	3,047	(293)	(14,408)	93,262	127,945
Share of profit of associates						13,399	13,399
Profit before income tax		582,051	628,525	178,744	375,982	109,768	1,875,070
Income tax expense		(125,255)	(135,566)	(46,793)	(78,972)	1,504	(385,082)
Profit for the year	W	456,796	492,959	131,951	297,010	111,272	1,489,988
Attributable to:							
Equity holder of the Bank	₩	456,796	492,959	131,951	297,010	110,938	1,489,654
Non-controlling interests						334	334
	₩	456,796	492,959	131,951	297,010	111,272	1,489,988

<sup>(\*)</sup> Net other income (expense) includes the effect of hedging on net investment in a foreign operation.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 6. Operating segments (continued)

(c) The following table provides information of net interest income of each operating segment from external consumers and net interest income (expenses) between operating segments for the years ended December 31, 2016 and 2015.

				2016	5		
		D -4-:1	C	International	O41	Consolidation	Т-4-1
NI 4 ' 4 ' C I		Retail	Corporate	group	Other	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)	-
				2015	5		
				International		Consolidation	
		Retail	Corporate	group	Other	adjustments	Total
Net interest income of each operating segment from							
external consumers	W	2,637,393	857,084	343,073	327,165	-	4,164,715
Net interest income (expenses)							
between operating segments		(95,190)	143,748	(11,998)	(24,456)	(12,104)	-

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 6. Operating segments (continued)

- (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, 2016 and 2015.

	_	Operating revenue		Operating	expense	Operating income	
	_	2016	2015	2016	2015	2016	2015
Domestic	W	15,718,353	13,885,506	14,015,643	12,393,602	1,702,710	1,491,904
Overseas	_	953,984	771,346	697,716	529,524	256,268	241,822
	W	16,672,337	14,656,852	14,713,359	12,923,126	1,958,978	1,733,726

ii) The following table provides information of non-current assets by geographical area as of December 31, 2016 and 2015.

	_	December 31, 2016(*1)	December 31, 2015(*1,2)
Domestic	W	2,836,507	2,944,529
Overseas		142,765	131,229
	₩	2,979,272	3,075,758

- (\*1) Non-current assets as of December 31, 2016 and 2015 include property and equipment, intangible assets and investment properties.
- (\*2) As the measurement for the business combination of PT Centratama Nasional Bank is completed during the current period, the balance of prior year is retrospectively adjusted.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 7. Cash and due from banks

(a) Cash and due from banks as of December 31, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015
Cash	W	1,763,335	1,900,980
Deposits in won:			
Reserve deposits		2,718,354	7,794,542
Others		3,767,363	2,072,672
	_	6,485,717	9,867,214
Deposits in foreign currency:	_		
Deposits		3,784,019	3,211,601
Time deposits		2,370,700	1,858,016
Others		81,354	66,411
	<u> </u>	6,236,073	5,136,028
Allowance for impairment		(15,738)	(12,836)
Anowance for impairment	₩ <sup>-</sup>	14,469,387	16,891,386

(b) Restricted due from banks as of December 31, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015
Deposits in won:	_		
Reserve deposits	W	2,718,354	7,794,542
Others		3,754,358	2,050,263
	_	6,472,712	9,844,805
Deposits in foreign currency:	_		
Deposits		1,013,342	1,590,183
Time deposits		20,545	19,924
Others		725	687
		1,034,612	1,610,794
	<b>W</b>	7,507,324	11,455,599

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 8. Trading assets

Trading assets as of December 31, 2016 and 2015 were as follows:

	December 31, 2016	December 31, 2015
	<u>.</u>	
₩	1,040,648	1,098,637
	2,067,814	1,791,606
	1,291,174	1,284,843
	3,016,745	2,329,928
	1,793,312	1,572,270
	19,851	19,884
	9,229,544	8,097,168
	70,097	87,176
	1,723,272	723,248
	1,793,369	810,424
	247,845	149,220
₩ <u></u>	11,270,758	9,056,812
	  	1,040,648 2,067,814 1,291,174 3,016,745 1,793,312 19,851 9,229,544  70,097 1,723,272 1,793,369  247,845

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 9. <u>Derivatives</u>

(a) The notional amounts of derivatives as of December 31, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015
Foreign currency related			
Over the counter:			
Currency forwards	W	82,556,281	48,399,755
Currency swaps		27,268,230	19,384,776
Currency options		1,205,825	2,420,036
Control of the contro		111,030,336	70,204,567
Exchange traded:			,,
Currency futures		70,093	67,976
•		111,100,429	70,272,543
Interest rates related		, , , _	, ,
Over the counter:			
Interest rate swaps		32,028,409	38,324,278
Interest rate options		750,000	1,216,000
•		32,778,409	39,540,278
Exchange traded:		, ,	, ,
Interest rate futures		346,947	600,539
Interest rate swaps(*)		22,141,755	14,573,000
• • •		22,488,702	15,173,539
		55,267,111	54,713,817
Equity related		, , , , , , , , , , , , , , , , , , ,	, ,
Over the counter:			
Equity swaps		6,509	13,871
Equity options		563,454	397,786
		569,963	411,657
Exchange traded:			
Equity futures		2,080	18,394
		572,043	430,051
Commodity related			
Over the counter:			
Commodity swaps and forwards		193,066	258,621
Commodity options		539	-
		193,605	258,621
Hedge			
Fair value hedge:			
Interest rate swaps		7,491,505	6,874,755
Net investment hedge:			
Currency forwards		241,700	234,400
		7,733,205	7,109,155 132,784,187
	$\mathbf{w}$	174,866,393	

<sup>(\*)</sup> The notional amount of derivatives which is settled in the 'Central Counter Party (CCP)' system.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 9. <u>Derivatives (continued)</u>

(b) Fair values of derivative instruments as of December 31, 2016 and 2015 were as follows:

	_	December 31, 2016		December 31, 2015	
		Assets	Liabilities	Assets	Liabilities
Foreign currency related					
Over the counter:					
Currency forwards	₩	1,580,696	1,416,071	731,358	505,205
Currency swaps		705,350	754,387	395,764	534,128
Currency options	_	11,860	9,422	17,713	10,652
	_	2,297,906	2,179,880	1,144,835	1,049,985
Interest rates related					
Over the counter:					
Interest rate swaps		249,395	246,508	403,321	372,945
Interest rate options	_	7,154	5,133	9,951	11,931
	_	256,549	251,641	413,272	384,876
Equity related					
Over the counter:					
Equity swaps		44	19	4	109
Equity options		3,317	4,065	3,882	2,540
		3,361	4,084	3,886	2,649
Commodity related		_			
Over the counter:					
Commodity swaps and forwards		715	12,971	2	9,147
Commodity options	_	21	21		
	_	736	12,992	2	9,147
Hedge	_	_			
Fair value hedge:					
Interest rate swaps		15,185	333,651	52,722	123,561
Net investment hedge:					
Currency forwards	_	5,384	3,144	2,801	3,214
	_	20,569	336,795	55,523	126,775
	₩ _	2,579,121	2,785,392	1,617,518	1,573,432

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 9. <u>Derivatives (continued)</u>

(c) Net gain (loss) on valuation of derivatives for the years ended December 31, 2016 and 2015 were as follows:

		2016		2015	
		Gain	Loss	Gain	Loss
Foreign currency related					
Over the counter:					
Currency forwards	W	1,294,171	1,405,389	662,649	490,396
Currency swaps		561,504	536,947	355,696	487,159
Currency options	_	14,383	4,761	16,928	4,775
		1,870,058	1,947,097	1,035,273	982,330
Interest rates related	_	_			
Over the counter:					
Interest rate swaps		125,087	117,001	139,032	147,160
Interest rate options		997	1,618	3,814	3,776
		126,084	118,619	142,846	150,936
Equity related	_	_			
Over the counter:					
Equity swaps		90	-	8	81
Equity options		755	2,099	1,289	904
	_	845	2,099	1,297	985
Commodity related					
Over the counter:					
Commodity swaps and forwards		715	12,971	2	9,147
Commodity options		5	4	-	-
	_	720	12,975	2	9,147
Hedge					
Fair value hedge:					
Interest rate swaps		15,697	256,069	18,515	139,175
Net investment hedge:					
Currency forwards	_	<u> </u>	2,535	1,954	
	_	15,697	258,604	20,469	139,175
	₩	2,013,404	2,339,394	1,199,887	1,282,573

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 9. <u>Derivatives (continued)</u>

(d) Gain or loss on fair value hedges for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015	
Hedged items	$oldsymbol{\Psi}$	237,112	139,737	
Hedging instruments		(250,133)	(139,184)	
	<del>W</del>	(13,021)	553	

(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, 2016 and 2015 were as follows:

	_	2016	2015
Borrowings in foreign currency	W	(23,441)	(17,492)
Debt securities issued in foreign currency		(35,727)	(14,005)
Currency forwards	_	4,775	(2,368)
	W	(54,393)	(33,865)

## 10. Loans

(a) Details of loans as of December 31, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015
Household loans	W	97,305,741	90,426,301
Corporate loans		116,475,754	113,635,229
Public and other		2,092,423	2,129,768
Loans to banks		4,625,545	4,566,712
Card receivables		18,281	21,307
		220,517,744	210,779,317
Deferred loan origination costs and fees		376,821	342,684
		220,894,565	211,122,001
Allowance for impairment		(1,455,884)	(1,470,518)
	₩ <u></u>	219,438,681	209,651,483

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 10. Loans (continued)

(b) Changes in the allowance for impairment for the years ended December 31, 2016 and 2015 were as follows:

		2016						
		Due from		Loans				
		banks	Household	Corporate	Other	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(*)				(4,452)		84	(4,368)	
Ending balance	₩	15,738	286,220	1,153,613	16,051	25,896	1,497,518	

	2015						
	Due from		Loans				
	banks	Household	Corporate	Other	Other assets	Total	
W	23,695	227,721	1,329,006	22,944	62,177	1,665,543	
	(10,859)	116,814	492,217	(2,629)	(2,698)	592,845	
	-	(116,497)	(562,628)	(67)	(290)	(679,482)	
	-	-	(26,168)	-	_	(26,168)	
	-	(4,447)	(55,143)	(1,911)	-	(61,501)	
	-	24,150	72,360	85	407	97,002	
	<u>-</u>		(45,289)		(17,846)	(63,135)	
W	12,836	247,741	1,204,355	18,422	41,750	1,525,104	
		banks  ₩ 23,695  (10,859)	banks     Household       ₩     23,695     227,721       (10,859)     116,814       -     (116,497)       -     -       -     (4,447)       -     24,150       -     -	Due from banks         Household Household         Corporate           ₩ 23,695         227,721         1,329,006           (10,859)         116,814         492,217           - (116,497)         (562,628)           - (26,168)           - (4,447)         (55,143)           - 24,150         72,360           - (45,289)	Date from banks         Household         Corporate         Other           ₩         23,695         227,721         1,329,006         22,944           (10,859)         116,814         492,217         (2,629)           -         (116,497)         (562,628)         (67)           -         -         (26,168)         -           -         (4,447)         (55,143)         (1,911)           -         24,150         72,360         85           -         (45,289)         -	Due from banks         Household         Corporate         Other         Other assets           ₩ 23,695         227,721         1,329,006         22,944         62,177           (10,859)         116,814         492,217         (2,629)         (2,698)           - (116,497)         (562,628)         (67)         (290)           - (26,168)         -         -           - (4,447)         (55,143)         (1,911)         -           - 24,150         72,360         85         407           - (45,289)         -         (17,846)	

<sup>(\*)</sup> 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, 2016 and 2015 were as follows:

		2016	2015
Beginning balance	W	342,684	268,219
Increase		217,907	234,469
Decrease		(183,770)	(160,004)
Ending balance	W _	376,821	342,684

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015
Available-for-sale financial assets:			
Debt securities:			
Government bonds	W	3,601,179	2,884,987
Financial institutions bonds		15,048,027	12,973,647
Corporate bonds		6,618,509	6,145,312
Others		13,043	22,257
		25,280,758	22,026,203
Equity securities(*):			
Stocks		1,032,813	1,305,500
Equity investments		253,795	311,897
Beneficiary certificates		1,207,415	763,042
Others		39,802	53,957
		2,533,825	2,434,396
	<b>W</b>	27,814,583	24,460,599
Held-to-maturity financial assets:			
Debt securities:			
Government bonds	₩	6,826,115	5,731,934
Financial institutions bonds		891,397	524,855
Corporate bonds		3,912,758	3,848,262
	₩	11,630,270	10,105,051

<sup>(\*)</sup> Equity securities with no quoted market prices in active markets and of which the fair value cannot be measured reliably are recorded at cost of \text{\$\text{\text{\$\text{W}}26,989}\$ million, \text{\$\}

(b) Gain or loss on sale of available-for-sale financial assets for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Gain on sale of available-for-sale financial assets	<del>W</del>	439,740	471,149
Loss on sale of available-for-sale financial assets		(28,310)	(48,870)
	W	411,430	422,279

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 12. Property and equipment

(a) Details of property and equipment as of December 31, 2016 and 2015 were as follows:

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

	<u></u>	December 31, 2015 Accumulated					
	·						
		Acquisition cost	depreciation	Book value			
Land(*)	W	1,145,236	-	1,145,236			
Buildings(*)		804,571	(165,952)	638,619			
Others		1,347,562	(1,127,932)	219,630			
	<b>W</b>	3,297,369	(1,293,884)	2,003,485			

<sup>(\*)</sup> As the measurement for the business combination of PT Centratama nasional Bank is completed during the current period, the balance of prior year is retrospectively adjusted.

(b) Changes in property and equipment for the years ended December 31, 2016 and 2015 were as follows:

	_	2016					
	_	Land	Buildings	Others	Total		
Beginning balance	W	1,145,236	638,619	219,630	2,003,485		
Acquisitions(*1,2)		-	17,068	79,425	96,493		
Disposals and write-off(*1,3)		(472)	(217)	(1,944)	(2,633)		
Depreciation Amounts transferred from investment		-	(29,558)	(91,008)	(120,566)		
properties Amounts transferred from non-current		58,478	4,443	-	62,921		
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		

<sup>(\*2) \\ 1,803</sup> million of provision for the asset retirement related to newly acquired assets was included.

<sup>(\*3) &</sup>lt;del>W</del>927 million of write-off was included.

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 12. Property and equipment (continued)

(b) Changes in property and equipment for the years ended December 31, 2016 and 2015 were as follows:

	_	2015					
	_	Land	Buildings	Others	Total		
Beginning balance	W	1,155,856	651,471	228,792	2,036,119		
Acquisitions(*1,2)		1	19,975	89,318	109,294		
Disposals and write-off(*1,3)		(933)	(874)	(4,581)	(6,388)		
Depreciation		-	(31,580)	(97,038)	(128,618)		
Amounts transferred to investment properties		(28,563)	(2,354)	-	(30,917)		
Effects of foreign currency movements		92	(3,052)	2,026	(934)		
Business combinations(*4)	_	18,783	5,033	1,113	24,929		
Ending balance	₩	1,145,236	638,619	219,630	2,003,485		

<sup>(\*1) \</sup>psi\_3,255 million transferred from construction-in progress was included.

(c) Insured assets and liability insurance as of December 31, 2016 were as follows:

Type of insurance	Insured assets		Amount covered	Insurance company
Comprehensive insurance for	Cash		_	Samsung Fire & Marine
financial institutions		W	20,000	Insurance Co., Ltd., etc.
Property insurance	Buildings & properties			Samsung Fire & Marine
	for business purpose		981,688	Insurance Co., Ltd., etc.
Theft insurance	Cash & securities			Samsung Fire & Marine
			60,000	Insurance Co., Ltd., etc
Compensation liability				Meritz Fire & Marine
insurance for officers	-		50,000	Insurance Co., Ltd., etc.
Compensation liability				Meritz Fire & Marine
insurance for gas accident	-		500	Insurance Co., Ltd., etc.
Compensation liability				Hyundai Marine & Fire
insurance for Personal				Insurance Co., Ltd., etc.
information protection	-		10,000	ilisurance Co., Ltd., etc.
Compensation liability				Dongbu Insurance Co.,
insurance for electronic				Ltd. etc.
financial transaction	-	_	2,000	Liu. Cic.
		W	1,124,188	

<sup>(\*)</sup> Besides the insurances listed above, the Group also maintained automobile liability insurance, medical insurance for employees, and casualty insurance protecting property and employees.

<sup>(\*2) \</sup>text{\text{\$\psi}}3,456 million of provision for the asset retirement related to newly acquired assets was included.

<sup>(\*3)</sup> W643 million of write-off was included.

<sup>(\*4)</sup> As the measurement for the business combination of PT Centratama nasional Bank is completed during the current year, the balance of prior year is retrospectively adjusted.

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 13. Intangible assets

(a) Changes in intangible assets for the years ended December 31, 2016 and 2015 were as follows:

	_	2016					
				Development			
		Goodwill	Software	cost	Memberships	Other	Total
Beginning balance	W	45,175	65,971	29,607	47,512	118,401	306,666
Acquisitions(*1)		-	19,720	13,717	788	5,652	39,877
Disposals		-	-	-	(1,344)	(67)	(1,411)
Impairment(*2)		-	-	-	(98)	-	(98)
Amortization(*3) Effects of foreign currency		-	(25,917)	(11,161)	-	(47,779)	(84,857)
movements		_	339		(25)	75	389
Ending balance	W	45,175	60,113	32,163	46,833	76,282	260,566

- (\*1) \preceq2,825 million among acquisition cost of other intangible assets was accounted 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) \text{\text{\$\psi}45,006} million among amortization cost of other intangible assets was included in other operating expenses.

			2015								
			Development								
		Goodwill	Software	cost	Memberships	Other	Total				
Beginning balance	₩	-	42,448	13,372	47,914	76,533	180,267				
Acquisitions(*1)		-	47,432	24,807	374	82,793	155,406				
Disposals and write- off(*2)		-	-	-	(827)	(101)	(928)				
Amortization(*3) Effects of foreign		-	(24,090)	(10,089)	-	(42,139)	(76,318)				
currency movements Business		-	54	-	51	10	115				
combination(*4)		45,175	127	1,517		1,305	48,124				
Ending balance	W	45,175	65,971	29,607	47,512	118,401	306,666				

- (\*1) \$\forall 59,810\$ million among acquisition cost of other intangible assets was accounted as accounts payable.
- (\*2) \prescript{\psi}101 million of loss on write-off was included.
- (\*3) \preceq33,544 million among amortization cost of other intangible assets was included in other operating expenses.
- (\*4) As the measurement for the business combination of PT Centratama nasional Bank is completed during the current year, the balance of prior year is retrospectively adjusted.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 13. Intangible assets (continued)

#### (b) Goodwill

(i) The carrying amounts of goodwill allocated to Cash-Generating Unit ("CGU") of PT Bank Shinhan Indonesia and PT Centratama Nasional Bank as of December 31, 2016 and 2015 were as follows:

Cash generating unit		December 31, 2016	December 31, 2015
PT Bank Shinhan Indonesia(*1)	W	45,175	33,317
PT Centratama Nasional Bank(*1, 2)		<u>-</u>	11,858
	W	45,175	45,175

- (\*1) There has been a merger on December 6, 2016 between PT Bank Shinhan Indonesia and PT Centratama Nasional Bank Corporation within the consolidated entity and the name of the company after merger is 'PT Bank Shinhan Indonesia'. For further information on the merger, refer to Note 46. Business Combination under Common Control.
- (\*2) As the measurement for the business combination of PT Centratama Nasional Bank is completed during the current period, the balance of prior year is retrospectively adjusted. For the further information on the measurement, refer to the Note 45. Business Combination.

## (ii) Impairment test

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

# a Valuation date and projection period

The recoverable amounts are based on June 30, 2016. The projection period used in value-in-use calculations is 9.5 years (2016.7~2025) 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.

#### (b) 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
13.20%	3.20%

- © The key indicators 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, 2016 were as follows:

		PT Bank Shinhan Indonesia
Recoverable amount	W	187,461
Carrying amount		171,990
Recoverable amount exceeded carrying amount	₩	15,471

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

#### 14. Investments in associates

- (a) Investments in associates as of December 31, 2016 and 2015 were as follows:
- (b)

			Ownership (%)			
			December 31,	December 31,		
Investees	Country	Reporting date	2016	2015		
Aju Capital Co., Ltd.(*1,2,6)	Korea	September 30	12.85	12.85		
Cardif Life Insurance(*1,3)	Korea	September 30	14.99	14.99		
UAMCO., Ltd.(*4)	Korea	-	-	17.50		
Pohang TechnoPark 2PFV(*2)	Korea	December 31	14.90	14.90		
Daewontos Co., Ltd.(*1,5)	Korea	September 30	36.33	36.33		
Inhee Co., Ltd.(*1,5)	Korea	September 30	15.36	15.36		
DAEGY Electrical Construction., Ltd.(*1,5)	Korea	September 30	27.45	27.45		
Kukdong Engineering & Construction Co., Ltd.(*4)	Korea	-	-	14.30		
YEONWOONG SYSTEM(*1,5)	Korea	September 30	21.77	21.77		
DOODOO LOGITECH(*1,5)	Korea	September 30	27.96	27.96		
Neoplux Co., Ltd.(*1)	Korea	September 30	33.33	33.33		
EQP Global Energy Infrastructure Private Equity Fund(*1)	Korea	September 30	22.64	22.64		
JAEYOUNG SOLUTEC CO., LTD. (*1,5,6,7)	Korea	September 30	10.45	11.90		
Partners 4th Growth Investment Fund(*1)	Korea	September 30	25.00	25.00		
PSA 1st Fintech Private Equity Fund(*1)	Korea	September 30	20.00	20.00		
KTB Newlake Global Healthcare PEF (*1)	Korea	September 30	20.00	-		
Jaeyang Industry(*5,8)	Korea	March 31	25.90	-		
Tigris-Aurum Fund1(*1)	Korea	September 30	27.27	-		
Treenkid(*1,5)	Korea	September 30	23.72	-		
Chungyoung INC.(*1,5)	Korea	September 30	18.94	-		
Semantic(*1,5)	Korea	September 30	19.25	-		
DAEKWANG SEMICONDUCTOR Co.,Ltd.(*5,8)	Korea	June 30	20.94	-		
branbuil Co.,Ltd.(*5,8)	Korea	December 31	15.53	-		

- (\*1) Financial statements as of September 30, 2016 were used for the equity method since the financial statements as of December 31, 2016 were not available. Significant trades and events occurred within the period were properly reflected.
- (\*2) Although the ownership interests in Aju Capital Co., Ltd., Pohang TechnoPark 2PFV were less than 15%, the Group used the equity method of accounting as the Group has significant influence on electing board members who are able to influence the entities' financial and operating policy decisions.
- (\*3) Although the ownership interest in Cardif Life Insurance Co., Ltd. was less than 15%, the Group used the equity method of accounting as the Group has significant influence through substantive operating transactions.
- (\*4) UAMCO., Ltd. reclassified investments in associates to available-for-sale financial assets as forfeiture of significant influence, Kukdong Engineering & Construction Co., Ltd. reduced its capital stock without any refund.
- (\*5) The group previously acquired the shares of Daewontos Co., Ltd., Inhee Co., Ltd., Daegy Electrical Construction., Ltd., YEONWOONG SYSTEM, DOODOO LOGITECH, JAEYOUNG SOLUTEC CO., LTD., Jeayang Industry, Treenkid, Chungyoung, Semantic, DAEKWANG SEMICONDUCTOR Co., Ltd. and branbuil Co., Ltd by debt-equity swap as a part of reorganization procedures where the group's voting right is restricted. As the reorganization procedures of them were completed and voting rights were restored, they were reclassified as investments in associates.

## 14. <u>Investments in associates (continued)</u>

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

- (\*6) The shares of Aju Capital Co., Ltd., JAEYOUNG SOLUTEC CO., LTD. were marketable securities and their market value were \(\pi\)51,543 million, \(\pi\)10,466 million, respectively, as of December 31, 2016 based on the quoted market price \(\pi\)6,970 per share, \(\pi\) 2,760 per share, respectively) at that date.
- (\*7) Although the ownership interests in JAEYOUNG SOLUTEC CO., LTD. were less than 15%, the group used the equity method as the group has significant influence on the entity's financial and operating policy decisions.
- (\*8) Recent financial statements were used for the equity method since the financial statements as of December 31, 2016 were not available. Significant trades and events occurred within the period were properly reflected.

### 14. <u>Investments in associates (continued)</u>

(b) Changes in investments in associates for the years ended December 31, 2016 and 2015 were as follows:

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

				201	16			
Associates	Acquisition cost	Beginning balance	Acquisition (Redemption)	Gain from disposal	Share of profit of associates	Changes in accumulated other comprehensive income	Dividends received	Ending balance
Aju Capital Co., Ltd. \\	36,971	34,444	-		9,038	(58)		40,836
Cardif Life Insurance Co., L	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	(102,773)	-	(1)	-	(20,701)	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 Co., Ltd.	7,668	1,993	5,668	-	765	-	(900)	7,526
EQP Global Energy Infrastructure Private Equity Fund	280	, _	105	_	(105)	_	_	, -
JAÉYOUNG SOLUTEC					, ,			
CO., LTD.	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	•	,	2,000		(828)			,
Equity Fund	2,000	2,000	-	-	(35)	-	-	1,965
KTB Newlake Global Healthcare PEF	162		922		(143)			779
Jaeyang Industry	102	-	922	-	(143)	-	-	119
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)	-	-	<del>-1</del> ,///
W	198,890	232,522	(86,199)	4,387	8,615	2,017	(30,449)	130,893

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 14. <u>Investments in associates (continued)</u>

(b) Changes in investments in associates for the years ended December 31, 2016 and 2015 were as follows:

	2015								
					Changes in accumulated				
	Acquisition	Beginning	Acquisition	Share of profit of	other comprehensive	Dividends	Impair-	Ending	
Associates	cost	balance	(Redemption)	associates	income	received	ment	balance	
Aju Capital Co., Ltd. W	36,971	30,426	-	6,277	(410)	(1,849)		34,444	
Cardif Life Insurance Co., L	35,279	56,897	-	(3,297)	3,756	-	-	57,356	
UAMCO., Ltd.	85,050	114,238	-	11,632	(48)	-	-	125,822	
Pohang TechnoPark 2PFV	4,470	1,977	-	(1)	-	-	-	1,976	
Daewontos Co., Ltd.	-	-	-	-	-	-	-	-	
Inhee Co., Ltd. DAEGY Electrical	-	532	-	(278)	-	-	-	254	
Construction., Ltd.	-	44	-	105	-	-	-	149	
Kukdong Engineering & Construction Co., Ltd.	9,092	7,158	-	(1,556)	3,422	-	(9,024)	-	
YEONWOONG SYSTEM	-	-	-	106	-	-	-	106	
DOODOO LOGITECH	-	-	-	384	-	-	-	384	
Neoplux Co., Ltd. EQP Global Energy Infrastructure Private	2,000	-	2,000	(7)	-	-	-	1,993	
Equity Fund JAEYOUNG SOLUTEC	174	-	174	(174)	-	-	-	-	
CO., LTD. Partners 4th Growth	6,238	-	6,238	-	-	-	-	6,238	
Investment Fund PSA 1st Fintech Private	1,800	-	1,800	-	-	-	-	1,800	
Equity Fund	2,000	-	2,000	-	-	-	-	2,000	
PT Bank Shinhan Indonesia	25,300		(208)	208					
₩	208,374	211,272	12,004	13,399	6,720	(1,849)	(9,024)	232,522	

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 14. <u>Investments in associates (continued)</u>

(c) The condensed financial statements of associates as of December 31, 2016 and 2015 were as follows:

-		1	0 1		<b>1</b>	-
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December 31, 2010							
Assets	Liabilities	Operating revenue	Profit (loss) for the period	Other comprehensive income (loss)	Total comprehensive income (loss)		
6,543,737	5,744,415	757,345	70,598	(458)	70,140		
4,182,208	3,779,257	144,583	(16,706)	36,189	19,483		
14,660	1,401	-	(4)	-	(4)		
399	2,492	517	(624)	-	(624)		
10,713	9,310	3,135	(253)	-	(253)		
659	191	-	(76)	-	(76)		
497	146	25	(135)	-	(135)		
891	6	213	(609)	-	(609)		
22,577	-	3,441	2,295	-	2,295		
1	1,376	_	(1,842)	-	(1,842)		
155,368	120,184	137,920	(7,095)	(614)	(7,709)		
18,479	258	113	(1,300)	-	(1,300)		
9,825	-	-	(175)	-	(175)		
3,805	478	-	(716)	-	(716)		
2,146	4,717	212	(69)	-	(69)		
5,431	-	-	(69)	-	(69)		
1,193	859	325	(54)	-	(54)		
2,341	6,753	-	-	-	-		
3,098	1,804	-	-	-	-		
35,204	12,392	-	-	-	-		
2,177	2,870	_	-	-	-		
11,015,409	9,688,909	1,047,829	43,166	35,117	78,283		
	6,543,737  4,182,208 14,660 399 10,713 659 497 891 22,577  1 155,368 18,479 9,825 3,805 2,146 5,431 1,193 2,341 3,098 35,204 2,177	6,543,737       5,744,415         4,182,208       3,779,257         14,660       1,401         399       2,492         10,713       9,310         659       191         497       146         891       6         22,577       -         1       1,376         155,368       120,184         18,479       258         9,825       -         3,805       478         2,146       4,717         5,431       -         1,193       859         2,341       6,753         3,098       1,804         35,204       12,392         2,177       2,870	Assets         Liabilities         Operating revenue           6,543,737         5,744,415         757,345           4,182,208         3,779,257         144,583           14,660         1,401         -           399         2,492         517           10,713         9,310         3,135           659         191         -           497         146         25           891         6         213           22,577         -         3,441           1         1,376         -           155,368         120,184         137,920           18,479         258         113           9,825         -         -           3,805         478         -           2,146         4,717         212           5,431         -         -           1,193         859         325           2,341         6,753         -           3,098         1,804         -           35,204         12,392         -           2,177         2,870         -	Assets         Liabilities         Operating revenue         Profit (loss) for the period           6,543,737         5,744,415         757,345         70,598           4,182,208         3,779,257         144,583         (16,706)           14,660         1,401         -         (4)           399         2,492         517         (624)           10,713         9,310         3,135         (253)           659         191         -         (76)           497         146         25         (135)           891         6         213         (609)           22,577         -         3,441         2,295           1         1,376         -         (1,842)           155,368         120,184         137,920         (7,095)           18,479         258         113         (1,300)           9,825         -         -         (175)           3,805         478         -         (716)           2,146         4,717         212         (69)           1,193         859         325         (54)           2,341         6,753         -         -           3,098	Assets         Liabilities         Operating revenue         Profit (loss) for the period         Other comprehensive income (loss)           6,543,737         5,744,415         757,345         70,598         (458)           4,182,208         3,779,257         144,583         (16,706)         36,189           14,660         1,401         -         (4)         -           399         2,492         517         (624)         -           10,713         9,310         3,135         (253)         -           659         191         -         (76)         -           497         146         25         (135)         -           891         6         213         (609)         -           22,577         -         3,441         2,295         -           1         1,376         -         (1,842)         -           155,368         120,184         137,920         (7,095)         (614)           18,479         258         113         (1,300)         -           9,825         -         -         (175)         -           3,805         478         -         (716)         -           2,146		

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 14. <u>Investments in associates (continued)</u>

(c) The condensed financial statements of associates as of December 31, 2016 and 2015 were as follows (continued):

D :		0 1	201	-
Decem	har	- 4	7/11	<b>-</b>

	_	December 51, 2015									
Investees	<u> </u>	Assets	Liabilities	Operating revenue	Profit (loss) for the period	Other comprehensive income (loss)	Total comprehensive income (loss)				
Aju Capital Co., Ltd.	W	6,906,603	6,155,236	844,216	48,870	(3,191)	45,679				
Cardif Life Insurance Co Ltd.	.,	4,128,588	3,745,119	481,472	(21,533)	25,039	3,506				
UAMCO., Ltd.		4,068,354	3,331,647	452,759	66,455	(276)	66,179				
Pohang TechnoPark 2PFV		14,664	1,401	-	(4)	-	(4)				
Daewontos Co., Ltd.		1,952	3,420	3,994	(263)	-	(263)				
Inhee Co., Ltd.		11,237	9,582	3,921	(1,803)	-	(1,803)				
DAEGY Electrical Construction., Ltd.		1,051	508	65	385	-	385				
Kukdong Engineering & Construction Co., Ltd.		278,497	233,376	269,079	(10,881)	(3,072)	(13,953)				
YEONWOONG SYSTEM		1,040	554	59	12	-	12				
DOODOO LOGITECH		1,418	44	65	(42)	-	(42)				
Neoplux Co., Ltd.		6,000	22	-	(22)	-	(22)				
EQP Global Energy Infrastructure Private Equity Fund		2	467	-	(767)	-	(767)				
JAEYOUNG SOLUTEC CO., LTD.		161,439	126,297	-	-	-	-				
Partners 4th Growth Investment Fund		7,200	-	-	-	-	-				
PSA 1st Fintech Private Equity Fund	-	10,000				<u>-</u> _					
	W	15,598,045	13,607,673	2,055,630	80,407	18,500	98,907				

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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, 2016 and 2015 were as follows:

	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			
Cardif Life Insurance Co., Ltd.	402,951	14.99%	60,443	(175)	-	60,268			
Pohang TechnoPark 2PFV	13,259	14.90%	1,975	-	-	1,975			
Daewontos Co., Ltd.(*2)	(2,093)	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 Co., Ltd.	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(*4)	(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	<del>-</del> ,,,,,			
₩	1,276,023	15.55/0	181.634	(175)	(50,566)	130,893			
<del>"</del>	1,270,023		101,034	(173)	(30,300)	130,073			

<sup>(\*1)</sup> Net assets do not include non-controlling interests. Other adjustments represent cumulative impairment losses recognized in prior periods.

<sup>(\*2)</sup> 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.

<sup>(\*3)</sup> 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.

<sup>(\*4)</sup> 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.

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (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, 2016 and 2015 were as follows(continued):

December 31, 2015

	-	December 31, 2013						
Associates		Net assets (A)	Proportion of ownership interest (B)	(A) x (B)	Unrealized income and expenses	Impair- ment	Other adjustme- nts	Carrying amount
Aju Capital Co., Ltd.(*1)	W	700,147	12.85%	89,969	_	_	(55,525)	34,444
Cardif Life Insurance Co., Ltd.		383,468	14.99%	57,520	(164)	-	-	57,356
UAMCO., Ltd.(*2)		718,983	17.50%	125,822	-	-	-	125,822
Pohang TechnoPark 2PFV		13,264	14.90%	1,976	-	-	-	1,976
Daewontos Co., Ltd.(*3)		(1,469)	36.33%	(534)	-	-	534	-
Inhee Co., Ltd.		1,655	15.36%	254	_	-	-	254
DAEGY Electrical Construction., Ltd.		544	27.45%	149	-	-	-	149
Kukdong Engineering & Construction Co., Ltd. (*4)		46,376	14.30%	6,629	-	(9,024)	2,395	_
YEONWOONGSYSTEM		486	21.77%	106	-	_	_	106
DOODOO LOGITECH		1,374	27.96%	384	-	-	-	384
Neoplux Co., Ltd.		5,978	33.33%	1,993	-	-	-	1,993
EQP Global Energy Infrastructure Private Equity Fund(*5) JAEYOUNG SOLUTEC		(464)	22.64%	(105)	-	-	105	-
CO., LTD.(*4)		34,193	11.90%	4,069	_	-	2,169	6,238
Partners 4th Growth Investment Fund PSA 1st Fintech Private		7,200	25.00%	1,800	-	-	-	1,800
Equity Fund		10,000	20.00%	2,000	-	_	_	2,000
* "	W	1,921,735		292,032	(164)	(9,024)	(50,322)	232,522
	-	,. ,		- ,		(- , /	( )/	- ,

<sup>(\*1)</sup> Net assets do not include non-controlling interests. Other adjustments represent cumulative impairment losses recognized in prior periods.

### 14. <u>Investments in associates (continued)</u>

<sup>(\*2)</sup> Net asset does not include non-controlling interests.

<sup>(\*3)</sup> Other adjustments represent the unrecognized share of losses of associate because the Group has stopped recognizing its share of losses of the associate as the balance of the investment has been reduced to zero.

<sup>(\*4)</sup> Net assets do not include non-controlling interests. Other adjustments represent the goodwill arising on the acquisition.

<sup>(\*5)</sup> Other adjustments represent the unrecognized share of losses of an associate because the Group has stopped recognizing its share of losses of associate.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

(e) The unrecognized share of loss on investments in associates for the years ended December 31, 2016 and 2015 were as follows:

		December 31, 2016			
Associates	_	Unrecognized share of loss	Accumulated unrecognized share of loss		
Daewontos Co., Ltd. EQP Global Energy Infrastructure	₩	(226)	(760)		
Private Equity Fund		(311)	(311)		
Jaeyang Industry	_	(18)	(18)		
	W	(555)	(1,089)		
		December	31, 2015		
	_		Accumulated unrecognized		
Associates	_	Unrecognized share of loss	share of loss		
Daewontos Co., Ltd. EQP Global Energy Infrastructure	W	(96)	(534)		
Private Equity Fund	_	(105)	(105)		
	w_	(201)	(639)		

# 15. <u>Investment properties</u>

(a) Investment properties as of December 31, 2016 and 2015 were as follows:

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

			December 31, 2016				
			Accumulated				
		Acquisition cost	depreciation	Book value			
Land	W	506,638	-	506,638			
Buildings		229,345	(60,837)	168,508			
	₩ <u>_</u>	735,983	(60,837)	675,146			
			December 31, 2015				
	_		Accumulated				
		Acquisition cost	depreciation	Book value			
Land	W	572,069	-	572,069			
Buildings		231,253	(37,716)	193,537			
	<b>W</b> _	803,322	(37,716)	765,606			

(b) The fair value of investment properties as of December 31, 2016 and 2015 were as follows:

	<u>I</u>	December 31, 2016	December 31, 2015
Land and buildings(*)	₩	773,511	836,030

<sup>(\*)</sup> 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, 2016 and 2015 were as follows

		2016	2015
Rental income	W	23,185	24,400
Direct operating expenses for investment properties that			
generate rental income		5,798	5,770

### 16. Other assets

Other assets as of December 31, 2016 and 2015 were as follows:

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

		December 31, 2016	December 31, 2015
Unsettled trades and accounts receivable	W	3,984,874	5,547,053
Domestic exchange settlement receivables		6,066,285	2,307,584
Guarantee deposits		1,040,801	1,089,375
Accrued income		837,531	757,772
Prepaid expense		62,819	72,001
Suspense payments		53,756	50,563
Sundry assets		86,839	94,142
Others		2,152	744
Present value discount		(31,708)	(41,561)
Allowance for impairment		(25,896)	(41,750)
	<b>W</b>	12,077,453	9,835,923

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 17. Pledged assets

(a) Assets pledged as collateral as of December 31, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015	
Loans	W	76,232	94,871	
Securities(*1):				
Available-for-sale financial assets		1,225,722	584,334	
Held-to-maturity financial assets		7,824,930	6,068,588	
		9,050,652	6,652,922	
Real estate(*2)		6,525	3,905	
	W	9,133,409	6,751,698	

<sup>(\*1)</sup> 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, 2016 and 2015 were \text{W1,209,161} million, \text{W759,654} million, respectively.

(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, 2016 and 2015 were as follows:

		December	31, 2016	December	r 31, 2015
			Collateral sold or		Collateral sold or
		Collateral held	repledged	Collateral held	repledged
Securities	W	3,749,791	-	5,285,701	-

<sup>(\*2)</sup> The amounts were based on the notification amount of pledge.

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 18. 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, 2016 and 2015 were as follows:

	_	December 31, 2016	December 31, 2015
Deposits(*1,2)	W	6,282	13,509

- (\*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 valuation model adopted by the Bank. The Bank did not recognize profit or loss related to its own credit risk adjustment for the years ended December 31, 2016 and 2015.
- (b) Maturity amounts and book values of financial liabilities designated at fair value through profit or loss as of December 31, 2016 and 2015 were as follows:

	_	December 31, 2016						
		Contractual amount due at maturity	Balance	Difference				
Deposits	W	6,247	6,282	(35)				
		December 31, 2015						
	_	Contractual amount						
	_	due at maturity	Balance	Difference				
Deposits	W	13,607	13,509	98				

(c) Gain or loss on financial liabilities designated at fair value through profit or loss for the years ended December 31, 2016 and 2015 were as follows:

	December 31, 2016	December 31, 2015
_		
₩	(97)	95
	(109)	(111)
<del>W</del> _	(206)	(16)
	 	₩ (97) (109)

#### 19. Deposits

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

Deposits as of December 31, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015
Demand deposits:			
Korean won	$\mathbf{W}$	81,617,492	74,319,215
Foreign currency		11,032,964	8,412,705
		92,650,456	82,731,920
Time deposits:		<u> </u>	
Korean won		110,106,106	110,090,844
Foreign currency		12,790,861	10,489,601
Gain on fair value hedge		(38,368)	(17,954)
		122,858,599	120,562,491
Negotiable certificates of deposits		6,319,914	4,351,326
Note discount deposits		4,581,276	3,018,551
CMA		2,473,048	2,280,816
Others		26,799	30,088
	W	228,910,092	212,975,192

# 20. Trading liabilities

Trading liabilities as of December 31, 2016 and 2015 were as follows:

	December 31, 2016			Decemb	oer 3!	1, 2015
	Interest rate (%)	_	Amount	Interest rate (%)		Amount
Securities sold	-	W	-	2.25	W	10,161
Gold/Silver deposits	-		485,995	-		453,605
			485,995			463,766

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 21. Borrowings

Borrowings as of December 31, 2016 and 2015 were as follows:

	Decem	December 31, 2016		December 31, 2015		
	Interest rate (%)		Amount	Interest rate (%)		Amount
Call money:						
Korean won	1.08~1.23	W	394,400	-	W	-
Foreign currency	0.35~10.00	_	412,868	0.32~7.00	_	268,114
		_	807,268		-	268,114
Bill sold Bonds sold under repurchase agreements:	0.65~1.52		12,427	0.75~2.00		24,245
Korean won	0.80		8,152	1.00~1.58		8,110
Foreign currency	1.42~6.29	_	569,956	0.69~3.49	_	510,464
		_	578,108		_	518,574
Borrowings in won:		_	_		_	
Borrowings from Bank of Korea	0.50~0.75		2,621,345	0.50~0.75		1,963,472
Others	0.00~4.30	_	4,551,825	0.00~4.35	_	3,729,298
			7,173,170			5,692,770
Borrowings in foreign currency:		_	_		_	_
Overdraft due to banks	0.00		152,589	0.00~0.76		180,527
Borrowings from banks	0.24~3.95		3,678,949	0.10~7.95		4,297,151
Sub-lease	0.00~1.72		470,176	0.47~1.18		571,829
Others	1.02~1.18	_	1,442,365	0.53~0.80	_	1,375,143
		_	5,744,079		_	6,424,650
Due to Bank of Korea in foreign		_	_		_	_
currency	-		-	0.10		71,810
Deferred origination costs		_	(723)		-	(1,684)
		W	14,314,329		W	12,998,479

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 22. <u>Debt securities issued</u>

Debt securities issued as of December 31, 2016 and 2015 were as follows:

	Decem	ber 31	1, 2016	December 31, 2015		1, 2015
	Interest rate (%)		Amount	Interest rate (%)		Amount
Debt securities issued in won:						
Debt securities issued	0.00~8.00	W	13,905,995	0.00~8.00	W	12,676,830
Subordinated debt securities issued	2.20~4.60		3,501,056	2.72~5.10		3,500,808
Loss on fair value hedges			(147,208)			(52,579)
Discount on debt securities issued		_	(19,599)		_	(31,794)
			17,240,244		_	16,093,265
Debt securities issued in foreign currency:						
Debt securities issued	0.03~4.38		3,176,276	0.32~4.38		3,912,108
Subordinated debt securities issued	3.88		1,189,067	-		-
Loss on fair value hedges			(9,977)			25,983
Discount on debt securities issued		_	(17,180)		_	(10,806)
		_	4,338,186		_	3,927,285
		W	21,578,430		W	20,020,550

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

#### 23. Liability for defined benefit obligation

### (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, 2016 and 2015 were as follows:

	_	December 31, 2016	December 31, 2015
Present value of defined benefit obligation	W	1,258,473	1,173,709
Fair value of plan assets	_	(1,208,370)	(1,018,940)
Recognized liabilities for defined benefit obligation	₩_	50,103	154,769

(b) Changes in the present value of defined benefit obligation for the years ended December 31, 2016 and 2015 were as follows:

	2016	2015
Beginning balance \text{\text{\text{\text{\text{\text{B}}}}}	1,173,709	999,623
Current service cost	136,566	119,239
Interest expense	37,947	38,229
Remeasurements(*1)	(39,969)	58,822
Effects of foreign currency movements	24	96
Benefits paid by the plan	(52,196)	(47,413)
Others(*2)	2,392	5,113
Ending balance W	1,258,473	1,173,709

<sup>(\*1)</sup> Remeasurements for the year ended December 31, 2016 consist of \(\pi\)4,634 million of actuarial loss arising from changes in demographic assumptions and \(\pi\) 8,347 million of actuarial gain arising from changes in financial assumptions, \(\pi\)36,256 million of gain arising experience adjustments.

(c) Changes in the fair value of plan assets for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Beginning balance	W	1,018,940	753,648
Interest income		34,033	30,297
Remeasurements		(14,376)	(13,269)
Contributions paid into the plan		210,300	290,800
Benefits paid by the plan		(40,527)	(42,536)
Ending balance	₩_	1,208,370	1,018,940

<sup>(\*2) \</sup>precequ2,359 million was adjusted to the balance as of December 31, 2015 due to completion of measurement for the business combination during the current period.

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 23. Liability for defined benefit obligation (continued)

(d) The amount of major categories of the fair value of plan assets as of December 31, 2016 and 2015 were as follows:

	_	December 31, 2016	December 31, 2015
Deposits	W	1,180,374	977,723
Others		27,996	41,217
	w -	1,208,370	1,018,940

(e) Actuarial assumptions as of December 31, 2016 and 2015 were as follows:

	December 31, 2016	December 31, 2015	Descriptions
Discount rate	3.40%	3.34%	AA0 Corporate bond yields
Future salary			
increasing rate	2.92% + Upgrade rate	2.92% + Upgrade rate	Average for last 5 years

### (f) Sensitivity analysis

Sensitivity analysis of the present value of defined benefit obligation as of December 31, 2016 and 2015 were as follows:

## (i) Discount rate

		December 31, 2016	December 31, 2015
Present value	W	1,258,473	1,173,709
Present value when the factor rises by 100 basis points		1,137,551	1.057,735
Present value when the factor falls by 100 basis points		1,399,688	1,309,579
(ii) Future salary increasing rate			

		December 31, 2016	December 31, 2015
Present value	W	1,258,473	1,173,709
Present value when the factor rises by 100 basis points		1,399,091	1,308,913
Present value when the factor falls by 100 basis points		1,135,816	1,056,141

<sup>(</sup>g) The weighted average durations of the defined benefit obligation as of December 31, 2016 and 2015 were 13.16 and 13.24 years.

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 24. Provisions

(a) Changes in provisions for the years ended December 31, 2016 and 2015 were as follows:

		2016					
	-	Asset retirement	Litigation	Unused credit	Guarantee	Others	Total
Beginning balance	W	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(*)		1,803	<u>-</u> _	<u>-</u>	(7,005)	<u>-</u>	(5,202)
Ending balance	W	36,098	12,044	94,985	78,499	85,305	306,931

		2015				
	Asset retirement	Litigation	Unused credit	Guarantee	Others	Total
Beginning balance	29,096	22,230	85,691	106,952	54,759	298,728
Provision (reversal)	1,958	(3,382)	14,818	(33,519)	18,926	(1,199)
Provision used	(530)	-	-	-	(12,762)	(13,292)
Foreign exchange						
movements	-	728	587	2,552	270	4,137
Others(*)	3,410			4,304	<u>-</u>	7,714
Ending balance 4	33,934	19,576	101,096	80,289	61,193	296,088

<sup>(\*)</sup> 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.

<sup>(</sup>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.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 25. Other liabilities

Other liabilities as of December 31, 2016 and 2015 were as follows:

	_	December 31, 2016	December 31, 2015
Accounts payable	W	3,938,413	5,528,790
Borrowing from trust account		3,443,287	2,966,681
Accrued expenses		2,333,120	2,268,540
Liability Incurred by Agency Relationship		799,462	1,311,763
Domestic exchange settlement payables		920,232	2,126,032
Account for agency business of other institutions		494,278	534,070
Security deposits received		374,932	368,468
Foreign exchange settlement payables		226,920	208,939
Suspense payable		44,882	83,965
Unearned income		80,744	66,398
Withholding value-added tax and other taxes		61,073	70,022
Dividend payable		1,309	9,231
Sundry liabilities		86,645	82,104
Present value discount	_	(2,404)	(2,651)
	W	12,802,893	15,622,352

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

#### 26. Equity

(a) Equity as of December 31, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015
Capital stock:	_		
Common stock	W	7,928,078	7,928,078
Other equity instruments:			
Hybrid bonds		469,392	801,298
Capital surplus:			
Share premium		398,080	398,080
Others	_	5,084	5,084
	_	403,164	403,164
Capital adjustments:			
Stock options		(887)	1,363
Others		(63,727)	(30,703)
		(64,614)	(29,340)
Accumulated other comprehensive income:			
Net change in fair value of available-for-sale			
financial assets		139,824	386,970
Equity in other comprehensive income of associates,		17,502	12.741
net Foreign currency translation differences for foreign		16,583	13,741
operations		(151,936)	(160,274)
Remeasurement of defined benefit obligations		(280,916)	(300,385)
g	-	(276,445)	(59,948)
Retained earnings:	-	(= ( = ( ; ( ) = )	(65,510)
Legal reserve(*1)		1,497,370	1,375,731
Voluntary reserve(*2)		9,064,867	8,719,986
Other reserve(*3)		87,029	75,215
Retained earnings(*4)		2,351,571	1,616,238
	_	13,000,837	11,787,170
Non-controlling interests(*5)		6,561	12,351
	W	21,466,973	20,842,773

- (\*1) According to the article 40 of the Banking Act, the Bank was required to appropriate a legal reserve in an amount equal to at least 10% of cash dividends for each accounting period until the reserve equals 100% of stated capital. The legal reserve may be used to reduce a deficit or may be transferred to common stocks in connection with a free issue of shares.
- (\*2) The amounts include a regulatory reserve for loan losses of \(\pi\)1,706,925 million and \(\pi\)1,738,249 million as of December 31, 2016 and December 31, 2015, respectively. The amounts include asset revaluation surplus of \(\prec{\pi}\)355,898 million as of December 31, 2016 and December 31, 2015.
- (\*3) Other reserve was established according to the oversea branch's laws and it may be used only to reduce overseas branch's deficit.
- (\*4) The amounts include differences between a regulatory reserve for loan loss based on separate financial statement and consolidated financial statement of \,\mathbb{W}34,200\, million and reversal of regulatory reserve for loan loss of \,\mathbb{W}47,566\, million as of December 31, 2016.
- (\*5) As the measurement for the business combination of PT Centratama Nasional Bank is completed during the current period, the balance of prior year is retrospectively adjusted.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 26. Equity (continued)

## (b) Capital stock

Capital stock of the Bank as of December 31, 2016 and 2015 were as follows:

	December 31, 2016	December 31, 2015
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, 2016 and 2015 were as follows:

			Book V	alue	
			December 31,	December 31,	Interest
Date of issue	Date of maturity		2016	2015	rate (%)
Hybrid bonds issued					
in foreign currency:					
September 20, 2006	September 20, 2036		-	94,761	6.82
September 20, 2006	September 20, 2036		-	237,144	6.82
Hybrid bonds issued					
in 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
		₩_	469,393	801,298	
Dividends on hybrid bond holders		W	45,691	57,158	
Weighted average interest rate (%)			6.45	6.72	

<sup>(\*)</sup> The above hybrid bonds are subject to early redemption option after 5 years or 10 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.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 26. Equity (continued)

(d) Changes in accumulated other comprehensive income for the years ended December 31, 2016 and 2015 were as follows:

				2016		
		Net change in fair value of available-for- sale financial assets	Equity in the other comprehensive income of associates, net	Foreign currency translation differences for foreign operations	Defined benefit plan actuarial gain (loss)	Total
Beginning balance	W	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 Remeasurement loss related		(240)	-	49,119	-	48,879
to defined benefit plan		-	-	-	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)

				2015		
		Net change in fair value of available-for- sale financial assets	Equity in the other comprehensive income of associates, net	Foreign currency translation differences for foreign operations	Defined benefit plan actuarial gain (loss)	Total
Beginning balance	₩	627,834	7,738	(152,433)	(245,740)	237,399
Change due to fair value		69,743	-	-	-	69,743
Change due to other comprehensive income of associates		-	6,720	-	-	6,720
Change due to impairment		9,567	-	-	-	9,567
Change due to disposal		(398,794)	-	-	-	(398,794)
Effect of hedge accounting		(864)	-	(33,865)	-	(34,729)
Effect of foreign currency movements Remeasurement loss related		2,585	-	25,123	-	27,708
to defined benefit plan		-	-	-	(72,091)	(72,091)
Effect of tax		76,899	(717)	901	17,446	94,529
Ending balance	₩	386,970	13,741	(160,274)	(300,385)	(59,948)

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 26. Equity (continued)

(e) Statements of appropriation of retained earnings for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
		Expected date of approval:	Date of approval:
		March 22, 2017	March 23, 2016
Unappropriated retained earnings:	_	-	
Balance at beginning of year	W	-	-
Interest on hybrid bond		(45,691)	(57,158)
Profit for the year		1,777,072	1,216,391
	_	1,731,381	1,159,233
Transfer from reserves:	_		
Voluntary reserve		6,723,196	6,346,989
Regulatory reserve for loan loss	_	<u> </u>	31,324
	_	6,723,196	6,378,313
	_	8,454,577	7,537,546
Appropriation of retained earnings:			
Legal reserve		177,707	121,639
Regulatory reserve for loan loss		47,848	-
Other reserve		12,652	11,814
Voluntary reserves		7,676,276	6,723,196
Redemption of hybrid bond		60,094	30,897
Dividends on common stock		480,000	650,000
(Dividends per share in won:			
Current year <del>W</del> 302.72 (6.05%)			
Last year  \text{\psi}409.94 (8.20\%))	_		
		8,454,577	7,537,546
Unappropriated retained earnings to be	_		
carried over to subsequent year	₩ <u></u>		

These statements of appropriation of retained earnings were based on the separate financial statements of the Parent Company.

## (f) Dividends

Dividends of common stock for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
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		6.05%	8.20%
Dividend per share in won	₩-	302.72	409.94

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 26. Equity (continued)

(g) Dividends payout ratio

Dividends payout ratio for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Dividends	W	480,000	650,000
Profit for the year(*)		1,940,256	1,489,654
Dividends payout ratio to profit for the year		24.74%	43.63%
Profit for the year adjusted for regulatory reserve(*)	W	1,892,690	1,492,621
Dividends to profit for the year		25.36%	43.55%

<sup>(\*)</sup> Profit for the year and profit for the year adjusted for regulatory reserve were the amount attributable to equity holder of the Group.

### 27. Regulatory reserve for loan loss

The Group should calculate and disclose regulatory reserve for loan loss, in accordance with Article 29-1 and 29-2 of Regulation on Supervision of Banking Business.

(a) The regulatory reserve for loan loss as of December 31, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015
Regulatory reserve for loan loss		1,741,125	1,744,092
Provision for (reversal of) regulatory reserve for			
loan loss		47,566	(2,967)
	W	1,788,691	1,741,125

(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, 2016 and 2015 were as follows:

		2016	2015
Provision for (reversal of) regulatory reserve for loan loss	W	47,566	(2,967)
Profit for the year adjusted for regulatory reserve		1,893,055	1,492,955
Earnings per share adjusted for regulatory reserve in won	W	1.165	906

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 28. Net interest income

(a) Net interest income for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Interest income:			
Cash and due from banks	W	73,921	101,931
Trading assets		168,205	162,624
Available-for-sale financial assets		454,557	485,026
Held-to-maturity financial assets		324,128	318,940
Loans		6,581,065	6,505,540
Others		94,325	75,431
		7,696,201	7,649,492
Interest expense:		_	
Deposits		(2,516,627)	(2,787,728)
Borrowings		(162,393)	(172,764)
Debt securities issued		(470,765)	(472,676)
Others		(42,295)	(51,609)
		(3,192,080)	(3,484,777)
Net Interest income	W	4,504,121	4,164,715

(b) Interest income recognized on impaired financial assets for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Interest income	₩ <sup>-</sup>	24,167	26,168

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 29. Net fees and commission income

Net fees and commission income for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Fees and commission income:			
Credit placement fees	W	69,953	68,509
Commission received as electronic charge receipt		136,180	135,996
Brokerage fees		90,547	110,684
Commission received as agency		343,929	321,506
Investment banking fees		47,348	67,277
Commission received in foreign exchange activities		164,680	149,057
Asset management fees from trust accounts		98,406	71,533
Guarantee fees		60,279	54,829
Others		50,298	70,895
		1,061,620	1,050,286
Fees and commission expense:			
Credit-related fee		(30,037)	(41,113)
Brand-related fee		(32,883)	(49,905)
Service-related fees		(14,573)	(12,787)
Trading and brokerage fees		(7,539)	(7,006)
Commission paid in foreign exchange activities		(29,899)	(24,766)
Others		(62,191)	(60,846)
		(177,122)	(196,423)
Net fees and commission income	W	884,498	853,863

## 30. Dividend income

Dividend income for the years ended December 31, 2016 and 2015 were as follows:

	2016	2015
W	28,957	35,580
	94,602	148,521
W	123,559	184,101
		¥ 28,957 94,602

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 31. Net trading gain (loss)

Net trading gain (loss) for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Trading assets and trading liabilities			
Debt:			
Gain on valuation	$oldsymbol{\Psi}$	3,044	8,414
Gain on sale		28,977	16,060
Loss on valuation		(34,816)	(13,199)
Loss on sale		(23,403)	(6,018)
		(26,198)	5,257
Equity:			<u> </u>
Gain on valuation		14,848	5,961
Gain on sale		27,440	39,794
Loss on valuation		(3,504)	(1,618)
Loss on sale		(16,851)	(37,696)
		21,933	6,441
Gold/Silver:			
Gain on valuation		18,336	24,366
Gain on sale		4,397	2,183
Loss on valuation		(61,321)	(5,238)
Loss on sale		(1,808)	(379)
		(40,396)	20,932
		(44,661)	32,630
Derivatives		<del></del>	
Foreign exchange:			
Gain on valuation and transaction, net		12,903	138,365
Interest rates:			
Gain (Loss) on valuation and transaction, net		17,526	(3,044)
Equity:			
Gain (Loss) on valuation and transaction, net		42,689	(1,203)
Commodity:			
Gain (Loss) on valuation and transaction, net		30,375	(32,327)
		103,493	101,791
Net trading gain	W	58,832	134,421

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 32. <u>Impairment loss on financial assets</u>

Impairment loss on financial assets for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Impairment loss:			
Loans and other financial assets	W	656,433	592,845
Available-for-sale financial assets		82,103	206,570
	<del>W</del>	738,536	799,415

### 33. General and administrative expenses

General and administrative expenses for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Employee benefits:		_	
Short and long term employee benefits	W	1,538,465	1,472,898
Post-employee benefits		140,480	127,171
Post-employee contributions		102	-
Termination benefits		94,478	59,549
		1,773,525	1,659,618
Amortization:		_	_
Depreciation		120,566	128,617
Amortization of intangible assets	<u></u>	39,851	36,764
		160,417	165,381
Other general and administrative: expenses:			
Employee fringe benefits		112,189	106,869
Rent		258,277	260,651
Service contract expenses		219,709	219,857
Taxes and dues		75,334	78,254
Advertising		57,394	57,950
Electronic data processing expenses		56,903	63,436
Others		176,105	173,418
		955,911	960,435
	<b>W</b>	2,889,853	2,785,434

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

#### 34. Share-based payments

(a) Cash-settled stock options as of December 31, 2016 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	Within 4years after 3years from grant date	Within 4years after 3years from grant date	Within 4years after 3years from grant date	Within 4years after 3years from grant date
Changes in number of shares granted: Outstanding at				
December 31, 2014	93,426	101,963	50,513	26,233
Exercised	-	-	-	-
Outstanding at December 31, 2015(*2)	93,426	101,963	50,513	26,233
Fair value in won(*3)	₩17,244	₩6,421	-	-

<sup>(\*1)</sup> As of December 31, 2016, the granted shares are fully vested, and the weighted-average exercise price of 272,135 options outstanding was \(\formalfont{W}\)39,019.

### (b) Equity-settled share-based payments

i) Equity-settled share-based payments as of December 31, 2016 were as follows:

	Content			
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	Upon appointment and promotion since January 1, 2014		
	(Within 3 years from grant date)	(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		

<sup>(\*1)</sup> 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

<sup>(\*2)</sup> Rights of exercise of 4, 5, 6, 7th grant are suspended as of December 31, 2016.

<sup>(\*3)</sup> As of December 31, 2016, suspended grants were evaluated based on the intrinsic value, which was the difference between the closing price of Shinhan Financial Group and the exercise price.

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 34. Share-based payments

- (b) Equity-settled share-based payments (continued)
  - ii) Granted shares and the fair value of grant date as of December 31, 2016 were as follows:

		Fair value(*1)	
Grant date	Grant shares	(in won)	Estimated shares(*2)
April 1, 2010	306,400	45,150	10,471
February 8, 2012	30,900	46,650	122
October 15, 2012	4,100	37,200	357
January 1, 2013	183,100	40,050	105,325
March 21, 2013	4,400	37,750	1,156
May 27, 2013	14,500	40,250	9,681
August 1, 2013	4,400	41,250	2,931
January 1, 2014	109,800	47,300	101,819
February 8, 2014	5,400	44,300	4,439
April 1, 2014	4,800	47,000	3,282
October 15, 2014	2,400	47,150	449
January 1, 2015	159,000	44,500	138,695
March 18 2015	16,800	42,650	11,736
April 10 2015	2,300	40,350	1,484
May 1 2015	2,300	46,000	1,370
May 22 2015	5,300	42,800	2,893
May 27 2015	2,300	40,200	1,229
August 1 2015	2,300	41,900	872
August 24 2015	2,300	40,250	724
January 1 2016	221,900	39,000	145,295
	1,084,700		544,330

<sup>(\*1)</sup> The fair value per share was evaluated based on the closing price of Shinhan Financial Group at each grant date. As of December 31, 2016, the fair value per share data evaluated by Shinhan Financial Group amounted to \text{W45,250}.

<sup>(\*2)</sup> 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.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 34. Share-based payment (continued)

(c) Stock compensation costs calculated for the years ended Dece	mber	31, 2016 and 2015 were	e as follows:
	_	2016	2015
Compensation costs recorded for the year	W	17,577	7,009
(d) Accrued expenses of the stock compensation costs and residu 2015 were as follows:	al con	•	
Accrued expenses	W	December 31, 2016 27,942	December 31, 2015 22.116
rectued expenses	**	21,342	22,110

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 35. Net other operating expenses

Net other operating expenses for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Other operating income			
Gain on sale of assets:			
Loans	W	28,314	72,554
Written-off loans		3,044	34,476
		31,358	107,030
Others:			
Gain on hedge activity from hedged items		270,662	176,204
Gain on hedge activity from hedging			
instruments		33,753	38,007
Reversal of allowance for			
acceptances and guarantee		6,780	33,519
Reversal of other allowance		14,569	1,958
Others		20,187	23,917
		345,951	273,605
		377,309	380,635
Other operating expense			
Loss on sale of assets:			
Loans		(10,783)	(8,974)
Others:		(10,703)	(0,571)
Loss on hedge activity from hedged items		(33,550)	(36,467)
Loss on hedge activity from hedging		(,)	(==,===)
instruments		(283,885)	(177,191)
Provision for allowance for		(,,	( , , , , ,
acceptances and guarantee		(11,003)	_
Provision for other allowance		(42,334)	(34,278)
Contribution to fund		(244,661)	(267,454)
Insurance fee		(274,881)	(248,960)
Others		(116,232)	(123,151)
		(1,006,546)	(887,501)
		(1,017,329)	(896,475)
	<del>W</del>	(640,020)	(515,840)

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 36. Net non-operating income

Net non-operating income for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Non-operating income			
Gain on sale of assets:			
Property and equipment	W	298	1,122
Intangible assets		51	2
Investment property		1,438	1,402
Non-current assets held for sale		821	705
Assets not used for business purpose		3	433
		2,611	3,664
Investments in associates and subsidiaries:			
Gain from disposition		5,177	95,232
Others:			
Rental income on investment property		23,185	24,400
Others		81,751	72,705
		104,936	97,105
		112,724	196,001
Non-operating expenses		,	<del></del>
Loss on sale of assets:			
Property and equipment		(566)	(75)
Intangible assets		(149)	(9)
Investment properties		(248)	(13)
Non-current assets held for sale		-	(29)
Assets not used for business purpose		(78)	-
• •		(1,041)	(126)
Investments in associates and subsidiaries:		<u></u>	<u> </u>
Impairment losses		-	(9,024)
Loss from disposition		(17)	(277)
1		(17)	(9,301)
Others:		, ,	· · · /
Investment properties depreciation		(15,356)	(9,324)
Donations		(13,334)	(18,614)
Impairment losses on property and equipment		(7)	(100)
Impairment losses on intangible asset		(98)	· · ·
Others		(21,740)	(30,591)
		(50,535)	(58,629)
		(51,593)	(68,056)
	₩	61,131	127,945
		- ,	. ,,,

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

#### 37. <u>Income tax expense</u>

(a) The components of income tax expense of the Group for the years ended December 31, 2016 and 2015 were as follows:

	2016	2015
W	378,526	275,694
	(36,362)	15,302
	(336,468)	-
	82,407	94,086
W	88,103	385,082
		¥ 378,526 (36,362) (336,468) 82,407

(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, 2016 and 2015 for the following reasons:

		2016	2015
Profit before income tax	W	2,028,724	1,875,070
Statutory tax rate		24.20%	24.20%
Income tax expense at statutory tax rates		490,489	453,305
Adjustments:			
Non-taxable income		(26,128)	(15,329)
Non-deductible expense		11,619	4,161
Decrease resulting from consolidated corporate			
tax system		(25,216)	(23,692)
Utilization of expired unused tax losses		(336,468)	-
Income tax refund		(22,316)	(9,795)
Others		(3,877)	(23,568)
Income tax expense	<del>W</del>	88,103	385,082
Effective tax rate(*)		4.34%	20.54%

(\*) 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 and insurance liabilities and the recent tax refund, the Group recognized the deferred tax asset after factoring in future taxable profits and the expected future extinguishment of deposit and insurance liabilities.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 37. Income tax expense (continued)

(c) Changes in temporary differences and deferred tax assets (liabilities) for the years ended December 31, 2016 and 2015 were as follows:

	_			2016		
	_	Beginning balance	Decreases	Increases	Ending balance	Deferred tax assets (liabilities)(*1)
Accrued income	W	(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) Deferred loan origination costs		(104,035)	(104,035)	(217,184)	(217,184)	(52,558)
and fee Revaluation and depreciation		(344,697)	(344,697)	(378,933)	(378,933)	(91,702)
on property and equipment		(483,906)	(6,985)	18,133	(458,788)	(111,161)
Derivative assets (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 Allowance for guarantees		215,799	215,799	228,432	228,432	55,280
and acceptance Allowance for advanced		80,290	80,290	78,499	78,499	18,997
depreciation Allowance for expensing		(179,485)	(47)	-	(179,438)	(45,977)
depreciation		(2,387)	(232)	-	(2,155)	(521)
Deemed dividends Net change in fair value of		5,513	-	-	5,513	1,334
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 Compensation expenses associated		286,635	286,635	318,993	318,993	85,739
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	r defer	red tax assets or lial	pilities:			
Investments in associates and subsidiaries(*2)	_	(146,133)		(134,824)	(280,957)	(67,992)
	W	238,070	78,800	1,643,988	1,803,258	438,033

<sup>(\*1)</sup> Deferred tax assets of overseas subsidiaries have increased by \$1,954 million due to foreign currency exchange rate changes.

<sup>(\*2)</sup> 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.

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 37. Income tax expense (continued)

(c) Changes in temporary differences and deferred tax assets (liabilities) (continued)

			2015		
	Beginning balance	Decreases	Increases	Ending balance	Deferred tax assets (liabilities)(*1)
Accrued income	(347,483)	(347,483)	(352,041)	(352,041)	(85,194)
Accounts receivable	(58,567)	(58,567)	(45,943)	(45,943)	(11,118)
Trading assets	(84,746)	(102,318)	(135,321)	(117,749)	(28,495)
Available-for-sale financial assets	1,171,729	256,361	230,483	1,145,851	277,296
Investments in associates and subsidiaries(*2) Deferred loan origination costs	43,362	43,362	(104,035)	(104,035)	(25,177)
and fee Revaluation and depreciation	(263,296)	(263,296)	(344,697)	(344,697)	(83,417)
on property and equipment	(449,814)	18,411	(15,681)	(483,906)	(117,241)
Derivative assets (liabilities)	(71,770)	(798)	(50,803)	(121,775)	(29,469)
Deposits	120,696	49,698	(7,310)	63,688	15,412
Accrued expenses	330,472	330,458	257,806	257,820	62,392
Defined benefit obligations	868,023	42,536	215,917	1,041,404	252,020
Plan assets	(753,648)	(42,536)	(307,828)	(1,018,940)	(246,583)
Other provisions Allowance for guarantees	191,776	191,776	215,799	215,799	52,223
and acceptance Allowance for advanced	106,952	106,952	80,290	80,290	19,430
depreciation Allowance for expensing	(181,031)	(1,546)	-	(179,485)	(45,989)
depreciation	(2,618)	(231)	-	(2,387)	(578)
Deemed dividends Net change in fair value of	5,513	-	-	5,513	1,334
available-for-sale financial assets	(828,276)	(828,276)	(510,514)	(510,514)	(123,544)
Donation payables	49,300	49,300	44,134	44,134	10,680
Allowance and bad debt Compensation expenses	192,503	192,503	286,635	286,635	77,700
associated with stock option	2,196	2,118	1,152	1,230	298
Fictitious dividends	3,909	3	7	3,913	947
Others(*3)	264,399	242,751	205,484	227,132	54,558
	309,581	(118,822)	(336,466)	91,937	27,485
Temporary differences not qualified for d Investments in associates and	leferred tax assets or lial	pilities:			
subsidiaries(*2)	(11,532)		(134,601)	(146,133)	(35,364)
	₩ 321,113	(118,822)	(201,865)	238,070	62,849

<sup>(\*1)</sup> Deferred tax assets of overseas subsidiaries have increased by \times1,455 million due to foreign currency exchange rate changes.

<sup>(\*2)</sup> 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.

<sup>(\*3)</sup> Deferred tax assets (liabilities) are adjusted retrospectively as the accounting treatment on the business combination of PT Centratama Nasional Bank is finalized during the year ended December 31, 2016.

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 37. <u>Income tax expense (continued)</u>

(d) Changes in tax effects that were directly charged or credited to equity for the years ended December 31, 2016 and 2015 were as follows:

		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	w	190,018	(50,194)	510,514	(123,544)	73,350
Equity in other comprehensive income of associates Foreign currency translation		16,392	191	14,376	(635)	826
differences for foreign operations Remeasurements of defined benefit		(140,918)	(11,018)	(135,644)	(24,630)	13,612
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
	_	December Amount		December 3		Changes in
	_	before tax	Tax effects	before tax	Tax effects	tax effects
Net change in fair value of available-for-sale financial assets Equity in other comprehensive	w	510,514	(123,544)	828,277	(200,443)	76,899
income of associates Foreign currency translation		14,376	(635)	7,656	82	(717)
differences for foreign operations Remeasurements of defined benefit		(135,644)	(24,630)	(126,901)	(25,531)	901
differences for foreign operations		(135,644) (396,286)	(24,630) 95,901	(126,901) (324,196)	(25,531) 78,456	901 17,445
differences for foreign operations Remeasurements of defined benefit	_	,	, ,		, ,	

(e) The current tax assets and liabilities as of December 31, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015
Current tax assets:	_		
Income taxes paid	W	11,769	7,409
Current tax liabilities:			
Payable due to consolidated tax system	W	122,866	22,476
Income taxes payables		14,856	17,553
	w_	137,722	40,029

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

#### 37. 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, 2016 and 2015 were as follows:

	_	December 31, 2016	December 31, 2015
Deferred tax assets	W	1,858,502	1,299,151
Deferred tax liabilities(*)		1,420,469	1,236,302
Current tax assets		182,653	251,324
Current tax liabilities		308,606	283,944

<sup>(\*)</sup>Deferred tax assets (liabilities) are adjusted retrospectively as the measurement for the business combination of PT Centratama Nasional Bank is completed during the year ended December 31, 2016.

### 38. Earnings per share

(a) Earnings per share for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Profit for the year	W	1,940,256	1,489,654
Less: dividends on hybrid bonds		(45,691)	(57,158)
Profit available for common stock		1,894,565	1,432,496
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	W	1,195	903

Considering that the Group had no dilutive potential ordinary 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 basic earnings per share for the years ended December 31, 2016 and 2015.

(b) Weighted average number of common shares outstanding as of December 31, 2016 and 2015 were as follows:

_	2016	2015
Number of common shares outstanding	1,585,615,506 shares	1,585,615,506 shares
Weight	366/366	365/365
Weighted average number of common shares		
outstanding	1,585,615,506 shares	1,585,615,506 shares

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 39. Commitments and contingencies

(a) Guarantees, acceptances and credit commitments as of December 31, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015
Guarantees:	_		
Guarantee outstanding	W	9,304,497	10,087,055
Contingent guarantees		2,995,307	3,032,620
	W	12,299,804	13,119,675
Commitments to extend credit:			
Loan commitments in won	W	53,470,641	53,154,222
Loan commitments in foreign currency		20,464,116	21,764,967
ABS and ABCP purchase commitments		2,060,089	2,668,370
Others	_	1,350,937	1,303,246
	W	77,345,783	78,890,805
Endorsed bills:	_		
Secured endorsed bills	W	32,187	29,549
Unsecured endorsed bills		8,822,654	7,542,862
	W	8,854,841	7,572,411
Loans sold with repurchase agreement	W	2,099	2,099

<sup>(</sup>b) Provision for acceptances and guarantees

Allowance for acceptances and guarantees, as of December 31, 2016 and 2015 were as follows:

	_	December 31, 2016	December 31, 2015
Guarantees outstanding	W	9,304,497	10,087,055
Contingent guarantees		2,995,307	3,032,620
ABS and ABCP purchase commitments(*)		2,060,089	2,668,370
Secured endorsed bills		32,187	29,549
	W	14,392,080	15,817,594
Allowance for acceptances and guarantees	W	78,499	80,289
Ratio (%)		0.55	0.51

<sup>(\*)</sup> ABS: Asset Backed Securities, ABCP: Asset Backed Commercial Paper

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 39. Commitments and contingencies (continued)

# (c) Legal contingencies

Pending litigations in which the Group was involved as a defendant as of December 31, 2016 were as follows:

Case	Number of Claim	Claim amount	Description
Claimed uncollected receivables of goods	1	43,761	A plaintiff claimed uncollected receivables of goods against the Bank since the plaintiff had delivered goods based on a guarantee of the Bank forged illegally. The Bank has paid the amount in full which is ordered to pay by ruling of its first trial, and has retrieved the amount in partial by ruling of its second trial. The bank is currently in its third trial.
Demands on stock return	1	31,000	The Medison stock sales contract made between the plaintiff and PEF has been discharged or cancelled. The plaintiff is demanding the return of Medison stocks based on the invalidity of the stock sales contract and the invalidity of option contracts and revised option contracts stated within the stock sales contract. During the 1st ~ 4th date for pleading, there has been legal battle between the plaintiff and defendant through submission of preparatory documents. After the 2nd date for pleading, the defendant has only submitted documents requested by the plaintiff and documents approved by the court, and has not submitted any other preparatory documents.
Lehman Brothers Special financing Inc. (LBSF)	1	12,085	A plaintiff, Lehman Brothers has claimed that the CDO investment that had been returned to the Bank after bankruptcy should be returned to the Lehman Brothers. Because it was contrary to US bankruptcy law. While in internal discussion for arbitral proceeding and settlement with Leman Brothers, defendants including the bank have won the first trial and have currently denied settlement payment. Further action will be considered depending on the effects of the arbitration and chances of winning the second trial.
Others	124	167,651	It includes various cases, such as compensation for a loss claim. The Bank recognizes provisions based on the progress of relevant lawsuits.
	127 <del>W</del>	254,497	

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

#### 39. Commitments and contingencies (continued)

#### (c) Legal contingencies (continued)

As of December 31, 2016, the Group recorded a provision of \text{\text{\$\text{\$W\$}}12,044 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.

#### (d) Maturity structure of minimum lease payments

The future minimum lease payments under non-cancellable operating leases were payable as of December 31, 2016 and 2015 were as follows:

		December 31, 2016			
		Within 1 year	1~5 years	Over 5 years	Total
Minimum lease payments	w	169,055	155,618	3,720	328,393
			December 3	1, 2015	
		Within 1 year	1~5 years	Over 5 years	Total
Minimum lease payments	₩	191,107	227,287	3,873	422,267

#### 40. Cash flows

(a) Cash and cash equivalents reported in the accompanying consolidated statements of cash flows as of December 31, 2016 and 2015 were as follows:

	_	December 31, 2016	December 31, 2015
Cash	W	1,763,335	1,900,980
Reserve deposits		2,718,354	7,794,542
Other deposits		9,987,698	7,195,864
Cash and due from banks	_	14,469,387	16,891,386
Restricted due from banks		(7,491,447)	(11,454,577)
Due with original maturities of less than three			
Months		(2,350,156)	(1,858,091)
	W	4,627,784	3,578,718

(b) Significant non-cash activities for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015	
Dividend payable of hybrid bonds	W	1,309	9,231	
Debt-equity swap		32,229	34,218	
Payable of purchased intangible assets		2,825	59,810	

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 41. Related parties

(a) Significant balances with the related parties as of December 31, 2016 and 2015 were as follows:

Related party	Account		December 31, 2016	December 31, 2015
The Parent company				
Shinhan Financial Group	Other assets	W	-	47
	Deposits		42	500,909
	Other liabilities		166,191	57,888
<b>Entities under common control</b>				
Shinhan Card Co., Ltd.	Derivative assets		4,365	10,452
	Other assets		2,097	2,039
	Deposits		86,658	88,779
	Derivative liabilities		119	-
	Provisions		48	48
	Other liabilities		19,881	20,130
Shinhan Life Insurance	Derivative assets		40,604	14,215
	Other assets		7	8
	Deposits		9,526	6,424
	Derivative liabilities		369	566
	Provisions		4	4
	Other liabilities		13,913	38,690
Shinhan Investment Corp.	Cash and due from banks		725	-
	Derivative assets		53,546	9,676
	Loans		-	9,426
	Allowances		-	(83)
	Other assets		18,823	18,530
	Deposits		252,707	180,784
	Derivative liabilities		4,354	5,180
	Provisions		33	76
	Other liabilities		34,423	32,786
Shinhan Capital Co., Ltd.	Deposits		457	573
	Borrowings		13,000	-
	Provisions		10	10
	Other liabilities		9,670	1,299
Jeju Bank	Loans		2,903	4,282
	Allowances		(1)	(2)
	Other assets		6	20
	Deposits		3,530	3,605
	Other liabilities		1,604	1,604
Shinhan Credit Information	Deposits		7,836	8,571
Co., Ltd.	Other liabilities		1,119	1,188
Shinhan Private Equity, Inc.	Loans		-	3,000
	Allowances		-	(16)
	Deposits		12	65
	Provisions		-	8

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 41. Related parties (continued)

(a) Significant balances with the related parties (continued)

Related party	Account		December 31, 2016	December 31, 2015
Entities under common control (c	_			
Shinhan Data System	Deposits	W	3,940	3,069
	Other liabilities		6,658	4,148
SHC Management Co., Ltd.	Deposits		, =	100
	Other liabilities		-	2
Shinhan Savings Bank	Other liabilities		8,987	-
Shinhan Aitas	Deposits		20,296	16,200
	Other liabilities		42	69
Shinhan BNP Paribas AMC	Deposits		42,549	72,601
	Other liabilities		821	1,127
Investments in associates and enti BNP Paribas Cardif	ties under common control'	s		
General Insurance	Deposits		13	12
Dream High Fun III	Deposits		1	4
Aju Capital Co., Ltd.	Trading assets		49,990	99,953
	Loans		210,000	160,000
	Allowances		(611)	(466)
	Deposits		692	1,061
	Provisions		73	55
Cardif Life Insurance	Deposits		353	644
	Provisions		1	1
Pohang TechnoPark 2PFV	Deposits		14,658	14,662
SH Rental Service	Deposits		-	219
SP New Technology Business investment Fund I Midas Dong-A Snowball	Deposits		-	283
Venture Fund IBKS-Shinhan Creative Economy New Technology	Deposits		427	303
Fund EQP Global Energy	Deposits		1,751	1,463
Infrastructure Private	Deposits		1	3
JAEYOUNG SOLUTEC	Loans		14,356	15,276
CO., LTD.	Allowances		(69)	(159)
	Deposits		7,638	15,261
	Provisions		7	15
Partners 4th Growth				
Investment Fund	Deposits		2,160	2,704
Credian Health Care II	Deposits		7	-

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 41. Related parties (continued)

(a) Significant balances with the related parties (continued)

Related party	Account		December 31, 2016	December 31, 2015
	_	a (aantinua		2013
Investments in associates and ent		s (continue	u)	
Snowball Venture Fund II	Deposits	W	242	-
IBKS-Shinhan Creative	Deposits		179	-
PSA FINTECH Private I	Deposits		525	-
YIUM The 3rd private investment joint				
stock company	Deposits		80	-
branbuil CO., LTD.	Loans		15	-
	Deposits		28	-
UAMCO., Ltd.(*1)	Loans		-	23,100
	Allowances		-	(31)
	Deposits		-	410
	Provisions		-	46
Kukdong Engineering &	Deposits		-	5,388
Construction Co., Ltd.(*1)	Provisions		-	15
Key management personnel				
	Loans		936	1,497
	Allowance		(1)	(1)
	Provisions		1	1

<sup>(\*1)</sup> UAMCO., Ltd and Kukdong Engineering & Construction Co., Ltd. were excluded from related parties during 2016.

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 41. Related parties (continued)

(b) Significant transactions with the related parties for the years ended December 31, 2016 and 2015 were as follows:

Related Party	Account	2016	2015
The parent company			
Shinhan Financial Group	Other operating income	₩ 2,011	2,054
	Interest expense	(1,751)	(2,429)
	Fees and commission expense	(29,893)	(45,368)
<b>Entities under common control</b>			
Shinhan Card Co., Ltd.	Interest income	417	199
	Fees and commission income	180,127	175,800
	Gain related to derivatives	7,317	8,649
	Other operating income	1,726	1,930
	Interest expense	(251)	(346)
	Fees and commission expense	(325)	(317)
	Loss related to derivatives	(5,986)	(2,490)
	Other operating expense	(1,982)	(395)
Shinhan Investment Corp.	Interest income	796	1,382
	Fees and commission income	4,517	4,077
	Gain related to derivatives	59,157	9,003
	Other operating income	4,431	3,692
	Interest expense	(1,317)	(2,135)
	Fees and commission expense	-	(12)
	Provision for allowance	83	(22)
	Loss related to derivatives	(13,564)	(7,630)
	Other operating expense	(1,171)	(824)
Shinhan Life Insurance	Interest income	45	50
	Fees and commission income	6,688	9,939
	Gain related to derivatives	45,570	22,643
	Other operating income	1,400	1,889
	Interest expense	(315)	(828)
	Loss related to derivatives	(9,531)	(3,766)
	Other operating expense	(557)	(645)
Shinhan Capital Co., Ltd.	Interest income	-	1
-	Gain related to derivatives	-	29
	Other operating income	302	899
	Interest expense	(150)	(219)
	Fees and commission expense	(14)	(2)
	Other operating expense	- -	(6)
Jeju Bank	Interest income	43	41
·	Other operating income	230	204
	Interest expense	(33)	(30)
	Provision for allowance	1	1
	Other operating expense	(11)	-
		` '	

## 41. Related parties (continued)

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# (b) Significant transactions with the related parties (continued)

Related Party	Account	2016	2015
<b>Entities under common control (co</b>	ontinued)		
Shinhan Credit Information	Fees and commission income	₩ 2	2
Co., Ltd.	Other operating income	67	77
	Interest expense	(126)	(190)
	Fees and commission expense	(4,895)	(5,474)
Shinhan Private Equity, Inc.	Other operating income	8	-
	Interest expense	-	(3)
	Provision for allowance	16	3
	Other operating expense	-	(3)
Shinhan BNP Paribas AMC	Fees and commission income	42	55
	Other operating income	52	53
	Interest expense	(747)	(1,770)
	Fees and commission expense	(2,243)	(2,579)
Shinhan Data System	Other operating income	119	89
	Interest expense	(142)	(141)
	Other operating expense	(31,281)	(32,447)
SHC management Co., Ltd.	Interest expense	-	(2)
Shinhan Savings Bank	Fees and commission income	481	229
	Other operating income	116	61
	Interest expense	(60)	-
Shinhan Aitas	Fees and commission income	28	27
	Other operating income	49	55
	Interest expense	(153)	(215)
	Fees and commission expense	-	(8)
Shinhan BNPP			
luxury fund selection security			
investment trust	Fees and commission income	2	-
Investments in associates and enti-	ties under common control's		
Aju Capital Co., Ltd.	Interest income	7,332	6,440
	Fees and commission income	72	78
	Other operating income	-	23
	Interest expense	(2)	(1)
	Provision for allowance	(146)	148
	Other operating expense	(18)	-
UAMCO., Ltd.(*)	Interest income	-	4
	Fees and commission income	-	9
	Other operating income	-	4
	Provision for allowance	-	(31)

## 41. Related parties (continued)

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### (b) Significant transactions with the related parties (continued)

Related Party	Account		2016	2015
Investments in associates and entitie	es under common control's (continue	d)		
Cardif Life Insurance	Fees and commission income	W	30	30
	Other operating expense		(1)	-
Pohang TechnoPark2PFV	Interest expense		(15)	(15)
Kukdong Engineering &				
Construction Co., Ltd.(*)	Interest income		-	26
	Fees and commission income		-	16
	Interest expense		-	(35)
	Fees and commission expense		-	(3)
	Other operating expense		-	(15)
BNP Paribas Cardif General			_	
Insurance	Fees and commission income		2	2
Dream High Fund III Midas Dong-A Snowball	Interest expense		-	(5)
Venture Fund	Interest expense		(4)	(3)
SH Rental Service	Interest expense		_	(1)
IBKS-Shinhan Creative Economy	r			( )
New Technology Fund	Interest expense		(1)	(2)
JAEYOUNG SOLUTEC	Interest income		671	616
CO.,LTD.	Fees and commission income		1	1
	Other operating income		7	-
	Interest expense		(21)	(47)
	Provision for allowance		90	(159)
	Other operating expense		-	(15)
Partners 4th Growth	_			
Investment Fund	Interest expense		(2)	(6)
Albatross Growth Fund	Interest expense		(6)	-
PSA FINTECH Private I	Interest expense		(5)	-
Snowball Venture Fund II	Interest expense		(1)	-
Semantic	Interest income		15	-
branbuil CO.,LTD.	Fees and commission income		1	-
Treenkid	Interest income		3	-
Key management personnel				
	Interest income		35	63

<sup>(\*)</sup> UAMCO., Ltd. and Kukdong Engineering & Construction Co., Ltd. were excluded from related parties during 2016.

### 41. Related parties (continued)

# **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

(c) Details of transactions with key management for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Short and long term employee benefits	W	7,770	8,684
Post-employment benefits		327	242
Share-based payment transactions		4,447	2,830
	W	12,544	11,756

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 41. Related parties (continued)

(d) The guarantees provided between the related parties as of December 31, 2015 and 2014 were as follows:

		_	Amount of	guarantees	
			December 31,	December 31,	
Guarantor	Guaranteed Parties	_	2016	2015	Account
Shinhan Bank	Shinhan Card Co., Ltd.	W	500,000	500,000	Unused credit
	Shinhan Investment Corp.		6,043	10,548	Performance guarantees
			181,000	181,000	Unused credit
	Shinhan Life Insurance		50,000	50,000	Unused credit
	Shinhan Capital Co., Ltd.		50,000	50,000	Unused credit
	Shinhan BNP Paribas AMC		104,008	43,063	Security underwriting commitment
	Shinhan Private Equity, Inc.		-	4,344	Unused credit
	KoFC Shinhan Frontier Champ				Security underwriting
	2010-4 PEF		=	13,417	commitment
	Aju Capital Co., Ltd.		50,000	50,000	Unused credit
	UAMCO., Ltd.(*)		-	89,100	Unused credit
			-	89,950	Security underwriting commitment
	Kukdong Engineering &				Performance guarantees
	Construction Co., Ltd.(*)		-	1,574	
	Cardif Life Insurance		10,000	10,000	Unused credit
	Neoplux Co., Ltd.				Security underwriting
	reopiux co., Etc.		12,000	18,000	commitment
	JAEYOUNG SOLUTEC		600	600	Unused credit
		_	483	469	Import letter of credit
		W_	964,134	1,112,065	

<sup>(\*)</sup> UAMCO., Ltd. and Kukdong Engineering & Construction Co., Ltd. were excluded from related parties during 2016.

(e) Details of collaterals provided to the related parties as of December 31, 2016 and 2015 were as follows:

		_	December	31, 2016	December 31, 2015	
	Related party	Pledged assets	Carrying amount	Amounts collateralized	Carrying amount	Amounts collateralized
Entities under common control	Shinhan Investment Corp. Shinhan Life	Securities <del>W</del>	235,084	43,799	195,496	37,646
	Insurance	Securities	21,963	10,310	10,349	10,349
		₩	257,047	54,109	205,845	47,995

## **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 41. Related parties (continued)

(f) Details of collaterals provided by the related parties as of December 31, 2016 and 2015 were as follows:

	D. L. L.	D1 1 1		December 31,	December 31,
	Related party	Pledged assets	_	2016	2015
Entities under	Shinhan Investment Corp.	Deposits	₩	112,011	22,000
common control		Real estate		91,974	91,974
	Jeju Bank	Government			
		bonds		20,000	20,000
	Shinhan Life Insurance	Government			
		bonds		7,518	7,686
	Shinhan Credit Information				
	Co., Ltd.	Deposits		210	210
Investments in	Aju Capital Co., Ltd.	Beneficiary			
associates		certificate		160,000	160,000
	BNP Paribas Cardif Life	Government			
	Insurance Co., Ltd.	bonds		13,699	13,676
	Treenkid	Real estate		200	-
	JAEYOUNG SOLUTEC.	Real estate		20,814	20,814
	CO.,LTD.	Korea Trade			
		Insurance			
		corporation			
		guarantee		7,037	7,214
			W	433,463	343,574

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

#### 42. Investments in subsidiaries

(a) Condensed financial positions for the Bank and its subsidiaries as of December 31, 2016 and 2015 were as follows:

			2016			2015(*3)	
	-	Total assets	Total liabilities	Total equity	Total assets	Total liabilities	Total equity
Shinhan Bank	₩	282,819,576	261,858,830	20,960,746	269,018,149	248,550,069	20,468,080
Shinhan America		1,443,057	1,263,893	179,164	1,151,705	987,281	164,424
Shinhan Canada		493,736	427,823	65,913	489,113	451,490	37,623
Shinhan Europe		495,306	417,345	77,961	457,882	380,874	77,008
Shinhan China		5,861,287	5,480,614	380,673	4,957,520	4,559,552	397,968
Shinhan Asia		476,735	257,202	219,533	372,005	166,062	205,943
Shinhan Kazakhstan		81,659	37,409	44,250	63,512	22,400	41,112
Shinhan Khmer		163,563	118,219	45,344	142,260	104,025	38,235
Shinhan Japan		6,106,195	5,702,025	404,170	5,225,394	4,890,613	334,781
Shinhan Vietnam(*1)		2,926,241	2,405,067	521,174	2,202,300	1,738,772	463,528
Shinhan Mexico		34,680	369	34,311	41,484	284	41,200
Shinhan Indonesia(*1,2) PT Centratama		400,127	186,513	213,614	178,966	86,549	92,417
Nasional Bank(*1,2)		-	-	-	97,863	72,497	25,366
Structured Entities etc.		6,943,817	6,945,661	(1,844)	5,879,249	5,890,951	(11,702)

<sup>(\*1)</sup> The fair value adjustment was applied after the completion of the business combination.

<sup>(\*2)</sup> On December 6, 2016, the merger between Shinhan Bank Indonesia and PT Centratama Nasional Bank in the Group occurred and the name of the company is Shinhan Bank Indonesia.

<sup>(\*3)</sup> As the measurement for the business combination of PT Centratama Nasional Bank is completed during the current period, the balance of prior year is retrospectively adjusted.

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 42. <u>Investments in subsidiaries (continued)</u>

(b) Condensed comprehensive income statements for the Bank and its subsidiaries for the years ended December 31, 2016 and 2015 were as follows:

			2016			2015	
	•	Operating income	Profit (Loss) for the period	Total comprehensive income (loss)	Operating income	Profit (Loss) for the period	Total comprehensive income (loss)
Shinhan Bank	₩	15,839,813	1,777,072	1,582,484	13,946,587	1,216,391	931,730
Shinhan America		56,921	9,858	14,740	50,352	3,586	13,344
Shinhan Canada		14,100	(769)	1,296	12,421	884	(3,599)
Shinhan Europe		13,861	1,754	953	11,790	1,854	(1,401)
Shinhan China		230,131	8,145	(17,295)	200,248	12,039	20,048
Shinhan Asia		19,721	11,950	13,591	18,940	14,029	22,694
Shinhan Kazakhstan		6,724	1,364	3,138	8,405	2,528	(28,310)
Shinhan Khmer		10,197	5,680	7,109	9,084	3,343	5,623
Shinhan Japan		171,099	48,396	69,389	141,070	32,674	49,002
Shinhan Vietnam(*1)		148,766	48,630	57,645	125,882	56,558	65,124
Shinhan Mexico		1,405	(1,784)	(7,229)	362	(2,650)	(5,296)
Shinhan Indonesia(*1,2) PT Centratama		24,444	235	6,334	8,674	854	858
Nasional Bank(*1,2) Structured Entities		-	-	-	10,478	345	347
etc.		221,192	(2,642)	2,526	218,186	9,011	8,891

<sup>(\*1)</sup> The fair value adjustment was applied after the completion of the business combination.

<sup>(\*2)</sup> On December 6, 2016, the merger between Shinhan Bank Indonesia and PT Centratama Nasional Bank in the Group occurred and the name of the company is Shinhan Bank Indonesia.

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 43. <u>Interests in unconsolidated structured entities</u>

(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 so able) if the Group does not have the exclusive or primary power to do so, or (iii) if the Group does not have exposure, or right, to a significant amount of variable returns from such entity due to the purchase (or commitment to purchase) of asset-backed securities so issued or subordinated obligations or by providing other forms of credit support.				
Project 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.				

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

# 43. <u>Interests in unconsolidated structured entities (continued)</u>

- (a) The nature and extent of interests in unconsolidated structured entities (continued)
  - i) The size of unconsolidated structured entities as of December 31, 2016 and 2015 were as follows:

		December 31, 2016					
	_	Assets-backed securitization	Structured financing	Investment fund	Total		
Total assets	W	60,869,229	32,231,488	11,262,929	104,363,646		
	_		December 31, 2015				
	_	Assets-backed	Structured	Investment	_		
	_	securitization	financing	fund	Total		
Total assets	W	58,379,605	27,913,420	8,884,598	95,177,623		

ii) Income and expense from unconsolidated structured entities for the years ended December 31, 2016 and 2015 were as follows:

	_		201	6	
		Assets-backed	Structured	Investment	T-4-1
	_	Securitization	Financing	Fund	Total
Income					
Interest income	W	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
	W	98,601	118,391	46,395	263,387
Expense	W	67	9	26,402	26,478

			201	5	
	-	Assets-backed securitization	Structured Financing	Investment fund	Total
Income	-				
Interest income	W	60,712	99,363	-	160,075
Fees and commission					
income		13,836	15,039	-	28,875
Dividend income		-	4,155	89,159	93,314
Other		185	1,801	61	2,047
	W	74,733	120,358	89,220	284,311
Expense	W	8	147	29,502	29,657

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 43. <u>Interests in unconsolidated structured entities (continued)</u>

- (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, 2016 and 2015 were as follows:

		December 31, 2016				
	_	Assets-backed securitization	Structured Financing	Investment fund	Total	
Assets:						
Loans	W	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 Held-to-maturity		1,994,025	196,758	1,356,365	3,547,148	
financial assets		2,381,934	-	-	2,381,934	
Others	_	12,327	21,017	2,010	35,354	
	W	6,639,373	3,024,860	1,465,157	11,129,390	
Liabilities:	_					
Derivative liabilities	W	137	-	-	137	
Borrowings	_	<u> </u>	1,318	<u> </u>	1,318	
	W	137	1,318	<u>-</u>	1,455	

		December 31, 2015				
	<del>-</del>	Assets-backed securitization	Structured Financing	Investment fund	Total	
Assets:	_					
Loans	W	190,778	2,790,044	-	2,980,822	
Trading assets		1,793,038	44,733	-	1,837,771	
Derivative assets		16,722	· -	-	16,722	
Available-for-sale financial assets Held-to-maturity		2,185,577	81,324	930,049	3,196,950	
financial assets		2,346,400	-	-	2,346,400	
Others		-	2,884	-	2,884	
	W	6,532,515	2,918,985	930,049	10,381,549	
Liabilities:	=					
Derivative liabilities	W	8	-	-	8	

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

## 43. Interests in Unconsolidated structured Entities (continued)

(b) Nature of risk associated with interests in unconsolidated structured entities (continued)

Assets-backed

ii) Exposure to risk relating to interests in unconsolidated structured entities as of December 31, 2016 and 2015 were as follows:

Structured

December 31, 2016

Investment

	_	securitization	Financing	fund	Total
Assets owned	W	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	_	<u>-</u>	10,559	<u> </u>	10,559
	W	8,665,038	3,189,229	1,512,402	13,366,669
	_	Assets-backed	December 3	Investment	
	-	Assets-backed securitization			Total
Assets owned	w		Structured	Investment	Total 10,381,549
Assets owned Purchase commitments	₩	securitization	Structured Financing	Investment fund	·
	₩	securitization 6,532,515	Structured Financing 2,918,985	Investment fund 930,049	10,381,549
Purchase commitments	₩	securitization 6,532,515 1,063,171	Structured Financing 2,918,985 31,134	Investment fund 930,049 74,328	10,381,549 1,168,633

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

### 44. <u>Information of trust business</u>

(a) Total assets with trust business as of December 31, 2016 and 2015 and operating revenue for the years ended December 31, 2016 and 2015 were as follows:

	_	Total assets		Operating revenue	
	_	December 31, 2016	December 31, 2015	December 31, 2016	December 31, 2015
Consolidated	W	4,314,473	4,114,569	139,767	144,781
Unconsolidated	_	40,743,814	33,189,301	530,690	505,820
	W_	45,058,287	37,303,870	670,457	650,601

(b) Significant balances with trust business as of December 31, 2016 and 2015 were as follows:

		December 31, 2016	December 31, 2015
Borrowings from trust accounts Accrued revenues from asset management fee	₩	3,443,287	2,966,681
from trust accounts		30,485	21,515
Accrued interest expenses		782	998

(c) Significant transactions with trust business for the years ended December 31, 2016 and 2015 were as follows:

		2016	2015
Asset management fee	₩	98,406	71,533
Termination fee		87	-
Interest on borrowings from trust account		35,877	44,976

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

#### 45. Business Combinations

On December 18, 2015, the Group acquired 75% of voting shares of PT Centratama Nasional Bank ("CNB"), a local bank located in Indonesia, and obtained the control of CNB. The Group has reported provisional amounts in its prior financial statements in connection with the estimated fair value of assets acquired and liabilities assumed. During the year ended December 31, 2016, the Group retrospectively adjusted the provisional amounts recognized at the acquisition date in accordance with the paragraph 45 of K-IFRS No. 1103, upon completion of measurement for the business combination.

(a) Details of the adjustments of the fair value of assets acquired and liabilities assumed are as follows:

		Before		After
	<del>-</del>	adjustments	Adjustments	adjustments
Asset:				
Cash and due from banks	₩	23,577	-	23,577
Loans and receivables		51,443	-	51,443
Property and equipment (*1)		3,815	16,938	20,753
Intangible assets (*2)		48	1,306	1,354
Other assets	_	734	<u> </u>	734
		79,617	18,244	97,861
Liabilities:				
Deposits		66,179	-	66,179
Borrowings		837	-	837
Deferred tax liabilities (*3)		-	4,961	4,961
Other liabilities		520	<u> </u>	520
	_	67,536	4,961	72,497
Fair value of the identifiable assets	₩	12.091	12 202	25 264
acquired and liabilities assumed	<del></del>	12,081	13,283	25,364

<sup>(\*1)</sup> The increased amount due to revaluation at acquisition date.

(b) Details of adjustment for goodwill arising from the acquisition are as follows:

		Before adjustments	Adjustments	After adjustments
Consideration transferred (cash)	W	30,782	-	30,782
Net fair value of assets and liabilities		(12,081)	(13,283)	(25,364)
Non-controlling interests (*)		3,020	3,420	6,440
Goodwill	₩	21,721	(9,863)	11,858

(\*) Non-controlling interests were measured in proportionate interest in the recognized amount of the fair value of identifiable net assets.

#### 46. Business combination under common control

<sup>(\*2)</sup> Identifiable intangible assets represent the estimated amount of cost savings of deposits which were discounted to the present value.

<sup>(\*3)</sup> Amount arising from temporary differences due to the difference between the fair value of an identifiable assets acquired and their tax value.

### **Notes to the Consolidated Financial Statements**

For the years ended December 31, 2016 and 2015 (In millions of won)

On December 6, 2016, a merger between PT Bank Shinhan Indonesia and PT Centratama Nasional Bank occurred in the Group and the name of the company was PT Bank Shinhan Indonesia. The merger is accounted for as a business combination between entities under common control pursuant to K-IFRS No. 1103, "Business Combinations".

The method of merger was to exchange shares of PT Centratama Nasional Bank for shares of Shinhan Bank of Indonesia. The exchange ratio between stocks is based on issuing one share of PT Bank Shinhan Indonesia for 2,357.93 shares of PT Centratama Nasional Bank. The reason is business synergy through merger between two local banks in Indonesia, cost reduction, and expansion of sales force in Indonesia.

(a) Details of the adjustments of the fair value of assets acquired and liabilities assumed are as follows:

		Amount
Asset:		
Cash and due from banks	<del>W</del>	15,066
Loans and receivables		66,339
Property and equipment		5,170
Other assets		8,995
	<del>W</del>	95,570
Liabilities:		
Deposits	<del>W</del>	74,373
Deposits		8,885
Other liabilities		520
	<del>W</del>	83,258
Fair value of the identifiable assets acquired and liabilities assumed	₩	12,312

(b) Changes in the share ratio in the business combination are as follows:

#### Before merger

	PT Bank Shinha	an Indonesia	PT Centratama Nasional Bank		
	Number of shares	Ratio	Number of shares	Ratio	
The Bank	217,850	97.76%	100,500,000	100%	
Others	5,000	2.24%	<u> </u>	0%	
	222,850	100%	100,500,000	100%	

### After merger

PT Bank	Shinhan	Indonesia
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	Number of shares	Ratio
The Bank(*)	260,472	98.12%
Others	5,000	1.88%
	265,472	100%

<sup>(\*)</sup> As a result of unequal rights offering after the merger, the equity interest in PT Bank Shinhan Indonesia is 98.98%.