

# **Meritz Securities Co., Ltd. and its subsidiaries**

Consolidated financial statements  
for the years ended December 31, 2016 and 2015  
with independent auditors' report



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Independent auditors' report

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## Independent auditors' report

### **The Shareholders and Board of Directors Meritz Securities Co., Ltd. and its subsidiaries.**

We have audited the accompanying consolidated financial statements of Meritz Securities Co., Ltd. (the "Company") and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as at December 31, 2016 and 2015, and the consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and 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 the 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 auditing standards generally accepted in the Republic of Korea. 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 the auditors' 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, the auditors 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, the financial position of the Group as at December 31, 2016 and 2015, and its financial performance and cash flows for the years then ended in accordance with Korean International Financial Reporting Standards.

March 15, 2017

This audit report is effective as at March 15, 2017, the independent auditors' report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the date of the independent auditors' report to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

# **Meritz Securities Co., Ltd. and its subsidiaries**

Consolidated financial statements  
for the years ended December 31, 2016 and 2015

“The accompanying consolidated financial statements, including all footnotes and disclosures, have been prepared by, and are the responsibility of, the Group.”

Alexander Heemoon Choi  
Chief Executive Officer  
Meritz Securities Co., Ltd.

**Meritz Securities Co., Ltd. and its subsidiaries**  
**Consolidated statements of financial position**  
**as at December 31, 2016 and 2015**

(Korean won in thousands)

	<u>Notes</u>	<u>December 31, 2016</u>	<u>December 31, 2015</u>
<b>Assets</b>			
Cash and due from banks	7, 37, 43, 44, 47	816,956,144	646,068,280
Financial assets at fair value through profit or loss	8, 23, 37, 43, 44, 45, 47	8,051,294,747	7,470,734,837
Available-for-sale financial assets	9, 37, 43, 44, 47	1,574,562,097	733,421,016
Investments in associates and joint ventures	10, 37	231,751,610	25,186,159
Loans	11, 43, 44, 45, 47	5,477,539,160	4,449,846,184
CMA	11, 43, 44, 47	28,009,548	54,820,249
Lease assets	12, 43, 44, 47	260,006,034	472,664,412
Property and equipment	13	99,645,669	101,299,873
Investment property	14	21,163,351	30,052,288
Intangible assets	15	35,713,934	40,451,501
Tax assets	35	65,029,381	45,992,366
Other assets	16, 37, 43, 44, 45, 47	606,141,558	358,131,463
<b>Total assets</b>		<b><u>17,267,813,233</u></b>	<b><u>14,428,668,628</u></b>
<b>Liabilities</b>			
Deposits	17, 37, 43, 44, 47	3,102,818,819	3,463,870,842
Financial liabilities at fair value through profit or loss	18, 23, 37, 43, 44, 45, 47	2,626,203,945	1,196,829,299
Borrowings	19, 43, 44, 45, 47	8,974,565,294	7,364,956,845
Provisions	20, 39	10,186,258	6,865,566
Defined benefit liabilities	21	2,628,149	1,506,629
Tax liabilities	35	14,966,779	76,054,817
Other liabilities	22, 37, 43, 44, 45, 47	658,133,762	600,020,384
<b>Total liabilities</b>		<b><u>15,389,503,006</u></b>	<b><u>12,710,104,382</u></b>
<b>Equity</b>			
Issued capital	24	496,638,534	496,638,534
Capital surplus and adjustments	25, 26	553,151,474	552,416,177
Accumulated other comprehensive income	27	79,007,654	69,538,207
Retained earnings	28	749,512,565	599,971,328
<b>Equity attributable to equity holder of the parent</b>		<b>1,878,310,227</b>	<b>1,718,564,246</b>
<b>Non-controlling shareholders' equity</b>		<b>-</b>	<b>-</b>
<b>Total equity</b>		<b><u>1,878,310,227</u></b>	<b><u>1,718,564,246</u></b>
<b>Total liabilities and equity</b>		<b><u>17,267,813,233</u></b>	<b><u>14,428,668,628</u></b>

The accompanying notes are an integral part of the consolidated financial statements

**Meritz Securities Co., Ltd. and its subsidiaries**  
**Consolidated statements of comprehensive income**  
**for the years ended December 31, 2016 and 2015**  
(Korean won in thousands)

	Notes	Year ended December 31,	Year ended December 31, 2015
<b>Operating revenues:</b>			
Commission income	29	343,273,840	346,740,943
Gain on valuation and disposal of financial instruments	30	498,547,762	471,392,957
Gain on derivative valuation and transactions	23, 30	2,560,164,797	1,557,499,954
Interest income	31	478,379,756	438,896,325
Gain on valuation and disposal of loans	11	8,294,777	25,229,847
Gain on foreign exchange transactions		1,009,782,003	291,664,682
Lease income	12	27,107,273	40,010,387
Others	33	21,051,457	69,613,838
		<u>4,946,601,665</u>	<u>3,241,048,933</u>
<b>Operating expenses:</b>			
Commission expenses	29	(29,693,021)	(21,292,401)
Loss on valuation and disposal of financial instruments	30	(502,413,130)	(314,277,243)
Loss on derivative valuation and transactions	23, 30	(2,497,752,034)	(1,546,492,097)
Interest expenses	31	(242,891,204)	(223,139,350)
Loss on valuation and disposal of loans	11	(11,352,283)	(14,759,959)
Loss on foreign exchange transactions		(1,009,575,611)	(308,845,807)
General and administrative expenses	32	(319,643,722)	(395,222,256)
Lease expense	12	(1,052,273)	(1,587,037)
Others	33	(5,372,412)	(10,312,629)
		<u>(4,619,745,690)</u>	<u>(2,835,928,779)</u>
<b>Operating income</b>		<b>326,855,975</b>	<b>405,120,154</b>
Other income	34	8,630,514	4,233,589
Other expenses	34	(2,883,630)	(2,865,106)
Income before income taxes		<u>332,602,859</u>	<u>406,488,637</u>
<b>Income tax expense</b>	35	<b>(78,756,155)</b>	<b>(119,151,902)</b>
<b>Net income</b>	28	<b>253,846,704</b>	<b>287,336,735</b>
<b>Other comprehensive income:</b>			
Items that will not be reclassified subsequently to profit or loss:			
Remeasurements of the net defined benefit liabilities	21	(36,999)	(293,932)
Items that may be reclassified subsequently to profit or loss:			
Gain (loss) on valuation of available-for-sale financial assets	9	8,970,776	(58,971,291)
Gain (loss) on effect of foreign currency translation		(10,155)	10,542
Capital change in equity method		545,824	-
		<u>9,469,446</u>	<u>(59,254,681)</u>
<b>Total comprehensive income:</b>		<b>263,316,150</b>	<b>228,082,054</b>
Controlling interests		263,316,150	237,469,543
Non-controlling interests		-	(9,387,489)
<b>Basic and diluted earnings per share</b>	36	<b>560</b>	<b>812</b>

The accompanying notes are an integral part of the consolidated financial statements

Meritz Securities Co., Ltd. and its subsidiaries  
**Consolidated statements of changes in equity**  
**for the years ended December 31, 2016 and 2015**  
(Korean won in thousands)

	<b>Issued capital</b>	<b>Capital surplus</b>	<b>Accumulated other comprehensive income</b>	<b>Retained earnings</b>	<b>Non-controlling shareholders' equity</b>	<b>Total</b>
As at January 1, 2015	\ 311,782,377	\ 111,625,899	\ 128,205,667	\ 348,143,771	\ 177,373,799	\ 1,077,131,513
Dividends	-	-	-	(44,309,445)	-	(44,309,445)
Total comprehensive income:						
Net income	-	-	-	296,137,002	(8,800,267)	287,336,735
Other comprehensive income:						
Remeasurements of the net defined benefit liabilities	-	-	(341,683)	-	47,751	(293,932)
Gain (loss) on valuation of available-for-sale financial assets	-	-	(58,335,932)	-	(635,360)	(58,971,292)
Gain (loss) on foreign currency transactions	-	-	10,155	-	387	10,542
New issuance of stocks for stock options	50,000	14,709	-	-	-	64,709
New issuance of stocks for merger	66,811,951	144,828,868	-	-	(167,986,310)	43,654,509
Capital increase with consideration	117,994,206	295,366,946	-	-	-	413,361,152
Acquisition of treasury shares	-	(3,744)	-	-	-	(3,744)
Allocated expense, of stock options	-	583,499	-	-	-	583,499
As at December 31, 2015	\ 496,638,534	\ 552,416,177	\ 69,538,207	\ 599,971,328	\ -	\ 1,718,564,246

	<b>Issued capital</b>	<b>Capital surplus</b>	<b>Accumulated other comprehensive income</b>	<b>Retained earnings</b>	<b>Non-controlling shareholders' equity</b>	<b>Total</b>
As at January 1, 2016	\ 496,638,534	\ 552,416,177	\ 69,538,207	\ 599,971,328	\ -	\ 1,718,564,246
Dividends	-	-	-	(104,305,466)	-	(104,305,466)
Total comprehensive income:						
Net income	-	-	-	253,846,703	-	253,846,703
Other comprehensive income:						
Remeasurements of the net defined benefit liabilities	-	-	(36,999)	-	-	(36,999)
Gain (loss) on valuation of available-for-sale financial assets	-	-	8,970,777	-	-	8,970,777
Capital change in equity method	-	-	545,824	-	-	545,824
Gain (loss) on foreign currency transactions	-	-	(10,155)	-	-	(10,155)
Allocated expense, of stock options	-	735,297	-	-	-	735,297
As at December 31, 2016	\ 496,638,534	\ 553,151,474	\ 79,007,654	\ 749,512,565	\ -	\ 1,878,310,227

The accompanying notes are an integral part of the consolidated financial statements

**Meritz Securities Co., Ltd. and its subsidiaries**  
**Consolidated statements of cash flows**  
**for the years ended December 31, 2016 and 2015**  
(Korean won in thousands)

	Year ended December 31, 2016	Year ended December 31, 2015
<b>Operating activities:</b>		
Net income before income taxes	\ 332,602,859	\ 406,488,637
Adjustments to non-cash items :		
Loss (gain) on valuation of financial instruments held-for-trading	21,221,231	2,924,442
Loss (gain) on derivative valuation, net	(18,171,280)	(20,288,450)
Loss (gain) on valuation of financial assets designated at fair value through profit or loss, net	12,776,898	(1,905,440)
Loss(gain) on evaluation of other financial instruments, net	(6,016)	(7)
Provision(reversal) of allowance for doubtful accounts	11,071,679	13,930,308
Provision(reversal) of other allowance for doubtful accounts	197,549	19,005
Loss (gain) on foreign currency translation, net	(2,310,496)	(372,903)
Depreciation of property and equipment	5,891,509	5,956,023
Amortization of intangible assets	7,109,290	7,188,060
Depreciation expenses on operating lease assets	242,586	747,426
Loss (gain) related to financial investments available-for-sale, net	(5,362,532)	(70,589,968)
Loss (gain) related to lease, net	(22,743)	(8,383)
Contribution to provision (reversal)	3,693,244	(199,193)
Provision(reversal) of credit risk adjustments	(71,309)	354,032
Day 1 profit or loss adjustments (reversal)	120,786	260,353
Post-employment benefit	4,382,567	4,510,330
Loss (gain) on valuation of incentives	(6,457,233)	2,842,712
Compensation expenses associated with stock option	735,297	583,499
Other operating revenues	(695,020)	(721,219)
Loss (gain) on disposal of property and equipment, net	235,249	24,638
Loss (gain) on disposal of investment property	85,597	-
Loss (gain) on disposal of intangible assets, net	(244,305)	-
Loss (gain) on disposal of investments in associates, subsidiaries and joint venture, net	(875,416)	(1,294,608)
Impairment loss on intangible assets	-	2,565,669
Loss (gain) in equity method	(2,453,020)	-
Impairment loss on investments in associates and joint venture (reversal)	(34,661)	34,243
Interest income	(502,991,670)	(475,619,291)
Interest expense	242,891,204	223,139,350
Dividend income	(13,474,703)	(19,561,558)
	<u>(242,515,718)</u>	<u>(325,480,930)</u>
Changes in operating assets and liabilities:		
Cash and Due from banks	(59,170,369)	(48,646,097)
Held-for-trading financial assets	(547,914,581)	-
Financial assets at fair value through profit or loss	(94,051,657)	(1,481,008,573)
Loans	(1,028,417,146)	(1,073,149,191)
CMA	26,900,000	3,100,000
Lease assets	212,694,088	135,801,767
Other assets	(237,711,408)	(160,206,111)
Due to customers	(368,826,811)	191,098,142
Held-for-trading financial liabilities	1,278,318,269	-
Financial liabilities at fair value through profit or loss	155,774,833	(249,292,242)
Provisions	(773,622)	(119,571)
Defined benefit liabilities	(3,309,775)	(7,783,030)
Other liabilities	96,925,870	167,140,433
	<u>(569,562,309)</u>	<u>(2,523,064,473)</u>
Total interest received	461,509,698	469,210,993
Total interest paid	(232,003,147)	(218,474,032)
Total dividends received	12,929,783	19,500,268
Income tax paid	(161,846,522)	(90,995,945)
<b>Net cash flows used in operating activities</b>	<u>(398,885,356)</u>	<u>(2,262,815,482)</u>



**Meritz Securities Co., Ltd. and its subsidiaries**  
**Consolidated statements of cash flows**  
**for the years ended December 31, 2016 and 2015**

(Korean won in thousands)

(Continued)

	<b>December 31, 2016</b>	<b>December 31, 2015</b>
<b>Investing activities:</b>		
Disposal of financial assets available-for-sale	\ 1,820,102,518	\ 574,862,656
Disposal of investment associates and joint venture	410,649,725	-
Receipt of dividends from associates	2,515,298	-
Disposal of property and equipment	292,214	-
Disposal of investment property	8,246,382	-
Decrease in intangible assets	2,175,007	-
Decrease in guarantee deposits	632,588	832,405
Acquisition of financial assets available-for-sale	(2,615,309,352)	(602,729,718)
Acquisition of investment associates and joint venture	(615,771,561)	-
Acquisition of property and equipment	(3,835,109)	(5,271,313)
Acquisition of intangible assets	(3,872,753)	(1,353,138)
Increase in guarantee deposits	(1,691,326)	(696,065)
Disposal of investments in subsidiaries (Note 41)	(307,945)	(28,158,040)
<b>Net cash flows used in investing activities</b>	<b>(996,174,314)</b>	<b>(62,513,213)</b>
<b>Financing activities:</b>		
Increase in borrowings, net	1,609,550,628	2,071,137,851
Cost of stock issuing	-	413,070,180
Acquisition of treasury stock	-	(3,744)
Subsidiary's appraisal right by stockholders	-	(259,702)
Dividends paid	(104,305,466)	(44,309,445)
<b>Net cash provided by financing activities</b>	<b>1,505,245,162</b>	<b>2,439,635,140</b>
<b>Net increase in cash and cash equivalents</b>	<b>110,185,492</b>	<b>114,306,445</b>
<b>Effect from exchange rate changes on cash and cash equivalents</b>	<b>776,176</b>	<b>228,025</b>
<b>Cash and cash equivalents at the beginning of the year (Note 7)</b>	<b>546,225,923</b>	<b>431,691,453</b>
<b>Cash and cash equivalents at the end of the year (Note 7, 41)</b>	<b>\ 657,187,591</b>	<b>\ 546,225,923</b>

The accompanying notes are an integral part of the consolidated financial statements

**Meritz Securities Co., Ltd. and its subsidiaries**  
**Notes to the consolidated financial statements**  
**December 31, 2016 and 2015**

**1. Group information**

Meritz Securities Co., Ltd. (the "Company") was established on February 24, 1973 under the name of Hanil Securities Co., Ltd. and primarily engages in the securities business including brokerage service, proprietary trading and underwriting of securities. The Company changed its name to Hanjin Investment Securities Co., Ltd. on October 1, 1990 and finally changed its current name to Meritz Securities Co., Ltd. on March 1, 2000.

The Company merged its subsidiary, Meritz Investment Bank Co., Ltd. ("Meritz IB") on April 1, 2010. As a result of the merger, the Company is allowed to maintain Meritz IB's operation, which is various financial services related to commercial paper, providing corporate loans and payment guarantees and other related services, until March 2020 according to the Financial Investment Industry Regulations. The Company operates through a network of the main office, 7 domestic branches including 1 sales department.

The Company prepared consolidated financial statements of the Company and its subsidiaries (see Note 2) (collectively referred to as the "Group") in accordance with KIFRS 1110 *Consolidated Financial Statements*. Investments in an associate and interest in a joint venture are accounted for using the equity method in the consolidated financial statements.

The Company is listed on the Korea Exchange ("KRX"), and the major shareholders of the Company as of December 31, 2016 are as follows:

Shareholders	Number of shares	Percentage of ownership (%)
Meritz Financial Group Inc. ("Meritz FG")	160,702,302	32.36
Cho Jeong Ho	6,424,646	1.29
Treasury Stock	43,136,506	8.69
Others	286,375,080	57.66
	<u>496,638,534</u>	<u>100.00</u>

**2. Scope of consolidation**

**2.1 The Company's equity ownership in its consolidated subsidiaries as of the reporting date is summarized as follows:**

December 31, 2016					
Investee	Country	Ownership (%)	Company	Main Business	Type of control
Eugene Separate Taxation High-Yield PE No.2	Korea	100.00	Investment fund and trust	Investment in securities etc.	Equity holding
Eugene Separate Taxation High-Yield PE No.7	Korea	90.45	Investment fund and trust	Investment in securities etc.	Equity holding
Kiwoom Separate Taxation High-Yield No.2	Korea	69.33	Investment fund and trust	Investment in securities etc.	Equity holding
Daishin Separate Taxation High-Yield Private Investment Trust No.2	Korea	67.21	Investment fund and trust	Investment in securities etc.	Equity holding
Sparx Separate Taxation High-Yield No.1	Korea	99.21	Investment fund and trust	Investment in securities etc.	Equity holding
Capstone Private MBS Real Estate Investment Trust No.2	Korea	100.00	Investment fund and trust	Investment in securities etc.	Equity holding
Capstone Private MBS Real Estate Investment Trust No.3	Korea	100.00	Investment fund and trust	Investment in securities etc.	Equity holding
Smart-S 6th Securitization Specialty Co., Ltd.	Korea	1.00	Special purpose company	Securitization of backed asset	ABS holding, a shareholder with the right of residuary estate
Smart-S 8th Securitization Specialty Co., Ltd.	Korea	1.00	Special purpose company	Securitization of backed asset	ABS holding, a shareholder with the right of residuary estate

**Meritz Securities Co., Ltd. and its subsidiaries**  
**Notes to the consolidated financial statements**  
**December 31, 2016 and 2015**

**2.1 The Company's equity ownership in its consolidated subsidiaries as of the reporting date is summarized as follows: (cont'd)**

Investee	Country	December 31, 2016			
		Ownership (%)	Company	Main Business	Type of control
Smart-S 10th Securitization Specialty Co., Ltd.	Korea	1.00	Special purpose company	Securitization of backed asset	ABS holding, a shareholder with the right of residuary estate
Meritz Securitization Specialty Co., Ltd.	Korea	0.90	Special purpose company	Securitization of backed asset	A shareholder with the right of residuary estate
M Square Gyeyang 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M Square Gyeyang 2 <sup>nd</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M Square Sungsu 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M Square Pyeongchon 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M Square Dongcheon 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
MJD 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Daegu SG	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
New Commons 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of backed asset	General loan
Haeundae Project 1 <sup>st</sup>	Korea	-	Real estate finance	Loans on real estates	Mortgage loan commitment and general loan
Haeundae Project 2 <sup>nd</sup>	Korea	-	Real estate finance	Loans on real estates	Mortgage loan commitment and general loan
M Square Shihung 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Sungbok 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M Square Osan 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
DM 1 <sup>st</sup>	Korea	-	Real estate finance	Loans on real estates	General loan
M Square Sangbong 2 <sup>nd</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M Square Woodong 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M Square Dadam	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M Square Yangsan 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Sanbon Master Plaza 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment and general loan
M Square Jochon 1 <sup>st</sup>	Korea	-	Real estate finance	Securitization of loans on real estates	Mortgage loan commitment and general loan
M Square Gunsan 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Yongjin Sungbok 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Aberlour 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of backed asset	Mortgage loan commitment

**Meritz Securities Co., Ltd. and its subsidiaries**  
**Notes to the consolidated financial statements**  
**December 31, 2016 and 2015**

**2.1 The Company's equity ownership in its consolidated subsidiaries as of the reporting date is summarized as follows: (cont'd)**

Investee	December 31, 2016				
	Country	Ownership (%)	Company	Main Business	Type of control
Smart Lake 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Dongdaemun H 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Nice Penta 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
MDS 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of backed asset	Mortgage loan commitment
AM1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of backed asset	Mortgage loan commitment
SMK 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of backed asset	Mortgage loan commitment
SMK 2 <sup>nd</sup>	Korea	-	Special purpose company	Securitization of backed asset	Mortgage loan commitment
Smart R&D 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
UPS 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Highest Ocean 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M Square Sagik 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M Square Chungju 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M Square Base 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Smart Dongcheon 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Smart Penta 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Real benefit	Korea	-	Special purpose company	Securitization of backed asset	Mortgage loan commitment
M Square Mia 2 <sup>nd</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Smart Sanghyun 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Yongin Sungbok 2 <sup>nd</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Smartup 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of backed asset	Mortgage loan commitment
Smartup 2 <sup>nd</sup>	Korea	-	Special purpose company	Securitization of backed asset	Mortgage loan commitment
Smartup 3 <sup>rd</sup>	Korea	-	Special purpose company	Securitization of backed asset	Mortgage loan commitment
CD Two 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
SLT 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Msquare Mia third, Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Msquare Mia fourth, Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
B Lake First Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
MJ Sangmi First Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Apple SG Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
DSM 3rd Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Yongjuksg Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
AM3 Co., Ltd.	Korea	-	Special purpose company	Securitization of backed asset	Mortgage loan commitment

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**2.1 The Company's equity ownership in its consolidated subsidiaries as of the reporting date is summarized as follows: (cont'd)**

Investee	Country	December 31, 2016			
		Ownership (%)	Company	Main Business	Type of control
Yongin Seongbok 4th Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Dujeong SG Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
SL The Ocean 1st Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Haeundae SG Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Msquare Mia the first, Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
H Society 3rd Inc.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
WE BEST Cheongdam 1 <sup>st</sup> Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
N.H.M.A 1 Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Doojung H.S 1 Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
MSM 1 <sup>ST</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Genius 2 <sup>nd</sup> Co., Ltd.	Korea	-	Special purpose company	Securitization of securities	Mortgage loan commitment
Msquare Myungji Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Yeksam Trinity 1 <sup>st</sup> Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M SQUARE SONGJEONG	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
SMART CHUNGDAM 1 <sup>ST</sup> Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
MBR Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
AM 4 <sup>th</sup> INC.	Korea	-	Special purpose company	Securitization of backed asset	Mortgage loan commitment
Yongin Sungbok 7 <sup>th</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
BK AGE Inc.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Chams Fild Oh Kid Co., Ltd.	Korea	-	Special purpose company	Securitization of backed asset	ABS holding, a shareholder
M QUEENS 1 <sup>st</sup> Inc.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
TH 1 <sup>st</sup> Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
H SOCIETY M	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
SLT MISA	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
WONJU SG	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
MDMA 1 <sup>ST</sup> Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
My Best 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Msquare Shihung 1 <sup>st</sup> Co., Ltd.	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
M square Sujeong	Korea	-	Special purpose company	Securitization of loans on real estates	Mortgage loan commitment
Genius 1 <sup>st</sup>	Korea	-	Special purpose company	Securitization of backed asset	General loan
RREEF SPEZIAL INVEST GmbH trust of security contract	Korea	100.00	Investment fund and trust	Investment in securities etc.	Equity holding
G New Jump Short-Term Bond Investment Trust 1	Korea	100.00	Investment fund and trust	Investment in securities etc.	Equity holding

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**2.1.1 The entities included in or excluded from the scope of consolidation for the year ended December 31, 2016 are as follows:**

	Subsidiaries	Reason for consolidation
Included in the consolidation	M Square Mia 3rd	(*1)
	M Square Mia 4th	(*1)
	B Lake First Co., Ltd	(*1)
	MJ Sangmi First Co., Ltd	(*1)
	Apple SG Co., Ltd	(*1)
	DSM 3rd Co., Ltd	(*1)
	Yongjuksg Co., Ltd	(*1)
	AM3 Co., Ltd	(*1)
	Yongin Seongbok 4th Co., Ltd	(*1)
	Dujeong SG Co., Ltd	(*1)
	SL The Ocean 1st Co., Ltd	(*1)
	Haeundae SG Co., Ltd	(*1)
	Msquare Mia the first, Co., Ltd	(*1)
	H Society 3rd Inc.	(*1)
	WE BEST Cheongdam 1 <sup>st</sup> Co., Ltd	(*1)
	N.H.M.A 1 Co., Ltd	(*1)
	Doojung H.S 1 Co., Ltd	(*1)
	MSM 1 <sup>ST</sup>	(*1)
	Genius 2th Co., Ltd	(*1)
	Msquare Myungji Co., Ltd	(*1)
	Yeksam Trinity 1 <sup>st</sup> Co., Ltd	(*1)
	M SQUARE SONGJEONG	(*1)
	SMART CHUNGDAM 1 <sup>ST</sup> Co., Ltd	(*1)
	MBR Co., Ltd.	(*1)
	AM 4TH INC.	(*1)
	Yongin Sungbok 7 <sup>th</sup>	(*1)
	BK AGE Inc.	(*1)
	Chams Fild Oh Kid Co., Ltd.	(*1)
	M QUEENS 1ST Inc.	(*1)
	TH 1 <sup>st</sup> Co., Ltd	(*1)
	H SOCIETY M	(*1)
	SLT MISA	(*1)
	WONJU SG	(*1)
MDMA 1 <sup>ST</sup> Co., Ltd	(*1)	
My Best 1 <sup>st</sup>	(*1)	
Msquare Shihung 1 <sup>st</sup> Co., Ltd	(*1)	
M square Sujeong	(*1)	
Excluded from the consolidation	Gold digger equity MMT	(*2)
	MGS 1st	(*2)
	LTSB 1st	(*2)
	Eugene High Yield Private Investment Trust 1st	(*2)
	MDS Ocean 3rd	(*2)
	DS Haeundae Project	(*2)
	MDS Ocean 1st	(*2)
	China Asia Investment & Consulting Ltd.	(*3)

(\*1) These are structured entities with the objective of investing in loans related to real estate and are included in consolidation scope, because the Group has existing rights that give it the current ability to direct the relevant activities, and is not only exposed, or has rights, to variable returns, but also has the ability to use its power to affect the investees' returns from its involvement with them.

(\*2) The Group lost control of these entities due to liquidation, termination of transaction, and decrease in equity ratio caused by the redemption of loans, the underlying asset.

(\*3) Excluded from the consolidation due to loss of controlling power over the entities by selling the securities.

### **2.1.2 Eugene Separate Taxation High-Yield PEF No.2 and other entities**

Eugene Separate Taxation High Yield Private Equity Fund No. 2 and other entities are the collective investment vehicles that invest more than a certain percentage of funds in bonds including bonds with ratings of BBB+ or under in accordance with the related laws and regulations.

The acquisition dates and the ownership of the Group are as follows:

Subsidiaries	Acquisition date	Ownership (%)
Eugene Separate Taxation High-Yield PE No.2	May 28, 2014	100.00
Eugene Separate Taxation High-Yield PE No.7	March 2, 2015	90.45
Kiwoom Separate Taxation High-Yield Private Investment Trust No.2	October 24, 2014	69.33
Daishin Separate Taxation High-Yield Private Investment Trust No.2	October 27, 2014	67.21
Sparx Separate Taxation High-Yield Private Investment Trust No.1	December 2, 2015	99.21

### **2.1.3 Capstone Private MBS Real Estate Investment Trust No.2 and No.3**

Capstone Private Equity MBS Real Estate Investment Trust No.2 and No.3 are the collective investment vehicles that invest more than 50% of funds in mortgage backed securities (MBS). The acquisition dates and the ownership of the Group are as follows.

Subsidiaries	Acquisition date	Ownership (%)
Capstone Private MBS Real Estate Investment Trust No.2	June 20, 2014	100.00
Capstone Private MBS Real Estate Investment Trust No.3	November 18, 2014	100.00

### **2.1.4 Smart-S 6th Securitization Specialty Co., Ltd. and other entities**

The entities specializing in securitization engage in the issuance and redemption of asset backed securities through the transfer, management, operation and disposition of non-performing loans under the laws of asset securitization. The Group is a shareholder with the right of residuary estate and owns all asset backed securities issued by the entities.

### **2.1.5 Meritz Securitization Specialty Co., Ltd.**

Meritz Securitization Specialty Co., Ltd. was established to securitize the finance lease asset and the Group is a shareholder with the right of residuary estate and owns all asset backed securities issued by the Group.

### **2.1.6 M Square Sungsu 1st other structured entities**

Structured entities enter into secured loan commitment contracts with the Group and they operate mortgage loans through funding from issuing ABCP.

### **2.1.7 G New Jump Short-Term Bond Investment Trust No.1**

It is a collective investment vehicle established on May 19, 1998, and has invested in corporate bonds.

During the Korean currency crisis, IM Investment & Securities Co., Ltd. repurchased the collective investment securities issued by the trust from the beneficiaries owing to the insolvency of bonds and the Group owns 100% shares of it.

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**2.1.8 RREEF SPEZIAL INVEST GmbH trust of securities contract**

The Group consigned government and public bonds to NH Bank for 5 years from June 2, 2015 to provide as collateral, and designated first-party beneficiary as the secured party.

**2.2 The summary of financial information in its consolidated subsidiaries as of December 31, 2016 and 2015 is as follows (Korean won in thousands):**

Investee	December 31, 2016			
	Assets	Liabilities	Operating income	Net income (loss)
China Asia Investment & Consulting Ltd.	₩ -	₩ -	₩ 48,564	₩ 27,907
G New Jump Short-Term Bond Investment Trust No.1	457,852	5	13,567	13,478
RREEF SPEZIAL INVEST GmbH trust of securities contract	1,939,647	-	59,443	32,661
Eugene Separate Taxation High-Yield PEF No.2	11,566,829	4,496	953,563	763,148
Eugene Separate Taxation High-Yield PEF No.7	54,212,625	77,574	3,265,809	2,220,999
Eugene Separate Taxation High-Yield PEF No.1	-	-	2,235,826	1,398,891
Kiwoom Separate Taxation High-Yield Private Investment Trust No. 2	66,470,986	50,580	3,405,359	2,192,326
Daishin Separate Taxation High-Yield Private Investment Trust No. 2	43,238,958	30,906	2,521,199	1,774,517
Sparx Separate Taxation High-Yield Private Investment Trust No.1	26,385,994	8,849	1,636,766	973,740
Capstone Private MBS Real Estate Investment Trust No. 2	3,209,198	207,245	440,045	280,408
Capstone Private MBS Real Estate Investment Trust No. 3	5,342,638	235,197	727,878	538,724
Smart-S 6th Securitization Specialty Co., Ltd.	258,683	5,166,388	34	(41,300)
Smart-S 8th Securitization Specialty Co., Ltd.	10,988	7,716,474	100,135	(72,176)
Smart-S 10th Securitization Specialty Co., Ltd.	1,160,987	2,874,334	624,331	245,574
Meritz Securitization Specialty Co., Ltd. (*)	827,468	-	-	-
M Square Seongsoo 1st and other structured entities	2,294,671,288	2,309,578,516	110,167,269	(6,180,121)



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**2.2 The summary of financial information in its consolidated subsidiaries as of December 31, 2016 and 2015 is as follows (Korean won in thousands): (cont'd)**

Investee	December 31, 2015			
	Assets	Liabilities	Operating income	Net income (loss)
China Asia Investment & Consulting Ltd.	₩ 208,094	₩ 4,835	₩ -	₩ (43,837)
G New Jump Short-Term Bond Investment Trust No.1	959,588	14	35,336	35,227
RREEF SPEZIAL INVEST GmbH trust of securities contract	1,895,960	-	10,495	10,495
Gold digger equity MMT Eugene Separate Taxation High-Yield PEF No.2	55,974,625	-	16,625	16,625
Eugene Separate Taxation High-Yield PEF No.7	12,207,796	4,642	7,869,678	7,193,632
Eugene Separate Taxation High-Yield PEF No.1	49,248,169	49,299	2,573,516	1,437,125
Kiwoom Separate Taxation High-Yield Private Investment Trust No. 2	39,860,057	9,065	12,011,547	10,883,989
Daishin Separate Taxation High-Yield Private Investment Trust No. 2	54,788,581	35,493	7,565,839	6,105,648
Sparx Separate Taxation High-Yield Private Investment Trust No.1	41,676,596	25,712	11,980,434	10,734,392
Capstone Private MBS Real Estate Investment Trust No. 2	21,094,052	7,075	94,052	86,977
Capstone Private MBS Real Estate Investment Trust No. 3	3,189,533	182,685	4,000,219	3,828,197
Smart-S 6th Securitization Specialty Co., Ltd.	5,310,144	301,604	4,252,355	4,085,804
Smart-S 8th Securitization Specialty Co., Ltd.	2,912,299	7,778,704	2,637	(895,387)
Smart-S 10th Securitization Specialty Co., Ltd.	16,503	7,649,813	744,523	(1,150,091)
Meritz Securitization Specialty Co., Ltd. (*)	1,188,620	3,147,541	2,499,775	1,138,052
M Square Seongsoo 1st and other structured entities	880,828	-	22,180	11,533
	1,670,599,681	1,685,093,358	69,625,543	(5,291,875)

(\*) Financial information of Meritz Securitization Specialty Co., Ltd. is the amounts of its financial statements withdrawn its finance leases securitization.

### 3. Unconsolidated structured entities

#### 3.1 Details of the nature of the Group's interests in unconsolidated structured entities as of December 31, 2015 are as follows:

	Purposes	Financing method	Controlling type
Asset-Backed Security SPC	Securitization of assets	Issuance of ABS /ABCP secured underlying assets	Purchase commitment, etc.
Real estate finance	Develop real estate and invest in social overhead capital facilities	Loan commitment, credit line commitment	Loan commitment, credit line commitment
Shipping finance and acceptance finance	Financing to acquire vessels and to raise fund for acquisition the ownership	Investment and borrowing	Loan commitment
Investment fund and trust	Investment in securities, etc.	Sales of beneficiary certificates, investment by general partners and limited partners	Holding beneficiary certificates, investment

#### 3.2 Details of the Group's maximum exposure to loss from its interests in unconsolidated structured entities as of December 31, 2016 are as follows (Korean won in thousands):

	Special purpose company	Real estate finance	Investment fund and trust
Total assets of unconsolidated structured entities	₩ 396,225,647	₩ 413,657,505	₩ 1,516,811,862
Assets:			
Loans receivable	17,153,949	107,158,051	59,905,448
Securities	33,329,139	-	302,230,030
	<u>₩ 50,483,088</u>	<u>₩ 107,158,051</u>	<u>₩ 362,135,478</u>
Liabilities:			
Deposits	-	4,933,665	-
	<u>₩ -</u>	<u>₩ 4,933,665</u>	<u>₩ -</u>
Maximum exposure to loss:			
Holding assets	50,483,088	107,158,051	362,135,478
ABCP purchase commitment	263,800,000	-	-
Unexecuted credit line commitment	1,000,000	102,930,000	-
Mortgage loan commitment	-	178,109,000	-
	<u>₩ 315,283,088</u>	<u>₩ 388,197,051</u>	<u>₩ 362,135,478</u>

#### **4. Summary of significant accounting policies**

##### **4.1 Basis of preparation**

The Group prepares statutory financial statements in the Korean language in accordance with Korean International Financial Reporting Standards (KIFRS) enacted by the *Act on External Audit of Stock Companies*. The accompanying consolidated financial statements have been translated into English from the Korean language financial statements. In the event of any differences in interpreting the financial statements or the independent auditors' report thereon, the Korean version, which is used for regulatory reporting purposes, shall prevail.

Significant accounting policies used to prepare the consolidated financial statements are as follows. These policies are equally applied to the consolidated financial statements for the years ended December 31, 2016 and 2015 except for standards which are effective for the annual periods beginning on or after January 1, 2016.

##### **Amendments to KIFRS 1111 *Joint Arrangements: Accounting for Acquisitions of Interests***

The amendments to KIFRS 1111 require that a joint operator accounting for the acquisition of an interest in a joint operation, in which the activity of the joint operation constitutes a business, must apply the relevant KIFRS 1103 principles for business combinations accounting. The amendments also clarify that a previously held interest in a joint operation is not remeasured on the acquisition of an additional interest in the same joint operation while joint control is retained. In addition, a scope exclusion has been added to KIFRS 1111 to specify that the amendments do not apply when the parties sharing joint control, including the reporting entity, are under common control of the same ultimate controlling party. The amendments apply to both the acquisition of the initial interest in a joint operation and the acquisition of any additional interests in the same joint operation and do not have any impact on the Group's financial statements.

##### **Amendments to KIFRS 1016 and KIFRS 1038: *Clarification of Acceptable Methods of Depreciation and Amortization***

The amendments clarify the principle in KIFRS 1016 and KIFRS 1038 that revenue reflects a pattern of economic benefits that are generated from operating a business (of which the asset is part) rather than the economic benefits that are consumed through use of the asset. As a result, a revenue-based method cannot be used to depreciate property, plant and equipment and may only be used in very limited circumstances to amortize intangible assets. These amendments do not have any impact on the Group given that the Group has not used a revenue-based method to depreciate its non-current assets.

##### **Amendments to KIFRS 1110 and KIFRS 1028: *Sale or Contribution of Assets between an Investor and its Associate or Joint Venture***

The amendments address the conflict between KIFRS 1110 and KIFRS 1028 in dealing with the loss of control of a subsidiary that is sold or contributed to an associate or joint venture. The amendments clarify that the gain or loss resulting from the sale or contribution of assets that constitute a business, as defined in KIFRS 1103, between an investor and its associate or joint venture, is recognized in full. Any gain or loss resulting from the sale or contribution of assets that do not constitute a business, however, is recognized only to the extent of unrelated investors' interests in the associate or joint venture. These amendments do not have any impact on the Group's financial statements.

##### **Amendments to KIFRS 1001 *Disclosure Initiative***

The amendments to KIFRS 1001 *Presentation of Financial Statements* clarify, rather than significantly change, existing KIFRS 1001 requirements. The amendments clarify:

- Ø The materiality requirements in KIFRS 1001
- Ø That specific line items in the statement(s) of profit or loss and OCI and the statement of financial position may be disaggregated
- Ø That entities have flexibility as to the order in which they present the notes to financial statements
- Ø That the share of OCI of associates and joint ventures accounted for using the equity method must be presented in aggregate as a single line item, and classified between those items that will or will not be subsequently reclassified to profit or loss

#### **4.1 Basis of preparation (cont'd)**

Furthermore, the amendments clarify the requirements that apply when additional subtotals are presented in the statement of financial position and the statement(s) of profit or loss and OCI. These amendments do not have any impact on the Group's financial statements.

#### **Amendments to KIFRS 1110, KIFRS 1112 and KIFRS 1028 *Investment Entities: Applying the Consolidation Exception***

The amendments address issues that have arisen in applying the investment entities exception under KIFRS 1110. The amendments to KIFRS 1110 clarify that the exemption from presenting consolidated financial statements applies to a parent entity that is a subsidiary of an investment entity, when the investment entity measures all of its subsidiaries at fair value.

Furthermore, the amendments to KIFRS 1110 clarify that only a subsidiary of an investment entity that is not an investment entity itself and that provides support services to the investment entity is consolidated. All other subsidiaries of an investment entity are measured at fair value. The amendments to KIFRS 1028 allow the investor, when applying the equity method, to retain the fair value measurement applied by the investment entity associate or joint venture to its interests in subsidiaries. These amendments do not have any impact on the Group's financial statements.

The Group has not early adopted any other standard, interpretation, or amendment that has been issued but is not yet effective.

Management of the Group is using many assumptions and reasonable estimates to create the consolidated financial statements on the basis of KIFRS. In applying the accounting policies of the Group, the management's judgment is required under KIFRS. Parts that require significant judgments and complexity or parts of which estimations and assumptions have significant impact on the preparation of the consolidated financial statements are disclosed in footnote 5.

#### **4.2 New and amended standards and interpretations**

The standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below.

#### **KIFRS 1109 *Financial Instruments***

KIFRS 1109, enacted on September 25, 2015, is effective for annual periods beginning on or after January 1, 2018, with early application permitted. KIFRS 1109 will replace KIFRS 1039 Financial Instruments: Recognition and Measurement. The Group plans to apply KIFRS 1109 for annual periods beginning on or after January 1, 2018.

The new KIFRS 1109 is retrospectively applied in principle, but there are some exceptions such as exemption of restatement of comparative information for classification, measurement, impairment of financial instruments. For hedge accounting, the requirements are generally applied prospectively, with some exceptions such as accounting for time value of options.

Major characteristics of KIFRS 1109 are financial assets being classified and measured on the basis of the holder's business model and instrument's contractual cash flow characteristics, impairment model of financial instruments based on expected credit losses (ECL), broader range of hedged items and hedging instruments that qualify for the application of hedge accounting or changes in evaluation of hedging effectiveness etc.

For smooth adoption of KIFRS 1109, financial impact analysis, accounting policies establishment, accounting system establishment and stabilization need to take place. The impact of the standards on the financial statements in the period they are initially adopted may differ depending on the Group's decisions and judgments of accounting policies as well as the financial instruments held by the Group, economic environment, etc.

#### 4.2 New and amended standards and interpretations (cont'd)

The Group formed the IFRS9 task force team for the adoption of IFRS 1109 starting from October 2016. The process is divided into three stages: stage 1 (impact analysis and establishment of accounting policies), stage 2 (design and build), and stage 3 (application of KIFRS 1039 and KIFRS 1109 at the same time). The Group is in the process of analyzing the financial impact on its financial statements if the standard is applied. However, the general impacts on the financial statements are as follows.

##### Financial asset classification and measurement

The new KIFRS 1109 requires a financial instrument to be classified and measured subsequently at amortized cost, fair value through other comprehensive income (FVOCI), or fair value through profit or loss (FVTPL), on the basis of the holder's business model and instrument's contractual cash flow characteristics as shown below. The requirements should be applied to an entire financial asset, even if it contains an embedded derivative. That is, in contrast with the requirements of KIFRS 1039, a derivative embedded within a hybrid (combined) contract containing a financial asset host is not accounted for separately.

Business model / Contractual cash flow characteristics	Composed solely of principal and interest	For other cases
Purpose of collecting contractual cash flows	Measured at amortized cost (*1)	Measured at FVTPL (*2)
Purpose of collecting and selling contractual cash flows	Measured at FVOCI (*2)	
Purpose of selling, others	Measured at FVTPL	

(\*1) can be designated at FVTPL in order to get rid of or reduce accounting mismatch (cannot cancel)

(\*2) can be designated at FVOCI in case of equity securities not for held-for-trading purposes (cannot cancel)

The Group holds ₩7,069,026 million of loans and receivables, ₩1,574,562 million of available-for-sale financial assets, and ₩8,051,295 million of financial assets at FVTPL as of December 31, 2016. (refer to Note 43)

In accordance to KIFRS 1109, a debt instrument that meets the following two conditions must be measured at amortized cost: 1) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, and 2) the objective of the entity's business model is to hold the financial asset to collect the contractual cash flows. The Group measures ₩7,069,026 million of loans and receivables as of December 31, 2016 at amortized costs.

In accordance with KIFRS 1109, a debt instrument that meets the following two conditions must be measured at FVOCI: 1) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, and 2) the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets. The Group holds ₩1,223,771 million of debt instruments classified as available-for-sale financial assets as of December 31, 2016. Debt instruments, the host contract after separating embedded derivatives from combined (hybrid) financial instruments, included in available-for-sale financial assets and loans and receivables are ₩140,485 million and ₩9,325 million, respectively.

In accordance with KIFRS 1109, if an equity instrument is not held for trading, an entity can make an irrevocable election at initial recognition to measure it at FVOCI, and subsequent recycling from comprehensive income to profit or loss is not permitted. The Group holds ₩ 244,490 million of equity instruments classified as available-for-sale financial assets as of December 31, 2016.

In accordance with KIFRS 1109, a debt instrument of which: 1) the contractual terms of the financial asset give rise to cash flows that are not solely payments of principal and interest on the principal amount outstanding, and 2) the financial asset is held within a business model whose objective is achieved by selling financial assets, and equity instruments that are not measured at FVOCI, are measured at FVTPL. The Group's debt instruments and equity instruments classified as financial assets at FVTPL as of December 31, 2016 are ₩ 7,184,305 million and ₩ 246,257 million, respectively.

## 4.2 New and amended standards and interpretations (cont'd)

### Financial liabilities classification and measurement

In KIFRS 1109, fair value changes of financial liabilities at FVTPL attributable to changes in credit risk of the liability shall be presented in other comprehensive income, not in profit or loss. Amounts presented in other comprehensive income shall not be subsequently recycled to profit or loss. However, the new standard allows the recognition of the full amount of change in the fair value in profit or loss only if the presentation of the changes in the liability's credit risk in other comprehensive income would create or enlarge an accounting mismatch in profit or loss.

### 4.2 New and amended standards and interpretations (cont'd)

The Group designated ~~₩~~ 654,430 million out of ~~₩~~ 15,166,450 million of financial liabilities at FVTPL as of December 31, 2016 and recognized ~~₩~~7,486 million of evaluation losses related to financial liabilities at FVTPL as current profit and loss for the year ended December 31, 2016.

### Impairment: financial assets and contract assets

In KIFRS 1039, impairment is recognized only when there is objective evidence of impairment based on incurred loss model. In the new KIFRS 1109, impairment of debt instruments, lease bonds, contract assets, loan commitments and financial guarantee contracts that are measured at amortized costs or at FVOCI is recognized based on the expected credit loss (ECL) impairment model.

KIFRS 1109 outlines a 'three-stage' model for impairment based on changes in credit risk since initial recognition. Loss allowance is measured based on the 12-month ECL or life-time ECL which allows early recognition of credit loss compared to the incurred loss model of KIFRS 1039.

Classification		Loss allowance
Stage 1	Assets with no significant increase in credit risk since initial recognition (*1)	12-month ECL: Expected credit losses that result from default events that are possible within 12 months after the reporting date.
Stage 2	Assets with significant increase in credit risk since initial recognition	Lifetime ECL: Expected credit losses that result from all possible default events over the expected life of the financial instrument.
Stage 3	Credit-impaired assets	

(\*1) Low credit risk at the end of reporting period may be considered as no significant increase in credit risk

In KIFRS 1109, accumulated changes in the life-time ECL after initial recognition are taken into account as loss allowance in case credit is impaired at initial recognition of financial assets.

The Group has debt instruments measured at FVOCI for ~~₩~~ 1,223,771 million classified as available-for-sale financial assets, debt instruments for ~~₩~~ 7,069,026 million (loans and receivables) measured at amortized cost, and loss allowance for loans and receivables for ~~₩~~ 77,602 million as of December 31, 2016. The contractual outstanding balance for the Group is ~~₩~~ 2,967,962 million as of December 31, 2016. (refer to Note 39-3).

### Hedge accounting

The new KIFRS 1109 maintains mechanics of hedge accounting (fair value hedge, cash flow hedge, overseas operations net investment hedge) as set forth in KIFRS 1039. However, unlike requirements in KIFRS 1039 that are too complex and strict, KIFRS 1109 is more practical, principle based and less strict and focuses on the entity's risk management activities. Also, KIFRS 1109 allows broader range of hedged items and hedging instruments. Under KIFRS 1039, a hedge is assessed to be highly effective only if the offset is in the range of 80-125 percentage by performing numerical test of effectiveness. In KIFRS 1109, such requirements are alleviated.

### KIFRS 1115 Revenue from Contracts with Customers

KIFRS 1115 establishes a five-step model to account for revenue arising from contracts with customers. Under KIFRS 1115, revenue is recognized at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer. The new revenue standard will supersede all current revenue recognition requirements under KIFRS. Either a full retrospective application or a modified retrospective application is required for annual periods beginning on or after January 1, 2018. Early adoption is permitted. These amendments are not expected to have impact on the Group's financial statements.

### **4.3 Principles of consolidation**

#### **4.3.1 Subsidiaries**

Subsidiaries are fully consolidated from the date on which control is transferred to the Group. Subsidiaries are no longer consolidated from the date on which the Group loses control over them. Control is achieved where the Group has the power to govern the financial and operating policies of an entity so as to obtain the benefits from its activities. The Group consolidates special purpose entities if the substance of its relationship with them indicates that it has control over them. The Group considers the existence and influence of exercisable or convertible voting rights when evaluating its subsidiaries.

All significant intercompany transactions and account balances among consolidated companies are eliminated on consolidation. Unrealized gains or losses included in loans and borrowings arising from transactions between consolidated companies are eliminated on consolidation. The related accounts receivable and payable are also eliminated on consolidation. The accounting Policies of subsidiaries can be revised on consolidation in consistency policies the Group has adopted.

#### **4.3.2 Non-controlling interests**

Non-controlling interests must be presented in the consolidated statement of financial position within equity, separate from the equity of the owners of the parent. Total comprehensive income must be attributed to the owners of the parent and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Some putable financial instruments or some financial instruments that impose on the entity an obligation to deliver to another party a pro rata share of the net assets of the entity only on liquidation are not accounted as the residual equity in consolidated financial statements, therefore, those non-controlling interests are classified as financial liabilities in the consolidated financial statement.

#### **4.3.3 Investment in an associate**

Associates are the entities that the Group has significant effect on, but has no controlling power and the Group generally owned its equity in 20~50% of their shares with voting rights by the Group. The Group's consolidated financial statements reflects investment in an associate in using the equity method and the amount of Investment in an associate include goodwill which is acquisition cost less any accumulated impairment losses.

After acquiring shares of an associate, the Group's share of the current income (loss) of the associate is recognized as current income (loss) of the Group, and the Group's share of changes in the retained earnings of the associate is recognized as the retained earnings of the Group. If the Group's share of the loss of the associate is the same as or above the Group's investment interest including other plain bond of the associate, the Group no longer recognizes a loss unless the Group is liable for paying or has to pay the associate's debt.

When signs of damage are not aroused, the Group's share in the investee's unrealized profits and losses resulting from transactions between the Group and its investee are eliminated to the extent of the interest in the investee. And when necessary, adjustments are made to the financial statements of associates to bring their accounting policies in line with those used by the Group.

### **4.4 Operating segment reporting**

Operating segments are disclosed in a manner consistent with the internal reporting provided to the chief operating decision maker. The chief operating decision maker is responsible for allocating resources and assessing the performance of the operating segments.

## **4.5 Foreign exchange**

### **4.5.1 Functional currency**

When preparing for the consolidated financial statements, the Group measures and recognizes all the transactions according to the functional currency, used to conduct operating activities in the primary economic environment. Consolidated Financial statements are expressed in Korean won.

### **4.5.2 Translation of foreign currency transactions and balances at the end of the reporting period**

Transactions in foreign currencies are initially recorded at the functional currency rate of exchange prevailing at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency rate of exchange prevailing at the reporting date and its exchange differences are recognized in net income for the period in which they arise. The Group applies a year-end exchange rate to non-monetary assets and liabilities measured at fair value in the consolidated statements of financial position. If valuation gain or loss on fair value is recognized as current income, foreign currency translation gain or loss is recognized in current income. If valuation gain or loss on non-monetary items is recognized in other comprehensive income, foreign currency translation gain or loss is recognized in other comprehensive income. Non-monetary items not measured at fair value are translated using the exchange rates as at the date of the initial transaction and have no exchange differences.

Exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur in the predictable future (therefore forming part of the net investment in the foreign operation), are recognized initially in other comprehensive income and reclassified from equity to net income on disposal or partial disposal of the net investment.

### **4.5.3 Translation of the Group's foreign operation**

As at the reporting date, the assets and liabilities of subsidiaries and overseas branches are translated into the Group's presentation currency, Korean won (KRW), at the rate of exchange as at the reporting date, and their statements of comprehensive income are translated at the weighted average exchange rates for the year. Exchange differences arising on translation are taken directly to a separate component of equity.

## **4.6 Cash and cash equivalents**

Cash and short-term deposits in the statement of financial position comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less.

## **4.7 Financial assets**

Financial assets within the scope of KIFRS 1039 *Financial Instruments: Recognition and Measurement* are classified as financial assets designated at fair value through profit or loss, available-for-sale financial assets, held-to-maturity investments, loans and receivables, as appropriate. The Group determines the classification of its financial assets at initial recognition.

### **4.7.1 Financial assets at fair value through profit or loss**

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated at fair value through profit or loss upon initial recognition. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the short-term. Derivatives, including separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments as defined by KIFRS 1039. Financial assets at fair value through profit or loss are carried in the statement of financial position at fair value with changes in fair value recognized in finance income or finance cost in the statement of comprehensive income. The Group designated DLS, separate deposit from investors and some other financial assets as financial assets at FVTPL.



#### **4.7.2 Available-for-sale financial assets**

Available-for-sale financial assets are non-derivative financial assets designated at available-for-sale item, and are not classified as loans and receivables, held-to-maturity financial assets or financial assets designated at fair value through profit or loss. They are measured at fair value and their valuation gains and losses are recognized in equity as other comprehensive income. The equity securities, whose active market values are not available and fair values cannot be reliably measured, are valued at acquisition cost. Accumulated other comprehensive income previously recognized in equity is recognized in the statement of comprehensive income when the investment is disposed of or impairment loss for the investment is recognized. Dividends earned whilst holding available-for-sale financial assets are recognized in the statement of comprehensive income when the right of the payment has been established.

#### **4.7.3 Held-to-maturity financial assets**

Non-derivative financial assets with fixed or determinable payments and fixed maturities are classified as held-to maturity when the Group has the positive intention and ability to hold them to maturity. After initial measurement, held-to-maturity investments are measured at amortized cost using the effective interest method, less impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate method ("EIR"). The EIR amortization is included in finance income in the statement of comprehensive income. The losses arising from impairment are recognized in finance costs in the statement of comprehensive income. There is no held-to-maturity assets as of December 31, 2016 and 2015.

#### **4.7.4 Loans and receivables**

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such financial assets are subsequently measured at amortized cost using the EIR, less allowance for possible loan losses. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included in finance income in the statements of comprehensive income.

### **4.8 Regular way trades**

Equity securities, debt securities, derivatives, which are traded in the KRX or qualified foreign exchange markets, are treated as regular way trades. The Group's specific accounting policies about regular way trades are described below.

#### **4.8.1 Proprietary trading**

As for proprietary trading, purchase or sale of the asset that require delivery of assets within a time frame established by regulation or convention in the marketplace are recognized or derecognized on the trading date.

#### **4.8.2 Trading on consignment**

As for trading on consignment, the Group serves a clientele of investors who trade public stocks and other securities and recognizes the brokerage fees on the trading date. Until the settlement date of the trading on consignment, the Group does not offset the receivables and payables to customers and offsets the receivables and payables to the KRX.

#### **4.9 Derecognition of financial assets**

A financial asset (or, where applicable a part of a financial asset or part of the Group of similar financial assets) is derecognized when:

- ∅ The rights to receive cash flows from the asset have expired.
- ∅ The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if and to what extent it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognize the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

#### **4.10 Impairment of financial assets**

The Group assesses at the end of each reporting period whether there is any objective evidence that a financial asset or group of financial assets is impaired. A significant or prolonged decline in the fair value of an investment in available-for-sale financial assets below its cost is also objective evidence of impairment. If any such evidence exists in the available-for-sale financial assets, the amount of the cumulative loss that is the difference between the acquisition cost and current fair value deducted the impairment loss on that financial asset previously recognized in profit or loss is recognized in the statement of comprehensive income. 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.

Furthermore, the losses on loans and receivables are identified as gains and losses for the current term using allowance for the account and if the objective evidence of the impairment exists, they are measured as the present value on future cash flow.

#### **4.11 Derivative financial instruments and hedge accounting**

Derivatives instruments are initially recognized at fair value on the contract date and are subsequently revalued at their fair value. Derivative instruments are accounted differently depending on whether hedge accounting is applied, and therefore, are classified into trading purpose derivatives and hedging purpose derivatives. In a hedge relationship, when a hedge item is any asset, liability or unrecognized fixed contract, which is exposed at the possibility that its some or entire fair value is fluctuated by the specified risks, fair value hedge accounting is applied. In another way, when a hedge item is any asset, liability or expected highly probable transaction, which is exposed at the possibility that its cash flow is fluctuated by the specified risk, cash flow hedge accounting is applied. For trading purpose derivative transaction, changes in the fair value of derivatives are recognized in net income.

At the inception of the hedge relationship, the Group formally documents the relationship between the hedged item and the hedging instrument, including the nature of the risk, the objective and strategy for undertaking the hedge and the method that will be used to assess the effectiveness of the hedging relationship. Also, at the inception of the hedge relationship, a formal assessment is undertaken to ensure that the hedging instrument is expected to be highly effective in offsetting the designated risk in the hedged item and the actual result.

#### **4.11.1 Fair value hedges**

The change in the fair value of an interest rate hedging derivative is recognized in finance costs in the statement of comprehensive income. The change in the fair value of the hedged item attributable to the risk hedged is recorded as a part of the carrying value of the hedged item and is also recognized in finance costs in the statement of comprehensive income.

For fair value hedges relating to items carried at amortized cost, any adjustment to carrying value is amortized through the statement of comprehensive income over the remaining term up to maturity. Effective interest rate amortization may begin as soon as an adjustment exists and shall begin no later than when the hedged item ceases to be adjusted for changes in its fair value attributable to the risk being hedged.

When an unrecognized firm commitment is designated as a hedged item, the subsequent cumulative change in the fair value of the firm commitment attributable to the hedged risk is recognized as an asset or liability with a corresponding gain or loss recognized in the statement of comprehensive income.

#### **4.11.2 Cash flow hedges**

The effective portion of the gain or loss on the hedging instrument is recognized directly as other comprehensive income in the cash flow hedge reserve, while any ineffective portion is recognized immediately in finance costs in the statement of comprehensive income.

Amounts recognized as other comprehensive income are transferred to the statement of comprehensive income when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognized or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognized as other comprehensive income are transferred to the initial carrying amount of the nonfinancial asset or liability.

If the forecast transaction or firm commitment is no longer expected to occur, the cumulative gain or loss previously recognized in equity are transferred to the statement of comprehensive income. If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover, or if its designation as a hedge is revoked, any cumulative gain or loss previously recognized in other comprehensive income remains in other comprehensive income until the forecast transaction or firm commitment affects profit or loss.

#### **4.11.3 Embedded derivatives**

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives. When their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured by fair value through profit or loss.

#### **4.12 'Day 1' profit or loss recognition**

When the transaction price is different from the fair value of other observable current market transactions in the same instrument or based on a valuation technique whose variables include only data from observable markets, the Group immediately recognizes the differences between the transaction price and fair value (a 'Day 1' profit or loss) in 'net trading income'.

In case where fair value is determined using data which is not observable, the difference between the transaction price and model value is deferred and amortized over the life of the associated instrument using the straight-line method.

#### **4.13 Interest income and interest expense**

The Group recognizes interest income and interest expense using the effective interest rate method on an accrual basis. When a financial instrument bearing interest is impaired, the Group reduces the carrying amount to its recoverable amount, being the estimated future cash flows discounted at its original effective interest rate of the instrument, and continues unwinding the discount as interest income.

#### **4.14 Fees and commission income**

The Group earns fees and commission income from a diverse range of services it provides to its customers. Fees and commissions income from financial services are accounted for based on the related accounting standards of financial instruments and the purpose of such fees and commissions. Fees and commissions income are accounted for as follows:

- ∅ Fees earned for the provision of services over a period of time are accrued over that period using the straight line method.
- ∅ Fees arising from providing significant transaction services for a third party are recognized on completion of the transaction services.
- ∅ Fees which are regarded as the part of the interest of financial instruments are recognized using the EIR.

#### **4.15 Dividend income**

Dividend income is recognized when the Group's right to receive the payment is established.

#### **4.16 Bonds purchased under resale agreements and bonds sold under repurchase agreements**

Securities purchased under agreements to resell at a specified future date ("reverse repos") are recorded in the statement of financial position as bonds purchased under repurchase agreements in the other loans. Conversely, securities sold under agreements to repurchase at a specified future date ("repos") are recorded in the statement of financial position as bonds sold under repurchase agreements in the other borrowing liabilities. Interest income and expense incurred from reverse repo and repo transactions are recorded as interest income on loan and interest expense on borrowings, respectively in the statement of comprehensive income.

#### **4.17 Property and equipment**

Property and equipment is stated at cost including transaction costs, less accumulated depreciation and accumulated impairment in value. Changes in the expected useful life are accounted for by changing the amortization period or method, as appropriate, and treated as changes in accounting estimates.

Depreciation is calculated on a straight-line basis over the estimated useful life of the asset. Land is not depreciated. The estimated useful lives are as follows:

	<u>Years</u>
Buildings	40
Vehicles	4
Furniture and fixtures	4

Property and equipment is derecognized on disposal or when no future economic benefits are expected from its use. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is recognized in 'Other operating income' in the statement of comprehensive income in the year the asset is derecognized.

#### **4.18 Investment properties**

Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are measured at depreciated cost.

Investment properties are derecognized when either they have been disposed of or when the investment property is permanently withdrawn from use and no future economic benefit is expected from its disposal. The difference between the net disposal proceeds and the carrying amount of the asset is recognized through profit or loss in the period of derecognition. And transfers are made to or from investment property only when there is a change in use.

#### **4.19 Investment properties (cont'd)**

Land is not depreciated. The estimated useful lives of buildings are as follows:

	Depreciation method	Years
Buildings	Straight-line method	40

#### **4.20 Intangible assets**

##### **4.20.1 Software**

Software acquired separately are measured on initial recognition at cost. The software with finite lives are carried at cost less any accumulated amortization. Amortization is calculated on a straight-line basis over the estimated useful life of the asset.

##### **4.20.2 Intangible assets with indefinite useful lives**

Intangible assets with indefinite useful lives are not amortized, but are annually tested for impairment. The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

#### **4.21 Impairment of non-financial assets**

The Group assesses at each reporting date whether there is an indication that an asset may be impaired. If indication exists, or when annual impairment testing for an asset is required, the Group estimates the assets recoverable amount. An asset's recoverable amount is the higher of an asset's or cash-generating unit's ("CGU") fair value less costs to sell and its value in use. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

After recognition of the impairment of non-financial assets, if there is a change in the assumptions used to determine the asset's recoverable amount, a previously recognized impairment loss is reversed. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceeds the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years.

After application of the equity method, the Group determines whether it is necessary to recognize an additional impairment loss on the Group's investment in its associates. The Group determines at each reporting date whether there is any objective evidence that the investment in the associate is impaired. If this is the case the Group calculates the amount of impairment as the difference between the recoverable amount of the associate and its carrying value and recognizes the amount in the statement of comprehensive income.

#### **4.22 Lease**

The classification of leases is based on the extent to which risks and rewards incidental to ownership of a leased asset lie with the lessor or the lessee.

At the commencement of the lease term, lessees shall recognize finance leases as assets and liabilities in their statements of financial position at amounts equal to the fair value of the leased property or, if lower, the present value of the minimum lease payments, each determined at the inception of the lease. The discount rate to be used in calculating the present value of the minimum lease payments is the interest rate implicit in the lease, if this is practicable to determine; if not, the lessee's incremental borrowing rate shall be used. Any initial direct costs of the lessee are added to the amount recognized as an asset.

#### **4.22 Lease (cont'd)**

Minimum lease payments shall be apportioned between the finance charge and the reduction of the outstanding liability. The finance charge shall be 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. The depreciation policy for depreciable leased assets shall be consistent with that for depreciable assets that are owned.

Minimum lease payments, excluding guaranteed residual value, under an operating lease shall be recognized as an expense on a straight-line basis over the lease term unless another systematic basis is more representative of the time pattern of the user's benefit. Operating lease assets are depreciated over expected useful lives (3 years ~ 5 years).

#### **4.23 Retirement benefits**

##### **4.23.1 Defined benefit pension plans**

The Group classifies all pension plans under defined benefit pension plans ("DB plan") except for defined contribution pension plan ("DC plan"). The retirement benefit liabilities recognized in the consolidated statements of financial position represents the present value of the defined benefit obligation reduced by the fair value of plan assets.

The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method by an independent actuary. The present value of defined benefit obligation is computed by discounting expected future cash outflows with market rate of return measured against the yield of high-graded corporate bond whose date of payment and maturity is similar to that of a defined benefit obligation. Actuarial gains and losses, incurred from the change in actuarial assumptions and the difference between the assumptions and the actual results, are recognized in other comprehensive income for the period.

If the calculated net value is an asset when the fair value of plan assets is deducted from the present value of defined benefit liabilities, the asset is recognized up to accumulated unrealized past service cost and the present value of an economic benefit available in the form of a refund from the pension plan or a saving of future contributions.

Unrecognized prior service cost, a change in the present value of defined benefit pension plan for employees' past services which is incurred by introduction or changes of severance payment, is immediately recognized in current expense for the period in which it arises.

##### **4.23.2 Defined contribution pension plans**

As the Group operates a defined contribution pension plans ("DC plan"), the amount of contribution that the Group has to pay is recognized under current expense as employee benefit expense.

#### **4.24 Income tax expenses and deferred tax assets and liabilities**

Income taxes comprise of current and deferred taxes. All items related to taxes, other than those recognized directly in equity, are accounted for in the statement of comprehensive income. Accordingly, items recognized directly in equity and the related income taxes are accounted for in the 'Other operating income'.

The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted by the reporting date. If the applied tax laws require an interpretation, the Group calculates income tax payable expected to be paid to the taxation authorities based on the opinion made when the taxes were reported.

Deferred tax is provided on the temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes. Deferred liabilities are recognized for all taxable temporary differences, except:

#### **4.24 Income tax expenses and deferred tax assets and liabilities (cont'd)**

When the deferred tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit loss.

In respect of taxable temporary differences associated with investments in subsidiaries, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

#### **4.25 Recognition and measurement of financial liabilities**

Financial liabilities within the scope of KIFRS 1039 are classified as financial liabilities at fair value through profit or loss, borrowings, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. The Group determines the classification of its financial liabilities at initial recognition.

All financial liabilities are recognized initially at fair value and in the case of loans and borrowings, plus directly attributable transaction costs.

##### **4.25.1 Financial liabilities at fair value through profit or loss**

Financial liabilities at fair value through profit or loss include financial liabilities held-for-trading and financial liabilities designated upon initial recognition as at fair value through profit or loss. Financial liabilities are classified as held-for-trading if they are acquired for the purpose of selling in the near term. All financial liabilities including an embedded derivative separated from the host contract are reclassified as financial liabilities at fair value through profit or loss except for financial liabilities designated as effective hedging instruments or financial guarantee contracts. After initial recognition, the changes in the fair value of the financial liabilities at fair value through profit or loss and the related interest expenses are recognized as profit or loss. The Group has designated derivative-linked securities sold by the Group as financial liabilities at fair value through profit or loss.

##### **4.25.2 Borrowings and debentures**

After initial recognition, interest bearing deposits, borrowings and debentures are subsequently measured at amortized cost using the EIR. Gains and losses are recognized in the statement of comprehensive income when the liabilities are derecognized as well as through the EIR amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included in finance cost in the statement of comprehensive income.

##### **4.25.3 Derecognition of financial liabilities**

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expired. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the statement of comprehensive income. Meanwhile, the group has designated derivatives linked securities sold by the group as financial liabilities at fair value through profit or loss.

#### **4.26 Fair value of financial instruments**

Financial assets and financial liabilities traded in active markets at the reporting date are based on their quoted market price or dealer price quotations (bid price for long positions and ask price for short positions), without any deduction for transaction costs.

For all other financial instruments not traded in an active market, the fair value is determined by using appropriate valuation techniques. Valuation techniques include the discounted cash flow method, comparison to similar instruments for which market observable prices exist, options pricing models, credit models and other relevant valuation models. These techniques incorporate the Group's estimate of assumptions that a market participant would make when valuing the instruments. Valuation techniques which provide reliable estimates on mark-to-market prices are applied.

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

Level 1: Quoted (unadjusted) prices in active markets for similar assets or liabilities.

Level 2: Other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly.

Level 3: Techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data.

#### **4.27 Provisions**

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

#### **4.28 Capital stock**

Common stock issued is classified as a capital stock in the statement of financial position and additional stock issuance costs or incremental costs related to the stock issuance are recorded as a deduction from issued capital net of tax effects.

#### **4.29 Dividends**

Dividends on common stock are deducted from the Group's equity and recognized as a liability when the shareholders' meeting of the Group approves the dividends.

### **5. Significant judgements and accounting estimates**

The preparation of the Group's consolidated financial statements requires the management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the end of the reporting period. Uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

In the process of applying the Group's accounting policies, the management has made the following judgments, which have the most significant effect on the amounts recognized in the consolidated financial statements.



### **5.1 Allowance for possible loan losses**

The Group assesses at each reporting date whether there is objective evidence that a loan is impaired. If there is objective evidence that an impairment loss has been incurred, the amount of the loss is measured as the difference between the loan's carrying amount and the present value of estimated future cash flows, which is discounted using the initial effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognized in the statement of comprehensive income.

The Group first assesses whether objective evidence of impairment exists for individual loan that is significant (individual assessment). If the Group determines that no objective evidence of impairment exists for an individually assessed loan, the Group includes the loan in a company of loans with similar credit risk characteristics and collectively assesses them for impairment (collective assessment).

When an individual loan is impaired, the amount of the loss is measured as the difference between the carrying amount and the present value of estimated future cash flows (including estimated future cash flows from its collateral). In collective assessments, the amount of the loss is statistically evaluated using the Group's historical loss data.

### **5.2 Impairment of non-financial assets**

Impairment exists when the carrying value of an asset or cash generating unit exceeds its recoverable amount, which is the higher of its fair value less costs to sell and its value in use. The fair value less costs to sell calculation is based on available data from binding sales transactions in an arm's length transaction of similar assets or observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a discounted cash flow model. The cash flows are derived from the budget for the next five years and do not include restructuring activities that the Group is not yet committed to or significant future investments that will enhance the asset's performance of the cash generating unit being tested. The recoverable amount is most sensitive to the discount rate used for the discounted cash flow model as well as the expected future cash inflows and the growth rate used for extrapolation purposes.

### **5.3 Income taxes**

Uncertainties exist with respect to the interpretation of complex tax regulations and the amount and timing of future taxable income. Given the wide range of international business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax income and expense already recorded. The Group establishes provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities of the respective countries in which it operates. The amount of such provisions is based on various factors, such as experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority.

### **5.4 Impairment losses on available-for-sale equity instruments**

The Group assesses its equity securities classified as available-for-sale assets at the end of each reporting period whether there is any indication that an asset may be impaired.

The Group also records impairment charges on available-for-sale equity investments when there has been a significant or prolonged decline in the fair value below their cost. The determination of what is 'significant' or 'prolonged' requires judgment. In making this judgment, the Group evaluates, among other factors, historical share price movements and duration and extent to which the fair value of an investment is less than its cost.

When the fair value below the cost of available-for-sale equity instruments is significant or prolonged, the Group recognizes impairment subsequently and reclassifies previous gain or loss that has been recognized in other comprehensive income to profit or loss.

## 5.5 Surtax on undistributed corporate earnings

The Group shall pay an additional surtax where the use of corporate earnings on qualifying investments, wage increase and dividend payments fall below a certain portion of its taxable income for 3 years from 2015. As the Group considers the surtax on its undistributed earnings when computing its corporate income tax, the Group's income tax may change arising from changes in investment, wage growth, or dividend payouts.

## 6. Operating segment information

The Group is organized into three operating segments based on their products and services and the details are presented below:

- Securities business: Brokerage service, proprietary trading and underwriting of securities
- Merchant banking: Issue, discount and trading of promissory note or bond, investment and loan of facilities or working capital, payment guarantees, and management of CMA
- Head office : Head office segment exclude segments above
- Others: The proportion of operating segment of the consolidated subsidiaries was not important in terms of the Group.

The financial information of the operating segments for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016					
	Securities business	Merchant banking	Head Office	Others	Consolidated adjustments	Total
Total revenue	\ 469,172,477	\ 357,919,935	\ 4,048,700,560	\ 127,992,663	\ (48,553,457)	\ 4,955,232,178
Total expense	(367,330,458)	(156,595,151)	(4,020,371,556)	(122,716,698)	44,384,543	(4,622,629,320)
Income (loss) before income tax expense	101,842,019	201,324,784	28,329,004	5,275,965	(4,168,914)	332,602,858
Income tax expense (*1)	(24,105,024)	(47,651,635)	(6,705,202)	(8,780)	(285,514)	(78,756,155)
Net income (loss)	\ 77,736,995	\ 153,673,149	\ 21,623,802	\ 5,267,185	\ (4,454,428)	\ 253,846,703
Assets (*2)	12,058,029,120	3,262,033,789	-	2,508,902,991	(561,152,667)	17,267,813,233
Liabilities (*2)	10,565,058,766	2,868,950,438	-	2,325,950,563	(370,456,762)	15,389,503,005

  

	Year ended December 31, 2015					
	Securities business	Merchant banking	Head Office	Others	Consolidated adjustments	Total
Total revenue	\ 645,682,785	\ 356,965,829	\ 2,164,229,145	\ 157,535,428	\ (79,130,666)	\ 3,245,282,521
Total expense	(490,390,787)	(164,259,243)	(2,118,905,930)	(90,901,275)	25,663,349	(2,838,793,886)
Income (loss) before income tax expense	155,291,998	192,706,586	45,323,215	66,634,153	(53,467,317)	406,488,635
Income tax expense (*1)	(59,299,094)	(45,933,412)	(10,803,211)	(231)	(3,115,955)	(119,151,903)
Net income (loss)	\ 95,992,904	\ 146,773,174	\ 34,520,004	\ 66,633,922	\ (56,583,272)	\ 287,336,732
Assets (*2)	9,308,668,381	3,565,614,373	-	1,961,130,297	(406,744,423)	14,428,668,628
Liabilities (*2)	7,897,314,250	3,246,345,136	-	1,704,289,841	(137,844,845)	12,710,104,382

(\*1) The amount is allocated using the ratio of net income before income tax of each segment for 2016 and 2015.

(\*2) The total assets and liabilities represent the amount as of December 31, 2016 and 2015.

The measured amounts in each segment are reported to the chief operating decision maker for the purpose of assessing the performance of each segment.

The geographic operating revenue information and the geographic non-current assets information for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016		Year ended December 31, 2015	
	Domestic	Overseas	Domestic	Overseas
Operating revenue	\ 4,946,573,758	\ 27,907	\ 3,240,822,368	\ 226,565
Non-current assets (*)	156,522,954	-	171,803,662	-

(\*) Represents the amount as of December 31, 2016 and 2015.

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**7. Cash and due from banks**

Cash and due from banks as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Cash and cash equivalents:		
Cash on hand		
Current deposits	1,291,772	11,020,912
Demand deposits	25,801,595	23,869,983
Foreign currency deposit	10,127,261	1,628,459
MMDA	63,900,000	109,500,000
Others	556,066,963	400,206,569
	<u>657,187,591</u>	<u>546,225,923</u>
Due from banks in Korean won:		
Reserve for claims of customers Deposits(*)	38,410,380	37,000,000
Guarantee deposits for securities Borrowed	62,101,200	9,059,110
Guarantee deposits for trading futures and options	37,100,000	38,723,763
Long - term deposits	2,000,000	2,000,000
Restricted deposits etc.	174,500	129,000
Other deposits	19,982,474	12,930,485
	<u>159,768,554</u>	<u>99,842,358</u>
	<u>\ 816,956,145</u>	<u>\ 646,068,281</u>

(\*) Pursuant to the Law on Capital Market and Financial Investment Services and related regulations, the Group is required to place a deposit after daily calculation in Korea Securities Finance Corporation ("KSFC") as a reserve against customers' deposits for the trading of stocks, derivatives and for other purposes. These deposits should exceed the amount which is calculated by deducting cash commission guarantee from total customers' deposit.

**8. Financial assets at fair value through profit or loss**

Financial assets at fair value through profit or loss as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Book value (Fair value)	
	December 31, 2016	December 31, 2015
Financial assets held for trading:		
Equity securities	\ 237,782,825	\ 278,575,974
Debt securities:		
Government and public bonds	3,573,543,493	2,923,902,109
Special purpose bonds	1,769,127,267	2,077,567,966
Corporate bonds	1,273,908,333	1,212,963,721
Collective investment securities	188,026,959	87,937,755
Commercial papers	269,355,080	368,891,602
Asset backed short-term bonds	50,078,198	22,436,864
Foreign currency securities	107,072,958	974,166
	<u>\ 7,468,895,113</u>	<u>\ 6,973,250,157</u>
Derivative assets held for trading:		
Interest rate derivatives	74,046,282	112,573,356
Foreign currency derivatives	50,225,716	31,296,123
Equity derivatives	29,541,408	10,620,497
Stock price index derivatives	364,124	21,760
Credit	386,719	1,071,624
Others	5,271,113	6,003,095
Credit risk adjustments	(607,797)	(489,476)
Deferred day 1 profit or loss	(1,854,851)	887,031
	<u>\ 157,372,714</u>	<u>\ 161,984,010</u>
Financial assets designated at fair value through profit or loss (*1):		
Equity-linked securities	4,517,369	4,180,453
Derivatives-linked securities	-	637,855
Reserve for claims of customers' deposits (trust) (*2)	270,866,951	295,920,714
Others	149,693,912	34,962,539
Credit risk adjustments	(6,987)	(7,576)
Deferred day 1 profit or loss	(44,327)	(193,316)
	<u>\ 425,026,918</u>	<u>\ 335,500,669</u>
	<u>\ 8,051,294,745</u>	<u>\ 7,470,734,836</u>

(\*1) Equity-linked securities, derivatives-linked securities and reserve for claims of customers' deposits were appointed as "Financial assets at fair value through profit or loss" by exercising the fair value option.

(\*2) Pursuant to the Law on Capital Market and Financial Investment Services and related regulations, the Group is required to place a deposit after daily calculation in Korea Securities Finance Corporation ("KSFC") as a reserve against customers' deposits for the trading of stocks, derivatives and for other purposes. These deposits should exceed the amount which is calculated by deducting cash commission guarantee from total customers' deposit.

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**8. Financial assets at fair value through profit or loss (cont'd)**

Debt securities of financial assets classified held-for-trading as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016			December 31, 2015		
	Face value	Acquisition cost	Fair value	Face value	Acquisition cost	Fair value
Debt securities:						
Government and public bonds	\ 3,761,036,247	\ 3,590,256,147	\ 3,573,543,493	\ 2,846,915,452	\ 2,923,976,468	\ 2,923,902,109
Special purpose bonds	1,752,526,931	1,775,692,786	1,769,127,267	2,054,544,978	2,077,145,127	2,077,567,966
Corporate bonds	1,276,987,327	1,277,956,215	1,273,908,333	1,210,142,447	1,213,834,901	1,212,963,721
	\ 6,790,550,505	\ 6,643,905,148	\ 6,616,579,093	\ 6,111,602,877	\ 6,214,956,496	\ 6,214,433,796
Foreign bonds (*)	93,150,000	104,160,587	102,723,226	-	-	-
	100,000,000	1,122,138	1,042,160	-	-	-
Commercial papers	269,000,000	269,000,000	269,355,080	368,025,000	368,025,000	368,891,602
Asset backed short-term bonds	50,000,000	50,000,000	50,078,198	22,400,000	22,400,000	22,436,864
	\ 7,302,700,505	\ 7,068,187,873	\ 7,039,777,757	\ 6,502,027,877	\ 6,605,381,496	\ 6,605,762,262

(\*) The acquisition cost and fair value of foreign bonds are converted into Korean won.

Derivative embedded securities of financial assets classified held-for-trading as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016			December 31, 2015		
	Nominal value	Issue value	Fair value	Nominal value	Issue value	Fair value
Equity linked securities	\ 4,472,000	\ 4,472,000	\ 4,517,369	\ 4,744,000	\ 4,744,000	\ 4,180,453
Derivative linked securities	-	-	-	1,475,000	1,475,000	637,855
	\ 4,472,000	\ 4,472,000	\ 4,517,369	\ 6,219,000	\ 6,219,000	\ 4,818,308

**9. Available-for-sale financial assets**

Available-for-sale financial assets as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Book value (Fair value)	
	December 31, 2016	December 31, 2015
Equity securities and equity investment (*)	\ 233,758,085	\ 252,073,398
Debt securities:		
Government and public bonds	341,241,014	85,404,225
Special purpose bonds	448,685,474	200,381,207
Corporate bonds	248,261,232	83,891,970
Collective investment securities	97,987,525	84,710,716
Foreign currency securities	10,731,480	-
Commercial papers	185,583,280	20,697,421
Others	8,314,005	6,262,079
	\ 1,574,562,095	\ 733,421,016

(\*) Some non-marketable equity securities were measured at acquisition cost because they could not be evaluated at fair value with a reliable valuation model. If net asset value significantly decreases, the Group recognizes the difference between acquisition cost and net asset value as impairment loss.

**Meritz Securities Co., Ltd. and its subsidiaries**  
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**9. Available-for-sale financial assets (cont'd)**

Valuation gain (loss) on valuation of available-for-sale financial assets as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016				
	Acquisition cost	Amortized cost	Accumulated impairment loss	Fair value	Gain(loss) on valuation
Equity securities:					
Marketable equity securities	\ 6,675,537	\ 6,675,537	\ (1,100,206)	\ 5,843,940	\ 268,609
Non-marketable equity securities	131,978,067	131,978,067	(3,903,847)	227,914,145	99,839,925
	<u>138,653,604</u>	<u>138,653,604</u>	<u>(5,004,053)</u>	<u>233,758,085</u>	<u>100,108,534</u>
Debt securities:					
Government and public bonds	340,411,936	340,357,251	-	341,241,014	883,763
Special purpose bonds	448,130,280	448,042,918	-	448,685,474	642,556
Corporate bonds	<u>236,378,643</u>	<u>241,763,244</u>	<u>-</u>	<u>248,261,232</u>	<u>6,497,988</u>
	<u>1,024,920,859</u>	<u>1,030,163,413</u>		<u>1,038,187,720</u>	<u>8,024,307</u>
Collective investment securities	111,306,758	111,306,758	(7,985,215)	97,987,525	(5,334,018)
Commercial paper	185,137,988	185,370,563	-	185,583,280	212,717
Foreign currency securities	10,444,600	10,444,600	(94,960)	10,731,480	381,840
Other securities	<u>8,314,005</u>	<u>8,314,005</u>	<u>-</u>	<u>8,314,005</u>	<u>-</u>
	<u>\ 1,478,777,814</u>	<u>\ 1,484,252,943</u>	<u>\ (13,084,228)</u>	<u>\ 1,574,562,095</u>	<u>\ 103,393,380</u>
	December 31, 2015				
	Acquisition cost	Amortized cost	Accumulated impairment loss	Fair value	Gain(loss) on valuation
Equity securities:					
Marketable equity securities	\ 56,498,809	\ 56,498,809	\ (50,091)	\ 51,917,330	\ (4,531,388)
Non-marketable equity securities	114,727,359	114,727,359	(3,558,879)	200,156,068	88,987,588
	<u>171,226,168</u>	<u>171,226,168</u>	<u>(3,608,970)</u>	<u>252,073,398</u>	<u>84,456,200</u>
Debt securities:					
Government and public bonds	81,876,736	81,876,736	-	85,404,225	3,527,489
Special purpose bonds	200,499,003	200,369,814	-	200,381,207	11,393
Corporate bonds	<u>84,059,116</u>	<u>84,089,240</u>	<u>(1,475,790)</u>	<u>83,891,970</u>	<u>1,278,520</u>
	<u>366,434,855</u>	<u>366,335,790</u>	<u>(1,475,790)</u>	<u>369,677,402</u>	<u>4,817,402</u>
Collective investment securities	90,369,206	90,369,206	(7,984,921)	84,710,716	2,326,431
Commercial paper	20,682,090	20,682,090	-	20,697,421	15,331
Foreign currency securities	94,960	94,960	(94,960)	-	-
Other securities	<u>6,262,079</u>	<u>6,262,079</u>	<u>-</u>	<u>6,262,079</u>	<u>-</u>
	<u>\ 655,069,358</u>	<u>\ 654,970,293</u>	<u>\ (13,164,641)</u>	<u>\ 733,421,016</u>	<u>\ 91,615,364</u>

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**9. Available-for-sale financial assets (cont'd)**

Changes in valuation gain (loss) on valuation available-for-sale financial assets for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016			
	Beginning balance	Reclassification	Gain on valuation	Ending balance
Equity securities:				
Marketable equity securities	\ (4,531,388)	\ 4,736,807	\ 63,190	\ 268,609
Non-marketable equity securities	88,987,588	152,698	10,699,639	99,839,925
	<u>84,456,200</u>	<u>4,889,505</u>	<u>10,762,829</u>	<u>100,108,534</u>
Debt securities				
Government and public bonds	3,527,489	(2,995,783)	352,057	883,763
Special purpose bonds	11,393	(381,207)	1,012,370	642,556
Corporate bonds	1,278,520	(90,857)	5,310,325	6,497,988
	<u>4,817,402</u>	<u>(3,467,847)</u>	<u>6,674,752</u>	<u>8,024,307</u>
Collective investment securities	2,326,431	(1,334,285)	(6,326,164)	(5,334,018)
Commercial paper	15,331	(14,696)	212,082	212,717
Foreign currency securities	-	-	381,840	381,840
	<u>91,615,364</u>	<u>72,677</u>	<u>11,705,339</u>	<u>103,393,380</u>
Income tax effect	(22,096,408)	(17,515)	(2,789,724)	(24,903,647)
	<u>\ 69,518,956</u>	<u>\ 55,162</u>	<u>\ 8,915,615</u>	<u>\ 78,489,733</u>
	Year ended December 31, 2015			
	Beginning balance	Reclassification	Gain on valuation	Ending balance
Equity securities:				
Marketable equity securities	\ 74,711,877	\ (75,056,772)	\ (4,186,493)	\ (4,531,388)
Non-marketable equity securities	88,334,656	(656,293)	1,309,225	88,987,588
	<u>163,046,533</u>	<u>(75,713,065)</u>	<u>(2,877,268)</u>	<u>84,456,200</u>
Debt securities				
Government and public bonds	1,656,429	-	1,871,060	3,527,489
Special purpose bonds	227,140	(194,491)	(21,256)	11,393
Corporate bonds	1,477,801	(404,070)	204,789	1,278,520
	<u>3,361,370</u>	<u>(598,561)</u>	<u>2,054,593</u>	<u>4,817,402</u>
Collective investment securities	2,458,240	(438,621)	306,812	2,326,431
Commercial paper	-	-	15,331	15,331
	<u>168,866,143</u>	<u>(76,750,247)</u>	<u>(500,532)</u>	<u>91,615,364</u>
Income tax effect	(40,375,894)	18,350,984	(71,498)	(22,096,408)
	<u>\ 128,490,249</u>	<u>\ (58,399,263)</u>	<u>\ (572,030)</u>	<u>\ 69,518,956</u>

Residual maturity of debt securities in available-for-sale financial assets as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016			
	No later than 1 year	After 1 year but no later than 5 years	After 5 year but no later than 10 years	Total
Debt securities:				
Government and public bonds	\ -	\ 330,586,942	\ 10,654,072	\ 341,241,014
Special purpose bonds	150,129,064	298,556,410	-	448,685,474
Corporate bonds	86,536,552	161,724,680	-	248,261,232
Commercial paper	185,354,788	228,492	-	185,583,280
	<u>\ 422,020,404</u>	<u>\ 791,096,524</u>	<u>\ 10,654,072</u>	<u>\ 1,223,771,000</u>

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**9. Available-for-sale financial assets (cont'd)**

	December 31, 2015			Total
	No later than 1 year	After 1 year but no later than 5 years	After 5 year but no later than 10 years	
Debt securities:				
Government and public bonds	\ -	\ -	\ 85,404,225	\ 85,404,225
Special purpose bonds	200,381,207	-	-	200,381,207
Corporate bonds	-	83,891,970	-	83,891,970
Commercial paper	20,242,271	455,150	-	20,697,421
	<u>\ 220,623,478</u>	<u>\ 84,347,120</u>	<u>\ 85,404,225</u>	<u>\ 390,374,823</u>

**10. Investments in associates and joint venture**

Details of investments in associates and joint venture as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

Associates	Location	Closing month	Ownership	Book value	
				December 31, 2016	December 31, 2015
Saengbo Wootoo Shinyoung Housing CR-Reit Co., Ltd. II (*1)	Korea	December	16.36%	\ 25,000,000	\ 25,000,000
Cabiorth Investment Consulting (Shanghai) Co., Ltd.	China	December	0.00%	-	186,159
Globalone Private IPO Investment Trust #1 (*2)	Korea		50.00%	6,500,000	-
MPLUS Private Real Estate Investment Trust #4	Korea		83.33%	4,945,084	-
Pureun Partners Fund (*2)	Korea		79.92%	3,246,789	-
Csquared Merry Private Investment Trust1st (*2)	Korea		79.87%	5,626,633	-
Bros IPO Investment Private Trust 1 <sup>st</sup> (*2)	Korea		80.00%	3,225,157	-
Human Investment Trust(*2)	Korea		80.00%	3,380,400	-
Aion Private Investment Trust 1st (*2)	Korea		80.00%	3,272,157	-
Kiwoom Milestone Europe Professional Private Real Estate InvestmentTrust3 (*2)	Korea		22.53%	23,514,987	-
Bestars Samo Property No.8 Investment Inc. (*2)	Korea		37.50%	31,188,362	-
Platform Partners active mezzanine private equity investment trust No.2 (*2)	Korea		8.50%	1,086,286	-
Airplane fund 5 (*2)	Korea		42.63%	74,926,701	-
Airplane fund 6 (*2)	Korea		36.37%	40,154,514	-
High Yield Plus Investment Trust 3 <sup>rd</sup> (*2)	Korea		1.37%	399,653	-
High Yield Plus Investment Trust 4 <sup>th</sup> (*2)	Korea		0.87%	600,515	-
East Spring High Yield 2 <sup>nd</sup> (*2)	Korea		7.90%	4,684,371	-
				<u>\ 231,751,609</u>	<u>\ 25,186,159</u>



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**10. Investments in associates and joint venture (cont'd)**

(\*1) Reclassified as an associate because the Group holds 21.58% of voting rights over the associate. Investments in this associate are cumulative participating preferred stocks and the Group has the right to receive dividends based on the dividend rate, if distributable profit is generated.

(\*2) Classified as joint venture after the consent of all participants that make important decisions. Joint venture is financed by the participants and invests in stocks, real estate, etc. and distributes the revenue to the investors.

Changes in investments in associates and joint venture for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

Year ended December 31, 2016									
Beginning balance	Acquisition	Disposal	Gain or loss on equity method	Receipt of dividends	Impairment	Capital changes in equity method	Other (*)	Increase due to business combination	Ending balance
\ 25,186,159	\ 615,771,561	\ (409,676,525)	\ 2,453,020	\ (2,515,298)	\ 34,661	\ 718,852	\ (220,821)	\ -	\ 231,751,609

(\*) The book value eliminated as a result of selling subsidiary shares for the year ended December 31, 2016 that held shares of Cabiroth Investment Consulting (Shanghai) Co., Ltd. is included.

Year ended December 31, 2015

Beginning balance	Acquisition	Impairment	Other	Increase due to business combination	Ending balance
\ 25,207,861	\ -	\ (34,243)	\ 12,541	\ -	\ 25,186,159

Condensed financial statements as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

December 31, 2016				
Associates	Asstes	Liabilities	Revenue	Net profit(loss)
Saengbo Wootoo Shinyoung Housing CR-Reit Co., Ltd. II	\ 375,244,229	\ 232,499,761	\ 82,831	\ (2,893,160)
Globalone Private IPO Investment Trust #1	13,537,963	537,963	1,456,932	850,683
MPLUS Private Real Estate Investment Trust #4	6,022,861	88,760	490,201	144,112
Pureun Partners Fund	4,064,465	1,998	818,799	640,559
Csquared Merry Private Investment Trust1st	7,049,218	4,806	913,290	727,992
Bros IPO Investment Private Trust 1 <sup>st</sup>	4,038,972	7,567	120,577	(37,372)
Human Investment Trust	4,229,228	3,727	319,801	238,027
Aion Private Investment Trust 1st	4,090,972	775	181,227	116,643
Kiwoom Milestone Europe Professional Private Real Estate Investment Trust3	110,225,143	5,847,421	1,619,751	(4,641,595)
Bestars Samo Property No.8 Investment Inc.	176,918,168	93,749,203	10,779,464	6,214,667
Platform Partners active mezzanine private equity investment trust No.2	12,782,641	34	1,008,010	1,007,369
Airplane fund 5	181,753,967	6,001,712	11,052,467	522,255
Airplane fund 6	114,127,800	3,729,755	8,297,628	3,145
High Yield Plus Investment Trust 3 <sup>rd</sup>	29,147,232	13,805	963,629	599,677
High Yield Plus Investment Trust 4 <sup>th</sup>	69,240,907	17,544	3,343,590	1,450,155
East Spring High Yield 2nd	59,321,944	44,981	2,449,187	1,637,472
	\ 1,171,795,710	\ 342,549,812	\ 43,897,384	\ 6,580,629

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**10. Investments in associates (cont'd)**

Associates	December 31, 2015			
	Assets	Liabilities	Revenue	Net Profit(loss)
Saengbo Wootoo Shinyoung Housing CR-Reit Co., Ltd. II	\ 388,126,330	\ 242,823,369	\ 210,055	\ (4,055,879)
Cabiroth Investment Consulting(Shanghai) Co., Ltd.	368,554	-	111,568	88,675
	<u>\ 388,494,884</u>	<u>\ 242,823,369</u>	<u>\ 321,623</u>	<u>\ (3,967,204)</u>

**11. Loans and CMA**

Details of loans and CMA as of December 31, 2016 and 2015 consist of the following (Korean won in thousands):

	December 31, 2016		
	Face value	Allowance for possible loan losses	Book value
<b>Loans:</b>			
Call loans	\ 60	\ -	\ 60
RP purchased	745,000,000	-	745,000,000
Broker's loan	605,663,407	-	605,663,407
Loans to employees	2,944,648	(68,673)	2,875,975
			<u>3,787,530,34</u>
Loans	3,843,948,015	(56,417,673)	2
Notes discounted	72,300,000	(276,393)	72,023,607
Loans purchased	170,535,303	(7,513,521)	163,021,782
Privately-placed corporate bonds	115,984,636	(466,826)	115,517,810
Payment on behalf of another company	4,399,789	(4,365,996)	33,793
Deferred loan fees	(14,127,616)	-	(14,127,616)
	<u>\ 5,546,648,242</u>	<u>\ (69,109,082)</u>	<u>\ 5,477,539,160</u>
<b>CMA:</b>			
CMA-notes discounted	\ 28,100,000	\ (90,452)	\ 28,009,548
	December 31, 2015		
	Face value	Allowance for possible loan losses	Book value
<b>Loans:</b>			
Call loans	\ 1,424,923	\ -	\ 1,424,923
RP purchased	432,200,000	-	432,200,000
Broker's loan	438,243,473	-	438,243,473
Loans to employees	3,148,248	(69,746)	3,078,502
Loans	3,446,919,425	(117,991,822)	3,328,927,603
Notes discounted	178,300,000	(340,284)	177,959,716
Loans purchased	36,597,083	(6,706,712)	29,890,371
Privately-placed corporate bonds	50,425,997	(1,804,136)	48,621,861
Payment on behalf of another company	7,311,254	(7,266,561)	44,693
Discount present value	-	-	-
Deferred loan fees	(10,544,957)	-	(10,544,957)
	<u>\ 4,584,025,446</u>	<u>\ (134,179,261)</u>	<u>\ 4,449,846,185</u>
<b>CMA:</b>			
CMA-notes discounted	\ 55,000,000	\ (179,751)	\ 54,820,249

**11. Loans and CMA (cont'd)**

**Broker's loans**

The Group provides loans to clients who either make margin transactions for purchasing securities or entrust their investment securities to the Group and records them as credit loans granted and loans secured by securities, respectively. Credit loans granted are secured with the securities purchased by clients and cash in clients' deposit account, which amount to 140~150% of the original loan. When the collateral value is insufficient to secure the loan and its accrued income, the Group requests for additional collateral cash or securities.

In addition, the Group asks for an opening guarantee deposit in connection with brokers' loans and the deposits are recorded as a liability item guarantee deposit received.

Residual maturity of debt securities as of December 31, 2016 and 2015 is as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
No later than 1 year	\ 3,464,093,262	\ 2,950,912,724
After 1 year but no later than 3 years	1,467,605,900	1,336,486,309
After 1 year but no later than 5 years	535,390,270	162,234,607
After 5 years	93,686,426	144,936,764
	<u>\ 5,560,775,858</u>	<u>\ 4,594,570,404</u>

Changes in allowance for possible loan losses for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Beginning balance	\ 134,359,012	\ 128,784,802
Bad debts written off	(56,637,682)	-
Collection of loans written-off in prior periods	535,105	-
Utilized	(15,579,819)	(5,858,864)
Transfer (*)	-	515,824
Unwinding effect	(4,046,832)	(3,660,923)
	58,629,784	119,780,839
Provision for allowance	<u>10,569,750</u>	<u>14,578,173</u>
	<u>\ 69,199,534</u>	<u>\ 134,359,012</u>

(\*) It was the amount transferred from provision to allowance for doubtful accounts, or from allowance for doubtful account to provision for the years ended December 31, 2016 and 2015.

Changes in incidental income or incident expense of deferred loans for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016			Ending balance
	Beginning balance	Income or expense incurred	Depreciation	
Incidental income	\ (11,509,134)	\ (21,405,867)	\ 18,448,010	\ (14,466,991)
Incidental expense	964,176	-	(624,801)	339,375
	<u>\ (10,544,958)</u>	<u>\ (21,405,867)</u>	<u>\ 17,823,209</u>	<u>\ (14,127,616)</u>

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**11. Loans and CMA (cont'd)**

	Year ended December 31, 2015			
	Beginning balance	Income or expense incurred	Depreciation	Ending balance
Incidental income	\ (7,434,236)	\ (17,072,744)	\ 12,997,846	\ (11,509,134)
Incidental expense	2,094,393	19,992	(1,150,209)	964,176
	<u>\ (5,339,843)</u>	<u>\ (17,052,752)</u>	<u>\ 11,847,637</u>	<u>\ (10,544,958)</u>

Gain (loss) related to loans for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Gain on disposal of loans	\ 8,294,777	\ 25,229,847
	8,294,777	25,229,847
Loss on disposal of loans	(782,533)	(181,786)
Provision for doubtful accounts	(10,569,750)	(14,578,173)
	(11,352,283)	(14,759,959)
	<u>\ (3,057,506)</u>	<u>\ 10,469,888</u>

**12. Lease**

Details of lease assets for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016				
	Acquisition cost	Allowance for lease	Accumulated depreciation	Provision for loss on disposal of lease	Book value
Financial lease	\ 264,854,951	\ (4,848,917)	\ -	\ -	\ 260,006,034
Operating lease	-	-	-	-	-
	<u>\ 264,854,951</u>	<u>\ (4,848,917)</u>	<u>\ -</u>	<u>\ -</u>	<u>\ 260,006,034</u>
	Year ended December 31, 2015				
	Acquisition cost	Allowance for lease	Accumulated depreciation	Provision for loss on disposal of lease	Book value
Financial lease	\ 477,850,702	\ (6,315,833)	\ -	\ -	\ 471,534,869
Operating lease	4,548,494	-	(3,396,209)	(22,742)	1,129,543
	<u>\ 482,399,196</u>	<u>\ (6,315,833)</u>	<u>\ (3,396,209)</u>	<u>\ (22,742)</u>	<u>\ 472,664,412</u>

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**12. Lease (cont'd)**

Details of total lease investment and the present value of minimum financial lease as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016		December 31, 2015	
	Total lease investment	Minimum financial lease	Total lease investment	Minimum financial lease
No later than 1 year	\ 156,054,935	\ 150,609,359	\ 225,222,812	\ 217,340,347
After 1 year but no later than 5 years	122,151,516	107,991,354	283,336,542	244,230,717
After 5 years	-	-	-	-
	<u>\ 278,206,451</u>	<u>\ 258,600,713</u>	<u>\ 508,559,354</u>	<u>\ 461,571,064</u>

Unearned interests of financial lease as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Total lease investment	\ 278,206,451	\ 508,559,354
Minimum financial lease	264,854,951	477,850,702
Unearned interest	<u>\ 13,351,500</u>	<u>\ 30,708,652</u>

Unsecured residual value of financial lease as of December 31, 2016 and 2015 is as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
	\ 2,121,148	\ 5,332,986

The estimated future operating lease revenues as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
No later than 1 year	\ -	\ 325,570
	<u>\ -</u>	<u>\ 325,570</u>

Changes in allowance for lease for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Beginning balance	\ 6,315,833	\ 7,105,121
Provision for allowance	-	-
Bad debts written off	(1,211,362)	-
Recovery of amortized bond	21,346	-
Unwinding effect	(222,378)	(141,422)
	<u>4,903,439</u>	<u>6,963,699</u>
Provision for allowance (Reversal of allowance for lease)	<u>(54,522)</u>	<u>(647,866)</u>
	<u>\ 4,848,917</u>	<u>\ 6,315,833</u>

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**12. Lease (cont'd)**

Gain (loss) related to lease for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Interest on financial lease	\ 24,611,914	\ 36,722,966
Commissions on operating lease	325,570	1,002,788
Gain on disposal of lease	2,092,524	1,628,385
Reversal of allowance for doubtful accounts	54,522	647,866
Others	22,742	8,383
	<u>27,107,272</u>	<u>40,010,388</u>
Operating lease depreciation	(242,586)	(747,426)
Lease commission expense	(194,312)	(483,306)
Loss on disposal of lease	(599,249)	(291,663)
Provision for allowance	-	-
Others	(16,125)	(64,642)
	<u>(1,052,272)</u>	<u>(1,587,037)</u>
	<u>\ 26,055,000</u>	<u>\ 38,423,351</u>

**13. Property and equipment**

Details of property and equipment as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016		
	Acquisition cost	Accumulated depreciation	Book value
Land	\ 59,306,738	\ -	\ 59,306,738
Buildings	39,081,619	(9,273,590)	29,808,029
Vehicles	122,925	(42,605)	80,320
Furniture and fixtures	60,407,262	(50,548,100)	9,859,162
Others	591,421	-	591,421
	<u>\ 159,509,965</u>	<u>\ (59,864,295)</u>	<u>\ 99,645,670</u>
	December 31, 2015		
	Acquisition cost	Accumulated depreciation	Book value
Land	\ 59,272,919	\ -	\ 59,272,919
Buildings	38,697,660	(8,008,532)	30,689,128
Vehicles	552,635	(308,215)	244,420
Furniture and fixtures	66,123,566	(55,621,581)	10,501,985
Others	591,421	-	591,421
	<u>\ 165,238,201</u>	<u>\ (63,938,328)</u>	<u>\ 101,299,873</u>

**Meritz Securities Co., Ltd. and its subsidiaries**  
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**December 31, 2016 and 2015**

**13. Property and equipment (cont'd)**

Changes in property and equipment for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016						Ending balance
	Beginning balance	Addition (*1)	Disposal	Depreciation	Transfer (*2)	Other	
Land	\ 59,272,919	\ -	\ (35,000)	\ -	\ 68,819	\ -	\ 59,306,738
Buildings	30,689,128	-	(10,849)	(957,708)	87,458	-	29,808,029
Vehicles	244,420	89,658	(206,578)	(47,180)	-	-	80,320
Furniture and fixture	10,501,985	4,118,151	(275,035)	(4,485,939)	-	-	9,859,162
Others	591,421	-	-	-	-	-	591,421
	\ 101,299,873	\ 4,207,809	\ (527,462)	\ (5,490,827)	\ 156,277	\ -	\ 99,645,670

(\*1) ₩372,701 thousand of tangible assets based on the recognition of provision for restoration cost are included in the acquisition of furniture and fixtures.

(\*2) Land and buildings are replaced with investment properties based on the change in rental rate.

	Year ended December 31, 2015						Ending balance
	Beginning balance	Addition (*1)	Disposal	Depreciation	Transfer (*2)	Other	
Land	\ 60,756,336	\ -	\ -	\ -	\ (1,483,417)	\ -	\ 59,272,919
Buildings	33,027,336	-	-	(999,548)	(1,338,660)	-	30,689,128
Vehicles	261,586	-	-	(113,109)	95,943	-	244,420
Furniture and fixture	8,545,041	5,642,644	(24,638)	(4,158,467)	-	497,405	10,501,985
Others	1,368,403	18,973	-	(292,128)	-	(503,827)	591,421
	\ 103,958,702	\ 5,661,617	\ (24,638)	\ (5,563,252)	\ (2,726,134)	\ (6,422)	\ 101,299,873

(\*1) ₩390,304 thousand of tangible assets based on the recognition of provision for restoration cost are included in the acquisition of furniture and fixtures.

(\*2) Land and buildings are replaced with investment properties based on the change in rental rate and the increase in vehicle is the amount that was replaced with finance lease receivables due to the early cancellation of the finance lease vehicles.

Insured tangible assets as of December 31, 2015 are as follows (Korean won in thousands):

Insurance	Insured asset	Insurance company	Insurance coverage
Property insurance	Buildings, etc.	Meritz Fire & Marine Insurance Co., Ltd., etc.	\ 66,608,872
Data processing equipment insurance	Data processing equipment, etc.	Meritz Fire & Marine Insurance Co., Ltd.	2,119,660
Automobile insurance	Vehicles	Meritz Fire & Marine Insurance Co., Ltd.	347,030
			\ 69,075,562

**14. Investment property**

Details of investment property as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016		
	Acquisition cost	Accumulated depreciation	Book value
Land	\ 12,489,782	\ -	\ 12,489,782
Buildings	14,976,426	(6,302,857)	8,673,569
	\ 27,466,208	\ (6,302,857)	\ 21,163,351

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**14. Investment property (cont'd)**

	December 31, 2015		
	Acquisition cost	Accumulated depreciation	Book value
Land	\ 19,360,454	\ -	\ 19,360,454
Buildings	16,995,058	(6,303,224)	10,691,834
	<u>\ 36,355,512</u>	<u>\ (6,303,224)</u>	<u>\ 30,052,288</u>

Changes in the net carrying amount of investment properties for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016				
	Beginning balance	Acquisition	Depreciation	Transfer (*)	Ending Balance
Land	\ 19,360,454	\ (6,801,853)	\ -	\ (68,819)	\ 12,489,782
Buildings:					
Acquisition cost	16,995,058	(1,614,198)	-	(404,434)	14,976,426
Accumulated depreciation	(6,303,224)	84,073	(400,682)	316,976	(6,302,857)
	<u>\ 30,052,288</u>	<u>\ (8,331,978)</u>	<u>\ (400,682)</u>	<u>\ (156,277)</u>	<u>\ 21,163,351</u>

	Year ended December 31, 2015				
	Beginning balance	Acquisition	Depreciation	Transfer (*)	Ending Balance
Land	\ 17,877,037	\ -	\ -	\ 1,483,417	\ 19,360,454
Buildings:					
Acquisition cost	14,410,398	-	-	2,584,660	16,995,058
Accumulated depreciation	(4,664,454)	-	(392,770)	(1,246,000)	(6,303,224)
	<u>\ 27,622,981</u>	<u>\ -</u>	<u>\ (392,770)</u>	<u>\ 2,822,077</u>	<u>\ 30,052,288</u>

(\*) Transferred from property and equipment, according to the change in rental ratio.

The fair value of the land and buildings provided by an independent property appraisal firm is amounted to \14,244,928 thousand and \10,818,375 thousand as of December 31, 2016 and 2015, respectively.

The rental income and depreciation arising from the Group's investment properties for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Rental income	\ 1,525,158	\ 1,480,426
Depreciation	(400,682)	(392,770)



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**15. Intangible assets**

Intangible assets as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016			
	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value
Software	\ 45,216,379	\ (37,230,508)	\ -	\ 7,985,871
Membership	15,851,273	-	(4,179,625)	11,671,648
Others	16,396,015	(339,600)	-	16,056,415
	<u>\ 77,463,667</u>	<u>\ (37,570,108)</u>	<u>\ (4,179,625)</u>	<u>\ 35,713,934</u>

  

	December 31, 2015			
	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book value
Software	\ 43,034,773	\ (30,291,018)	\ -	\ 12,743,755
Membership	15,946,156	-	(4,464,625)	11,481,531
Others	16,396,015	(169,800)	-	16,226,215
	<u>\ 75,376,944</u>	<u>\ (30,460,818)</u>	<u>\ (4,464,625)</u>	<u>\ 40,451,501</u>

Changes in carrying amounts of intangible assets for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016					
	Beginning balance	Addition	Decrease	Amortization	Others	Ending balance
Software	\ 12,743,755	\ 2,181,606	\ -	\ (6,939,490)	\ -	\ 7,985,871
Membership	11,481,531	2,120,819	(1,930,702)	-	-	11,671,648
Others	16,226,215	-	-	(169,800)	-	16,056,415
	<u>\ 40,451,501</u>	<u>\ 4,302,425</u>	<u>\ (1,930,702)</u>	<u>\ (7,109,290)</u>	<u>\ -</u>	<u>\ 35,713,934</u>

  

	Year ended December 31, 2015					
	Beginning balance	Addition	Amortization	Impairment loss (*)	Others	Ending balance
Software	\ 16,401,527	\ 1,624,688	\ (6,596,344)	\ -	\ 1,313,884	\ 12,743,755
Membership	14,006,320	40,880	-	(2,565,669)	-	11,481,531
Others	18,005,713	119,680	(591,716)	-	(1,307,462)	16,226,215
	<u>\ 48,413,560</u>	<u>\ 1,785,248</u>	<u>\ (7,188,060)</u>	<u>\ (2,565,669)</u>	<u>\ 6,422</u>	<u>\ 40,451,501</u>

(\*) Impairment loss was recognized due to a significant decrease in recoverable amount of membership for the year ended December 31, 2015.

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**16. Other assets**

Other assets as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Receivable from proprietary trading	\ 240,257,668	\ 28,188,124
Receivable from trading on consignment	87,922,838	77,661,415
Other receivable	26,723,951	49,467,371
Accrued income	80,870,284	38,319,211
Guarantee deposits	7,074,919	6,016,181
Unsettled spot exchange	46,659,606	107,821,400
Unsettled difference	861,411	2,404,554
Allowance for possible losses	(3,553,525)	(4,696,672)
Present value discount	(301,750)	(326,738)
	<u>\ 486,515,402</u>	<u>\ 304,854,846</u>
Advanced payment	95,106,092	28,742,687
Prepaid expenses	22,421,431	22,781,047
Others	2,098,633	1,752,883
	<u>\ 119,626,156</u>	<u>\ 53,276,617</u>
	<u>\ 606,141,558</u>	<u>\ 358,131,463</u>

Changes in allowance for other assets for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Beginning balance	\ 4,696,672	\ 4,677,667
Bad debt written-off	(1,340,697)	-
Recovery of amortized bond	50	-
Business combination	-	-
Provision for (reversal of) allowance	197,500	19,005
	<u>\ 3,553,525</u>	<u>\ 4,696,672</u>

**17. Deposits**

Deposits as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Customers' claims on deposits	\ 319,674,249	\ 323,290,631
Guarantee deposit for customers' security trading	-	283,000
Leasehold deposits provided	104,057,434	158,133,067
CMA deposits	14,878,546	47,984,195
Notes payable	2,669,376,108	2,947,535,124
Others	2,042,775	1,333,937
	<u>\ 3,110,029,112</u>	<u>\ 3,478,559,954</u>
Discounted present value	(7,210,292)	(14,689,113)
	<u>\ 3,102,818,820</u>	<u>\ 3,463,870,841</u>

## 18. Financial liabilities fair value through profit or loss

Financial liabilities at fair value through profit or loss as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Book value (fair value)	
	December 31, 2016	December 31, 2015
Financial liabilities held-for-trading:		
Stock	\ 190,198,715	\ 79,764,851
Bonds:	1,135,551,151	
Government bonds	542,038,960	490,643,123
Special purpose bonds	-	-
Others	828,935	1,291,137
	\ 1,868,617,761	\ 571,699,111
Derivatives liabilities held-for-trading:		
Interest	57,898,596	114,940,846
Currency	30,734,971	13,332,353
Stock	8,878,608	2,158,373
Stock index	358,335	25,167
Others	5,334,373	4,047,279
Credit risk adjustments	(141,305)	(166,656)
Deferred Day1 profit or loss adjustments	92,922	-
	\ 103,156,500	\ 134,337,362
Financial liabilities designated at fair value through profit or loss:		
Equity linked securities sold (*)	38,669,005	86,618,863
Derivative linked securities sold (*)	603,015,306	404,798,971
Others	13,253,118	-
Credit risk value adjustments	(817,716)	(603,324)
Deferred day 1 profit or loss adjustments	309,972	(21,684)
	\ 654,429,685	\ 490,792,826
	\ 2,626,203,946	\ 1,196,829,299

(\*) The Group designates equity linked securities sold and derivative linked securities sold as financial liability at fair value through profit or loss without separating embedded derivative from the host contract.

## 19. Borrowings

Borrowings as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Lender	Interest rate (%)	December 31, 2016	December 31, 2015
Commercial paper	KTB Investment & Securities and others	1.46~1.63	\ 430,100,000	\ 80,000,000
Commercial Paper (ABCP)		1.85~6.00	882,200,000	642,900,000
Asset backed short-term bonds	KTB Investment & Securities and others	1.42~1.83	1,111,500,000	859,100,000
Repurchase agreements sold	Woori Bank and others	1.15~1.60	5,351,618,732	5,324,808,245
Borrowing from KSFC	Korea securities Finance Corporation ("KSFC")	1.35~1.68	625,000,000	100,000,000
Others (*)	Meritz Fire & Marine Insurance Co., Ltd.	5.00~6.50	294,190,141	78,250,000
			\ 8,694,608,873	\ 7,085,058,245

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**19. Borrowings (cont'd)**

(\*) \209,190 million and \78,250 million that subsidiaries borrowed from Meritz Fire & Marine Insurance Co., Ltd. and Meritz Capital Co., Ltd. as of December 31, 2016 and 2015, respectively, are included.

Debentures as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Interest rate (%)	Date of issue	Maturity	December 31, 2016	December 31, 2015
Unwarranted subordinated debentures	6.20	2011.08.18	2017.02.18	\ 10,100,000	\ 10,100,000
Unwarranted subordinated debentures	5.44	2012.06.28	2017.12.28	30,000,000	30,000,000
Unwarranted subordinated debentures	5.74	2012.06.28	2019.06.28	70,000,000	70,000,000
Unwarranted subordinated debentures	4.26	2013.03.29	2018.09.29	40,000,000	40,000,000
Unwarranted subordinated debentures	4.66	2013.03.29	2020.03.29	50,000,000	50,000,000
Unwarranted subordinated debentures	4.02	2014.11.25	2020.05.25	80,000,000	80,000,000
Discount on debenture issued				(143,580)	(201,400)
				<u>\ 279,956,420</u>	<u>\ 279,898,600</u>

**20. Provisions**

Provisions as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Reserve for rehabilitation	\ 1,364,582	\ 1,040,217
Provision for possible losses from lawsuits	8,821,677	5,825,349
	<u>\ 10,186,259</u>	<u>\ 6,865,566</u>

Changes in provision for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016					
	Beginning balance	Addition (*1)	Provision (Reversal)	Use	Transfer	Ending balance
Reserve for rehabilitation	\ 1,040,217	\ 372,701	\ 10,282	\ (58,618)	\ -	\ 1,364,582
Provision for possible losses from lawsuits	5,825,349	-	3,711,332	(715,004)	-	8,821,677
	<u>\ 6,865,566</u>	<u>\ 372,701</u>	<u>\ 3,721,614</u>	<u>\ (773,622)</u>	<u>\ -</u>	<u>\ 10,186,259</u>
	Year ended December 31, 2015					
	Beginning balance	Addition (*1)	Provision (Reversal)	Use	Transfer (*2)	Ending balance
Reserve for rehabilitation	\ 654,514	\ 390,304	\ 20,970	\ (25,571)	\ -	\ 1,040,217
Provision for possible losses from lawsuits	6,634,366	-	(199,193)	(94,000)	(515,824)	5,825,349
	<u>\ 7,288,880</u>	<u>\ 390,304</u>	<u>\ (178,223)</u>	<u>\ (119,571)</u>	<u>\ (515,824)</u>	<u>\ 6,865,566</u>

(\*1) This is the amount for tangible assets based on the recognition of provision for restoration cost.

(\*2) Transfers to allowance for advance for customers in allowance for possible loan losses.

**21. Defined benefit liabilities**

Defined benefit liabilities as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Present value of defined benefit liabilities	\ 13,103,654	\ 10,660,762
Fair value of plan assets	(10,475,505)	(9,154,133)
Defined benefit obligation	<u>\ 2,628,149</u>	<u>\ 1,506,629</u>

**21. Defined benefit liabilities (cont'd)**

Changes in defined benefit liabilities for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Beginning balance	\ 10,660,762	\ 10,009,524
Current service cost	4,347,293	4,211,341
Loss on merger	-	237,547
Interest expense	229,454	169,443
Re-measurement:		
Experience adjustments	(81,152)	118,101
Actuarial changes arising from changes in demographic assumptions	4,092	259,543
Actuarial changes arising from changes in financial assumptions	76,285	26,551
Payment	(2,133,080)	(4,385,921)
Other	-	14,633
Ending balance	<u>\ 13,103,654</u>	<u>\ 10,660,762</u>

Changes in plan assets for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Beginning balance	\ 9,154,133	\ 5,633,608
Expected return on plan assets	194,180	108,001
Re-measurement:		
Interest income from plan assets (Excluding the amount included in the interest income above)	(49,504)	782
Contributions by employer	3,502,939	4,655,481
Payment	(2,326,243)	(1,258,372)
Other	-	14,633
Ending balance	<u>\ 10,475,505</u>	<u>\ 9,154,133</u>

Changes in remeasured element of defined benefit liabilities for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Beginning balance	\ (626,265)	\ (284,582)
Re-measurement on defined benefit liabilities	775	(404,195)
Re-measurement on plan assets	(49,504)	782
Income tax effect	11,729	109,481
Non-controlling interest	-	(47,751)
Ending balance	<u>\ (663,265)</u>	<u>\ (626,265)</u>

**21. Defined benefit liabilities (cont'd)**

The details of defined benefit liabilities for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Current service cost	\ 4,347,293	\ 4,448,888
Interest expense, net	35,274	61,442
Defined benefit of severance payment	\ 4,382,567	\ 4,510,330

The principal actuarial assumptions as of December 31, 2016 and 2015 are as follows :

	December 31, 2016	December 31, 2015
Discount rate	2.25%	2.36%
Expected return ratio on plan assets	2.25%	2.36%
Future ratio of salary increase	2.00%	2.00%
Mortality rate	0.004% ~ 0.067%	0.002% ~ 0.067%

Sensitivity analysis for actuarial assumptions in defined benefit liabilities as of December 31, 2015 is as follows (Korean won in thousands):

	December 31, 2016	1% Increase	1% Decrease
Fluctuation of future salary	\ 13,103,654	13,840,779	12,429,185
Fluctuation of discount rate	\ 13,103,654	12,438,297	13,844,723

The details of plan assets as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Deposits, etc.	\ 3,842,081	\ 2,981,187
Equity	7,266	4,595
Bonds	1,749,906	2,070,500
Collective investment securities	132,427	3,765,541
Financial assets in foreign currency	271,930	65,061
Others	4,471,895	267,249
	\ 10,475,505	\ 9,154,133

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**22. Other liabilities**

Details of other liabilities as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Other financial liabilities:		
Account payable for proprietary trading	\ 17,457,194	\ 9,626,878
Account payable for trading on consignment	86,986,180	76,110,848
Accounts payables	17,014,540	13,357,937
Accrued expense payables	246,759,356	218,570,448
Accrued dividend	120,235	127,107
Leasehold deposits received	4,071,940	4,115,400
Unsettled spot exchange	46,667,720	107,822,900
Unsettled difference	3,872,015	1,716,067
Redeemable equity for non-controlling shareholders	39,912,458	25,573,417
	<u>462,861,638</u>	<u>457,021,002</u>
Other non-financial liabilities:		
Advance receipts	65,222,295	5,579,525
Unearned income	105,561,878	98,196,630
Withholding tax	8,481,018	12,827,565
Others	16,006,933	26,395,663
	<u>195,272,124</u>	<u>142,999,383</u>
	<u>\ 658,133,762</u>	<u>\ 600,020,385</u>

**23. Derivative instruments**

The Group uses derivative financial instruments such as interest rate swaps to exchange interest rate cash flows, currency swaps to hedge against exchange rate fluctuations, stock index options or stock index futures to make a profit and other derivative instruments.

Notional amount outstanding of derivatives, derivative assets and liabilities as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016		
	Notional amount	Asset	Liability
Exchange-traded derivatives:			
Interest rates:			
Interest futures	\ 864,493,279	\ 184,821	\ 311,718
Interest option purchased	-		
Interest option sold	291,490	529	-
Currency:			
Currency futures	26,431,212	23,799	16,047
Currency option purchased	-	-	
Currency option sold	-	-	
Stock :			
Stock futures	697,220,362	47,330	17,891
Stock option purchased	91,124,495	8,230,229	-
Stock option sold	89,740,662	-	362,581





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**23. Derivative instruments (cont'd)**

	December 31, 2015		
	Notional amount	Asset	Liability
Exchange-traded derivatives:			
Commodity:			
Commodity futures	\ 9,305,716 \	\ 144,039 \	\ 220,819
Commodity option purchased	4,341,088	7,032	-
Commodity option sold	79,876,019	-	1,154,420
	<u>2,753,403,276</u>	<u>6,691,703</u>	<u>1,598,584</u>
Over-the-counter derivatives:			
Interest rates:			
Interest rate swap	75,812,383,000	111,906,732	113,354,688
Interest rate option sold	10,000,000	-	1,271,169
Currency:			
Currency forward	943,534,631	31,181,516	13,312,350
Currency swap	-	-	-
Currency option	-	-	-
Stock:			
Options purchased	32,814,879	3,595,325	-
Options sold	4,281,009	-	2,102,368
Stock swap	305,844	-	26,896
Credit:			
CDS	60,000,000	2,756,709	-
Others:			
Other swap	70,548,389	5,732,111	2,645,167
Options purchased	24,721,000	119,914	-
Options sold	5,000,000	-	26,140
	<u>76,963,588,752</u>	<u>155,292,307</u>	<u>132,738,778</u>
	<u>\ 79,716,992,028 \</u>	<u>\ 161,984,010 \</u>	<u>\ 134,337,362 \</u>

Gain (loss) on valuation of trading derivative financial instruments for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Exchange-traded derivatives:		
Interest rates	\ (769,013) \	\ (2,486,630) \
Currency	(395,491)	68,330
Stock	192,507	735,685
Stock index	(7,456,394)	913,113
Others	3,845,419	(282,715)
	<u>(4,582,972)</u>	<u>(1,052,217)</u>
Over-the-counter derivatives:		
Interest rates	15,159,898	2,168,908
Currency	(2,754,849)	17,947,113
Stock	12,330,904	(4,216,881)
Credit	(684,905)	(330,812)
Others	(1,296,795)	5,772,337
	<u>22,754,253</u>	<u>21,340,665</u>
	<u>\ 18,171,281 \</u>	<u>\ 20,288,448 \</u>

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**24. Capital stock**

The Group is authorized to issue 1,000,000,000 shares of common stock and has 496,638,534 shares issued and outstanding in the amount of ₩496,638,534 thousand as of December 31, 2015.

Changes in capital stock for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands, thousand stocks):

Year ended December 31, 2016	<u>Issued shares</u>	<u>Capital stock</u>
January 1, 2016	496,638,534	₩ 496,638,534
Rights issued	-	-
Issuance of stock upon merger	-	-
Issuance of capital stock	-	-
	<u>496,638,534</u>	<u>₩ 496,638,534</u>
	<u>496,638,534</u>	<u>₩ 496,638,534</u>
Year ended December 31, 2015	<u>Issued shares</u>	<u>Capital stock</u>
January 1, 2015	311,782,377	₩ 311,782,377
Rights issued	50,000	50,000
Issuance of stock upon merger	66,811,951	66,811,951
Issuance of capital stock	117,994,206	117,994,206
	<u>496,638,534</u>	<u>₩ 496,638,534</u>
December 31, 2015	<u>496,638,534</u>	<u>₩ 496,638,534</u>

**25. Other capital**

Other capital as of December 31, 2016 and 2015 consist of the following (Korean won in thousands):

	<u>December 31, 2016</u>	<u>December 31, 2015</u>
Paid in capital in excess of par value	₩ 556,127,022	₩ 556,127,022
Gain on disposal of treasury stock	3,456,342	3,456,342
Others (*)	1,961,311	1,961,311
Treasury stock	(9,711,997)	(9,711,997)
Stock options (*)	1,318,796	583,499
	<u>₩ 553,151,474</u>	<u>₩ 552,416,177</u>

(\*) See share-based payment transaction (Note 26)

**Meritz Securities Co., Ltd. and its subsidiaries**  
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**25. Other capital (cont'd)**

Changes in other capital for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Beginning balance	\ 552,416,177	\ 111,625,897
Acquisition of treasury stock	-	(3,744)
Allocated expense of share based payment	735,297	583,499
Increase of stock issued upon merger	-	144,828,870
Issuance of capital stock	-	295,366,946
Executed stock options:		
Stock options	-	(20,591)
Issued capital in excess of par value	-	36,091
Costs of the issue	-	(791)
	<u>\ 553,151,474</u>	<u>\ 552,416,177</u>

**26. Share-based payment transaction**

The Group granted stock options based on general meeting's special decision. in accordance with commercial law and relative laws.

The details of stock options granted by the Group as of December 31, 2016 are summarized as follows (Korean won and number of shares):

Stock options granted	4,900,000	2,900,000
Settlement date	2005.12.01	2015.03.20
Settlement method	(*1)	(*1)
Exercise price (*5)	₩ 1,310	₩ 4,380
Exercisable period	(*2)	(*3)
Forfeiture period	(*4)	(*4)

(\*1) Option holder can select either cash-settled method or equity-settled method at the time of exercise.

(\*2) Exercisable within 10 years after the settlement date.

(\*3) Exercisable within 4 years after the settlement date.

(\*4) Stock options will be forfeited, if not exercised, within the exercisable period.

(\*5) The exercise price of stock option granted in this year was adjusted from ₩4,710 due to issuance of capital stock.

Changes in stock options granted during the years ended December 31, 2016 and 2015 are summarized as follows (number of shares in units):

	Number of stock options
January 1, 2016	2,900,000
Number of options granted	-
Number of options decreased	-
December 31, 2016	<u>2,900,000</u>

**26. Share-based payment transaction (cont'd)**

	Number of stock options
January 1, 2015	50,000
Number of options granted	2,900,000
Number of options decreased	(50,000)
December 31, 2015	<u>2,900,000</u>

Fair value of stock option granted by the Group and related information are as follows.

Stock option granted by the Group is evaluated by using binomial model of option pricing model, and major inputs of evaluation model are as follows.

Date (*1)	2015.03.20	2015.08.17
Risk free rate	2.10%	2.12%
Expected exercise period	3.6 years	3.6 years
Estimated share volatility (*2)	19.96%	24.43%
Estimated dividend rate	4.83%	4.90%

(\*1) The exercise price was adjusted on August 17, 2015 when the issue price was determined. This date is a key variable for calculating the increase in fair value. The increment was ₩310 million which will be treated as an expensed over residual period.

(\*2) The estimated share volatility is assessed based on equity volatility for the past 5 years.

The Group recorded ₩3,402,323 thousand as other capital at the reporting date (₩ 2,667,026 thousand at the end of the prior year). And the Group has accounted for share-based payment (₩735,298 thousand) as sales and administrative expense for the year ended December 31, 2016.

The Group recognizes an incentive for certain executives as an expense in the period services are received, while it implements the payment method by connecting with daily average stock price and pays in cash. In this cash-settled share-based payment transactions, the Group recognizes the liability incurred and measures the liability at fair value at each reporting date. Any changes in fair value are recognized as profit or loss. For the fair value of liability, Monte Carlo Simulation is utilized by using stock price prediction method.

Details of the cash-settled share-based payments for the year ended December 31, 2016 are as follows (Korean won in thousands):

Book value	Before fair value assessment	Variation of fair value	Intrinsic value of liability
\ 38,527,735 \	\ 39,691,473 \	\ (1,163,738) \	\ 38,469,840 \

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**27. Accumulated other comprehensive income**

Accumulated other comprehensive income as of December 31, 2016 and 2015 consist of the following (Korean won in thousands):

	December 31, 2016	December 31, 2015
Gain on valuation of available-for-sale financial assets:		
Stock	\ 100,108,534	\ 84,456,201
Bonds	8,024,308	4,817,402
Collective investment securities	(5,334,018)	2,326,431
Commercial paper	212,718	15,332
Foreign currency securities	381,840	-
Income tax effect	(24,903,648)	(22,096,409)
	<u>78,489,734</u>	<u>69,518,957</u>
Capital change in equity method		
Capital change in equity method	718,852	-
Income tax effect	(173,028)	-
	<u>545,824</u>	<u>-</u>
Gain (loss) on effect of foreign currency translation		
Gain (loss) on effect of foreign currency translation	-	13,877
Income tax effect	-	(3,335)
	<u>-</u>	<u>10,542</u>
Remeasurement of the defined benefit liability:		
Actuarial loss	(825,788)	(777,060)
Income tax effect	210,276	198,547
	<u>(615,512)</u>	<u>(578,513)</u>
Non-controlling interest	<u>(587,609)</u>	<u>(587,222)</u>
	<u>\ 79,007,655</u>	<u>\ 69,538,208</u>

**28. Retained earnings**

Retained earnings as of December 31, 2016 and 2015 consist of the following (Korean won in thousands):

	December 31, 2016	December 31, 2015
Legal reserve	\ 36,979,394	\ 26,048,847
Reserve for possible loan losses	12,276,239	17,742,597
Voluntary reserves	42,466,457	42,466,457
Unappropriated retained earnings	<u>657,790,477</u>	<u>513,713,429</u>
	<u>\ 749,512,567</u>	<u>\ 599,971,330</u>

Changes in unappropriated retained earnings for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

**28. Retained earnings (cont'd)**

	December 31, 2016	December 31, 2015
Beginning balance	\ 513,713,429	\ 268,203,020
Reserve for possible loan losses	5,466,358	(1,886,205)
Cash dividends	(104,305,466)	(44,309,444)
Reserve of legal reserve	(10,930,547)	(4,430,944)
Net income of non-controlling interests	253,846,703	296,137,002
Ending balance	<u>\ 657,790,477</u>	<u>\ 513,713,429</u>

In case total sum of allowance for possible loan losses does not meet the amount prescribed in the Regulations 3-8 on Financial Investment Business, the Group is required to compensate the difference, if any, at the reporting date as a regulatory reserve for possible loan losses. In case the amount of existing regulatory reserve for possible loan losses exceeds the amount needed to be laid aside as at the current period, the difference, if any, shall be reversed. If there is an undisposed deficit, the Group can accumulate reserves for possible loan losses after disposing the deficit.

Changes in regulatory reserve for possible loan losses the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Appropriated regulatory reserve for possible loan losses	\ 12,276,239	\ 17,742,597
Planned provision of regulatory reserve for possible loan losses	11,399,590	(5,466,358)
Ending of regulatory reserve for possible loan losses	<u>\ 23,675,829</u>	<u>\ 12,276,239</u>

Provision of regulatory reserve for possible loan losses and adjusting income after the provision of regulatory reserve for possible loan losses for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Net income	\ 253,846,703	\ 287,336,735
Planned provision of regulatory reserve for possible loan losses	(11,399,590)	5,466,358
Adjusted income after provision of regulatory reserve for possible loan losses (*)	\ 242,447,113	\ 292,803,093
Earnings per share	535	803

(\*) Adjusted income after provision of regulatory reserve for possible loan losses is hypothetical amount not accorded with KIFRS. The amount was calculated by adding (deducting) provision from net income.

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**29. Net fees and commission income**

Net fees and commission income for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Fees and commission income:		
Brokerage commissions	\ 72,990,925	\ 93,233,704
Underwriting commissions	26,514,261	24,851,328
Brokerage commissions on collective investment securities	4,580,330	4,940,264
Management fees on wrap account and asset management	1,357,714	1,634,154
Finance commissions	135,102,720	157,460,226
Fees on trust accounts	3,116,893	4,517,970
Commissions on CMA	107,901	130,577
Others	99,503,096	59,972,719
	<u>343,273,840</u>	<u>346,740,942</u>
Fees and commission expense:		
Trading commissions	(5,742,417)	(6,960,931)
Lending and borrowing transaction commissions	(10,365,901)	(6,736,742)
Others	(13,584,703)	(7,594,728)
	<u>(29,693,021)</u>	<u>(21,292,401)</u>
	<u>\ 313,580,819</u>	<u>\ 325,448,541</u>

**30. Gain (loss) on financial assets and liabilities**

Gain (loss) on financial assets does not include interest income and dividends income. Interest income and dividends income are disclosed separately in Notes 31 and 33, respectively

Gain (loss) on financial assets and liabilities held-for-trading for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016				Net gain (loss)
	Gain on disposal	Loss on disposal	Gain on valuation	Loss on valuation	
Financial assets held-for-trading:					
Stock	\ 70,566,564	\ (68,273,756)	\ 6,222,958	\ (3,855,013)	\ 4,660,753
Bonds	138,940,350	(182,919,134)	10,340,680	(39,172,280)	(72,810,384)
Collective investment securities	63,461,085	(62,438,398)	3,726,265	(2,309,550)	2,439,402
Commercial paper	25,845,397	(1,635,064)	450,432	(95,352)	24,565,413
Asset backed short-term bonds	13,751,541	(81,152)	78,198	-	13,748,587
	<u>312,564,937</u>	<u>(315,347,504)</u>	<u>20,818,533</u>	<u>(45,432,195)</u>	<u>(27,396,229)</u>
Financial liabilities held-for-trading:					
Securities sold	49,925,948	(56,596,008)	5,393,119	(2,794,032)	(4,070,973)
Bonds sold	80,110,205	(44,768,525)	3,441,434	(2,635,957)	36,147,157
Collective investment securities sold	98,026	(57,064)	-	(12,133)	28,829
	<u>130,134,179</u>	<u>(101,421,597)</u>	<u>8,834,553</u>	<u>(5,442,122)</u>	<u>32,105,013</u>
	<u>\ 442,699,116</u>	<u>\ (416,769,101)</u>	<u>\ 29,653,086</u>	<u>\ (50,874,317)</u>	<u>\ 4,708,784</u>

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**30. Gain (loss) on financial assets and liabilities (cont'd)**

	Year ended December 31, 2015				Net gain (loss)
	Gain on disposal	Loss on disposal	Gain on valuation	Loss on valuation	
Financial assets held-for-trading:					
Stock	\ 64,945,746	\ (45,306,762)	\ 3,526,076	\ (5,402,113)	\ 17,762,947
Bonds	120,448,364	(100,920,000)	3,691,372	(4,264,163)	18,955,573
Collective investment securities	54,505,050	(48,802,472)	1,855,580	(2,059,669)	5,498,489
Commercial paper	28,891,633	(1,300,463)	924,380	(57,778)	28,457,772
Asset backed short-term bonds	10,158,526	(70,771)	36,864	-	10,124,619
	<u>278,949,319</u>	<u>(196,400,468)</u>	<u>10,034,272</u>	<u>(11,783,723)</u>	<u>80,799,400</u>
Financial liabilities held-for-trading:					
Securities sold	76,682,509	(45,509,360)	3,729,924	(2,424,488)	32,478,585
Bonds sold	19,648,245	(43,985,175)	28,166	(2,535,415)	(26,844,179)
Collective investment securities sold	138,121	(1,142)	26,819	-	163,798
	<u>96,468,875</u>	<u>(89,495,677)</u>	<u>3,784,909</u>	<u>(4,959,903)</u>	<u>5,798,204</u>
	<u>\ 375,418,194</u>	<u>\ (285,896,145)</u>	<u>\ 13,819,181</u>	<u>\ (16,743,626)</u>	<u>\ 86,597,604</u>

Gain (loss) on financial assets and liabilities designated at fair value through profit or loss for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016				Net gain (loss)
	Gain on disposal	Loss on Disposal	Gain on valuation	Loss on valuation	
Financial assets designated at fair value through profit or loss:					
Equity linked securities	\ 35,388	\ (201)	\ 616,795	\ -	\ 651,982
Derivatives linked securities	40,268	(1,688)	-	-	38,580
Reserve for claims of customers' deposits (trust)	-	-	4,602,561	-	4,602,561
Others	1,177,584	-	466,679	(6,397,183)	(4,752,920)
	<u>1,253,240</u>	<u>(1,889)</u>	<u>5,686,035</u>	<u>(6,397,183)</u>	<u>540,203</u>
Financial assets designated at fair value through profit or loss:					
Equity linked securities sold	26,195	(1,230,853)	13,014	(1,186,711)	(2,378,355)
Derivative linked securities sold	3,219	(5,193,876)	509,257	(6,821,513)	(11,502,913)
Others	-	-	-	(601,635)	(601,635)
	<u>29,414</u>	<u>(6,424,729)</u>	<u>522,271</u>	<u>(8,609,859)</u>	<u>(14,482,903)</u>
	<u>\ 1,282,654</u>	<u>\ (6,426,618)</u>	<u>\ 6,208,306</u>	<u>\ (15,007,042)</u>	<u>\ (13,942,700)</u>



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**30. Gain (loss) on financial assets and liabilities (cont'd)**

	Year ended December 31, 2015				
	Gain on disposal	Loss on disposal	Gain on valuation	Loss on valuation	Net gain (loss)
Financial assets designated at fair value through profit or loss:					
Equity linked securities	75,736	-	7,852	(571,828)	(488,240)
Derivatives linked securities	71,796	(5,910)	5,724	(218,873)	(147,263)
Reserve for claims of customers' deposits (trust)	-	-	4,304,673	-	4,304,673
Others	-	(66,692)	2,639,864	(9,930)	2,563,242
	<u>147,532</u>	<u>(72,602)</u>	<u>6,958,113</u>	<u>(800,631)</u>	<u>6,232,412</u>
Financial assets designated at fair value through profit or loss:					
Equity linked securities sold	10,299	(989,399)	1,025,198	(486,154)	(440,056)
Derivative linked securities sold	82,084	(4,999,802)	717,848	(1,664,353)	(5,864,223)
	<u>92,383</u>	<u>(5,989,201)</u>	<u>1,743,046</u>	<u>(2,150,507)</u>	<u>(6,304,279)</u>
	<u>\ 239,915</u>	<u>\ (6,061,803)</u>	<u>\ 8,701,159</u>	<u>\ (2,951,138)</u>	<u>\ (71,867)</u>

Gain (loss) on available-for-sale financial assets for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016			
	Gain on disposal	Loss on disposal	Impairment loss	Net gain (loss)
Stock	\ 4,981,670	\ (9,777,396)	\ (1,405,897)	\ (6,201,623)
Bonds	7,763,618	(1,247,976)	-	6,515,642
Collective investment securities	5,928,751	(904,483)	(293)	5,023,975
Others	24,537	-	-	24,537
	<u>\ 18,698,576</u>	<u>\ (11,929,855)</u>	<u>\ (1,406,190)</u>	<u>\ 5,362,531</u>
	Year ended December 31, 2015			
	Gain on disposal	Loss on disposal	Impairment loss	Net gain (loss)
Stock	\ 68,616,066	\ (131,808)	\ (666,096)	\ 67,818,162
Bonds	107,094	-	(509,518)	(402,424)
Collective investment securities	1,262,495	(1,063,602)	(21)	198,872
Others	3,228,844	(253,487)	-	2,975,357
	<u>\ 73,214,499</u>	<u>\ (1,448,897)</u>	<u>\ (1,175,635)</u>	<u>\ 70,589,967</u>

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**30. Gain (loss) on financial assets and liabilities (cont'd)**

Gain (loss) on other financial liabilities for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016			
	Loss on redemption	Gain on valuation	Loss on valuation	Net gain (loss)
Debentures	\ -	\ -	\ -	\ -
Other financial liabilities	-	6,023	(6)	6,017
	\ -	\ 6,023	\ (6)	\ 6,017

  

	Year ended December 31, 2015			
	Loss on redemption	Gain on valuation	Loss on valuation	Net gain (loss)
Debentures	\ -	\ -	\ -	\ -
Other financial liabilities	-	7	-	7
	\ -	\ 7	\ -	\ 7

Gain (loss) on financial derivatives for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016				
	Gain on disposal/redemption	Loss on disposal/redemption	Gain on valuation	Loss on valuation	Net gain (loss)
Exchange-traded derivatives:					
Futures	\ 295,217,058	\ (255,870,255)	\ 2,398,898	\ (11,289,735)	\ 30,455,966
Option	27,508,549	(31,083,585)	5,098,526	(790,661)	732,829
Over-the-counter derivatives:	2,141,711,299	(2,133,241,583)	88,230,467	(65,476,214)	31,223,969
	\ 2,464,436,906	\ (2,420,195,423)	\ 95,727,891	\ (77,556,610)	\ 62,412,764

  

	Year ended December 31, 2015				
	Gain on disposal/redemption	Loss on disposal/redemption	Gain on valuation	Loss on valuation	Net gain (loss)
Exchange-traded derivatives:					
Futures	\ 200,630,593	\ (202,422,591)	\ 3,864,725	\ (4,972,108)	\ (2,899,381)
Option	120,130,674	(112,716,023)	673,693	(618,525)	7,469,819
Over-the-counter derivatives:					
Stock warrant securities	728,443	-	-	-	728,443
Others	1,181,939,868	(1,197,571,556)	49,531,958	(28,191,293)	5,708,977
	\ 1,503,429,578	\ (1,512,710,170)	\ 54,070,376	\ (33,781,926)	\ 11,007,858

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**31. Net interest income**

Net interest income for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Interest income:		
Cash and due from banks	\ 10,244,916	\ 13,527,494
Held-for-trading financial assets	177,297,346	174,130,157
Available-for-sale financial assets	13,828,936	6,776,604
Loans, etc.	261,808,390	226,503,550
CMA	1,144,551	1,568,572
Others	14,055,617	16,389,948
	<u>478,379,756</u>	<u>438,896,325</u>
Interest expense:		
Deposits	(46,037,985)	(59,394,153)
Borrowings	(162,331,157)	(118,931,096)
Bonds	(13,705,247)	(13,565,703)
Others	(20,816,815)	(31,248,398)
	<u>(242,891,204)</u>	<u>(223,139,350)</u>
	<u>\ 235,488,552</u>	<u>\ 215,756,975</u>

**32. Selling and administrative expense**

Selling and administrative expenses for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Payroll expenses:		
Salary expenses	\ 193,998,949	\ 267,492,891
Post-employment benefits (DB)	4,382,567	4,510,330
Post-employment benefits (DC)	3,224,102	2,880,284
Early retirement benefits	2,873,139	7,952,981
Compensation Expenses Associated with Stock Option	735,298	583,499
	<u>205,214,055</u>	<u>283,419,985</u>
General and administrative expenses:		
Employee benefits	25,601,303	21,751,682
Electronic data processing expenses	8,153,227	10,888,701
Rental expense	7,213,848	6,517,858
Commission expense	20,014,832	16,056,755
Entertainment expenses	8,139,706	8,855,464
Advertising expense	1,330,825	1,117,098
Depreciation	5,891,509	5,956,023
Training expenses	128,897	166,567
Amortization	7,109,290	7,188,060
Taxes and dues	17,947,584	20,352,952

**32. Selling and administrative expense (cont'd)**

	Year ended December 31, 2016	Year ended December 31, 2015
General and administrative expenses:		
Others	\ 12,898,647	\ 12,951,111
	<u>114,429,668</u>	<u>111,802,271</u>
	<u>\ 319,643,723</u>	<u>\ 395,222,256</u>

**33. Other operating income (expense)**

Other operating income (expense) for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Other operating income:		
Dividends on financial assets held for trading	\ 4,799,610	\ 8,194,022
Dividends on available-for-sale financial assets	8,675,092	11,367,536
Reversal of impairment loss	-	1,671
Reversal of other provisions	18,088	199,193
Reversal of credit risk adjustments	214,981	-
Reversal of deferred day 1 profit or loss adjustments	5,806,488	37,979,319
Others	<u>1,537,198</u>	<u>11,872,098</u>
	<u>21,051,457</u>	<u>69,613,839</u>
Other operating expenses:		
Provision for other doubtful accounts	(197,500)	(20,677)
Provision for other provisions	(3,711,332)	-
Provision for credit risk adjustments	(143,671)	(354,032)
Amortization of deferred day 1 profit or loss adjustments	(1,284,265)	(1,157,295)
Others	<u>(35,644)</u>	<u>(8,780,625)</u>
	<u>(5,372,412)</u>	<u>(10,312,629)</u>
	<u>\ 15,679,045</u>	<u>\ 59,301,210</u>

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**34. Non-operating income (expense)**

Non-operating income (expense) for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Non-operating income:		
Gain on disposal property and equipment	\ 64,988	\ -
Rental fee income	1,525,158	1,480,426
Gain on disposal subsidiaries and associates	973,201	1,296,676
Share of earnings from investments in associates and joint ventures	4,250,794	-
Recovery of impairment loss on investments in subsidiaries and associates, joint ventures	47,965	-
Others (*)	1,768,409	1,456,487
	<u>8,630,515</u>	<u>4,233,589</u>
Non-operating expense:		
Loss on disposal property and equipment	(300,236)	(24,638)
Loss on disposal investment properties	(85,597)	-
Loss on disposal intangible assets	(124,100)	-
Impairment losses on intangible assets	-	(2,068)
Share of losses from investments in associates and Joint ventures	(1,797,774)	-
Loss on disposal subsidiaries and associates	(97,785)	(34,243)
Impairment losses on subsidiaries and associates	(13,303)	(2,565,669)
Others	(464,834)	(238,489)
	<u>(2,883,629)</u>	<u>(2,865,107)</u>
	<u>\ 5,746,886</u>	<u>\ 1,368,482</u>

**35. Income taxes**

The major components of income tax expense for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Current income taxes	₩ 84,989,417	₩ 151,109,937
Adjustments of prior year's income tax	(2,107,434)	389,310
Changes in deferred income taxes due to temporary differences	(1,160,515)	(50,715,598)
Current and deferred income taxes recognized directly to equity :		
Gain (loss) on valuation of available-for-sale financial assets	(2,807,239)	18,262,116
Equity method capital change	(173,028)	
Actuarial gain	-	-
Loss (gain) on effect of foreign currency translation	3,226	(3,344)
Capital surplus & adjustments	11,729	109,481
Income tax expense	<u>₩ 78,756,156</u>	<u>₩ 119,151,902</u>

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**35. Income taxes (cont'd)**

Details of the relationship between income tax expense and income before income taxes for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Income before income taxes	₩ 332,602,859	₩ 406,488,637
Income taxes at statutory tax rate (*1)	80,027,892	97,908,250
Adjustments:		
Non-deductible expenses and others (*2)	1,879,610	24,589,457
Non-taxable income and others (*2)	(166,926)	(7,889,652)
Income tax on undistributed corporate earnings	(1,232,644)	4,510,910
Adjustments of prior year's income tax	(2,107,434)	389,310
Others	355,658	(356,373)
Income tax expense	₩ 78,756,156	₩ 119,151,902
Effective income tax rate	23.68%	29.31%

(\*1) Income tax rate of 11% is applied for income below ₩200 million and 22% for income above ₩200 million and below ₩20 billion and 24.2% for income above ₩20 billion for the years ended December 31, 2016 and 2015.

(\*2) Income tax on capital gains of IM Investment & Securities Co., Ltd., the acquiree as a result of the merger of the Company and IM Investment & Securities Co., Ltd., and the effect of exclusion from taxable income for fictional dividend of the acquiree's shareholders are reflected on non-deductible expenses and non-taxable income in the adjustments of 2015.

The details of tax liabilities as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Deferred income tax assets	₩ 65,029,381	₩ 45,992,366
Income tax assets	65,029,381	45,992,366
Current income tax liabilities	14,966,779	76,054,817
Income tax liabilities	14,966,779	76,054,817

Temporary differences and deferred income tax assets (liabilities) as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Finance lease receivables	₩ (1,064,695)	₩ (2,905,021)
Gain on valuation of financial liabilities held-for-trading	(816,558)	283,173
Gain (loss) on valuation of financial assets held-for-trading	5,922,405	462,414
Gain (loss) on valuation of financial assets designated at fair value through profit or loss	1,414,051	(584,755)
Gain on valuation of derivatives-combined securities sold	1,446,002	(127,760)
Gain (loss) on valuation of derivatives-combined securities	(18,533)	327,899
Gain on valuation of derivative instruments	(11,454,651)	(3,154,585)

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**35. Income taxes (cont'd)**

	December 31, 2016	December 31, 2015
Deferred loan fee	₩ 3,388,951	₩ 2,529,583
Deferred day 1 profit or loss	522,253	(193,378)
Gain (loss) on foreign transactions	(554,313)	(89,870)
Allowance for loan losses	272,728	586,997
Lease	-	5,481
Withdrawal of sales transaction	(196,765)	(197,010)
Available-for-sale financial assets	(17,733,810)	(16,859,377)
Accrued income	(5,589,979)	(4,610,844)
Accrued expenses	23,974,317	9,143,653
Credit risk-adjusted	(82,858)	(65,776)
Property and equipment, intangible assets	(7,657,616)	(6,952,934)
Subsidiaries and associates	4,420,396	5,053,812
Allowance accounts	2,451,832	1,660,735
Retirement pension premium	(2,521,454)	(1,971,574)
Defined benefit liabilities	3,154,049	2,465,477
Treasury stock	60,277,411	60,352,539
Others	5,476,218	833,487
	<u>65,029,381</u>	<u>45,992,366</u>
Deferred income tax assets	₩ 112,720,613	₩ 83,705,250
Deferred income tax liabilities	₩ (47,691,232)	₩ (37,712,884)

Changes in the temporary differences and deferred income tax assets (liabilities) for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016		
	Beginning balance (*)	Changes	Ending balance
Financial lease receivables	₩ (12,054,027)	₩ 7,630,700	₩ (4,423,327)
Gain (loss) on valuation of financial liabilities held-for-trading	1,174,993	(4,567,423)	(3,392,430)
Gain (loss) on valuation of financial assets held-for-trading	1,918,730	22,686,195	24,604,925
Gain (loss) on valuation of financial assets designated at fair value through profit or loss	(2,699,630)	8,574,376	5,874,746
Gain (loss) on valuation of derivatives-combined securities sold	(530,126)	6,537,613	6,007,487
Gain (loss) on valuation of derivatives-combined securities	1,360,577	(1,437,573)	(76,996)
Gain (loss) on valuation of derivative instruments	(13,089,566)	(34,499,347)	(47,588,913)
Deferred loan fee	10,496,193	3,583,371	14,079,564
Deferred day 1 profit or loss	(802,398)	2,972,123	2,169,725
Gain (loss) on foreign transactions	(285,403)	(2,017,519)	(2,302,922)
Allowance for loan losses	2,435,671	(1,302,610)	1,133,061
Lease	22,742	(22,742)	-
Withdrawal of sales transaction	(817,468)	-	(817,468)
Available-for-sale financial assets	(67,784,890)	(5,891,084)	(73,675,974)
Accrued income	(19,132,134)	(4,091,708)	(23,223,842)
Accrued expenses	110,847,814	(11,245,336)	99,602,478
Credit risk-adjusted	(272,928)	(71,309)	(344,237)
Property and equipment, intangible assets	(29,538,586)	(2,275,356)	(31,813,942)

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**35. Income taxes (cont'd)**

	Year ended December 31, 2016		
	Beginning balance (*)	Changes	Ending balance
Subsidiaries and associates	₩ 20,968,559	₩ (2,603,805)	₩ 18,364,754
Allowance accounts	6,865,566	3,320,692	10,186,258
Retirement pension premium	(8,180,804)	(2,294,701)	(10,475,505)
Defined benefit liabilities	10,230,193	2,873,461	13,103,654
Treasury stock	250,425,472	-	250,425,472
Others	3,457,506	19,293,706	22,751,212
	<u>₩ 265,016,056</u>	<u>₩ 5,151,724</u>	<u>₩ 270,167,780</u>
Deferred income tax liabilities	<u>₩ 63,868,867</u>	<u>₩ 1,160,514</u>	<u>₩ 65,029,381</u>

	Year ended December 31, 2015		
	Beginning balance (*)	Changes	Ending balance
Financial lease receivables	₩ (17,963,986)	₩ 5,909,959	₩ (12,054,027)
Gain (loss) on valuation of financial liabilities held-for-trading	1,263,872	(88,879)	1,174,993
Gain (loss) on valuation of financial assets held-for-trading	(6,161,818)	8,080,548	1,918,730
Gain (loss) on valuation of financial assets designated at fair value through profit or loss	(6,059)	(2,420,310)	(2,426,369)
Gain (loss) on valuation of derivatives-combined securities sold	641,545	(1,171,671)	(530,126)
Gain (loss) on valuation of derivatives-combined securities	785,239	575,338	1,360,577
Gain (loss) on valuation of derivative instruments	7,805,593	(20,895,159)	(13,089,566)
Deferred loan fee	5,038,624	5,457,569	10,496,193
Deferred day 1 profit or loss	(694,617)	(107,781)	(802,398)
Gain (loss) on foreign transactions	(96,959)	(275,944)	(372,903)
Allowance for loan losses	3,060,444	(624,773)	2,435,671
Lease	31,125	(8,383)	22,742
Withdrawal of sales transaction	(816,162)	(1,306)	(817,468)
Available-for-sale financial assets	(221,798,375)	151,842,452	(69,955,923)
Accrued income	(26,080,405)	6,948,271	(19,132,134)
Accrued expenses	35,775,383	2,165,087	37,940,470
Credit risk-adjusted	(626,960)	354,032	(272,928)
Property and equipment, intangible assets	(42,724,690)	13,874,342	(28,850,348)
Subsidiaries and associates	24,888,451	(3,918,263)	20,970,188
Allowance accounts	7,314,332	(423,313)	6,891,019
Retirement pension premium	(5,019,350)	(3,161,454)	(8,180,804)
Defined benefit liabilities	10,953,149	(722,956)	10,230,193
Treasury stock	185,964,125	64,461,347	250,425,472
Others	18,483,167	(15,024,716)	3,458,451
	<u>₩ (19,984,332)</u>	<u>₩ 210,824,037</u>	<u>₩ 190,839,705</u>
Deferred income tax liabilities	<u>₩ (4,723,232)</u>	<u>₩ 50,715,598</u>	<u>₩ 45,992,366</u>

(\*) Beginning temporary difference and deferred income taxes and calculated reflecting the changes in the final income tax return, merger, etc.



### 35. Income taxes (cont'd)

Deferred income tax assets (liabilities) are measured at the average tax rates that are expected to apply in the year when the related temporary differences are expected to reverse, based on tax rates (and tax laws) that have been enacted at the reporting date.

### 36. Earnings per share

The Group presents basic earnings per share attributable to its common stock holders in the statement of comprehensive income. Basic earnings per share amounts are calculated by dividing the net profit for the period attributable to common stock holders of the parent by the weighted average number of common shares outstanding during the period.

The Group presents basic earnings per share attributable to its common stock holders in the statement of comprehensive income. Basic earnings per share amounts are calculated by dividing the net profit for the period attributable to common stock holders of the parent by the weighted average number of common shares outstanding during the period.

Basic earnings per share amounts for the years ended December 31, 2016 and 2015 are as follows (Korean won and shares):

	Year ended December 31, 2016	Year ended December 31, 2015
Net income attributable to the common stock holder of the parent	₩ 253,846,703,366	₩ 296,137,002,455
Weighted average number of common stock outstanding (*)	453,502,028	364,583,142
Basic earnings per share	560	812

(\*) Weighted average number of common stock outstanding is calculated by deducting treasury stock from total issued stock.

Diluted earnings per share amounts for the years ended December 31, 2016 and 2015 are as follows (Korean won):

	Year ended December 31, 2016	Year ended December 31, 2015
Net income attributable to common stock holders	₩ 253,846,703,366	₩ 296,137,002,455
Diluted net income attributable to common stock holders	253,846,703,366	296,137,002,455
Weighted average number of common stock outstanding (*)	453,502,028	364,602,520
Diluted earnings per share	560	812

(\*) The amount is calculated by reflecting the dilution effect. The number of potential common stock of the current and prior period which has dilution effect is 19,378 and 26,963 shares for the years ended December 31, 2016 and 2015, respectively.

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**37. Assets and liabilities denominated in foreign currencies**

Significant assets and liabilities denominated in foreign currencies as of December 31, 2016 and 2015 are as follows (Korean won in thousands or USD, JPY, EUR, HKD, NOK, CNH, AUD, GBP, CAD, MYR, BRL):

	December 31, 2016		
	Currency	Amount in foreign currency in unit	Korean won equivalent
Assets in foreign currencies:			
Cash and due from banks	USD	26,402,834	₩ 31,907,825
	EUR	624,756	791,941
	HKD	349,417	54,450
	JPY	224,410,840	2,326,714
	GBP	252,191	373,286
	CNH	9,189	1,592
	AUD	35,675	31,110
	NOK	2	1
	CAD	44,655	39,954
	MYR	21,300	5,741
	BRL	21,577	8,013
Financial assets at fair value through profit or loss	USD	95,886,924	115,879,348
	JPY	100,000,000	1,036,810
Available-for-sale financial assets	USD	8,880,000	10,731,480
Investments in associates	USD	-	-
Other assets	USD	44,729,089	54,055,104
	JPY	168,329	1,745
			₩ 217,245,114
Liabilities in foreign currency:			
Deposits	USD	5,395,809	₩ 6,520,836
Financial liabilities at fair value through profit or loss	USD	48,454,106	58,556,787
Other liabilities	USD	19,600,000	23,686,600
			₩ 88,764,223
December 31, 2015			
	Currency	Amount in foreign currency in unit	Korean won equivalent
Assets in foreign currencies:			
Cash and due from banks	USD	11,438,296	₩ 13,405,683
	EUR	280,215	358,824
	HKD	331,649	50,149
	JPY	1,714,130	16,662
	GBP	133	231
	CNH	549	98
	AUD	75	64
	NOK	2	1
Financial assets at fair value through profit or loss	USD	831,200	974,166

**Meritz Securities Co., Ltd. and its subsidiaries**  
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**37. Assets and liabilities denominated in foreign currencies (cont'd)**

Investments in associates	USD	158,839	186,159
Other assets	USD	56,000,000	65,632,000
			<u>₩ 80,624,037</u>
Liabilities in foreign currency:			
Deposits	USD	91,399	₩ 107,120
Other liabilities	USD	36,004,126	42,196,835
			<u>₩ 42,303,955</u>

**38. Pledged assets**

Restricted balances in due from banks as of December 31, 2016 and 2015 are summarized as follows (Korean won in thousands):

	Counterparty	Others information	December 31, 2016	December 31, 2015
Cash and Deposits:				
Restricted due from financial institutions	KB Bank and others	Deposits for checking accounts	\ 174,500	\ 129,000
Long-term deposits	Woori Bank and others	Pledged for settlement	2,000,000	2,000,000
Reserve for claims of customers' deposits	Korea Securities Finance Corporation ("KSFC")	(*)	38,410,380	37,000,000
Guarantee deposits for loan transaction	Korea Securities Depository and others		62,101,200	9,059,110
Guarantee deposits for trading futures and options (brokerage)	KRX		37,100,000	38,723,763
Financial asset at fair value through profit or loss:				
Reserve for claims of customers' deposits(Trust)	KSFC	(*)	270,866,951	295,920,714
Available-for-sale financial assets:				
Collective fund for default loss	KRX		8,314,005	6,262,079
			<u>\ 418,967,036</u>	<u>\ 389,094,666</u>

(\*) Pursuant to the Law on Capital Market and Financial Investment Services and related regulations, the Group is required to place a deposit after daily calculation in Korea Securities Finance Corporation ("KSFC") as a reserve against customers' deposits for the trading of stocks, derivatives and for other purposes. These deposits should exceed the amount which is calculated by deducting cash commission guarantee from total customers' deposit.

Details of securities pledged as collateral for operating activities including derivative transactions, loan transactions and borrowings as of the reporting date are as follows (Korean won in thousands):

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**38. Pledged assets (cont'd)**

Pledged to	Description of pledged asset	December 31, 2016	
		Pledged amount(*)	Pledged for
KRX	Bonds	₩ 66,616,598	Derivative transaction
KSD & KSFC	ETF beneficiary certificate, Stocks, CP, Bonds	2,537,054,577	Lending and borrowing transactions
KSD and others	Bonds	5,639,142,725	Bonds under repurchase agreements
KSD	Stocks, Bonds	139,087,588	Collateral of borrowings
KSFC and others	Bonds	27,274,899	Payment fund
RREEF SPEZIAL INVEST GmbH	Bonds	1,899,642	Withholdings
		<u>₩ 8,411,076,029</u>	
		December 31, 2015	
Pledged to	Description of pledged asset	Pledged amount(*)	Pledged for
KRX	Bonds	₩ 50,546,133	Derivative transaction
KSD & KSFC	ETF beneficiary certificate, Stocks, CP, Bonds	950,549,189	Lending and borrowing transactions
KSD and others	Bonds	5,599,768,082	Bonds under repurchase agreements
KSFC and others	Bonds	25,736,717	Payment fund
RREEF SPEZIAL INVEST GmbH	Bonds	1,884,010	Withholdings
		<u>₩ 6,628,484,131</u>	

(\*) The amount excludes restricted balances and beneficial interest in trust, calculated from the closing price of collateral or based on External Credit Assessment Institution's valuation. The collateral is included in borrowing securities.

**39. Guarantees and commitments**

**Credit line facilities**

The Group has the following agreements with several banks as of December 31, 2015 (Korean won in thousands, USD):

Agreement	Bank	Currency	Maximum limit	Maturity date
Intraday overdraft	Woori Bank	KRW	10,000,000	2017.09.07
	Woori Bank	KRW	50,000,000	2017.09.07
	Hana Bank	KRW	10,000,000	2017.10.27
	Shinhan Bank	KRW	20,000,000	2017.09.05
	KB Bank	KRW	10,000,000	2017.11.24
Overdraft	KB Bank	KRW	5,000,000	2017.07.07
	Daegoo Bank	KRW	5,000,000	2017.06.29
Note discounted	KSFC	KRW	170,000,000	2019.10.31
			Subscription amount	
Note discounted	KSFC	-	within the limits	2019.10.31
Agency operating funds	KSFC	KRW	200,000,000	2020.03.02
			Deposit within	
Agency operating funds (trust)	KSFC	-	operational limits	2020.03.02
Financial capital distribution	KSFC	KRW	150,000,000	2017.03.29
Mortgage financing	KSFC	KRW	400,000,000	2020.04.30

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**39. Guarantees and commitments (cont'd)**

Agreement	Bank	Currency	Maximum limit	Maturity date
Call half the day	KSFC	KRW	200,000,000	2020.03.03
Financial bond dealer	KSFC	KRW	500,000,000	2020.03.31

**Lawsuit**

The Group is involved in 14 lawsuits (plaintiff: 11 cases, defendant: 3 cases) with total claim amounting \29,154 million. The Group provided provisions estimated from previous experience in similar lawsuits (balance of provisions: \5,825 million) as of December 31, 2015 (Note 20).

**Purchase Agreement**

The Group's purchase agreements as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	
	Maximum limit	Balance
ABCP purchase commitment (*1)	\ 294,370,000	\ 294,370,000
Conditional loan commitment	-	-
Loan commitment	1,078,990,000	687,723,645
Mortgage loan commitment (*2)	1,985,868,000	1,985,868,000
	<u>\ 3,359,228,000</u>	<u>\ 2,967,961,645</u>
	December 31, 2015	
	Maximum limit	Balance
ABCP purchase commitment (*1)	\ 116,059,600	\ 116,059,600
Conditional loan commitment	72,000,000	72,000,000
Loan commitment	802,332,263	517,929,921
Mortgage loan commitment (*2)	2,603,859,784	2,603,859,784
	<u>\ 3,594,251,647</u>	<u>\ 3,309,849,305</u>

(\*1) The Group purchased residual commercial papers that are issued but not sold through liquidity-providing commitments. Liquidity-providing commitment can be exercised when the credit ratings of underlying assets of commercial papers and financial institute are not below the required rating.

(\*2) It is contractual amounts of secured loans executed by the Group according to mortgage loan commitment as of December 31, 2016 and 2015 and mortgage loan commitment between consolidated entities is excluded.

Details of the Group's Details of agreement as of December 31, 2016 are as follows (Korean won in thousands):

	Opponent	December 31, 2016	
		Maximum limit	Balance
ABCP purchase commitment	SINCHON BEST 1ST INC.		
	SINCHON BEST 2ND INC.		
	SINCHON BEST 4TH INC.	130,000,000	130,000,000
	ILD UP 19TH Co., Ltd.	36,000,000	36,000,000
	Swallow One Co., Ltd	30,570,000	30,570,000
	MEEGEREN5 Co., Ltd	22,400,000	22,400,000
	MS PREMIUM 1ST Co., Ltd.	20,400,000	20,400,000
	M FUTURE RIO 1ST Co., Ltd.	55,000,000	55,000,000
		<u>294,370,000</u>	<u>294,370,000</u>
Limit loan	Nike, INC	36,500,000	36,500,000
	Yoon Jeong-Kyu	31,190,000	14,760,000
	Oriental Press Association Co., Ltd	30,500,000	2,000,000

39. Guarantees and commitments (cont'd)

	Opponent	December 31, 2016	
		Maximum limit	Balance
Limit loan	GEOJE BIG	30,000,000	6,000,000
	Angel	30,000,000	19,400,000
	Engineering and Construction Co., Ltd	30,000,000	6,299,857
	Delta Co., Ltd.	30,000,000	10,630,000
	Yoo world	30,000,000	25,000,000
	JOYCREDIT. Co., Ltd	30,000,000	8,816,000
	Chaewoo	30,000,000	30,000,000
	Coreana corporation	25,000,000	1,543,000
	SD Dream House Co., Ltd.	21,500,000	1,434,000
	L Jeonghoom Jisan	21,000,000	19,880,000
	Mastern NO.12 Seocho PFV	15,000,000	4,000,000
	Apex Stone Co., Ltd	15,000,000	9,500,000
	Seho Development Co., Ltd	15,000,000	11,980,000
	Songdo American Town Co., Ltd	15,000,000	9,047,170
	Yongin Technovalley Co., Ltd.	15,000,000	4,000,000
	Suseong Beommool		
	LocalHousing associations	15,000,000	3,000,000
	MegaAsset Co., Ltd	15,000,000	11,400,000
	Golden DMC Co., Ltd.	15,000,000	15,000,000
	DREAM LAND 2ND Co., Ltd.	15,000,000	4,300,000
	The Ocean City 2nd	15,000,000	12,046,000
	Sejong & Partners Co., Ltd.	15,000,000	11,838,000
	RICH PERSON THINKING Co., Ltd.	15,000,000	15,000,000
	M Techno Center Co., Ltd.	15,000,000	14,350,000
	The Ocean City 1st	15,000,000	12,046,000
	TJ Otis Co., Ltd	15,000,000	13,591,000
	Las Flores Co., Ltd	15,000,000	13,245,000
	HANIM ENS Co., Ltd	15,000,000	13,100,263
	JSPARTNERS.Co., Ltd	15,000,000	13,388,000
	Haedeun Industrial	15,000,000	13,950,000
	Development Co., Ltd.	15,000,000	10,900,000
	IB Gurae 1ST L.L.C	15,000,000	15,000,000
	Chung Urban Development Co., Ltd	15,000,000	10,875,000
	Siwon D&P Corp.	15,000,000	623,000
	Korea asset in trust Co., Ltd	15,000,000	15,000,000
	Korea asset in trust Co., Ltd	15,000,000	14,700,000
	Thank you Road D&C Co., Ltd	15,000,000	15,000,000
	Haegeum Limited Company	15,000,000	15,000,000
	CM ilgongil Co., Ltd.	15,000,000	5,500,000
	IB Gurae 2ND L.L.C	15,000,000	10,900,000

39. Guarantees and commitments (cont'd)

	Opponent	December 31, 2016	
		Maximum limit	Balance
Limit loan	A1capital	15,000,000	10,000,000
	WingBridge I&D	14,000,000	9,887,000
	STOBA C & D Co., Ltd	13,000,000	11,300,000
	BIFC Hotel Project Co., Ltd.	12,500,000	7,500,000
	Segora Dikal Co., Ltd.	11,400,000	11,400,000
	Sungwoon Co., Ltd.	10,000,000	3,100,000
	Into Industrial	10,000,000	10,000,000
	M Square PFV Co., Ltd	10,000,000	1,000,000
	AJU HOTEL SEOKYO WIBESEUTEUPYEONGDON G 1ST INC.	10,000,000	10,000,000
	Yeongtong Project Co., Ltd.	10,000,000	5,900,000
	Hyundai Private Real Estate Investment Trust 20	10,000,000	10,000,000
	Ilbeongi building Co., Ltd	9,200,000	6,270,000
	HOUSE PAN Co., Ltd.	9,000,000	15,000,000
	M-Square Gwacheon 3th.Co., Ltd	9,000,000	1,000,000
	UB HOLDING Co., Ltd	9,000,000	9,000,000
	LHN	8,000,000	4,400,000
	Kimhae Mugye 2nd Inc.	7,500,000	5,502,000
	SEYEONG DREAM 1ST INC.	7,500,000	6,000,000
	Kimhae Mugye 1st Inc.	7,500,000	5,502,000
	SIP 1st Inc.	7,500,000	2,800,000
	KIMPO M 1ST INC.	7,500,000	4,000,000
	SEYEONG DREAM 1ST INC.	7,500,000	6,000,000
	Wonju Bangok 2nd Inc.	7,500,000	7,067,000
	Wonju Bangok 1st Inc.	7,500,000	7,067,000
	LSH 1st	7,500,000	2,800,000
	Seoil development	5,800,000	1,375,840
	HAEJIN ASSET LOAN INC.	5,000,000	5,000,000
	E.M Consulting Co., Ltd	5,000,000	2,387,000
	BIZ FORE Co., Ltd.	4,900,000	4,020,000
	YUNIAE LOAN INC.	4,000,000	1,000,000
	MyungDong Tower Co., Ltd	2,500,000	1,000,000
	GL-MUNJEONG PFV Co., Ltd.	2,500,000	2,500,000
	EOS ASSET MANAGEMENT 1ST LOAN INC.	2,500,000	2,500,000
	AGE DEVELOPMENT KIMPO Co., Ltd.	2,000,000	2,000,000
	Deokeun City Development Co., Ltd	1,500,000	450,000
		<u>1,078,990,000</u>	<u>687,723,645</u>

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**39. Guarantees and commitments (cont'd)**

	Opponent	December 31, 2016	
		Maximum limit	Balance
Commitment on loan	LCT PFV Co., Ltd.	170,000,000	170,000,000
	Jinseong Housing Company	160,000,000	160,000,000
	GEUMYANGDIAENDI Co., Ltd.	111,241,000	111,241,000
	M-Square GwaCheon 4 <sup>th</sup> Co., Ltd	100,500,000	100,500,000
	Seyoung KNI Co., Ltd.	100,000,000	100,000,000
	SAMJUNG Co., Ltd.	90,000,000	90,000,000
	Las Flores Co., Ltd.	74,172,000	74,172,000
	Yoo world	66,482,000	66,482,000
	Green NARAE.INC	66,000,000	66,000,000
	Haegeum Limited Company	60,500,000	60,500,000
	M Square PFV Co., Ltd.	60,000,000	60,000,000
	Seho Development Co., Ltd.	58,871,000	58,871,000
	HD 5TH Co., Ltd.	56,300,000	56,300,000
	UNJEONG CONSTRUCTION Co., Ltd.	54,100,000	54,100,000
	Yongin Technovalley Co., Ltd.	50,050,000	50,050,000
	Angel Engineering and Construction Co., Ltd.	49,460,000	49,460,000
	Gachang Logistics Center PFV, Inc.	45,500,000	45,500,000
	Chungdam enc Co., Ltd	40,174,000	40,174,000
	Chaewoo coreana corporation	37,800,000	37,800,000
	EMSEQUEOHYEONGOK Co., Ltd.	36,168,000	36,168,000
	CM ilgongil Co., Ltd.	35,000,000	35,000,000
	SAEHAN Co., Ltd.	35,000,000	35,000,000
	Samin Co., Ltd	35,000,000	35,000,000
	EMSQUARE HIGS 1ST Co., Ltd.	30,000,000	30,000,000
	Smart Green Co., Ltd	30,000,000	30,000,000
	Daim D&C	26,000,000	26,000,000
	HANIM ENS Co., Ltd.	25,053,000	25,053,000
	Songdo American Town Co., Ltd	25,000,000	25,000,000
	GOLDEN GRAND HOLDINGS Co., Ltd	23,697,000	23,697,000
	HILSEUWAELEMISA INC.	23,300,000	23,300,000
	Misodnc Ltd	22,700,000	22,700,000
	JESE CONSTRUCTION	21,113,000	21,113,000
	Moodong 1 <sup>st</sup> area residence association	20,400,000	20,400,000
	JOONGHYUN CNC & SPC	20,000,000	20,000,000
	CityGalaxy	18,600,000	18,600,000
	E.M Consulting. Co., Ltd	17,387,000	17,387,000
	SGCA	16,900,000	16,900,000



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**39. Guarantees and commitments (cont'd)**

	Opponent	December 31, 2016	
		Maximum limit	Balance
Commitment on loan	J&C Partners. Co., Ltd.	15,000,000	15,000,000
	M-Square Base 1st Inc.	15,000,000	15,000,000
	CK Corporation	11,500,000	11,500,000
	TRINY M	9,000,000	9,000,000
	Sewon Investment Development Co., Ltd	8,400,000	8,400,000
	DongsanC&D Co., Ltd	8,000,000	8,000,000
	SAMIN Co., Ltd	6,500,000	6,500,000
		<u>1,985,868,000</u>	<u>1,985,868,000</u>
		<u>\ 3,359,228,000</u>	<u>\ 2,967,961,645</u>

The Group's securities received as deposit held on behalf of clients as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Securities received as deposit:		
Consigner	\ 12,948,098,272	\ 11,856,776,779
Savers	4,063,541	4,653,084
Beneficiary	<u>4,724,960,895</u>	<u>4,380,497,873</u>
	<u>\ 17,677,122,708</u>	<u>\ 16,241,927,736</u>
Securities loaned:		
Stock	\ 78,548,118	\ 5,406,774
Securities borrowed:		
Stock	138,825,063	67,833,269
Government & local bonds	<u>322,328,457</u>	<u>99,510,751</u>
	<u>\ 461,153,520</u>	<u>\ 167,344,020</u>
Written-off loan	<u>\ 107,813,882</u>	<u>\ 48,624,141</u>
Endorsed bills	<u>\ 135,000,000</u>	<u>\ 80,000,000</u>

**40. Related party disclosures**

Significant related parties for the year ended December 31, 2016 are as follows.

	Company
Parent company	Meritz Financial Group Inc.
Subsidiaries	Eugene Separate Taxation High-Yield PE No. 2
	Eugene Separate Taxation High-Yield PE No. 7
	Kiwoom Separate Taxation High-Yield No. 2
	Daishin Separate Taxation High-Yield Private Investment Trust No. 2
	Sparx Separate Taxation High-Yield No. 1
	Capstone Private Mbs Real Estate Investment Trust No. 2
	Capstone Private Mbs Real Estate Investment Trust No. 3
	Smart-S 6th Securitization Specialty
	Smart-S 8th Securitization Specialty
	Smart-S 10th Securitization Specialty
	Meritz Securitization Specialty Co., Ltd.

40. Related party disclosures (cont'd)

Subsidiaries	Company
	M Square Gyeyang 1 <sup>st</sup>
	M Square Gyeyang 2 <sup>nd</sup>
	M Square Sungsu 1 <sup>st</sup>
	M Square Pyeongchon 1 <sup>st</sup>
	M Square Dongcheon 1 <sup>st</sup>
	MJD 1 <sup>st</sup>
	Daegu SG
	New Commons 1 <sup>st</sup>
	Haeundae Project 1 <sup>st</sup>
	Haeundae Project 2 <sup>nd</sup>
	M Square Shihung 1 <sup>st</sup>
	Sungbok 1 <sup>st</sup>
	M Square Osan 1 <sup>st</sup>
	DM 1 <sup>st</sup>
	M Square Sangbong 2 <sup>nd</sup>
	M Square Woodong 1 <sup>st</sup>
	M Square Dadam
	M Square Yangsan 1 <sup>st</sup>
	Sanbon Master plaza 1 <sup>st</sup>
	M Square Jochon1 <sup>st</sup>
	M Square Gunsan 1 <sup>st</sup>
	Yongin Sungbok 2 <sup>nd</sup>
	Aberlour 1 <sup>st</sup>
	Smart Lake 1 <sup>st</sup>
	Dongdaemun H 1 <sup>st</sup>
	Nice Penta 1 <sup>st</sup>
	MDS 1 <sup>st</sup>
	AM 1 <sup>st</sup>
	SMK 1 <sup>st</sup>
	SMK 2 <sup>nd</sup>
	Smart R&D 1 <sup>st</sup>
	UPS 1 <sup>st</sup>
	Highest Ocean 1 <sup>st</sup>
	M Square Sagik 1 <sup>st</sup>
	M Square Chungju 1 <sup>st</sup>
	M Square Base 1 <sup>st</sup>
	Smart Dongcheon 1 <sup>st</sup>
	Smart Penta 1 <sup>st</sup>
	Real Benefit
	M Square Mia 2 <sup>nd</sup>
	Smart Sanghyun 1 <sup>st</sup>
	Yongin Sungbok 1 <sup>st</sup>
	Smartup 1 <sup>st</sup>
	Smartup 2 <sup>nd</sup>
	Smartup 3 <sup>rd</sup>
	CD Two 1 <sup>st</sup>

40. Related party disclosures (cont'd)

Subsidiaries	Company
	SLT 1 <sup>st</sup>
	Genius 1 <sup>st</sup>
	Msquare Mia third, Co., Ltd. (*1)
	Msquare Mia fourth, Co., Ltd. (*1)
	B Lake First Co., Ltd. (*1)
	MJ Sangmi First Co., Ltd. (*1)
	Apple SG Co., Ltd. (*1)
	DSM 3rd Co., Ltd. (*1)
	Yongjuksg Co., Ltd. (*1)
	AM3 Co., Ltd. (*1)
	Yongin Seongbok 4th Co., Ltd. (*1)
	Dujeong SG Co., Ltd. (*1)
	SL The Ocean 1st Co., Ltd. (*1)
	Haeundae SG Co., Ltd. (*1)
	Msquare Mia the first, Co., Ltd. (*1)
	H Society 3rd Inc. (*1)
	WE BEST Cheongdam 1st Co., Ltd. (*1)
	N.H.M.A 1 Co., Ltd. (*1)
	Doojung H.S 1 Co., Ltd. (*1)
	MSM 1 <sup>ST</sup> (*1)
	Genius 2th Co., Ltd. (*1)
	Msquare Myungji Co., Ltd. (*1)
	Yeksam Trinity 1 <sup>st</sup> Co., Ltd. (*1)
	M SQUARE SONGJEONG (*1)
	SMART CHUNGDAM 1 <sup>ST</sup> Co., Ltd. (*1)
	MBR Co., Ltd. (*1)
	AM 4TH INC. (*1)
	Yongin Sungbok 7 <sup>th</sup> (*1)
	BK AGE Inc. (*1)
	Chams Fild Oh Kid Co., Ltd. (*1)
	M QUEENS 1ST Inc. (*1)
	TH 1 <sup>st</sup> Co., Ltd. (*1)
	H SOCIETY M (*1)
	SLT MISA (*1)
	WONJU SG (*1)
	MDMA 1 <sup>ST</sup> Co., Ltd. (*1)
	My Best 1 <sup>st</sup> (*1)
	Msquare Shihung 1 <sup>st</sup> Co., Ltd. (*1)
	M square Sujeong (*1)
	RREEF SPEZIAL INVEST GmbH trust of securities contract
	G New Jump Short-Term Bond Investment Trust 1

40. Related party disclosures (cont'd)

	Company
Associates	<p>Saengbo Wootoo Shinyoung Housing CR-Reit Co., Ltd. II (*2)</p> <p>Globalone Private IPO Investment Trust #1 (*4)</p> <p>MPLUS Private Real Estate Investment Trust #4 (*4)</p> <p>Pureun Partners Fund (*4)</p> <p>Csquared Merry Private Investment Trust 1<sup>st</sup> (*4)</p> <p>Bros IPO Investment Private Trust 1<sup>st</sup> (*4)</p> <p>Human Investment Trust (*4)</p> <p>Aion Private Investment Trust 1st (*4)</p> <p>Kiwoom Milestone Europe Professional Private Real Estate Investment Trust3 (*4)</p> <p>Bestars Samo Property No.8 Investment Inc.(*4)</p> <p>Platform Partners active mezzanine private equity investment trust No.2 (*4)</p> <p>Airplane fund 5 (*4)</p> <p>Airplane fund 6 (*4)</p> <p>High Yield Plus Investment Trust 3<sup>rd</sup> (*4)</p> <p>High Yield Plus Investment Trust 4<sup>th</sup> (*4)</p> <p>East Spring High Yield 2nd (*4)</p>
Other related parties (*3)	<p>Meritz Fire &amp; Marine Insurance Co., Ltd.</p> <p>Meritz Asset Management Co., Ltd.</p> <p>Meritz Financial Information Service Co., Ltd.</p> <p>Meritz Business Service Co., Ltd.</p> <p>Meritz Capital Co., Ltd.</p> <p>Meritz Real Estate Asset Management Co., Ltd.</p> <p>Mertiz Vietnam Security Investment Trust</p> <p>Eugene High Yield Private Investment Trust 1st</p> <p>Meritz DM Investment Trust on Special Asset 1<sup>st</sup></p> <p>PT.MERITZ KORINDO INSURANCE</p> <p>Meritz Private Offering Property 6<sup>th</sup></p> <p>Meritz Korea Security Investment Trust CI</p> <p>Meritz Korea Investment Trust on Bond</p> <p>BNK High Yield Investment 1st</p> <p>Hyundai High-Yield Private Trust 11<sup>th</sup></p> <p>Meritz Korea smallcap Securities Investment trusts CI</p> <p>Meritz Korea Private Investment Trust 6th</p> <p>Meritz Global Healthcare High-Yield Trust on Securities 1<sup>st</sup> (CI)</p> <p>Meritz Auto 1<sup>st</sup> Securitization Specialty Co., Ltd.</p> <p>Meritz Auto 2<sup>nd</sup> Securitization Specialty Co., Ltd.</p> <p>Meritz Auto 3<sup>rd</sup> Securitization Specialty Co., Ltd.</p> <p>Meritz Auto Fourth Securitization Specialty Company</p> <p>Meritz Auto Fifth Securitization Specialty Company</p> <p>Meritz Asia Frontier Private Investment</p> <p>Meritz China Security Investment CI</p>

**Meritz Securities Co., Ltd. and its subsidiaries**  
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**40. Related party disclosures (cont'd)**

(\*1) The entities are additional subsidiaries for the year ended December 31, 2016. Meanwhile, during this year, MGS 1st and four others (liquidation), Gold digger equity MMT (trust termination), China Asia Investment & Consulting Ltd. (sale), Eugene Separate Taxation High-Yield PE No.1 (decline in ratio of shareholding) were excluded from subsidiaries.

(\*2) Related parties with shares in subsidiaries.

(\*3) By selling shares of China Asia Investment & Consulting Ltd., Cabiroth Investment Consulting (Shanghai) Co., Ltd. owned by this subsidiary was excluded from affiliated companies.

(\*4) Classified as joint enterprise due to consent of the participants of the company's important decision-making body

(\*5) Meritz Financial Group's subsidiary entities.

Significant transactions with related parties for the years ended December 31, 2016 and 2015 are summarized as follows (Korean won in thousands):

	Company	Year ended December 31, 2016		Year ended December 31, 2015	
		Income	Expense	Income	Expense
Parent company	Meritz Financial Group	\ 5,147	\ 8,496,841	\ 5,725	\ 4,653,767
Others	Meritz Fire & Marine insurance Co., Ltd.	2,771,534	10,773,184	6,471,889	18,360,779
	Meritz Asset Management	-	2,221	-	-
	BNK High Yield Investment 1st	1,005,402	-	-	126,027
	Meritz Financial Information Service Co., Ltd.(before Ritz Partners)	-	23,480	-	39,362
	Meritz Business Service Co., Ltd.	-	1,657,399	-	1,420,794
	Meritz Capital Co., Ltd.	184,919	2,512,374	213,933	2,452,340
	Meritz Real Estate Asset Management Co., Ltd.	52,920	-	-	-
	Eugene High Yield Private Investment Trust 1st	110,267	-	-	-
	Hyundai High-Yield Private Trust 11 <sup>th</sup>	29,740	-	-	-
	Hyundai High Yield Private Trust 3th	98,474	-	-	-
		\ 4,258,403	\ 23,465,499	\ 6,691,547	\ 27,053,069

**Meritz Securities Co., Ltd. and its subsidiaries**  
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**40. Related party disclosures (cont'd)**

Outstanding balances with related parties as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Company	Year ended December 31, 2016		Year ended December 31, 2015	
		Assets	Liabilities	Assets	Liabilities
Parent company	Meritz Financial Group	\ 41,917	\ 21,999,850	\ 63,365	\ 22,707,120
Others	Meritz fire & marine insurance Co., Ltd.	231,689	320,461,753	456,703	176,977,433
	Meritz Financial Information Service Co., Ltd. (formerly Ritz Partners)	-	2,080,429	-	1,534,387
	Meritz Business Service Co., Ltd.	-	1,784,733	-	1,519,917
	Meritz Capital Co., Ltd.	15,044,334	29,554,811	34,169,178	27,764,647
	Meritz Real Estate Asset Management Co., Ltd.	-	36,540	-	-
	Meritz Vietnam Security Investment Trust	7,824,313	-	-	-
	Meritz Korea Security Investment Trust 1st	23,618,964	-	-	-
	BNK High Yield Investment 1st	31,312,232	-	-	-
	Eugene High Yield Private Investment Trust 1st	23,907,815	-	-	-
	Bros IPO Investment Private Trust 1st	3,196,028	-	-	-
	Csquared Merry Private Investment Trust	5,315,107	-	-	-
	Aion Private Investment Trust 1st	3,210,962	-	-	-
	East Spring High Yield 2nd	4,889,120	-	-	-
	Pureun Partners Fund	3,257,172	-	-	-
	High Yield Plus Investment Trust 3rd	399,572	-	-	-
	High Yield Plus Investment Trust 4th	599,096	-	-	-
	Hyundai High-Yield Private Trust 11 <sup>th</sup>	999,860	-	-	-
	Human Investment Trust	3,260,015	-	-	-
		<u>\ 127,108,196</u>	<u>\ 375,918,116</u>	<u>\ 34,689,246</u>	<u>\ 230,503,504</u>

Details of compensation paid to key management personnel are shown below. The key management personnel is composed of registered directors and non-registered directors who have the authority and responsibilities of corporate activities (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Short-term salary	\ 27,819,741	\ 32,956,593
Severance payment	835,078	1,367,709
	<u>\ 28,654,819</u>	<u>\ 34,324,302</u>

**41. Statements of cash flows**

Cash and cash equivalents in the statements of cash flows as of December 31, 2016 and 2015 are summarized as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Cash	\ -	\ -
Cash equivalents	657,187,591	546,225,923
	<u>\ 657,187,591</u>	<u>\ 546,225,923</u>

**41. Statements of cash flows (cont'd)**

Significant non-cash transactions for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31, 2015
Gain (loss) on valuation of available-for-sale financial assets	\ 11,778,016	\ (77,124,678)
Actuarial valuation of the net defined benefit liabilities	(48,728)	(403,413)
Present value discount of loans	-	114,281
Present value discount of other assets	92,281	173,558
Present value discount of withholdings	1,608,671	8,002,619
Initial recognition of provisions for restoration costs	372,701	390,304
Transferred between advanced payments and intangible assets	429,672	432,110
Transferred between available-for-sale financial assets and loans	344,967	-
Transferred between RCPS and common stock	2,272,944	-
Transferred between provision and allowance for possible loan losses	-	515,824
Transferred between investment property and tangible assets	(156,277)	2,822,078
Repayment of borrowing securities	-	(5,909,288)
Transferred between financial lease and property	-	95,944
Transferred between priority paid and collective fund for default loss	(57)	(11,482)
Bad debts written off	59,189,741	-
Increase in redeemable equity of non-controlling shareholders	1,472,488	3,327,534
Increase in non-controlling interests	-	(9,387,489)
Increase in loss on foreign currency transactions	(13,381)	13,877
Increase(decrease) in equity method capital fluctuation	718,852	-
Separation of conversion rights from convertible redeemable preferred stock	(664,085)	-
Issuance of stock upon merger	-	211,996,500
Decrease in non-controlling interest by merger	-	(167,726,608)

Net cash flow in accordance with disposal of subsidiaries for the years ended December 31, 2016 and 2015 is as follows (Korean won in thousands):

	Year ended December 31, 2016	Year ended December 31,2015
Proceed from disposal	\ 120,000	\ -
Cash and cash equivalent in subsidiaries	(427,945)	(28,158,040)
Net cash flow	\ (307,945)	\ (28,158,040)

**42. Trust accounts**

The Group engages in the investment trust services and separately maintains the books of accounts and financial statements in connection with the trust operations (the trust accounts) from those of the Group accounts in accordance with the Financial Investment Services and Capital Market Act.

Details of the financial information in relation to trust accounts as of December 31, 2016 are as follows (Korean won in thousands):

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**42. Trust accounts (cont'd)**

	Specific money trust	Property trust	Total
Cash and due from banks	\ 122,492,024	\ -	\ 122,492,024
Negotiable instruments	726,878,874	1,106	726,879,980
Monetary claims	20,000,000	1,410,356,345	1,430,356,345
Real property	-	-	-
Other assets	4,483,331	-	4,483,331
	<u>\ 873,854,229</u>	<u>\ 1,410,357,451</u>	<u>\ 2,284,211,680</u>
Other liabilities	10,897,432	-	10,897,432
Trust and the original	862,956,797	1,410,357,451	2,273,314,248
	<u>\ 873,854,229</u>	<u>\ 1,410,357,451</u>	<u>\ 2,284,211,680</u>

Details of transactions with trust accounts as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016	December 31, 2015
Fees on trust accounts	\ 3,116,893	\ 4,517,970
Accrued fees on trust accounts	1,444,983	1,337,368

**43. Classification of financial assets and liabilities**

Classification of financial assets and liabilities as of December 31, 2016 and 2015 is as follows (Korean won in thousands):

	December 31, 2016				Total
	Financial assets or liabilities held- for-trading	Financial assets or liabilities designated at fair value through profit or loss	Available-for-sale financial assets or liabilities	Amortized cost of a financial assets or liabilities	
Financial assets:					
Cash and due from banks	\ -	\ -	\ -	\ 816,956,145	\ 816,956,145
Financial assets held-for- trading	7,468,895,113	-	-	-	7,468,895,113
Derivative assets	157,372,714	-	-	-	157,372,714
Financial assets designated at fair value through profit or loss	-	425,026,918	-	-	425,026,918
Available-for-sale financial assets	-	-	1,574,562,095	-	1,574,562,095
Loans	-	-	-	5,477,539,160	5,477,539,160
CMA	-	-	-	28,009,548	28,009,548
Lease	-	-	-	260,006,034	260,006,034
Other financial assets	-	-	-	486,515,402	486,515,402
	<u>\ 7,626,267,827</u>	<u>\ 425,026,918</u>	<u>\ 1,574,562,095</u>	<u>\ 7,069,026,289</u>	<u>\ 16,694,883,129</u>
Financial liabilities:					
Deposits	-	-	-	3,102,818,820	3,102,818,820
Financial liabilities held- for-trading	1,868,617,761	-	-	-	1,868,617,761
Derivative liabilities	103,156,500	-	-	-	103,156,500



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**43. Classification of financial assets and liabilities (cont'd)**

	December 31, 2016				
	Financial assets or liabilities held- for-trading	Financial assets or liabilities designated at fair value through profit or loss	Available-for-sale financial assets or liabilities	Amortized cost of a financial assets or liabilities	Total
Financial liabilities					
designated at fair value through profit or loss	-	654,429,685	-	-	654,429,685
Borrowings	-	-	-	8,694,608,873	8,694,608,873
Bonds	-	-	-	279,956,420	279,956,420
Other financial liabilities	-	-	-	462,861,638	462,861,638
	<u>\ 1,971,774,261</u>	<u>\ 654,429,685</u>	<u>\ -</u>	<u>\ 12,540,245,751</u>	<u>\ 15,166,449,697</u>
Financial assets:					
Cash and due from banks	\ -	\ -	\ -	\ 646,068,281	\ 646,068,281
Financial assets held-for- trading	6,973,250,157	-	-	-	6,973,250,157
Derivative assets	161,984,010	-	-	-	161,984,010
Financial assets designated at fair value through profit or loss	-	335,500,669	-	-	335,500,669
Available-for-sale financial assets	-	-	733,421,016	-	733,421,016
Loans	-	-	-	4,449,846,185	4,449,846,185
CMA	-	-	-	54,820,249	54,820,249
Lease	-	-	-	471,534,869	471,534,869
Other financial assets	-	-	-	304,854,846	304,854,846
	<u>\ 7,135,234,167</u>	<u>\ 335,500,669</u>	<u>\ 733,421,016</u>	<u>\ 5,927,124,430</u>	<u>\ 14,131,280,282</u>
Financial liabilities:					
Deposits	-	-	-	3,463,870,841	3,463,870,841
Financial liabilities held- for-trading	571,699,111	-	-	-	571,699,111
Derivative liabilities	134,337,362	-	-	-	134,337,362
Financial liabilities designated at fair value through profit or loss	-	490,792,826	-	-	490,792,826
Borrowings	-	-	-	7,085,058,245	7,085,058,245
Bonds	-	-	-	279,898,600	279,898,600
Other financial liabilities	-	-	-	457,021,002	457,021,002
	<u>\ 706,036,473</u>	<u>\ 490,792,826</u>	<u>\ -</u>	<u>\ 11,285,848,688</u>	<u>\ 12,482,677,987</u>

**44. Fair value of financial assets and liabilities**

Fair value means a price that a market participant receives by selling an asset or pays by transferring a liability in an ordinary transaction on the date of transaction. Fair value measurement estimates the price in the ordinary transaction between the market participants, who sell the asset and transfer the liability, at an active market on the date of transaction. The Group calculates the fair values of assets/liabilities by making the best use of market values and making the least use of inputs that are not based on the observable market data.

Fair values classification:

The Group classifies fair value measurements of financial assets or liabilities by reference to the source of inputs used to derive the fair values. The classification is as follows:

**44. Fair value of financial assets and liabilities (cont'd)**

	Details
(Level 1)	In case assets or liabilities are measured by quoted prices (unadjusted) in active markets, fair value of the assets or liabilities is classified as Level 1. The assets of liabilities classified as Level 1 include stock transacted in KRX, ETF, listed option, stock warrant, stock transacted in foreign, etc.
(Level 2)	In case assets or liabilities are measured by valuation techniques and all significant inputs are based on the observable market data, fair value of the assets or liabilities is classified as Level 2. The assets of liabilities classified as Level 2 include bond, interest rate swap, foreign exchange forward, etc.
(Level 3)	In case assets or liabilities are measured by valuation techniques and all significant inputs are based on the no observable market data, fair value of the assets or liabilities is classified as Level 3. The assets of liabilities classified as Level 3 include unlisted stock, option related over-the-counter securities, DLS, separate deposit from investors, etc.

The Group calculates the fair values of assets/liabilities by using an internal valuation model or receives fair market values assessed by independent external appraisers.

Details of the carrying amount and fair value of financial instruments as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

	December 31, 2016			
	Fair value			
	Level 1	Level 2	Level 3	Total
<b>Financial assets:</b>				
<b>Financial assets held-for-trading:</b>				
Equity securities	344,855,784	-	-	344,855,784
Debt securities	-	6,936,012,372	-	6,936,012,372
Others	188,026,959	-	-	188,026,959
Derivative assets	9,953,821	123,455,053	23,963,840	157,372,714
Financial assets designated at fair value through profit or loss	-	144,498,917	280,528,001	425,026,918
<b>Available-for-sale financial assets:</b>				
Equity securities	5,843,940	-	238,645,625	244,489,565
Debt securities	-	1,223,771,001	-	1,223,771,001
Others	-	-	106,301,531	106,301,531
	<u>548,680,504</u>	<u>8,427,737,343</u>	<u>649,438,997</u>	<u>9,625,856,844</u>
<b>Financial liabilities:</b>				
<b>Financial liabilities held-for-trading:</b>				
Equity securities	190,198,715	-	-	190,198,715
Debt securities	-	1,677,590,111	-	1,677,590,111
Others	828,935	-	-	828,935
Derivative liabilities	2,659,166	88,164,497	12,332,836	103,156,499
Financial liabilities designated at fair value through profit or loss	-	-	654,429,685	654,429,685
	<u>193,686,816</u>	<u>1,765,754,608</u>	<u>666,762,521</u>	<u>2,626,203,945</u>

(\*1) There was no transfer between level 1 and level 2 in 2016 and 2015. The Group recognizes a transfer at the end of the reporting period when an event or circumstance causing the transfer among fair value levels is incurred.

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**44. Fair value of financial assets and liabilities (cont'd)**

(\*2) Because there was no posted price of the same financial product in an active market or fair value could not be reliably estimated, the balance of financial instruments measured at cost is ¥27,803,668 thousand (excluding joint compensation fund for loss incurred from contravention of contracts). Of the financial instruments measured at cost for the year ended December 31, 2016, ¥7,515,429 thousand of book value was eliminated, and in regard to the elimination, ¥1,482,109 thousand was recognized as a gain or loss on disposal.

	December 31, 2015			
	Fair value			
	Level 1	Level 2	Level 3	Total
<b>Financial assets:</b>				
<b>Financial assets held-for-trading:</b>				
Equity securities	¥ 279,550,141	¥ -	¥ -	¥ 279,550,141
Debt securities	-	6,605,762,262	-	6,605,762,262
Others	87,937,755	-	-	87,937,755
Derivative assets	6,691,703	143,088,248	12,204,059	161,984,010
Financial assets designated at fair value through profit or loss	4,281,009	30,509,447	300,710,213	335,500,669
<b>Available-for-sale financial assets:</b>				
Equity securities	51,917,331	-	200,156,068	252,073,399
Debt securities	-	390,374,823	-	390,374,823
Others	-	-	90,972,795	90,972,795
	<u>¥ 430,377,939</u>	<u>¥ 7,169,734,780</u>	<u>¥ 604,043,135</u>	<u>¥ 8,204,155,854</u>
<b>Financial liabilities:</b>				
<b>Financial liabilities held-for-trading:</b>				
Equity securities	79,764,851	-	-	79,764,851
Debt securities	-	490,643,123	-	490,643,123
Others	1,291,137	-	-	1,291,137
Derivative liabilities	1,625,479	127,938,207	4,773,675	134,337,361
Financial liabilities designated at fair value through profit or loss	-	-	490,792,826	490,792,826
	<u>¥ 82,681,467</u>	<u>¥ 618,581,330</u>	<u>¥ 495,566,501</u>	<u>¥ 1,196,829,298</u>

(\*1) There was no transfer between level 1 and level 2 in 2016 and 2015. The Group recognizes a transfer at the end of the reporting period when an event or circumstance causing the transfer among fair value levels is incurred.

(\*2) Because there was no posted price of the same financial product in an active market or fair value could not be reliably estimated, the balance of financial instruments measured at cost is ¥10,811,445 thousand (excluding joint compensation fund for loss incurred from contravention of contracts). Of the financial instruments measured at cost for the year ended December 31, 2015, ¥13,790,408 thousand of book value was eliminated, and in regard to the elimination, ¥6,048,762 thousand was recognized as a gain or loss on disposal.

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**44. Fair value of financial assets and liabilities (cont'd)**

Details of inputs used in fair value, valuation technique, and measurement of fair value classified into level 2 among financial assets and liabilities, currently measured at fair value as of December 31, 2016 and 2015 are as follows(Korean won in millions):

	December 31, 2016	December 31, 2015	Valuation technique	Inputs
<b>Financial assets:</b>				
<b>Financial assets held-for-trading:</b>				
Debt securities	\ 6,936,012,372	\ 6,605,762,262	DCF model	Discount rate, interest rate
Derivative assets	123,455,053	143,088,248	DCF model	Discount rate, exchange rate
Financial assets designated at fair value through profit or loss	144,498,917	30,509,447	DCF model	Discount rate, interest rate
<b>Available-for-sale financial assets:</b>				
Debt securities	1,223,771,001	390,374,823	DCF model	Discount rate, interest rate
	<u>\ 8,427,737,343</u>	<u>\ 7,169,734,780</u>		
<b>Financial liabilities:</b>				
<b>Financial liabilities held-for-trading:</b>				
Debt securities	1,677,590,111	490,643,123	DCF model	Discount rate, interest rate
Derivative liabilities	88,164,497	127,938,207	DCF model	Discount rate, interest rate
	<u>\ 1,765,754,608</u>	<u>\ 618,581,330</u>		

Changes in the fair value of level 3 for the years ended December 31, 2016 and 2015 are as follows (Korean won in thousands):

	Year ended December 31, 2016						
	January 1,2016	Profit/Loss	Other comprehen-sive income	Move between levels (* )	Purchase/ issuance	Disposal/ redemption	December 31, 2016
<b>Assets:</b>							
<b>Financial assets held-for-trading:</b>							
Derivative instruments	₩ 12,204,059	₩ 6,022,615	₩ -	₩ -	₩ 12,965,213	₩ (7,228,047)	₩ 23,963,840
<b>Financial assets designated at fair value through profit or loss</b>							
Available-for-sale financial assets:	300,710,213	5,479,948	-	-	7,904,112,689	(7,929,774,849)	280,528,001
Equity instrument	200,156,068	3,152,981	11,234,177	(5,046,159)	43,833,353	(14,684,795)	238,645,625
Others	90,972,795	5,023,975	(7,660,449)	-	565,558,480	(547,593,270)	106,301,531
	<u>₩ 604,043,135</u>	<u>₩ 19,679,519</u>	<u>₩ 3,573,728</u>	<u>₩ (5,046,159)</u>	<u>₩ 8,526,469,735</u>	<u>₩ (8,499,280,961)</u>	<u>₩ 649,438,997</u>
<b>Liabilities:</b>							
<b>Financial liabilities held-for-trading:</b>							
Derivative instruments	4,773,675	768,575	-	-	18,308,292	(9,980,556)	12,332,836
<b>Financial liabilities designated at fair value through profit or loss</b>							
	490,792,826	(14,257,340)	-	-	1,101,682,827	(952,303,308)	654,429,685
	<u>₩ 495,566,501</u>	<u>₩ (13,488,765)</u>	<u>₩ -</u>	<u>₩ -</u>	<u>₩ 1,119,991,119</u>	<u>₩ (962,283,864)</u>	<u>₩ 666,762,521</u>

(\* ) There was no transfer to level 3 in 2016. Because an unlisted company went public in 2016, the amount of ₩5,046,159 thousand was transferred from level 3 to level 1. The Group recognizes a transfer at the end of the reporting period when an event or circumstance causing the transfer among fair value levels is incurred.

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**44. Fair value of financial assets and liabilities (cont'd)**

	Year ended December 31, 2015					
	January 1, 2015	Profit/Loss	Other comprehensive income	Purchase/issuance	Disposal/redemption	December 31, 2015
<b>Assets:</b>						
Financial assets held-for-trading:						
Derivative instruments	₩ 4,890,269	₩ 4,870,824	₩ -	₩ 8,997,488	₩ (6,554,522)	₩ 12,204,059
Financial assets designated at fair value through profit or loss	154,013,123	3,609,512	-	8,116,334,446	(7,973,246,868)	300,710,213
Available-for-sale financial assets:						
Equity instrument	261,872,604	8,808,362	652,932	25,720,921	(96,898,751)	200,156,068
Others	72,520,064	198,872	(131,808)	99,664,799	(81,279,132)	90,972,795
	<u>₩ 493,296,060</u>	<u>₩ 17,487,570</u>	<u>₩ 521,124</u>	<u>₩ 8,250,717,654</u>	<u>₩ (8,157,979,273)</u>	<u>₩ 604,043,135</u>
<b>Liabilities:</b>						
Financial liabilities held-for-trading:						
Derivative instruments	2,117,002	(1,890,405)	-	2,900,097	(2,133,829)	4,773,675
Financial liabilities designated at fair value through profit or loss	320,323,756	(6,463,822)	-	813,937,168	(649,931,920)	490,792,826
	<u>₩ 322,440,758</u>	<u>₩ (8,354,227)</u>	<u>₩ -</u>	<u>₩ 816,837,265</u>	<u>₩ (652,065,749)</u>	<u>₩ 495,566,501</u>

(\*) There was no transfer to level 3 and from level 3 to level 1 in 2015. The Group recognizes a transfer at the end of the reporting period when an event or circumstance causing the transfer among fair value levels is incurred.

Of the changes in the fair value of the financial assets that were measured at fair value and classified as level 3 in fair value hierarchy, current profits or losses in 2016 and 2015 were recognized as follows (Korean won in thousands):

	December 31, 2016		December 31, 2015	
	Profit and loss for the current term	Gain and loss on valuation	Profit and loss for the current term	Gain and loss on valuation
<b>Assets:</b>				
Financial assets held-for-trading:				
Derivative instruments	₩ 6,022,615	₩ 8,638,965	₩ 4,870,824	₩ 2,914,797
Financial assets designated at fair value through profit or loss	5,479,948	1,650,136	3,609,512	143,588
Available-for-sale financial assets:				
Equity instruments	3,152,981	(344,967)	8,808,362	-
Others	5,023,975	(293)	198,872	(21)
	<u>19,679,519</u>	<u>9,943,841</u>	<u>17,487,570</u>	<u>3,058,364</u>
<b>Liabilities:</b>				
Financial liabilities held-for-trading:				
Derivative instruments	768,575	1,748,711	(1,890,405)	(1,870,881)
Financial liabilities designated at fair value through profit or loss	(14,257,340)	(8,087,588)	(6,463,822)	(407,462)
	<u>(13,488,765)</u>	<u>(6,338,877)</u>	<u>(8,354,227)</u>	<u>(2,278,343)</u>
	<u>₩ 6,190,754</u>	<u>₩ 3,604,964</u>	<u>₩ 9,133,343</u>	<u>₩ 780,021</u>

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**44. Fair value of financial assets and liabilities (cont'd)**

Details of fair value, valuation technique, and inputs used to develop those measurements classified into level 3 assets and liabilities disclosure but not measured at fair value as at December 31, 2016 are as follows (Korean won in millions):

December 31, 2015						
	Fair value	Valuation technique	Inputs	Significant unobservable inputs	Range	Sensitivity of the input to fair value
Financial assets:						
Financial assets held for-trading	₩ 23,963,840	FDM, Binomial model, Black Scholes model, Monte-Carlo Simulation Reduced Form Model	Risk free rate, dividend rate, discount rate, volatility, probability default	Recovery rate Volatility	0%~100% 3.24% ~ 50.00%	Fair value increased due to the increase in recovery rate Fair value increased due to the increase in volatility.
Financial assets designated at fair value through profit or loss	280,528,001	Monte-Carlo Simulation, Cox, Ross and Rubinstein Model	Risk free rate, dividend rate discount rate stock price	Volatility Correlation	17.44% ~ 29.48% 0.27 ~ 0.70	Fair value decreased due to the increase in volatility Fair value decreased due to the increase in correlation
Available-for-sale financial assets	344,947,155	DCF, Past deal method, Cost method	-	Growth rate Discount rate	0% ~ 1% 4.94% ~ 18.01%	Fair value increased due to the increase in growth rate Fair value decreased due to the increase in discount rate
	<u>₩ 649,438,996</u>					
Financial liabilities:						
Financial liabilities held-for-trading	12,332,836	Binomial model Monte-Carlo Simulation, Hull&White 1 factor	Risk free rate, dividend rate, discount rate, stock price	Volatility	8.97% ~ 50.00%	Fair value decreased due to the increase in volatility
Financial liabilities designated at fair value through profit or loss	654,429,685	Monte-Carlo Simulation, Reduced form, Hull&White 1 zfactor Black-Scholes Model	Risk free rate, dividend rate discount rate, probability default,	Recovery rate Volatility Correlation	0% ~ 100% 11.98% ~ 41.21% 0.27 ~ 0.9472	Fair value increased due to the increase in recovery rate Fair value increased or decreased due to the increase in correlation Fair value increased due to the increased in correlation
	<u>₩ 666,762,521</u>					

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**44. Fair value of financial assets and liabilities (cont'd)**

Based on changes in fair values of financial assets according to changes in unobservable input variables by using statistics method, the sensitivity analysis of financial assets is conducted by dividing into favorable changes and unfavorable changes. If fair value is influenced by more than 2 input variables, the fair value is calculated on the basis of the most favorable or the most unfavorable amount. As of December 31, 2016, the result of sensitivity analysis according to changes in input variables by financial asset is as follows (Korean won in thousands):

	Computation effect of volatility	Favorable change	Unfavorable change
<b>Assets:</b>			
Financial assets held for-trading	Adjustment of 10% in unobservable inputs (volatility, recovery rate)	₩ 4,122,942	₩ (2,757,331)
Financial assets designated at fair value through profit or loss	Adjustment of 10% in unobservable inputs (volatility, recovery rate)	221,793	(281,093)
Available-for-sale financial assets	Adjustment 1% of growth rate, discount rate	31,490,759	(12,654,976)
		<u>35,835,494</u>	<u>(15,693,400)</u>
<b>Liabilities:</b>			
Derivative instruments	Adjustment of 10% in unobservable inputs (volatility, recovery rate)	262,632	(238,308)
Financial liabilities designated at fair value through profit or loss	Adjustment of 10% in unobservable inputs (volatility, recovery rate)	1,638,166	(1,580,003)
		<u>1,900,798</u>	<u>(1,818,311)</u>
		<u>₩ 37,736,292</u>	<u>₩ (17,511,711)</u>

The hierarchical fair values of the financial assets, which were not measured at fair value but of which the fair values were disclosed, in the statements of financial position as of December 31, 2016 are as follows (Korean won in thousands):

	December 31, 2016				
	Book value	Fair value			Total
	Level 1	Level 2	Level 3		
<b>Financial assets:</b>					
Cash and due from banks (*)	816,956,145	-	816,956,145	-	816,956,145
Loans receivable	5,477,539,160	-	-	5,511,969,128	5,511,969,128
CMA (*)	28,009,548	-	-	28,009,548	28,009,548
Lease	260,006,034	-	-	269,207,468	269,207,468
Other financial assets (*)	486,515,402	-	-	486,515,402	486,515,402
	<u>7,069,026,289</u>	<u>-</u>	<u>816,956,145</u>	<u>6,295,701,546</u>	<u>7,112,657,691</u>
<b>Financial liabilities:</b>					
Deposits (*)	3,102,818,820	-	3,102,818,820	-	3,102,818,820
Borrowings (*)	8,694,608,873	-	8,694,608,873	-	8,694,608,873
Bonds	279,956,420	-	291,508,242	-	291,508,242
Other financial liabilities (*)	462,861,638	-	-	462,861,638	462,861,638
	<u>12,540,245,751</u>	<u>-</u>	<u>12,088,935,935</u>	<u>462,861,638</u>	<u>12,551,797,573</u>

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**44. Fair value of financial assets and liabilities (cont'd)**

The hierarchical fair values of the financial assets, which were not measured at fair value but of which the fair values were disclosed, in the statements of financial position as of December 31, 2015 are as follows (Korean won in thousands):

	December 31, 2015				
	Book value	Fair value			Total
		Level 1	Level 2	Level 3	
Financial assets:					
Cash and due from banks (*)	\ 646,068,281	\ -	\ 646,068,281	\ -	\ 646,068,281
Loans receivable	4,449,846,185	-	-	4,506,142,642	4,506,142,642
CMA (*)	54,820,249	-	-	54,820,249	54,820,249
Lease	471,534,869	-	-	495,303,504	495,303,504
Other financial assets (*)	304,854,846	-	-	304,854,846	304,854,846
	\ 5,927,124,430	\ -	\ 646,068,281	\ 5,361,121,241	\ 6,007,189,522
Financial liabilities:					
Deposits (*)	\ 3,463,870,841	\ -	\ 3,463,870,841	\ -	\ 3,463,870,841
Borrowings (*)	7,085,058,245	-	7,085,058,245	-	7,085,058,245
Bonds	279,898,600	-	296,360,098	-	296,360,098
Other financial liabilities (*)	457,021,002	-	-	457,021,002	457,021,002
	\ 11,285,848,688	\ -	\ 10,845,289,184	\ 457,021,002	\ 11,302,310,186

(\*) Because book value was considered to be a reasonable proxy to fair value, book value was disclosed as fair value.

The following valuation methods and input variables were applied to the financial assets classified as level 2 of the financial assets, which were not measured at fair value but of which the fair values were disclosed, in the statements of financial position as of December 31, 2015 (Korean won in thousands).

	December 31, 2016	December 31, 2016	Valuation method	Input variables
Financial liabilities:				
Debentures (*)	₩ 291,508,242	₩ 296,360,098	DCF method	Discount rate

(\*) If book value is deemed a reasonable proxy to fair value, book value is disclosed as fair value. Therefore, valuation methods or input variables are not disclosed.

The following valuation methods, input variables and unobservable input were applied to the financial assets classified as level 3 of the financial assets, which were not measured at fair value but of which the fair values were disclosed, in the statements of financial position as of December 31, 2016 (Korean won in thousands).

	December 31, 2016	December 31, 2015	Valuation method	Input variable	Unobservable input variable
Financial assets (*):					
Loans	₩ 5,511,969,128	₩ 4,506,142,642	DCF method	Discount rate	Credit risk
Lease assets	269,207,468	495,303,504	DCF method	Discount rate	Credit risk
	₩ 5,781,176,596	₩ 5,001,446,146			

(\*) If book value is deemed a reasonable proxy to fair value, book value is disclosed as fair value. Therefore, valuation methods or input variables are not disclosed.



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**45. Offsetting of financial assets and liabilities**

Details of financial assets subject to offsetting, enforceable master netting arrangements and similar agreements as of December 31, 2016 and 2015 are as follows (Korean won in thousands):

		December 31, 2016					
		Gross amounts of recognized financial instruments	Gross amounts of recognized financial instruments set off in the statement of financial position	Net amounts of financial assets presented in the statement of financial position	Related amounts not set off in the statement of financial position (*)		
					Enforceable master netting arrangement	Cash collateral received	Net amount
<b>Assets:</b>							
Derivatives	₩	159,835,362	₩ -	₩ 159,835,362	₩ (77,808,067)	₩ -	₩ 82,027,295
Loans							
Repurchase agreement		745,000,000	-	745,000,000	-	(745,000,000)	-
Other assets							
Receivable spot exchange		46,659,606	-	46,659,606	(46,650,520)	-	9,086
Difference of uncollected		14,354,596	(13,493,185)	861,411	-	-	861,411
Receivable from proprietary trading		326,630,084	(86,372,416)	240,257,668	-	-	240,257,668
Receivable from trading on consignment		283,620,195	(195,697,357)	87,922,838	-	-	87,922,838
	₩	<u>1,576,099,843</u>	₩ <u>(295,562,958)</u>	₩ <u>1,280,536,885</u>	₩ <u>(124,458,587)</u>	₩ <u>(745,000,000)</u>	₩ <u>411,078,298</u>
<b>Liabilities:</b>							
Derivatives	₩	103,204,882	₩ -	₩ 103,204,882	₩ (77,808,067)	₩ (10,009,021)	₩ 15,387,794
Securities sold		1,868,617,761	-	1,868,617,761	-	(1,868,617,761)	-
Borrowings							
Repurchase agreement		5,351,618,732	-	5,351,618,732	-	(5,351,618,732)	-
Other liabilities							
Payable spot exchange		46,667,720	-	46,667,720	(46,650,520)	-	17,200
Difference of unsettled		17,365,199	(13,493,185)	3,872,014	-	-	3,872,014
Accounts payable for proprietary trading		103,829,610	(86,372,416)	17,457,194	-	-	17,457,194
Accounts payable for trading on consignment		282,683,538	(195,697,357)	86,986,181	-	-	86,986,181
	₩	<u>7,773,987,442</u>	₩ <u>(295,562,958)</u>	₩ <u>7,478,424,484</u>	₩ <u>(124,458,587)</u>	₩ <u>(7,230,245,514)</u>	₩ <u>123,720,383</u>
		December 31, 2015					
		Gross amounts of recognized financial instruments	Gross amounts of recognized financial instruments set off in the statement of financial position	Net amounts of financial assets presented in the statement of financial position	Related amounts not set off in the statement of financial position (*)		
					Enforceable master netting arrangement	Cash collateral received	Net amount
<b>Assets:</b>							
Derivatives	₩	161,586,455	₩ -	₩ 161,586,455	₩ (112,591,726)	₩ -	₩ 48,994,729
Loans							
Repurchase agreement		432,200,000	-	432,200,000	-	(432,200,000)	-
Other assets							
Receivable spot exchange		107,821,400	-	107,821,400	(107,806,800)	-	14,600
Difference of uncollected		14,655,475	(12,250,921)	2,404,554	-	-	2,404,554
Receivable on proprietary trading		88,831,167	(60,643,043)	28,188,124	-	-	28,188,124
Receivable on trading on consignment		252,344,857	(174,683,442)	77,661,415	-	-	77,661,415
	₩	<u>1,057,439,354</u>	₩ <u>(247,577,406)</u>	₩ <u>809,861,948</u>	₩ <u>(220,398,526)</u>	₩ <u>(432,200,000)</u>	₩ <u>157,263,422</u>
<b>Liabilities:</b>							
Derivatives	₩	134,504,017	₩ -	₩ 134,504,017	₩ (112,591,726)	₩ (11,230,135)	₩ 10,682,156
Securities sold		571,699,111	-	571,699,111	-	(571,699,111)	-
Borrowings							
Repurchase agreement		5,324,808,245	-	5,324,808,245	-	(5,324,808,245)	-
Other liabilities							
Payable spot exchange		107,822,900	-	107,822,900	(107,806,800)	-	16,100
Difference of unsettled		13,966,988	(12,250,921)	1,716,067	-	-	1,716,067
Accounts payable for proprietary trading		70,269,921	(60,643,043)	9,626,878	-	-	9,626,878
Accounts payable for trading on consignment		250,794,290	(174,683,442)	76,110,848	-	-	76,110,848
	₩	<u>6,473,865,472</u>	₩ <u>(247,577,406)</u>	₩ <u>6,226,288,066</u>	₩ <u>(220,398,526)</u>	₩ <u>(5,907,737,491)</u>	₩ <u>98,152,049</u>

(\*) The rights to offset exist only in case of default and others. Accordingly, the amounts are not offset in the statement of financial position as they do not meet the criteria for offsetting.

#### 46. Deferred day 1 profit or loss

Changes in deferred day 1 profit or loss, for the years ended December 31, 2016 and 2015 are as follows (Korean won in millions):

	Year ended December 31, 2016		Year ended December 31, 2015	
	Assets	Liabilities	Assets	Liabilities
Beginning	\ (693,715)	\ (21,685)	\ (665,276)	\ (29,343)
Increase	2,466,790	429,894	221,693	(55,927)
Decrease	126,102	(5,317)	(250,132)	63,585
Ending	\ 1,899,177	\ 402,892	\ (693,715)	\ (21,685)

#### 47. Risk management

The Group is exposed to credit risk, liquidity risk, market risk and operational risk of its financial instruments. Risk management is the basic activities to effectively use the Group's limited capital under the rapidly changing financial circumstances. The ultimate goal of risk management is to maximize the Group's shareholder value while minimizing the sudden fluctuation of its income through a proper balance between risks and returns.

The basic policies for managing risk are as follows:

- (i) Set the limits and comply with them for each risk, and strike a balance between risk and return.
- (ii) When a conflict exists between risk and return, the Group should seek to increase return without exceeding the risk limits.
- (iii) Spread the risks to prevent them from being concentrated in specific areas.
- (iv) Analyze the effect of various market fluctuations on parts of or entire portfolio on a regular basis.
- (v) Separate risk management segment, operating segment, and segment that deals with trade-confirmation and payments to maintain independence from one another.

Risk management committee is responsible for setting maximum permissible limits for each risk, and the risk management conference is responsible for checking compliance with the limit and the risk levels.

Risk management committee is the top decision-making body within the Board of Directors for risk management. Through risk management committee, the Group establishes the control system of risk management from top management to operating segment. However, risk management conference is a subordinate committee for risk management and practices risk management by business unit in detail.

Risk management center consists of risk management team and credit risk analysis team. Risk management team manages market risk, liquidity risk, operational risk and capital and credit risk analysis team to perform credit risk analysis of counterparties and assessment on loan contracts. Risk management center deals with monitoring of risk position, risk measurement, identification of assets exposed to risk and forecasting change of risk position.

##### **Credit risk**

Credit risk is the risk that the Group will incur a loss because its customers or counterparties fail to discharge their contractual obligations. Credit risk arises from on-balance and off-balance accounts including loans, financial guarantees, securities and derivatives. The purpose to manage the credit risk is to control the relevant losses upon the counterparties' default, for a certain period, within the allowable range.

Credit risk management is performed by the risk management committee and judging committee, risk management conference and credit risk management department which is a subordinate organization of the risk management center.

Risk management committee establishes risk management strategy through the periodical report on asset management and portfolio construction. Judging committee is delegated to deal with all the matters. Credit risk management department, which is separated from operating segments, manages the overall credit risk of the Group and operates the credit risk management system.

## **47. Risk management (cont'd)**

### **Credit risk management**

#### **Loans**

Performing comprehensive analysis on economic environments and changes, the Group reduces credit concentration by setting credit limits on same counterparties to ensure asset quality.

The Group measures and manages risk indicators of each operating segment. Also, the Group regularly examines the counterparties whose credit ratings are likely to be degraded.

As to large credit, the Group examines the customer's credit and adequacy of credit evaluation as part of the subsequent management process. In addition, the Group conducts focused examinations on industries or groups with increasing credit risks and performs sample inspections on small loans.

#### **Debt securities**

The Group controls credit exposure of debt securities through either the agencies' ratings of creditworthiness or its own rating. The debt securities are held as a means of maintaining resources in order to keep high credit rating as well as to meet the demands of financing.

### **Risk reduction policy**

#### **Collateral**

The Group manages various policies and practices so as to reduce credit risks. Acquisition of collateral on loans is conventional method to reduce credit, and collaterals for secured loans are mainly deposits and financial instruments such as debt securities or equity securities. Collaterals on financial assets other than loans are decided by the attributes of the financial instruments. Debt securities are usually unsecured; asset backed securities or other similar instruments are secured by financial instrument portfolio.

#### **Derivatives**

Considering the notional exposure, the amount exposed to credit risk remains within small limits. Credit exposure is managed and controlled through limiting the counterparty risks such as latent exposure to market fluctuations.

#### **Master netting arrangement**

The Group limits credit exposure by entering into a 'master netting agreement' with the counterparties in the high volume trading. Generally such an agreement is settled by gross, and therefore assets and liabilities related to it are not offset in the financial statements of position. However, in case the remaining contracts are settled net at the end because default occurs, credit risk related to profitable contracts decreases. Due to the impact of individual trades, total credit exposure can vary substantially in the short term.

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**47. Risk management (cont'd)**

**Maximum exposure to credit risk**

The maximum exposure to credit risk as of December 31, 2016 and 2015 is as follows. The Group does not consider risk reduction obtained by collaterals or other. Equity securities in the trading financial assets and available-for-sale financial assets are excluded. (Korean won in thousands):

	December 31, 2016	December 31, 2015
On balance accounts:		
Cash and due from banks	₩ 816,956,144	₩ 646,068,280
Financial assets held-for-trading	6,936,012,372	6,605,762,262
Derivative instruments	128,206,238	146,196,291
Financial assets designated at fair value through profit or loss	149,044,902	35,499,839
Available-for-sale financial assets	1,223,771,001	390,374,823
Loans	5,560,775,858	4,594,570,403
CMA management assets	28,100,000	55,000,000
Lease assets	264,854,951	477,850,702
Other financial assets	490,370,676	309,878,256
	<u>₩ 15,598,092,142</u>	<u>₩ 13,261,200,856</u>
Off balance accounts:		
Commitments on loans	₩ 2,673,591,645	₩ 3,261,264,354
ABCP Purchase agreement	294,370,000	116,059,600
	<u>₩ 2,967,961,645</u>	<u>₩ 3,377,323,954</u>

Impaired or neither past due nor impaired loans among loans, cash management account assets, finance lease assets and other financial assets as of December 31, 2016 and 2015 are as follow (Korean won in thousands):

	December 31, 2016			
	Neither past due nor impaired	Past due but not impaired	Impaired	Total
Loans:				
Call loans	₩ 60	₩ -	₩ -	₩ 60
Repurchase agreement	745,000,000	-	-	745,000,000
Granting of credit	605,566,566	96,841	-	605,663,407
Loans to employees	2,875,974	-	68,673	2,944,647
Loans	3,744,716,533	3,211,509	96,019,974	3,843,948,016
Short-term note trading	72,300,000	-	-	72,300,000
Loans purchased	118,170,349	-	52,364,954	170,535,303
Privately-placed bonds	114,326,636	-	1,658,000	115,984,636
Advance for customers	33,793	-	4,365,996	4,399,789
Allowance for possible loan losses	(22,323,657)	(53,612)	(46,731,814)	(69,109,083)
	<u>5,380,666,254</u>	<u>3,254,738</u>	<u>107,745,783</u>	<u>5,491,666,775</u>
CMA management assets:				
Notes discounted	28,100,000	-	-	28,100,000
Allowance for possible loan losses	(90,452)	-	-	(90,452)
	<u>28,009,548</u>	<u>-</u>	<u>-</u>	<u>28,009,548</u>

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**47. Risk management (cont'd)**

	December 31, 2016			
	Neither past due nor impaired	Past due but not impaired	Impaired	Total
Lease assets:				
Financial lease receivables	241,253,435	19,601,256	4,000,260	264,854,951
Allowance for possible loan losses	(2,331,053)	(205,827)	(2,312,037)	(4,848,917)
	238,922,382	19,395,429	1,688,223	260,006,034
Other financial assets (*):				
Other financial assets	486,828,921	-	3,541,755	490,370,676
Allowance for possible loan losses	(125,275)	-	(3,428,250)	(3,553,525)
	486,703,646	-	113,505	486,817,151
	₩ 6,134,301,830	₩ 22,650,167	₩ 109,547,511	₩ 6,266,499,508
	December 31, 2015			
	Neither past due nor impaired	Past due but not impaired	Impaired	Total
Loans:				
Call loans	₩ 1,424,923	₩ -	₩ -	₩ 1,424,923
Repurchase agreement	432,200,000	-	-	432,200,000
Granting of credit	438,078,848	164,626	-	438,243,474
Loans to employees	3,078,501	-	69,746	3,148,247
Loans	3,275,871,114	9,847,763	161,200,549	3,446,919,426
Short-term note trading	178,300,000	-	-	178,300,000
Loans purchased	24,924,809	-	11,672,273	36,597,082
Privately-placed bonds	48,673,997	-	1,752,000	50,425,997
Advance for customers	44,693	-	7,266,561	7,311,254
Allowance for possible loan losses	(22,417,148)	(171,971)	(111,590,143)	(134,179,262)
	4,380,179,737	9,840,418	70,370,986	4,460,391,141
CMA management assets:				
Notes discounted	55,000,000	-	-	55,000,000
Allowance for possible loan losses	(179,751)	-	-	(179,751)
	54,820,249	-	-	54,820,249
Lease assets:				
Financial lease receivables	460,460,159	13,215,143	4,175,400	477,850,702
Allowance for possible loan losses	(4,756,787)	(200,746)	(1,358,300)	(6,315,833)
	₩ 455,703,372	₩ 13,014,397	₩ 2,817,100	₩ 471,534,869
Other financial assets (*):				
Other financial assets	305,044,531	-	4,833,726	309,878,257
Allowance for possible loan losses	(151,138)	-	(4,545,534)	(4,696,672)
	304,893,393	-	288,192	305,181,585
	₩ 5,195,596,751	₩ 22,854,815	₩ 73,476,278	₩ 5,291,927,844

(\*) Items that do not meet the definition of loans and receivables were excluded from other assets.

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**47. Risk management (cont'd)**

Loans that are past due but not impaired as of December 31, 2016 and 2015 consist of the following (Korean won in thousands):

	December 31, 2016	December 31, 2015
Less than 30 days	₩ 19,888,411	₩ 12,919,536
30 to 60 days	2,030,460	3,143,735
60 to 90 days	990,735	7,164,261

**Impaired loans**

The details of impaired loans as of December 31, 2016 and 2015 are as follow (Korean won in thousands) :

	December 31, 2016		December 31, 2015	
	Loans	Allowance for possible loan losses	Loans	Allowance for possible loan losses
Loans:				
Loans to employees	₩ 68,673	₩ 68,673	₩ 69,746	₩ 69,746
Loans	96,019,974	33,280,815	161,200,549	96,337,771
Loans purchased	52,364,954	7,358,330	11,672,273	6,264,064
Privately-placed bonds	1,658,000	1,658,000	1,752,000	1,652,000
Advance for customers	4,365,996	4,365,996	7,266,561	7,266,561
	154,477,597	46,731,814	181,961,129	111,590,142
Lease assets	4,000,260	2,312,037	4,175,400	1,358,300
Other financial assets:				
Receivables from trading on consignment	628,672	628,672	1,141,295	1,141,295
Other receivables	2,329,541	2,216,036	2,703,397	2,415,206
Accrued income	583,542	583,542	989,034	989,034
	3,541,755	3,428,250	4,833,726	4,545,535
	₩ 162,019,612	₩ 52,472,101	₩ 190,970,255	₩ 117,493,977



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**47. Risk management (cont'd)**

Details on the classification of due from banks and debt securities on credit soundness as of December 31, 2016 and 2015 consist of the following (Korean won in thousands):

	December 31, 2016			December 31, 2015		
	Financial assets held-for-trading (*)	Financial assets designated at fair value through profit or loss (*)	Available-for-sale financial assets (*)	Financial assets held-for-trading (*)	Financial assets designated at fair value through profit or loss (*)	Available-for-sale financial assets (*)
<b>Bonds:</b>						
Government, public and specific bonds	₩ 4,505,173,023	-	₩ 789,926,488	₩ 4,158,346,399	-	₩ 285,785,432
AAA	1,726,957,148	-	10,053,273	1,541,074,181	-	-
AA- to AA+	190,712,347	144,527,532	61,143,560	402,661,002	30,681,530	-
A- to A+	49,381,525	-	22,354,810	5,781,926	-	7,208,903
Less A-	144,355,050	-	40,640,176	106,570,288	-	39,174,879
Unrated	-	-	114,069,414	-	-	37,508,187
	<u>6,616,579,093</u>	<u>144,527,532</u>	<u>1,038,187,721</u>	<u>6,214,433,796</u>	<u>30,681,530</u>	<u>369,677,401</u>
<b>CP:</b>						
A1	226,648,278	-	-	178,182,131	-	-
A2 to A3	92,785,001	-	185,126,297	213,146,335	-	20,014,696
Less B	-	-	456,983	-	-	682,726
	<u>319,433,279</u>	<u>-</u>	<u>185,583,280</u>	<u>391,328,466</u>	<u>-</u>	<u>20,697,422</u>
	<u>₩ 6,936,012,372</u>	<u>₩ 144,527,532</u>	<u>₩ 1,223,771,001</u>	<u>₩ 6,605,762,262</u>	<u>₩ 30,681,530</u>	<u>₩ 390,374,823</u>

(\*) The Group surveyed the credit soundness on debt securities in financial assets. In case of other financial assets, credit risk is not taken into consideration or rating of credit soundness cannot be calculated due to their nature of business.

Details of industrial credit exposure classified by Korean Standard Industrial Classification as of December 31, 2016 and 2015 consist of the following (Korean won in thousands):

	December 31, 2016					
	Finance and insurance	Manufacturing	Wholesale and retailing	Construction	Others	Total
Cash and due from banks	₩ 816,956,144	₩ -	₩ -	₩ -	₩ -	₩ 816,956,144
Financial assets held-for-trading (*)	2,103,324,451	882,926	-	1,300,944	4,830,504,051	6,936,012,372
Derivative instrument assets (*)	128,206,238	-	-	-	-	128,206,238
Financial assets designated at fair value through profit or loss (*)	4,517,369	10,005,250	-	-	134,522,283	149,044,902
Available-for-sale financial assets (*)	365,830,484	31,165,474	-	8,679,569	818,095,474	1,223,771,001
Loans	1,356,461,628	74,004,977	44,682,848	819,594,164	3,266,032,241	5,560,775,858
CMA	25,000,000	-	-	-	3,100,000	28,100,000
Lease assets	33,021,499	37,598,710	29,317,004	10,488,775	154,428,963	264,854,951
Other financial assets	287,778,685	-	-	-	202,591,991	490,370,676
	<u>₩ 5,121,096,498</u>	<u>₩ 153,657,337</u>	<u>₩ 73,999,852</u>	<u>₩ 840,063,452</u>	<u>₩ 9,409,275,003</u>	<u>₩ 15,598,092,142</u>
	December 31, 2015					
	Finance and insurance	Manufacturing	Wholesale and retailing	Construction	Others	Total
Cash and due from banks	₩ 646,068,280	₩ -	₩ -	₩ -	₩ -	₩ 646,068,280
Financial assets held-for-trading (*)	2,005,508,994	1,423,633	-	-	4,598,829,635	6,605,762,262
Derivative instrument assets (*)	146,196,291	-	-	-	-	146,196,291
Financial assets designated at fair value through profit or loss (*)	4,818,308	9,971,169	-	-	20,710,362	35,499,839
Available-for-sale financial assets (*)	62,956,682	-	-	579,143	326,838,998	390,374,823
Loans	1,304,763,986	59,134,768	23,934,675	1,397,451,466	1,809,285,508	4,594,570,403
CMA	25,000,000	15,000,000	-	-	15,000,000	55,000,000
Lease assets	66,097,400	70,192,553	53,668,107	22,526,054	265,366,588	477,850,702
Other financial assets	138,414,078	-	-	-	171,500,641	309,914,719
	<u>₩ 4,399,824,019</u>	<u>₩ 155,722,123</u>	<u>₩ 77,602,782</u>	<u>₩ 1,420,556,663</u>	<u>₩ 7,207,531,732</u>	<u>₩ 13,261,237,319</u>

(\*) The Group excluded financial assets below, since they had no significant credit risk.



#### **47. Risk management (cont'd)**

- ∅ Financial assets held-for-trading: Stocks and collective investment securities
- ∅ Financial assets designated at fair value through profit and loss: Reserve for claims of customers' deposits (trust)
- ∅ Financial assets available-for-sale: Stocks, collective investment securities, foreign currency securities and others
- ∅ Derivative financial assets: Options purchased of stock

#### **Liquidity risk**

##### **Procedures of the liquidity risk management**

The Group defines liquidity risk as the possibility of incurring losses due to a temporary shortage in funds caused by a maturity mismatch or an unexpected capital outlay. Liquidity risk soars when funding rates rise, or assets are sold below a normal price, or a good investment opportunity is missed. The purpose to manage liquidity risk is to early identify the potential risk factors upon raising and operating the Group's funds and to obtain a stable revenue base maintaining an appropriate level of the Group's liquidity by systematically managing the risk.

The targets of liquidity risk management are all assets and liabilities outstanding in the Group's statements of financial position.

The Group's principles of the liquidity risk management are as follows:

- ∅ Set up and comply with tolerable limits to liquidity risk.
- ∅ Prepare insufficient liquidity by forecasting cash requirements regularly.
- ∅ Establish an emergency plan against a liquidity crisis to prepare for an unexpected liquidity risk.
- ∅ Evaluate and manage the effect of a large amount of money that is loaned out, invested, or procured on liquidity risks.



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**47. Risk management (cont'd)**

The residual maturity of derivative financial instruments as of December 31, 2016 and 2015 consists of the following (Korean won in thousands):

		December 31, 2016						
		Within 1 week	After 1 week~ but no later than 1 month	After 1 month~ but no later than 3 months	After 3 months~ but no later than 6 months	After 6 months~ but no later than 1 year	After 1 year	Total
Exchange-traded derivatives	₩	75,182	₩ 56,249	₩ 332,768	₩ (811,677)	₩ (75,821)	₩ 7,756,426	₩ 7,333,127
Over-the-counter derivatives:								
Interests		(204,630)	(244,266)	(539,343)	(260,410)	1,450,121	16,072,582	16,274,054
Currency		(782,226)	(1,549,984)	(3,127,767)	1,367,413	23,406,632	168,925	19,482,993
Stock		-	-	-	-	(7,599,197)	20,400,139	12,800,942
Credit		-	-	85,593	-	301,126	-	386,719
Others		-	-	91,013	(462,741)	854,732	(130,361)	352,643
	₩	(986,856)	₩ (1,794,250)	₩ (3,490,504)	₩ 644,262	₩ 18,413,414	₩ 36,511,285	₩ 49,297,351
	₩	(911,674)	₩ (1,738,001)	₩ (3,157,736)	₩ (167,415)	₩ 18,337,593	₩ 44,267,711	₩ 56,630,478

  

		December 31, 2015						
		Within 1 week	After 1 week~ but no later than 1 month	After 1 month~ but no later than 3 months	After 3 months~ but no later than 6 months	After 6 months~ but no later than 1 year	After 1 year	Total
Exchange-traded derivatives	₩	12,296	₩ 2,153,718	₩ (223,642)	₩ (737,141)	₩ (221,670)	₩ 4,109,558	₩ 5,093,119
Over-the-counter derivatives:								
Interests		273,257	(369,982)	30,300	(1,026,841)	1,247,509	(1,357,326)	(1,203,083)
Currency		(1,075,600)	(1,907,913)	(5,687,089)	4,366,823	13,050	22,237,843	17,947,114
Stock		-	-	-	965,522	(2,108,024)	3,406,618	2,264,116
Credit		-	-	-	-	-	1,071,624	1,071,624
Others		2,085	4,807	28,704	(713,651)	718,994	3,703,988	3,744,927
	₩	(800,258)	₩ (2,273,088)	₩ (5,628,085)	₩ 3,591,853	₩ (128,471)	₩ 29,062,747	₩ 23,824,698
	₩	(787,962)	₩ (119,370)	₩ (5,851,727)	₩ 2,854,712	₩ (350,141)	₩ 33,172,305	₩ 28,917,817

**Market risk**

Market risk is the risk that the fair value or future cash flows of financial instruments will fluctuate due to the changes in market variables such as interest rates, equity prices, and exchange ratios in the market and so on.

The purposes of market risk management are to control the tolerable loss-limit of assets and liabilities arising from the changes in market variables such as interest rates, foreign exchanges and equity prices. The scope of market risk management is marketable securities which are traded for operating the Group's properties, net foreign exchange positions, derivatives, other assets and liabilities embedded with market risks and off-balances. Significant market risks are interest rate risk, foreign exchange risk and equity price risk as of the reporting date.

The Group manages and controls the market risk arising from the changes of market variables within adequate level by measuring and monitoring the risk exposures on a regular basis.

**Trading positions**

The trading positions include positions of interest rate, equity price, commodity and foreign exchange held for trading purpose:

- (i) Financial instruments for the purpose of acquiring the differences incurred due to held-for-trading or price fluctuations
- (ii) Financial instruments for the purpose of hedging risks
- (iii) Financial instruments for the purpose of acquiring arbitrages
- (iv) Financial instruments for the purpose of acquisition, brokerage, and market-making

The Group's principles to manage the market risk of its trading positions are to measure its market risk status on a regular basis and to establish and comply with the various market risk limits. The Group analyzes whether the return against risk is appropriate by reviewing its profit and risk on a regular basis.

#### 47. Risk management (cont'd)

##### Value at risk (VaR)

Value at Risk ("VaR") is a primary method that manages and measures the degree of market risks of the trading portfolio subject to exposure, which estimates the potential loss of the trading portfolio that is not expected to be exceeded if the current market risk positions were to be held unchanged for one day. The Group calculates VaR for a standard 10 days in the 99% confidence level. In addition, to account for the method's limited use, a stress test is performed in order to measure the extent of the loss in extreme cases.

The types of Market VaR as of December 31, 2016 and 2015 consist of the following (Korean won in thousands):

	December 31, 2016		Average	Max	Min	December 31, 2015		
Interest rates risk	₩	5,416,615	₩	5,499,350	6,951,226	3,577,558	₩	3,190,860
Stock price risk		7,653,772		10,471,240	13,491,780	7,653,772		5,355,450
Foreign exchange rates risk		1,500,180		3,088,696	7,135,087	379,448		3,519,675
Total risk	₩	<u>14,570,567</u>					₩	<u>12,065,985</u>

##### Operational risk

Operational risk is the risk of loss arising from systems failure, human error, fraud or external events. Risks related to strategy or damaging reputation are excluded but legal or regulatory implications are identified as operational risks. Operational risk includes non-financial risks related to losses due to internal operational problems and due to externalities such as natural disasters and terrorist attacks. Operational risk does not have a direct correlation with income and the Group needs to mitigate such risk through internal controls and insurance. The Group measures the operational risk exposures using the approaches suitable to the Financial Investment Industry Regulations.

##### Capital Management

The Group evaluates the internal capital adequacy by calculating net capital ratio ("NCR") in accordance with the Regulation on Financial Investment Services and detailed enforcement regulations in order to have adequate capital and comply with supervisory regulation.

NCR as of December 31, 2016 and 2015 consist of the following (Korean won in millions):

	December 31, 2016		December 31, 2015(*1)	
I. Net capital for business	₩	1,252,346	₩	1,260,451
Net asset amount in consolidated financial statements		1,878,310		1,730,623
Deduction		(751,454)		(653,982)
Add		125,490		183,810
II. Total risk amount		323,231		215,271
Market risk amount		198,691		130,656
Credit risk amount		44,871		24,926
Operating risk amount		79,669		59,689
III. Surplus capital(I - II)		929,115		1,045,180
IV. Regulatory capital required (*2)		134,610		134,610
V. NCR(III/IV)		690.23%		776.45%

(\*1) As of December 31, 2016, the new regulation was enacted to calculate net capital ratio of the consolidated financial statements. The net capital ratio as of December 31, 2015, presented for a comparative purpose was recalculated based on the operating net capital ratios (I/II\*100) disclosed in the separate financial statements as of December 31, 2015.

(\*2) Own capital required is calculated as 70% of legal capital (₩192.3 billion).

#### **48. Comprehensive share exchange**

By the resolution of the Board of Directors on November 16, 2016, the Company entered into a comprehensive share exchange agreement with Meritz Capital Co., Ltd., where the Company gains 100% ownership in Meritz Capital Co., Ltd. The objective of the comprehensive share exchange is to promote efficiency and unity of management thereby create synergy effect. This may also enhance corporate value achievement as well as continuous growth. The resolution on the comprehensive share exchange from the shareholders' meeting is scheduled on March 24, 2017.

The comprehensive share exchange is a business combination under common control where Meritz Capital Co., Ltd., the subsidiary of Meritz Financial Group Inc., the controlling company, becomes a wholly-owned subsidiary of the Company. Accordingly, the Company plans to account for the comprehensive share exchange by using book values of assets and liabilities of Meritz Capital Co., Ltd. in the consolidated financial statements of Meritz Financial Group Inc. The Company also plans to adjust the difference in the book values of assets and liabilities and issued share consideration in other components of capital.

#### **49. Approval of the financial statements**

The 2016 consolidated financial statements were approved by the Board of Directors on February 8, 2017.