

Hanon Systems and Subsidiaries

Consolidated Financial Statements

December 31, 2016

(With Independent Auditor's Report Thereon)

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Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

To the Shareholders and Board of Directors of
Hanon Systems

We have audited the accompanying consolidated financial statements of Hanon Systems and its subsidiaries, which consist of the consolidated statement of financial position as of December 31, 2016, and the consolidated statements of income, comprehensive income, changes in equity and cash flows for the year then ended, and notes, including a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the 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 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 Hanon Systems and its subsidiaries as of December 31, 2016, and their financial performance and cash flows for the year then ended in accordance with the Korean IFRS.

Other Matters

The consolidated financial statements of the Company for the year ended December 31, 2015, were audited by other auditors whose report dated March 22, 2016, expressed an unqualified opinion on those statements.

Auditing standards and their application in practice vary among countries. The procedures and practices used in the Republic of Korea to audit such financial statements may differ from those generally accepted and applied in other countries.

March 23, 2017

Seoul, Korea

This report is effective as of March 23, 2017, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

Hanon Systems and Subsidiaries
Consolidated Statements of Financial Position
December 31, 2016 and 2015

<i>(in Korean won)</i>	Notes	2016	2015
Assets			
Current assets			
Cash and cash equivalents	6	425,160,400,983	447,114,126,189
Other financial assets	6,21	7,500,000,000	5,000,000,000
Derivative financial assets	5,6,22	2,494,817,003	7,308,550,327
Trade receivables	6,8,33	930,890,053,852	999,077,410,412
Other current receivables	6,9,33	113,332,716,106	47,522,332,066
Other current assets	10	152,328,106,294	105,252,423,548
Inventories	11	429,724,145,263	382,241,023,685
Non-current assets held-for-sale	34	89,551,788,974	-
Total current assets		2,150,982,028,475	1,993,515,866,227
Non-current assets			
Long-term financial assets	6	28,006,940	28,741,620
Available-for-sale financial assets	6	1,000,000	1,000,000
Held-to-maturity investments	5,6	17,120,000	17,120,000
Derivative financial assets	5,6,22	3,676,361,000	1,375,133,000
Other non-current receivables	6,9,33	9,990,720,269	6,924,865,620
Investments in associates	12	94,962,046,530	89,168,221,358
Property, plant and equipment	13	1,178,144,090,379	1,092,715,577,406
Intangible assets	14	350,265,704,291	207,385,526,999
Deferred tax assets	28	67,042,595,274	63,576,352,828
Other non-current assets	10	4,627,848,148	4,653,033,180
Total non-current assets		1,708,755,492,831	1,465,845,572,011
Total assets		3,859,737,521,306	3,459,361,438,238

Hanon Systems and Subsidiaries
Consolidated Statements of Financial Position
December 31, 2016 and 2015

<i>(in Korean won)</i>	<u>Notes</u>	<u>2016</u>	<u>2015</u>
Liabilities			
Current liabilities			
Trade payables	4,6,33	700,310,343,905	724,792,520,215
Other current payables	4,6,15,33	301,525,408,313	272,988,779,021
Short-term borrowings	4,6,20	303,414,777,004	336,522,420,161
Current tax liabilities		69,455,719,471	55,216,949,954
Derivative financial liabilities	4,5,6,22	13,700,235,265	4,718,578,998
Other current liabilities	16	41,674,009,096	34,248,569,363
Other provisions	17	5,090,962,583	2,440,614,856
Non-current liabilities held-for-sale	34	28,258,726,809	-
Total current liabilities		<u>1,463,430,182,446</u>	<u>1,430,928,432,568</u>
Non-current liabilities			
Other non-current payables	4,15	15,156,856,209	14,241,728,066
Long-term borrowings	4,5,6,20	43,527,043,465	64,560,699,986
Debentures	4,5,6,20	299,273,294,246	-
Derivative financial liabilities	4,5,6,22	16,856,141,000	4,655,886,000
Net defined benefit liabilities	18	60,219,647,037	60,164,433,351
Other non-current provisions	17	36,217,909,673	25,835,671,888
Deferred tax liabilities	28	14,910,721,660	32,108,226,344
Other non-current liabilities	16	<u>25,239,638,410</u>	<u>27,425,106,822</u>
Total non-current liabilities		<u>511,401,251,700</u>	<u>228,991,752,457</u>
Total liabilities		<u>1,974,831,434,146</u>	<u>1,659,920,185,025</u>
Equity			
Equity attributable to owners of the Parent Company			
Common stock	1,30	53,380,000,000	53,380,000,000
Additional Paid-In Capital	30	48,060,000,000	48,060,000,000
Other components of equity	30	(71,131,343,144)	(71,131,343,144)
Accumulated other comprehensive income (loss)	31	(139,312,474,868)	(115,250,851,855)
Retained earnings	32	<u>1,936,589,780,717</u>	<u>1,829,642,417,156</u>
		<u>1,827,585,962,705</u>	<u>1,744,700,222,157</u>
Non-controlling interest		<u>57,320,124,455</u>	<u>54,741,031,056</u>
Total equity		<u>1,884,906,087,160</u>	<u>1,799,441,253,213</u>
Total liabilities and equity		<u>3,859,737,521,306</u>	<u>3,459,361,438,238</u>

The accompanying notes are an integral part of these consolidated financial statements.

Hanon Systems and Subsidiaries
Consolidated Statements of Income
Years Ended December 31, 2016 and 2015

(In Korean won)	Notes	2016	2015
Sales	7,33	5,703,714,576,919	5,558,080,871,335
Cost of sales	27,33	4,804,845,996,828	4,697,001,621,187
Gross profit		898,868,580,091	861,079,250,148
Selling, general and administrative expenses	24,27	476,320,431,807	501,529,108,096
Operating profit		422,548,148,284	359,550,142,052
Financial income	6,25	7,202,948,757	9,810,017,064
Financial expenses	6,25	29,176,391,538	26,438,047,705
Other non-operating income	6,26	139,936,459,516	114,278,805,097
Other non-operating expenses	6,26	133,883,439,015	124,076,049,030
Share of profit in associates	12	9,024,825,921	12,559,200,635
Profit before income taxes		415,652,551,925	345,684,068,113
Income tax expense	28	111,896,685,614	102,313,082,643
Profit for the year		303,755,866,311	243,370,985,470
Profit for the year attributable to equity holders of the parent company		292,125,004,918	230,509,316,538
Profit for the year attributable to non-controlling interest		11,630,861,393	12,861,668,932
Earnings per share attributable to the equity holders of the parent company for the year			
Basic and diluted earnings per share of common stock	23	547	432

The accompanying notes are an integral part of these consolidated financial statements.

Hanon Systems and Subsidiaries
Consolidated Statements of Comprehensive Income
Years Ended December 31, 2016 and 2015

<i>(In Korean won)</i>	<u>Notes</u>	<u>2016</u>	<u>2015</u>
Profit for the year		303,755,866,311	243,370,985,470
Other comprehensive income (loss) for the year, after tax		(26,673,959,137)	(561,290,410)
Items that may be subsequently reclassified to profit or loss:			
Gain (loss) on cash flow hedge derivative instruments	22,31	(15,684,963,332)	7,041,817,144
Foreign currency translation adjustments	31	(10,939,333,059)	(15,021,990,437)
Accumulated other comprehensive income (loss) from investment in associates, net	12,31	1,500,778,611	1,820,660,392
Items that will not be reclassified subsequently to profit or loss:			
Remeasurement of the net defined benefit liabilities	18	(1,550,441,357)	5,598,222,491
Total comprehensive income for the year		<u>277,081,907,174</u>	<u>242,809,695,060</u>
Attributable to :			
Equity holders of the Company		266,512,940,548	229,730,241,172
Non-controlling interests		10,568,966,626	13,079,453,888

The accompanying notes are an integral part of these consolidated financial statements.

Hanon Systems and Subsidiaries
Consolidated Statements of Changes in Equity
Years Ended December 31, 2016 and 2015

(in Korean won)	Notes	Attributable to equity holders of the parent company					Non-controlling interests	Total Equity
		Issued Capital	Share Premium	Other components of equity	Accumulated other comprehensive income(loss)	Retained earnings		
Balances at January 1, 2015		53,380,000,000	48,060,000,000	(71,131,343,144)	(108,873,553,998)	1,697,092,078,127	51,465,249,118	1,669,992,430,103
Profit for the year		-	-	-	-	230,509,316,538	12,861,668,932	243,370,985,470
Remeasurement of net defined benefit liabilities	18	-	-	-	-	5,598,222,491	-	5,598,222,491
Gain on cash flow hedge derivative instruments	22,31	-	-	-	7,041,817,144	-	-	7,041,817,144
Translation of foreign currency financial statements	31	-	-	-	(15,239,775,393)	-	217,784,956	(15,021,990,437)
Share of other comprehensive profit of associates	12	-	-	-	1,820,660,392	-	-	1,820,660,392
Comprehensive income		-	-	-	(6,377,297,857)	236,107,539,029	13,079,453,888	242,809,695,060
Cash dividends	32	-	-	-	-	(103,557,200,000)	(9,803,671,950)	(113,360,871,950)
Transactions with equity holders of the Company		-	-	-	-	(103,557,200,000)	(9,803,671,950)	(113,360,871,950)
Balances at December 31, 2015		53,380,000,000	48,060,000,000	(71,131,343,144)	(115,250,851,855)	1,829,642,417,156	54,741,031,056	1,799,441,253,213

Hanon Systems and Subsidiaries
Consolidated Statements of Changes in Equity
Years Ended December 31, 2016 and 2015

(in Korean won)	Notes	Attributable to equity holders of the parent company					Non-controlling interests	Total Equity
		Issued Capital	Share Premium	Other components of equity	Accumulated other comprehensive income(loss)	Retained earnings		
Balances at January 1, 2016		53,380,000,000	48,060,000,000	(71,131,343,144)	(115,250,851,855)	1,829,642,417,156	54,741,031,056	1,799,441,253,213
Profit for the year		-	-	-	-	292,125,004,918	11,630,861,393	303,755,866,311
Remeasurement of net defined benefit liabilities	18	-	-	-	-	(1,550,441,357)	-	(1,550,441,357)
Gain on cash flow hedge derivative instruments	22,31	-	-	-	(15,684,963,332)	-	-	(15,684,963,332)
Translation of foreign currency financial statements	31	-	-	-	(9,877,438,292)	-	(1,061,894,767)	(10,939,333,059)
Share of other comprehensive profit of associates	12	-	-	-	1,500,778,611	-	-	1,500,778,611
Comprehensive income (loss)		-	-	-	(24,061,623,013)	290,574,563,561	10,568,966,626	277,081,907,174
Cash dividends	32	-	-	-	-	(183,627,200,000)	(10,710,795,152)	(194,337,995,152)
Capital inflow from non-controlling interests		-	-	-	-	-	2,720,921,925	2,720,921,925
Transactions with equity holders of the Company		-	-	-	-	(183,627,200,000)	(7,989,873,227)	(191,617,073,227)
Balances at December 31, 2016		53,380,000,000	48,060,000,000	(71,131,343,144)	(139,312,474,868)	1,936,589,780,717	57,320,124,455	1,884,906,087,160

The accompanying notes are an integral part of these consolidated financial statements.

Hanon Systems and Subsidiaries
Consolidated Statements of Cash Flows
Years Ended December 31, 2016 and 2015

<i>(in Korean won)</i>	Notes	2016	2015
Cash flows from operating activities			
Cash generated from operations		501,856,426,086	531,543,488,388
Profit for the year		303,755,866,311	243,370,985,470
Adjustments to reconcile profit for the year to net cash provided by operating activities	29	402,987,943,183	347,815,738,020
Changes in operating assets and liabilities	29	(204,887,383,408)	(59,643,235,102)
Interest received		6,269,164,897	6,408,754,345
Interest paid		(19,621,968,121)	(13,456,597,489)
Dividend received		5,718,066,860	4,262,758,530
Income tax paid		(105,051,838,987)	(81,242,020,063)
Net cash inflow from operating activities		389,169,850,735	447,516,383,711
Cash flows from investing activities			
Cash inflows from investing activities		22,422,848,124	17,330,868,516
Disposal of property, plant and equipment		19,158,284,233	11,605,700,163
Disposal of intangible assets		569,907,675	1,968,018,569
Disposal of long-term financial instruments		500,000	-
Disposal of held-to-maturity investments		-	26,650,000
Collection of short-term loans		2,694,156,216	1,306,799,784
Collection of long-term loans		-	42,900,000
Cash inflow from derivative instrument transactions		-	2,380,800,000
Cash outflows from investing activities		(474,300,457,627)	(273,235,149,426)
Acquisition of property, plant and equipment	13	(249,726,731,829)	(226,934,841,190)
Acquisition of intangible assets	14	(85,703,017,143)	(40,947,702,475)
Acquisition of short-term financial instruments		(2,500,000,000)	(5,000,000,000)
Increase in short-term loans receivable		(10,581,552,608)	(352,605,761)
Increase in long-term loans receivable		(2,000,000,000)	-
Cash outflow from derivative instrument transactions		(679,350,000)	-
Cash outflow from business combination		(123,109,806,047)	-
Net cash outflow from investing activities		(451,877,609,503)	(255,904,280,910)
Cash flows from financing activities			
Cash inflows from financing activities		543,420,670,183	292,347,942,232
Increase in short-term borrowings	20	240,292,756,629	291,106,480,358
Increase in long-term borrowings	20	408,996,984	1,241,461,874
Proceeds from issuance of debentures	20	299,030,200,000	-
Capital inflow from non-controlling interests		2,716,716,570	-
Cash inflow from derivative instrument transactions		972,000,000	-
Cash outflows from financing activities		(495,108,609,300)	(404,192,478,023)
Repayment of short-term borrowings	20	(287,171,032,640)	(293,870,736,726)
Repayment of long-term borrowings	20	(4,651,195,680)	(2,294,759,488)
Dividends paid	32	(183,627,200,000)	(103,557,200,000)
Dividends paid to non-controlling interests		(19,659,180,980)	(4,469,781,809)
Net cash inflow (outflow) from financing activities		48,312,060,883	(111,844,535,791)
Net increase (decrease) in cash and cash equivalents			
Beginning of the year		(14,395,697,885)	79,767,567,010
Effect of exchange rate on cash and cash equivalents		447,114,126,189	381,339,285,637
Cash and cash equivalents classified as assets held-for-sale	34	(5,207,953,531)	(13,992,726,458)
End of the year		(2,350,073,790)	425,160,400,983
		447,114,126,189	

The accompanying notes are an integral part of these consolidated financial statements.

Hanon Systems and Subsidiaries

Notes to the Financial Statements

December 31, 2016 and 2015

1. General Information

Hanon Systems (the “Company”) and its subsidiaries (collectively “the Group”) were established on March 11, 1986, under the Commercial Code of the Republic of Korea to manufacture, assemble and sell automotive parts such as radiators, air conditioners and heaters, and was organized pursuant to a joint venture agreement on December 12, 1985 between Ford Motor Company (“Ford”) and Mando Machinery Corporation. On July 31, 1996, the Company offered its ordinary shares for public offering on the Korea Stock Exchange. The capital initially issued by the Company was ₩900,000 thousand upon establishment, and amounts to ₩53,380,000 thousand as of December 31, 2016. Visteon (VIHI,LLC), the former largest shareholder of the parent company, had entered into an agreement to sell its 70% ownership interest in the parent company to Hahn & Co. Auto Holdings Co., Ltd. and Hankook Tire Co., Ltd., on December 17, 2014, and completed the sale on June 9, 2015. The Company’s major shareholders and their respective equity ownership as of December 31, 2016 and 2015, are as below.

Shareholders	December 31, 2016		December 31, 2015	
	Number of shares	Equity ownership (%)	Number of shares	Equity ownership (%)
Hahn & Co Auto Holdings Co., Ltd.	269,569,000	50.50	53,913,800	50.50
Hankook Tire Co., Ltd,	104,031,000	19.49	20,806,200	19.49
Others	160,200,000	30.01	32,040,000	30.01
	533,800,000	100.00	106,760,000	100.00

During this reporting period, in order to expand the number of issued shares, the Company increased the number of common stock by 400%, from 106,700,000 shares to 533,800,000 shares by stock-split.

1.1 Consolidated Subsidiaries

Subsidiaries included in the consolidated financial statements as of December 31, 2016 and 2015, are as follows:

Hanon Systems and Subsidiaries

Notes to the Financial Statements

December 31, 2016 and 2015

Subsidiaries ¹	Location	Percentage of ownership (%)			Main business
		2016	2015	Year end	
Hanon Beijing	China	80.00	80.00	December	Production and sales of vehicle components
Hanon Dalian	China	100.00	100.00	December	Production and sales of vehicle components
Hanon Jinan	China	99.70	99.70	December	Production and sales of vehicle components
Hanon Shanghai	China	100.00	100.00	December	Development, technical consultation and export of vehicle components
Hanon Chongqing	China	100.00	100.00	December	Production and sales of vehicle components
Hanon Nanchang	China	80.90	80.90	December	Production and sales of vehicle components
Hanon Nanjing	China	51.00	51.00	December	Production and sales of vehicle components
Hanon Yancheng	China	100.00	100.00	December	Production and sales of vehicle components
Hanon New Chongqing ³	China	66.60	-	December	Production and sales of vehicle components
HASI (formerly, VASI) ²	India	100.00	100.00	March	Production and sales of vehicle components
Hanon Bhiwadi	India	61.00	61.00	March	Production and sales of vehicle components
VEIPL ²	India	100.00	-	March	Production and sales of vehicle components
Hanon Japan	Japan	100.00	100.00	December	Development, technical consultation and export of vehicle components
Hanon Thailand	Thailand	100.00	100.00	December	Production and sales of vehicle components
Hanon Slovakia	Slovakia	100.00	100.00	December	Production and sales of vehicle components
Hanon Turkey	Turkey	100.00	100.00	December	Production and sales of vehicle components
Hanon Portugal	Portugal	100.00	100.00	December	Production and sales of vehicle components
Hanon Autopal Service	Czech	100.00	100.00	December	Research of vehicle components
Hanon Autopal	Czech	100.00	100.00	December	Production and sales of vehicle components
Hanon Charleville	France	100.00	100.00	December	Production and sales of vehicle components
Hanon Hungary	Hungary	100.00	100.00	December	Production and sales of vehicle components
Hanon UK	United Kingdom	100.00	100.00	December	Development, technical consultation and export of vehicle components
Hanon Deutschland	Germany	100.00	100.00	December	Research of vehicle components
Hanon Southern Germany	Germany	100.00	100.00	December	Development, technical consultation and export of vehicle components
Hanon Netherlands	Netherlands	100.00	100.00	December	Sales of vehicle components
Hanon Russia	Russia	100.00	100.00	December	Production and sales of vehicle components
Hanon Alabama	U.S.A.	100.00	100.00	December	Production and sales of vehicle components
Hanon USA	U.S.A.	100.00	100.00	December	Research of vehicle components
Hanon Canada	Canada	100.00	100.00	December	Production and sales of vehicle components
Hanon Coclisa	Mexico	100.00	100.00	December	Production and sales of vehicle components
Hanon Mexicana	Mexico	100.00	100.00	December	Sales of vehicle components
Hanon Brazil	Brazil	100.00	100.00	December	Production and sales of vehicle components
Hanon Brasil Holdings ³	Brazil	100.00	-	December	Production and sales of vehicle components
Hanon South Africa	Republic of South Africa	100.00	100.00	December	Production and sales of vehicle components

¹ The official names of the subsidiaries are as follows:

Subsidiaries	Official names
Hanon Beijing	Hanon Systems (Beijing) Co., Ltd.
Hanon Dalian	Hanon Systems (Dalian) Co., Ltd.
Hanon Jinan	Halla Visteon Climate Control (Jinan) Co., Ltd.
Hanon Shanghai	Hanon Systems (Shanghai) Co., Ltd.
Hanon Chongqing	Hanon Systems (Chongqing) Co., Ltd.

Hanon Systems and Subsidiaries

Notes to the Financial Statements

December 31, 2016 and 2015

Subsidiaries	Official names
Hanon Nanchang	Hanon Systems (Nanchang) Co., Ltd.
Hanon Nanjing	Hanon Jie Xi Si Systems (Nanjing) Co., Ltd.
Hanon Yancheng	Hanon Systems (Yancheng) Co., Ltd.
Hanon New Chongqing	Chongqing Hanon Systems Co., Ltd
HASI(formerly, VASI)	Hanon Automotive Systems India Private Ltd.
Hanon Bhiwadi	Hanon Climate Systems India Private Limited
VEIPL	Visteon Electronics India Private Limited
Hanon Japan	Hanon Systems Japan Ltd.
Hanon Thailand	Hanon Systems (Thailand) Co. Ltd.
Hanon Slovakia	Hanon Systems Slovakia s.r.o.
Hanon Turkey	Hanon Automotive Climate Sys. Manufacturing Industrial and Commercial Co.
Hanon Portugal	Hanon Systems Portugal, S.A.
Hanon Autopal Service	Hanon Systems Autopal Services s.r.o.
Hanon Autopal	Hanon Systems Autopal s.r.o.
Hanon Charleville	Hanon Systems Charleville SAS
Hanon Hungary	Hanon Systems Hungary Kft.
Hanon UK	Hanon Systems UK Limited
Hanon Deutschland	Hanon Systems Deutschland GmbH
Hanon Southern Germany	Hanon Systems Southern Germany GmbH
Hanon Netherlands	Hanon Systems Netherlands Cooperatief U.A.
Hanon Russia	Hanon Systems Rus LLC
Hanon Alabama	Hanon Systems Alabama Corp.
Hanon USA	Hanon Systems USA, LLC
Hanon Canada	Hanon Systems Canada Inc.
Hanon Coclisa	Coclisa, S.A. de C.V.
Hanon Mexicana	Climate Systems Mexicana, S.A. de C.V.
Hanon Brazil	Hanon Systems Climatizacoe do Brasil Industria e Comercio Ltda.
Hanon Brasil Holdings	Hanon Brasil Holdings Ltda
Hanon South Africa	Hanon Systems South Africa (PTY) Ltd.

² During the year ended December 31, 2016, the Group has split the electronic equipment product group of HASI, and incorporated a subsidiary, VEIPL. The assets and liabilities related to VEIPL were disclosed as held-for-sale. (Note 34)

³ During the year ended December 31, 2016, Hanon Beijing and Hanon Brazil, which are subsidiaries of Hanon Systems, have incorporated Hanon New Chongqing in China and Hanon Brasil Holdings in Brazil, respectively.

1.2 Summary of financial information of subsidiaries

The summarized financial information of subsidiaries as of and for the years ended December 31, 2016 and 2015, is as follows:

Hanon Systems and Subsidiaries

Notes to the Financial Statements

December 31, 2016 and 2015

(in thousands of
Korean won)

Subsidiary	2016					Profit (loss) for the year	Total comprehensive income (loss)
	Assets	Liabilities	Equity	Sales			
Hanon Beijing	289,218,421	161,485,694	127,732,727	549,297,362	31,624,233	27,405,946	
Hanon Dalian	180,140,078	56,154,139	123,985,939	274,318,558	28,077,866	23,960,888	
Hanon Jinan	11,890,128	905,748	10,984,380	13,188,748	1,929,520	1,646,535	
Hanon Shanghai	14,612,881	12,390,521	2,222,360	10,799,389	(1,520,464)	(1,622,990)	
Hanon Chongqing	72,279,351	28,030,331	44,249,020	115,228,621	14,405,538	13,176,335	
Hanon Nanchang	64,675,622	28,481,237	36,194,385	90,523,193	11,486,647	10,281,018	
Hanon Nanjing	39,285,573	23,037,449	16,248,124	38,225,933	1,940,295	1,496,162	
Hanon Yancheng	55,779,522	45,067,148	10,712,374	84,523,602	3,373,674	3,127,042	
Hanon New Chongqing	16,891,576	849,957	16,041,619	-	(72,031)	(202,690)	
HASI(formerly, VASI)	149,135,906	94,399,949	54,735,957	286,587,130	4,911,373	5,959,225	
Hanon Bhiwadi	42,771,127	10,089,727	32,681,400	55,596,479	6,578,830	6,799,109	
VEIPL	63,186,019	33,659,427	29,526,592	44,306,402	282,163	1,637,492	
Hanon Japan	33,295,110	24,241,231	9,053,879	96,389,696	813,981	1,415,432	
Hanon Thailand	104,167,483	25,479,513	78,687,970	149,131,251	17,912,551	20,888,549	
Hanon Slovakia	226,061,597	102,759,624	123,301,973	419,972,635	20,706,993	19,404,570	
Hanon Turkey	73,785,733	42,427,073	31,358,660	196,650,138	8,243,323	3,267,603	
Hanon Portugal	109,631,402	36,054,556	73,576,846	184,567,609	963,840	211,248	
Hanon Autopal Service	17,484,109	7,321,068	10,163,041	24,965,132	2,293,896	2,185,278	
Hanon Autopal	210,737,430	149,535,033	61,202,397	346,513,442	(2,436,637)	(3,051,613)	
Hanon Charleville	64,488,099	52,892,482	11,595,617	191,954,008	(536,789)	(125,910)	
Hanon Hungary	162,236,481	81,783,047	80,453,434	193,015,478	7,157,565	6,321,958	
Hanon UK	3,233,764	5,206,728	(1,972,964)	9,185,079	1,927,797	1,115,192	
Hanon Deutschland	68,881,196	77,019,621	(8,138,425)	120,222,663	14,018,622	11,428,472	
Hanon Southern Germany	3,955,539	2,354,606	1,600,933	6,288,512	249,136	232,268	
Hanon Netherlands	324,726,552	337,221,323	(12,494,771)	801,248,940	(34,556,261)	(34,354,220)	
Hanon Russia	6,982,042	11,722,090	(4,740,048)	2,341,923	2,745,533	1,561,272	
Hanon Alabama	185,309,810	86,867,985	98,441,825	520,341,161	12,902,108	16,003,174	
Hanon USA	138,367,430	87,310,993	51,056,437	222,420,173	16,373,869	18,078,170	
Hanon Canada	97,151,716	33,650,930	63,500,786	139,887,036	12,424,950	15,535,318	
Hanon Coclisa	44,734,521	32,990,256	11,744,265	87,825,343	2,848,685	1,148,621	
Hanon Mexicana	58,767,358	53,668,579	5,098,779	71,514,372	(802,569)	(1,663,541)	
Hanon Brazil	14,035,054	15,921,433	(1,886,379)	9,157,250	(1,720,286)	(1,904,205)	
Hanon Brasil Holdings	88,330	2,538,369	(2,450,039)	-	(2,208,244)	(2,450,225)	
Hanon South Africa	6,089,507	3,463,245	2,626,262	3,210,909	80,510	307,744	

(in thousands of
Korean won)

Subsidiary	2015					Profit (loss) for the year	Total comprehensive income (loss)
	Assets	Liabilities	Equity	Sales			
Hanon Beijing	345,054,615	207,892,757	137,161,858	522,870,777	39,725,021	43,385,430	
Hanon Dalian	189,263,977	56,302,488	132,961,489	271,664,722	23,147,767	24,047,506	
Hanon Jinan	29,337,384	20,092,931	9,244,453	31,501,572	609,470	686,901	
Hanon Shanghai	8,448,360	4,603,010	3,845,350	16,101,506	37,885	73,302	
Hanon Chongqing	68,413,346	29,604,601	38,808,745	110,551,579	13,275,551	13,441,185	

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(in thousands of
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Subsidiary	2015					Profit (loss) for the year	Total comprehensive income (loss)
	Assets	Liabilities	Equity	Sales			
Hanon Nanchang	63,135,464	24,815,391	38,320,073	94,526,815	12,478,439	12,651,359	
Hanon Nanjing	38,327,823	23,575,860	14,751,963	39,724,729	1,529,640	1,644,915	
Hanon Yancheng	32,646,792	24,968,068	7,678,724	48,992,500	753,675	814,311	
HASI(formerly, VASI)	188,472,689	111,031,396	77,441,293	298,695,675	7,585,737	4,659,579	
Hanon Bhiwadi	38,968,977	9,006,410	29,962,567	60,677,486	5,640,856	6,196,634	
Hanon Japan	30,621,696	22,842,218	7,779,478	91,027,868	2,277,306	2,643,547	
Hanon Thailand	94,033,230	21,520,683	72,512,547	153,326,555	15,283,956	12,919,783	
Hanon Slovakia	207,233,896	103,336,493	103,897,403	370,095,707	13,660,622	10,003,291	
Hanon Turkey	77,835,911	49,744,853	28,091,058	191,221,919	8,975,467	5,199,364	
Hanon Portugal	109,107,755	35,742,157	73,365,598	184,723,129	6,186,409	3,379,571	
Hanon Autopal Service	15,651,398	7,673,634	7,977,764	26,966,350	1,333,455	1,071,069	
Hanon Autopal	181,899,667	117,645,413	64,254,254	298,653,228	1,931,436	(624,997)	
Hanon Charleville	65,496,809	53,775,282	11,721,527	205,163,001	(1,451,183)	(418,510)	
Hanon Hungary	126,497,639	52,366,162	74,131,477	208,338,770	1,947,879	(953,513)	
Hanon UK	5,101,184	8,189,340	(3,088,156)	9,332,331	(1,091,135)	(777,508)	
Hanon Deutschland	45,664,337	65,231,234	(19,566,897)	124,440,113	481,274	5,760,574	
Hanon Southern Germany	5,383,698	4,015,034	1,368,664	9,823,372	3,118,123	3,260,397	
Hanon Netherlands	268,456,238	246,596,788	21,859,450	711,365,938	(21,842,040)	(24,119,363)	
Hanon Russia	4,114,931	10,416,252	(6,301,321)	31,581,048	(2,708,060)	(1,367,966)	
Hanon Alabama	166,769,434	84,330,783	82,438,651	492,897,579	6,222,072	11,165,272	
Hanon USA	74,301,037	41,322,771	32,978,266	245,386,199	6,548,119	8,409,731	
Hanon Canada	80,635,747	32,670,280	47,965,467	123,962,326	8,195,378	2,970,968	
Hanon Coclisa	40,839,850	30,244,206	10,595,644	71,468,570	2,619,108	2,061,811	
Hanon Mexicana	24,605,572	17,843,252	6,762,320	30,220,174	(1,397,465)	(1,574,050)	
Hanon Brazil	4,721,592	4,703,580	18,012	9,851,649	(1,691,894)	(2,041,531)	
Hanon South Africa	55,810	-	55,810	-	-	-	

1.3 Changes in Scope for Consolidation

There is no subsidiary excluded for the year ended December 31, 2016, and subsidiaries newly included in the consolidation for the year ended December 31, 2016, are as follows:

Subsidiaries	Reason
Hanon New Chongqing	Newly incorporated by Hanon Beijing, which is a subsidiary.
Hanon Brasil Holdings	Newly incorporated by Hanon Brazil, which is a subsidiary.

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2. Significant Accounting Policies

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

2.1 Basis of Preparation

The Group maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language (Hangul) in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS). The accompanying consolidated financial statements have been condensed, restructured and translated into English from the Korean language financial statements.

Certain information attached to the Korean language financial statements, but not required for a fair presentation of the Group's financial position, financial performance or cash flows, is not presented in the accompanying consolidated financial statements.

The consolidated financial statements of the Group have been prepared in accordance with Korean IFRS. These are the standards, subsequent amendments and related interpretations issued by the International Accounting Standards Board (IASB) that have been adopted by the Republic of Korea.

The preparation of the consolidated financial statements requires the use of certain critical accounting estimates. It also requires management to exercise judgment in the process of applying the Group's accounting policies. The areas which require a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 3.

2.2 Changes in Accounting Policy and Disclosures

(a) New and amended standards adopted by the Group

The Group newly applied the following amended and enacted standards for the annual period beginning January 1, 2016, and this application does not have a material impact on the financial statements:

- Amendment to Korean IFRS 1001, *Presentation of Financial Statements*
- Amendment to Korean IFRS 1016, *Property, Plant and Equipment*, and Korean IFRS 1041, *Agriculture and Fishing: Productive Plants*
- Amendment to Korean IFRS 1016, *Property, Plant and Equipment*, and Korean IFRS 1038, *Intangible assets: Amortization Based on Revenue*
- Amendment to Korean IFRS 1110, *Consolidated Financial Statements*, Korean IFRS 1028, *Investments in Associates and Joint Ventures*, and Korean IFRS 1112, *Disclosures of Interests in Other Entities: Exemption for Consolidation by an Investment Entity*
- Amendment to Korean IFRS 1111, *Joint Arrangements*
- Annual Improvements to Korean IFRS 2012-2014 Cycle
- Korean IFRS 1011, *Construction Contract*, Korean IFRS 1037, *Provisions, Contingent Liabilities*

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and Contingent Assets; and Interpretation 2115, Arrangements for Property Construction

(b) New and amended standards and interpretations not yet adopted by the Group

Amendments which have been issued but not effective for the financial year beginning January 1, 2016, and which are not early adopted are enumerated below.

- Amendments to Korean IFRS 1007 *Statement of Cash Flows*
- Amendments to Korean IFRS 1012 *Income Tax*
- Amendments to Korean IFRS 1102 *Share-based Payment*
- Korean IFRS 1109 *Financial Instruments*

The new standard for financial instruments issued on September 25, 2015 will be effective for annual periods beginning on or after January 1, 2018 and early adoption is permitted. This standard will replace Korean IFRS 1039 *Financial Instruments: Recognition and Measurement*. The Group will apply the standards for annual periods beginning on or after January 1, 2018, and is analyzing the financial effects of applying the standards.

- Korean IFRS 1115 Revenue from Contracts with Customers

The Group will apply Korean IFRS 1115 *Revenue from Contracts with Customers* issued on November 6, 2015 for annual reporting periods beginning on or after January 1, 2018, and earlier adoption is permitted. This standard replaces Korean IFRS 1018 *Revenue*, Korean IFRS 1011 *Construction Contracts*, Interpretation 2031 *Revenue-Barter Transactions Involving Advertising Services*, Interpretation 2113 *Customer Loyalty Programs*, Interpretation 2115 *Agreements for the Construction of Real Estate* and Interpretation 2118 *Transfers of assets from customers*. The Group must apply Korean IFRS 1115 *Revenue from Contracts with Customers* within annual reporting periods beginning on or after January 1, 2018.

The new standard is based on the principle that revenue is recognized when control of a good or service transfers to a customer so the notion of control replaces the existing notion of risks and rewards. A new five-step process must be applied before revenue from contract with customer can be recognized:

- Identify contracts with customers
- Identify the separate performance obligation
- Determine the transaction price of the contract
- Allocate the transaction price to each of the separate performance obligations, and
- Recognize the revenue as each performance obligation is satisfied.

As of December 31, 2016, preparation for internal management process and adjustment of accounting system in relation to implementation of Korean IFRS 1115 as well as analysis on the

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financial effects of adopting the standard are not initiated yet by the Group. The Group plans to analyze the financial effects of applying the standard and disclose the result of the analysis in the notes on the financial statement by the end of September 30, 2017.

2.3 Consolidation

The Group has prepared the consolidated financial statements in accordance with Korean IFRS 1110, *Consolidated Financial Statements*.

(a) Subsidiaries

Subsidiaries are all entities over which the parent company has control. The parent company controls the corresponding investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The consolidation of a subsidiary begins from the date the parent company obtains control of a subsidiary and ceases when the parent company loses control of the subsidiary.

The Group applies the acquisition method to account for business combinations. The consideration transferred is measured at the fair values of the assets transferred, and identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are initially measured at their fair values at the acquisition date. The Group recognizes any non-controlling interest in the acquiree on an acquisition-by-acquisition basis in the event of liquidation, either at fair value or at the non-controlling interest's proportionate share of the recognized amounts of acquiree's identifiable net assets. All other non-controlling interests are measured at their acquisition-date fair values, unless another measurement basis is required by IFRSs. Acquisition-related costs are expensed as incurred.

Goodwill is recognized as the excess of the aggregate of the consideration transferred, the amount of any non-controlling interest in the acquiree, and the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree over the identifiable net assets acquired. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized in profit or loss.

Balances of receivables and payables, income and expenses and unrealized gains on transactions between the Group subsidiaries are eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

(b) Associates

Associates are entities over which the Group has significant influence, and investments in associates are initially recognized at acquisition cost using the equity method. Unrealized gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. If there is any objective evidence that the investment in the associate is impaired, the Group recognizes the difference between the recoverable amount of the associate and its book value as impairment loss.

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2.4 Foreign Currency Translation

(a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which each entity operates (the "functional currency"). The consolidated financial statements are presented in Korean won, which is the Company's functional and presentation currency.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognized in profit or loss.

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognized in profit or loss as part of the fair value gain or loss and translation differences on non-monetary assets such as equities classified as available-for-sale financial assets are recognized in other comprehensive income.

2.5 Financial Assets

(a) Classification and measurement

The Group classifies its financial assets into the following categories: financial assets at fair value through profit or loss, available-for-sale financial assets, loans and receivables, and held-to-maturity financial assets. Regular way purchases and sales of financial assets are recognized on trade-date, the date on which the Group commits to purchase or sell the asset.

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss. Available-for-sale financial assets and financial assets at fair value through profit or loss are subsequently carried at fair value. And, loans and receivables and held-to-maturity investments are subsequently carried at amortized cost using the effective interest method.

Gains or losses arising from changes in the fair value of financial assets at fair value through profit or loss are recognized in profit or loss within other income or other expenses. Gains or losses arising from changes in the available-for-sale financial assets are recognized in other comprehensive income, and amounts are reclassified to profit or loss when the associated assets are sold or impaired.

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(b) Impairment

The Group assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or a group of financial assets that can be reliably estimated.

Impairment of loans and receivables is presented as a deduction in an allowance account, and that of other financial assets is directly deducted from their carrying amount. The Group writes off financial assets when the assets are determined to be no longer recoverable.

The Group considers that there is objective evidence of impairment if significant financial difficulties of the debtor, or delinquency in interest or principal payments is indicated. Moreover, in the case of equity investments classified as available-for-sale, a significant decline in the fair value of the security below its cost, or prolonged decline is considered an objective evidence of impairment.

c) Derecognition

If a transfer does not result in derecognition because the Group has retained substantially all the risks and rewards of ownership of the transferred asset, the Group continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received. The Group classified the financial liability as "borrowings" in the statement of financial position (Note 20).

(d) Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount reported in the consolidated statements of financial position where there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the assets and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Group or the counterparty.

2.6 Derivative Instruments

Derivatives are initially recognized at fair value on the date when a derivative contract is entered into and are subsequently remeasured at their fair value at the end of each reporting period. Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognized immediately in profit or loss within 'other non-operating income (expenses)' based on the nature of transactions.

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2.7 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using following methods.

Inventories	Method
Merchandises, finished goods, work in process, raw material, supplies	Moving-weighted average method
Materials-in-transit	Specific identification method

2.8 Non-current Assets (or Disposal Group) Held for sale

Non-current assets (or disposal group) are classified as held for sale when their carrying amount will be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. The assets are measured at the lower amount between their carrying amount and the fair value less costs to sell.

2.9 Property, Plant and Equipment

Property, plant and equipment are stated at historical cost less accumulated depreciation and accumulated impairment losses. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Depreciation of all property, plant and equipment, except for land, is calculated using the straight-line method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives as follows:

	Useful lives
Buildings	4 - 50 years
Structures	5 - 50
Machinery	1 - 21
Vehicles	4 - 10
Tools and equipment	2 - 16
Office Equipment	3 - 16
Lease Improvements	5 - 10

The assets' depreciation method, residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

2.10 Government Grants

Grants from the government are recognized at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions. Government grants related to assets are presented in the statement of financial position by setting up the grant as deferred income, and government grants related to costs are deferred and recognized in the profit or loss over the period necessary to match them with the costs that they

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are intended to compensate.

2.11 Intangible Assets

Goodwill is measured as described in Note 2.12 and carried at cost less accumulated impairment losses.

Intangible assets, except for goodwill, are initially recognized at its historical cost, and carried at cost less accumulated amortization and accumulated impairment losses.

Software development costs that are directly attributable to internally generated by the Group are recognized when the criteria; such as, technically feasible, generate probable future economic benefits and other, are met. Membership rights that have an indefinite useful life are not subject to amortization because there is no foreseeable limit to the period over which the assets are expected to be utilized. The Group amortizes intangible assets with a limited useful life using the straight-line method over the following periods:

	Useful lives
Industrial rights	5 - 10 years
Development costs	1 - 5
Other intangible assets	5 - 15

2.12 Impairment of Non-financial Assets

Impairment test is being conducted for goodwill and intangible assets which have indefinite useful lives on an annual basis, and for assets which are subject to depreciation or amortization when indicators of impairment are present. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less cost to sell and value-in-use. Impairment losses from non-financial assets other than goodwill are reviewed for reversal of the impairment at the end of each reporting period.

2.13 Financial Liabilities

(a) Classification and measurement

The Group's financial liabilities at fair value through profit or loss are derivative financial instruments. A financial liability is classified as a liability held for trading if it is incurred principally for the purpose of repurchasing in the near term. A derivative that is not designated as hedging instruments and an embedded derivative that is separated from financial instrument are also classified as liability held for trading.

The Group classifies non-derivative financial liabilities, except for financial liabilities at fair value through profit or loss, financial guarantee contracts and financial liabilities that arise when a transfer of financial assets does not qualify for derecognition, as financial liabilities carried at amortized cost and present as 'trade payables', 'borrowings', and 'other financial liabilities' in the statement of financial position.

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(b) Derecognition

Financial liabilities are derecognized in the statement of financial position when it is extinguished; for example, when the obligation specified in the contract is discharged or cancelled or expired or when the terms of an existing financial liability are substantially modified.

2.14 Financial Guarantee Contracts

Financial guarantee contracts are recognized as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value, subsequently at the higher of the following amounts

- (a) the amount determined in accordance with Korean IFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets*
- (b) the amount initially recognized less cumulative amortization in accordance with Korean IFRS1018 *Revenue*, and recognized in the statement of financial position within ‘other financial liabilities’.

2.15 Provisions

Provisions are measured at the present value of management’s best estimate of the expenditure required to settle the present obligation at the end of the reporting period, and the increase in the provision due to the passage of time is recognized as interest expense.

2.16 Current and Deferred Tax

The corporate income tax expense for the period consists of current and deferred income tax. Current and deferred income tax is recognized in profit or loss, but if it relates to other comprehensive income or items directly recognized in equity, it is recognized in the items.

The corporate income tax expense is measured at the amount expected to be paid to the tax authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. The Group recognizes current income tax on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination, unless it affects accounting or taxable profit (loss).

Deferred tax assets are recognized only if it is probable that future taxable amounts will be available to utilize those temporary differences and losses.

The Group recognizes a deferred tax liability all taxable temporary differences associated with

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

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis.

2.17 Employee Benefits

(a) Post-employment benefits

The Group operates both defined contribution and defined benefit pension plans.

For defined contribution plans, the Group pays contribution to publicly or privately administered pension insurance plans on mandatory, contractual or voluntary basis. The Group has no further payment obligation once the contribution has been paid. The contribution are recognized as employee benefit expense when they are due.

A defined benefit plan is a pension plan that is not a defined contribution plan. Generally, post-employment benefits are payable after the completion of employment, and the benefit amount depended on the employee's age, periods of service or salary levels. The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms approximating to the terms of the related obligation. Gains and losses arising from remeasurement on experience adjustments and changes in actuarial assumptions are recognized in the period in which they occur, directly in other comprehensive income.

Changes in the present value of the defined benefit obligation resulting from plan amendments or curtailments are recognized immediately in profit or loss as past service costs.

(b) Share-based payments

Equity-settled share-based payment is recognized at fair value of equity instruments granted, and employee benefit expense is recognized over the vesting period. At the end of each period, the Group revises its estimates of the number of options that are expected to vest based on the non-market vesting and service conditions. It recognizes the impact of the revision to original estimates, if any, in profit or loss, with a corresponding adjustment to equity.

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When the options are exercised, the Group issues new shares. The proceeds received, net of any directly attributable transaction costs, are recognized as share capital (nominal value) and share premium.

2.18 Revenue Recognition

Revenue is measured at the fair value of the consideration received or receivable for the sale of goods or rendering of services arising from the normal course of the business. Amounts disclosed as revenue are net of value added taxes, returns, rebates and discounts and after elimination of inter-company transactions.

The Group recognizes revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the Group and when specific criteria have been met for each of the Group's activities as described below. The Group bases its estimate on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

(a) Sale of goods

The Group manufactures and sells automobile parts. Sales are recognized when control of the products has transferred, being when the products are delivered to the buyer.

(b) Rendering of services

The Group renders research and development services to the automobile manufacturers and other automobile parts manufacturers. This service is rendered based on type of contract, fixed-price and time-and-materials contracts. The contract terms are generally less than one year to two years.

2.19 Reclassification of certain accounts in prior year's financial statements

The Company reclassified certain accounts in the comparative financial statements of the year ended December 31, 2015, according to the accounts in the current period's financial statements in order to enhance the comparability of the financial statements. Such reclassifications do not affect the reported net income or net assets.

2.20 Approval of Issuance of the Financial Statements

The consolidated financial statements 2016 were approved for issue by the Board of Directors on February 14, 2017 and are subject to change with the approval of shareholders at their Annual General Meeting.

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3. Critical Accounting Estimates and Assumptions

The Group makes estimates and assumptions concerning the future. The estimates and assumptions are continuously evaluated with consideration to factors such as events reasonably predictable in the foreseeable future within the present circumstance according to historical experience. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

(a) *Estimated goodwill impairment*

The Group tests whether goodwill has suffered any impairment on an annual basis. The recoverable amount of a cash generating unit (CGU) is determined based on value-in-use calculations (Note 14).

(b) *Income taxes*

The Group is operating in numerous countries and the income generated from these operations is subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain (Note 28).

If certain portion of the taxable income is not used for investments, increase in wages, or dividends in accordance with the Tax System for Recirculation of Corporate Income, the Group is liable to pay additional income tax calculated based on the tax laws. The new tax system is effective for three years from 2015. Accordingly, the measurement of current and deferred income tax is affected by the tax effects from the new system. As the Group's income tax is dependent on the investments, increase in wages and dividends, there exists uncertainty with regard to measuring the final tax effects.

(c) *Fair value of financial instruments*

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period (Note 5).

(d) *Net defined benefit liability*

The present value of net defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions including the discount rate (Note 18).

(e) *Provisions for warranty and legal contingencies*

The Group recorded provisions related to warranty as of December 31, 2016, and determined the provisions using the estimation based on past experience. In addition, the Group accounted for

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legal contingencies arising from litigation related to in Note 21 based on management's judgment and estimation.

4. Financial Risk Management

4.1 Financial Risk Factors

The Group is exposed to market risk (foreign exchange risk, interest risk), credit risk and liquidity risk. The Group's management reviews that the Group's financial risk-taking activities are governed by appropriate policies and procedures, which have not significant changed since the prior reporting period.

4.1.1 Market risk

(a) Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risks arising from various currency exposures, primarily with respect to the US dollar and the Euro. Foreign exchange risk arises from future expected transactions and recognized assets and liabilities.

It is the Group's policy to manage its financial currency against foreign exchanges risks. Foreign exchange risk arises when future expected transactions or recognized assets and liabilities are denominated in a currency that is not the entity's functional currency.

The Group manages foreign exchange risks arising from expected cash flows (mainly export sales and purchase of inventory) per major foreign currency for a 40 month period and uses foreign currency forward contracts to hedge foreign exchange risk.

The Group's monetary assets and liabilities denominated in foreign currencies as of December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016		2015	
	Assets	Liabilities	Assets	Liabilities
USD	410,782,693	(308,022,640)	352,576,290	(389,139,418)
EUR	82,826,110	(26,388,443)	111,645,890	(17,580,099)
Others	27,864,298	(25,103,843)	59,872,992	(46,541,765)
	521,473,101	(359,514,926)	524,095,172	(453,261,282)

The impacts on the Group's profit before tax due to 5% changes in foreign exchange rates as of December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016		2015	
	5% increase	5% decrease	5% increase	5% decrease
USD	1,935,478	(1,935,478)	(4,992,556)	4,992,556
EUR	(287,373)	287,373	2,539,194	(2,539,194)
Others	138,023	(138,023)	666,561	(666,561)
	1,786,128	(1,786,128)	(1,786,801)	1,786,801

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The sensitivity analysis as of December 31, 2016 and 2015 includes the monetary assets and liabilities denominated in foreign currencies other than functional currencies and excludes monetary assets and liabilities in which hedge accounting was applied.

(b) Interest rate risk

Interest rate risk is the risk that the interest income or interest expense from deposits, loans or borrowings will fluctuate due to changes in future market interest rates. The Group's exposure to the risk of changes in market interest rates relates primarily to the Group's long-term loans and borrowings with floating interest rates.

Financial liabilities exposed to the Group's risk of changes in market interest rates are short-term and long-term borrowings with floating interest rates amounting to ₩314,014,216 thousand and ₩346,172,120 thousand as of December 31, 2016 and 2015, respectively. In addition, except for a sharp drop in economy, the Group is not exposed to the interest risk of replacement in consideration of the Group's retained cash level and capacity of cash generating through operations.

The following table shows the effect on the interest expenses due to a 1% variation of interest rate on the Group's short-term and long-term borrowings for one year period, with all other variables fixed, as of December 31, 2016 and 2015:

	2016		2015	
	1% increase	1% decrease	1% increase	1% decrease
(in thousands of Korean won)				
Interest expense	3,140,142	(3,140,142)	3,461,721	(3,461,721)

4.1.2 Credit Risk

Credit risk occurs when customers or counterparties will not meet its obligations under contracts. The Group is exposed to credit risk from its operating and investing activities. In order to manage credit risk, the Group assesses the credit rating regularly considering financial position of customers or counterparties, historical data and so on and defines the credit limits for each customers and counter-parties, respectively.

For the year ended December 31, 2016, there are not trade receivables which are overdue nor other receivables and loans of other financial assets which have significant indicators of impairment . As of December 31, 2016 and 2015, the Group assessed that the possibility of default is low.

The maximum exposure to credit risk as of December 31, 2016 and 2015, is as follows. Outstanding financial instruments are the Group's maximum exposure amounts, net of impairment loss.

Credit risk arises from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions. For mitigating the risk, the group deals with banks and financial institutions, only independently rated parties with high ratings are accepted.

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4.1.3 Liquidity Risk

Cash flow forecasting is performed in the operating entities of the Group and aggregated by the Group. The Group monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities (Note 21) at all times so that the Group does not breach borrowing limits or covenants on any of its borrowing facilities. Such forecasting takes into consideration the Group's debt financing plans, covenant compliance, compliance with internal statement of financial position ratio targets and, if applicable external regulatory or legal requirements.

Surplus cash held by the operating entities over and above the balance required for working capital management are transferred to the Group's Treasury department. The Treasury department invests surplus cash in interest bearing accounts, time deposits, money market deposits and marketable securities, choosing instruments with appropriate maturities or sufficient liquidity to provide sufficient headroom as determined by the aforementioned forecasts.

The maturity profile of the Group's financial liabilities (based on contractual undiscounted payments) as of December 31, 2016 and 2015 are as follows:

	2016				
	Book value	Contractual cash flow	Less than 1 year	1~5 years	Over 5 years
Borrowings(Debentures)	646,215,115	672,137,026	313,135,959	352,250,130	6,750,937
Trade payables	700,310,344	700,310,344	700,310,344	-	-
Other payables	316,682,265	316,682,265	301,525,409	15,156,856	-
Derivative financial liabilities	2,099,249	2,099,249	2,099,249	-	-

	2015				
	Book value	Contractual cash flow	Less than 1 year	1~5 years	Over 5 years
Borrowings	401,083,120	410,823,779	338,407,875	60,172,001	12,243,903
Trade payables	724,792,520	724,792,520	724,792,520	-	-
Other payables	287,230,507	287,230,507	272,988,779	14,241,728	-

The table above analyses the Group's financial liabilities into relevant maturity groupings based on the remaining period from the date of the consolidated statement of financial position to the contractual maturity date. The amounts disclosed in the table are contractual undiscounted cash flows.

All of the Group's non-trading gross settled derivative financial instruments are in hedge relationships and are due to settle within 31 months from the statement of financial position date. These financial instruments are not included in the above table and the contracts require undiscounted contractual cash inflows are as follows:

	2016		2015	
	Contractual cash inflows	Contractual cash outflows	Contractual cash inflows	Contractual cash outflows
	1,525,337,980		1,352,848,276	
		1,548,039,949		1,355,268,552

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4.2 Capital Risk Management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. The Group manages capital risk based upon the debt to equity ratio just as other companies within the same industry.

The Group's strategy is to maintain its corporate credit rating at over an investment grade. The Group received AA credit ratings from Korea Investors Service and Korea Ratings.

The debt to equity ratio of the Group as of December 31, 2016 and 2015, are as follows:

<i>(in thousands of Korean won)</i>	2016	2015
Liabilities	1,974,831,434	1,659,920,185
Equity	1,884,906,087	1,799,441,253
Debt to equity ratio	104.8%	92.2%

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5. Fair Value

5.1 Fair Value of Financial Instruments by Category

Carrying amount and fair value of financial instruments by category as of December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016		2015	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets				
Derivative financial instruments	6,171,178	6,171,178	8,683,683	8,683,683
Held-to-maturity financial assets	17,120	17,120	17,120	17,120
Financial liabilities				
Debentures	299,273,294	301,695,950	-	-
Borrowings	43,527,044	43,353,243	64,560,700	64,560,700
Derivative financial instruments	30,556,376	30,556,376	9,374,465	9,374,465

Trade receivables, trade payables and others of which carrying amount is a reasonable approximation of fair value are excluded from the fair value disclosures.

5.2 Fair Value Hierarchy

Assets which are measured at fair value or of which the fair value is disclosed are categorized within the fair value hierarchy, and the defined levels are as follows:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1).
- Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, prices) or indirectly (that is, derived from prices) (Level 2).
- Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (Level 3).

Fair value hierarchy classifications of the financial instruments that are measured at fair value as of December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016			
	Level 1	Level 2	Level 3	Total
Recurring fair value measurements				
Derivative financial assets	-	6,171,178	-	6,171,178
Held-to-maturity financial assets	-	17,120	-	17,120
Derivative financial liabilities	-	30,556,376	-	30,556,376
 2015				
(in thousands of Korean won)	Level 1	Level 2	Level 3	Total
Recurring fair value measurements				

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Derivative financial assets	-	8,683,683	-	8,683,683
Held-to-maturity financial assets	-	17,120	-	17,120
Derivative financial liabilities	-	9,374,465	-	9,374,465

5.3 Transfers between Fair Value Hierarchy Levels of Recurring Fair Value Measurements

The Group's policy is to recognize transfers between levels of the fair value at the date of the event or change in circumstances that caused the transfer. There are no transfers between fair value hierarchy levels during the reporting period.

5.4 Valuation Technique and the Inputs

Valuation techniques and inputs used in the fair value of financial instruments categorized within Level 2 of the fair value hierarchy as of December 31, 2016 and 2015 are as follows:

(in thousands of Korean won)

	2016				
	Fair value	Level	Valuation techniques	Inputs	Range of inputs (weighted average)
Derivative financial assets	6,171,178	2	Present value technique	N/A	N/A
Held-to-maturity financial assets	17,120	2	Present value technique	N/A	N/A
Derivative financial liabilities	30,556,376	2	Present value technique	N/A	N/A

	2015				
	Fair value	Level	Valuation techniques	Inputs	Range of inputs (weighted average)
Derivative financial assets	8,683,683	2	Present value technique	N/A	N/A
Held-to-maturity financial assets	17,120	2	Present value technique	N/A	N/A
Derivative financial liabilities	9,374,465	2	Present value technique	N/A	N/A

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6. Financial Instruments by Category

Categorizations of financial assets and liabilities as of December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016					
	Loans and receivables	Financial assets at fair value through profit or loss	Financial assets used for hedging purposes	Available- for-sale financial assets	Held-to- maturity financial assets	Total
Cash and cash equivalents	425,160,401	-	-	-	-	425,160,401
Other financial instruments	7,500,000	-	-	-	-	7,500,000
Trade receivables	930,890,054	-	-	-	-	930,890,054
Other receivables	123,323,436	-	-	-	-	123,323,436
Derivative financial assets	-	416,020	5,755,158	-	-	6,171,178
Long-term financial instruments	28,007	-	-	-	-	28,007
Available-for-sale financial assets	-	-	-	1,000	-	1,000
Held-to-maturity financial assets	-	-	-	-	17,120	17,120
	<u>1,486,901,898</u>	<u>416,020</u>	<u>5,755,158</u>	<u>1,000</u>	<u>17,120</u>	<u>1,493,091,196</u>

(in thousands of Korean won)	2016			
	Financial liabilities measured at amortized cost	Financial liabilities at fair value	Financial liabilities used for hedging purposes	
			Total	
Trade payables	700,310,344	-	-	700,310,344
Other payables	316,682,265	-	-	316,682,265
Derivative financial liabilities	-	2,099,249	28,457,127	30,556,376
Borrowings(Debentures)	646,215,115	-	-	646,215,115
	<u>1,663,207,724</u>	<u>2,099,249</u>	<u>28,457,127</u>	<u>1,693,764,100</u>

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(in thousands of
Korean won)

	2015				
	Loans and receivables	Financial assets at fair value through profit or loss	Financial assets used for hedging purposes	Available-for-sale financial assets	Held-to-maturity financial assets
					Total
Cash and cash equivalents	447,114,126	-	-	-	-
Other financial instruments	5,000,000	-	-	-	-
Trade receivables	999,077,410	-	-	-	-
Other receivables	54,447,198	-	-	-	-
Derivative financial assets	-	1,729,494	6,954,189	-	-
Long-term financial instruments	28,742	-	-	-	-
Available-for-sale financial assets	-	-	-	1,000	-
Held-to-maturity financial assets	-	-	-	-	17,120
	1,505,667,476	1,729,494	6,954,189	1,000	17,120
					1,514,369,279

(in thousands of Korean won)

	2015		
	Financial liabilities measured at amortized cost	Financial liabilities at fair value	Financial liabilities used for hedging purposes
			Total
Trade payables	724,792,520	-	-
Other payables	287,230,507	-	-
Derivative financial liabilities	-	-	9,374,465
Borrowings(debentures)	401,083,120	-	-
	1,413,106,147	-	9,374,465
			1,422,480,612

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Net gains or net losses on each category of financial instruments for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016			
	Financial assets at fair value through profit or loss	Loans and receivables	Available- for-sale financial assets	Held-to- maturity financial assets
Interest income	-	5,571,119	-	462
Gain on foreign exchange transactions	-	(3,337,928)	-	-
Gain on foreign currency translation	-	11,056,137	-	-

(in thousands of Korean won)	2016		
	Financial liabilities at fair value through profit or loss	Financial liabilities measured at amortized cost	Total
Interest expenses	-	(20,864,007)	(20,864,007)
Loss on foreign exchange transactions	-	(7,372,232)	(7,372,232)
Loss on foreign currency translation	-	(3,490,298)	(3,490,298)

(in thousands of Korean won)	2015			
	Financial assets at fair value through profit or loss	Loans and receivables	Available- for-sale financial assets	Held-to- maturity financial assets
Interest income	-	7,254,669	-	1,179
Gain on foreign exchange transactions	-	7,273,106	-	-
Gain on foreign currency translation	-	9,071,263	-	-

(in thousands of Korean won)	2015		
	Financial liabilities at fair value through profit or loss	Financial liabilities measured at amortized cost	Total
Interest expenses	-	(13,478,743)	(13,478,743)
Loss on foreign exchange transactions	-	(11,438,224)	(11,438,224)
Loss on foreign currency translation	-	(15,510,699)	(15,510,699)

See note 22 about derivative financial assets and liabilities including related profit or loss.

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7. Operating Segment Information

- (1) Management has determined the operating segments based on the information reported to and reviewed by the board of directors that performs strategic decision making process. Operating segment of the Group consists of one operating segment and accordingly, no information on operating segments have been disclosed.
- (2) Details of the Group's revenue for the years ended December 31, 2016 and 2015 are as follows:

<i>(in thousands of Korean won)</i>	2016	2015
Sales of finished goods	5,651,123,495	5,469,955,985
Other revenue	52,591,082	88,124,886
	5,703,714,577	5,558,080,871

- (3) Sales by geographic information for the years ended December 31, 2016 and 2015 are as follows:

<i>(in thousands of Korean won)</i>	2016	2015
Korea (Location of the Company)	1,519,663,813	1,554,978,411
Asia	1,505,308,973	1,456,154,553
America	900,808,997	821,658,064
Europe	1,777,932,794	1,725,289,843
	5,703,714,577	5,558,080,871

- (4) Non-current assets by geographic information as of December 31, 2016 and 2015 are as follows:

<i>(in thousands of Korean won)</i>	2016	2015
Korea (Location of the Company)	596,517,900	572,980,572
Asia	353,445,271	252,049,040
America	148,734,455	101,220,502
Europe	434,340,017	378,504,023
	1,533,037,643	1,304,754,137

Financial instruments, deferred tax assets and net defined benefit assets are excluded from 'non-current assets'.

- (5) Sales to key customers representing 10% or more of the Group's total sales for the years ended December 31, 2016 and 2015, are as follows:

<i>(in thousands of Korean won)</i>	2016	2015
Company A	1,094,487,080	1,104,962,541
Company B	1,295,811,235	1,215,231,737

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Company C	1,074,101,898	1,156,609,648
	<u>3,464,400,213</u>	<u>3,476,803,926</u>

8. Trade Receivables

Details of trade receivables as of December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016	2015
Trade receivables	937,708,403	1,005,159,724
Allowance for doubtful accounts	(6,818,349)	(6,082,314)
	<u>930,890,054</u>	<u>999,077,410</u>

The Group provides an allowance for doubtful trade and other receivables considering the estimation of collectivity individually and collectively at the same time.

The aging analysis of trade and other receivables as of December 31, 2016 and 2015, is as follows:

(in thousands of Korean won)	2016	2015
Neither past due nor impaired	861,008,798	935,321,237
Past due but not impaired		
Less than 3 months	55,440,654	43,607,356
Less than 6 months	8,972,300	8,026,801
Over 6 months	12,286,651	18,204,330
	<u>76,699,605</u>	<u>69,838,487</u>
Past due and impaired		
Total amount of receivables	937,708,403	1,005,159,724
Allowance	(6,818,349)	(6,082,314)
Book Value	<u>930,890,054</u>	<u>999,077,410</u>

Changes in the allowance for doubtful accounts of trade receivables for the years ended December 31, 2016 and 2015, are as follows

(in thousands of Korean won)	2016	2015
Beginning balance	6,082,314	4,722,025
Bad debt expense for impaired receivables	2,656,950	3,189,468
Transferred to disposal group classified as held-for-sale	(722,743)	-
Foreign exchange differences	(1,198,172)	(1,829,179)
Ending balance	<u>6,818,349</u>	<u>6,082,314</u>

The creation and release of provision for impaired receivables have been included in 'selling and

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administrative expenses' in the statement of income (Note 24). Amounts charged to the allowance account are generally written off when there is no expectation of recovering additional cash.

9. Other Receivables and Other Non-current Receivables

Details of other receivables as of December 31, 2016 and 2015, are as follows:

	2016		2015	
	Current	Non-current	Current	Non-current
(in thousands of Korean won)				
Non-trade receivables	33,358,590	-	39,684,534	-
Accrued revenues	608,312	-	4,832,157	-
Other receivables	10,346,109	-	464,919	-
Certificate of deposits	69,019,705	9,990,720	2,540,722	6,924,866
	113,332,716	9,990,720	47,522,332	6,924,866

10. Other Current Assets and Other Non-Current Asset

Other current and non-current assets as of December 31, 2016 and 2015, are as follows:

	2016		2015	
	Current	Non-current	Current	Non-current
(in thousands of Korean won)				
Advance payment	52,320,247	-	13,814,690	-
VAT prepaid	77,848,222	-	67,537,986	-
Prepaid expense	22,159,637	-	23,899,748	-
Long-term prepaid expenses and others	-	4,627,848	-	4,653,033
	152,328,106	4,627,848	105,252,424	4,653,033

11. Inventories

(1) Details of inventories as of December 31, 2016 and 2015, are as follows:

	2016			2015		
	Acquisition cost	Less valuation allowance	Book value	Acquisition cost	Less valuation allowance	Book value
Merchandises	11,656,179	(692,264)	10,963,915	6,944,181	(787,929)	6,156,252
Finished goods	105,289,910	(3,031,584)	102,258,326	78,247,290	(1,867,448)	76,379,842
Goods partly processed	15,943,037	(282,505)	15,660,532	12,975,603	(44,841)	12,930,762
Work in process	23,098,447	(173,394)	22,925,053	48,215,093	(1,375,373)	46,839,720
Raw material	205,118,815	(12,350,630)	192,768,185	161,075,934	(7,687,122)	153,388,812
Supplies	16,688,157	(1,612,105)	15,076,052	18,914,289	(1,234,285)	17,680,004
Materials-in-transit	70,072,082	-	70,072,082	68,865,632	-	68,865,632
	447,866,627	(18,142,482)	429,724,145	395,238,022	(12,996,998)	382,241,024

(2) The Company recognized loss on inventory valuation of ₩27,078,761 thousand and ₩22,829,980 thousand for the years ended December 31, 2016 and 2015, respectively. The

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amount of loss on inventory has been included in cost of sales. In addition, the Company excluded the beginning balance of inventory valuation amounting to ₩12,996,998 thousand and ₩8,467,560 thousand from the cost of sales for the years ended December 31, 2016 and 2015, respectively.

12. Investments in Associates

Investments in associates as of December 31, 2016 and 2015, are as follows:

Company ¹	Country	Year end	Ownership (%)		Book value	
			2016	2015	2016	2015
Bonaire	China	December	37.5	37.5	33,020,982	31,900,682
JCS	Japan	March	33.3	33.3	37,250,420	34,227,370
FHTS (Formerly, FVCC)	China	December	50.0	50.0	24,690,645	23,040,169
					94,962,047	89,168,221

¹ The official names of the associates are as follows:

Associates	Official names
Bonaire	Bonaire Automotive Electrical System Co., Ltd.
JCS	Japan Climate Systems Corporation
FHTS (Formerly, FVCC)	FAWER Hanon Thermal Systems (Changchun) Company Ltd

Changes in carrying amounts of investment in associates for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016				
	Beginning balance	Equity in earnings of associates	Changes in equity of associates	Dividends	Ending balance
Bonaire	31,900,682	2,497,225	(390,638)	(986,287)	33,020,982
JCS	34,227,370	4,437,005	2,331,537	(3,745,492)	37,250,420
FHTS (Formerly, FVCC)	23,040,169	2,090,596	(440,120)	-	24,690,645
	89,168,221	9,024,826	1,500,779	(4,731,779)	94,962,047

(in thousands of Korean won)	2015				
	Beginning balance	Equity in earnings of associates	Changes in equity of associates	Dividends	Ending balance
Bonaire	30,843,613	1,890,839	118,160	(951,930)	31,900,682
JCS	28,381,516	8,514,266	1,594,347	(4,262,759)	34,227,370
FHTS (Formerly, FVCC)	20,777,920	2,154,096	108,153	-	23,040,169
	80,003,049	12,559,201	1,820,660	(5,214,689)	89,168,221

Summary of condensed financial information of major associates as of and for the years ended December 31, 2016 and 2015, are as follows:

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(in thousands of
Korean won)

	2016					Total
	Assets	Liabilities	Equity	Sales	Profit (loss) for the year	comprehensive income (loss)
Bonaire	101,386,593	63,085,838	38,300,755	91,051,700	6,810,548	5,768,847
JCS	179,315,534	67,452,411	111,863,123	322,246,285	13,337,172	20,327,048
FHTS (Formerly, FVCC)	86,612,146	54,337,038	32,275,108	98,975,570	4,212,630	3,338,794

(in thousands of
Korean won)

	2015					Total
	Assets	Liabilities	Equity	Sales	Profit (loss) for the year	comprehensive income (loss)
Bonaire	89,327,713	54,165,705	35,162,008	79,290,004	5,179,294	5,494,389
JCS	172,119,405	69,334,511	102,784,894	321,019,259	25,568,367	30,356,194
FHTS (Formerly, FVCC)	71,094,303	42,157,989	28,936,314	92,983,397	4,319,224	4,525,721

Details of adjustments from financial information of major associates and joint ventures to the book value of investments in associates and joint ventures for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of
Korean won)

	2016					
	Net assets at the end of the year (a)	Group's share in % (b)	Group's share in KRW (a x b)	Goodwill	Intergroup transactions and other	Book value
Bonaire	38,300,755	37.5%	14,362,783	16,022,106	2,636,093	33,020,982
JCS	111,863,123	33.3%	37,250,420	-	-	37,250,420
FHTS (Formerly, FVCC)	32,275,108	50.0%	16,137,554	8,680,903	(127,812)	24,690,645

(in thousands of
Korean won)

	2015					
	Net assets at the end of the year (a)	Group's share in % (b)	Group's share in KRW (a x b)	Goodwill	Intergroup transactions and other	Book value
Bonaire	35,162,008	37.5%	13,185,753	16,022,106	2,692,823	31,900,682
JCS	102,784,894	33.3%	34,227,370	-	-	34,227,370
FHTS (Formerly, FVCC)	28,936,314	50.0%	14,468,157	8,680,903	(108,891)	23,040,169

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13. Property, Plant and Equipment

Details of property, plant and equipment as of December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)

	2016		
	Cost	Accumulated depreciation ¹	Book value
Land	76,855,902	-	76,855,902
Building	360,020,019	(133,794,660)	226,225,359
Structures	18,323,647	(6,162,870)	12,160,777
Machinery	1,607,781,499	(1,041,771,174)	566,010,325
Vehicles	4,251,529	(2,945,819)	1,305,710
Tools, equipment and others	445,349,257	(341,746,425)	103,602,832
Office equipment	55,067,356	(37,675,347)	17,392,009
Lease Improvements	2,316,199	(1,010,004)	1,306,195
Machinery in transit	4,810,617	-	4,810,617
Construction in progress	168,474,364	-	168,474,364
	2,743,250,389	(1,565,106,299)	1,178,144,090

(in thousands of Korean won)

	2015		
	Cost	Accumulated depreciation ¹	Book value
Land	65,930,136	-	65,930,136
Building	337,000,772	(123,437,944)	213,562,828
Structures	15,003,574	(5,372,798)	9,630,776
Machinery	1,520,617,020	(964,482,437)	556,134,583
Vehicles	3,739,246	(2,789,590)	949,656
Tools, equipment and others	403,739,272	(316,038,725)	87,700,547
Office equipment	45,804,622	(35,143,504)	10,661,118
Lease Improvements	1,612,080	(760,094)	851,986
Machinery in transit	4,918,864	-	4,918,864
Construction in progress	142,375,083	-	142,375,083
	2,540,740,669	(1,448,025,092)	1,092,715,577

¹ Accumulated impairment losses are included.

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Changes in carrying amounts of property, plant and equipment for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016							Transferred to disposal group	
	Beginning balance	Additions¹	Disposals	Depreciation²	Impairment	Transfer	Exchange differences	classified as held-for-sale	Ending balance
Land	65,930,136	11,664,725	(142,097)	-	-	182,206	(638,294)	(140,774)	76,855,902
Building	213,562,828	26,826,110	(249,954)	(11,701,060)	-	1,164,812	(1,229,770)	(2,147,607)	226,225,359
Structures	9,630,776	3,490,823	(42,048)	(965,049)	-	207,053	(160,778)	-	12,160,777
Machinery	556,134,583	78,619,305	(8,224,222)	(119,340,392)	(1,079,028)	85,570,758	(3,941,559)	(21,729,120)	566,010,325
Vehicles	949,656	690,186	(50,654)	(355,758)	-	71,756	524	-	1,305,710
Tools, equipment and others	87,700,547	51,557,840	(6,184,669)	(39,841,841)	-	12,412,851	(1,224,750)	(817,146)	103,602,832
Office equipment	10,661,118	10,604,480	(510,796)	(5,370,123)	-	2,218,241	251	(211,162)	17,392,009
Lease									
Improvements	851,986	845,306	(78)	(352,188)	-	-	(38,831)	-	1,306,195
Machinery in transit	4,918,864	1,577,971	(647,911)	-	-	(883,613)	(154,694)	-	4,810,617
Construction in progress	<u>142,375,083</u>	<u>141,423,398</u>	<u>(3,643,883)</u>	<u>-</u>	<u>-</u>	<u>(103,626,027)</u>	<u>(691,214)</u>	<u>(7,362,993)</u>	<u>168,474,364</u>
	<u>1,092,715,577</u>	<u>327,300,144</u>	<u>(19,696,312)</u>	<u>(177,926,411)</u>	<u>(1,079,028)</u>	<u>(2,681,963)</u>	<u>(8,079,115)</u>	<u>(32,408,802)</u>	<u>1,178,144,090</u>

(in thousands of Korean won)	2015							Exchange differences	Ending balance
	Beginning balance	Additions¹	Disposals	Depreciation²	Impairment	Transfer³			
Land	67,181,399	63,168	(39,466)	-	-	-	(1,274,965)	65,930,136	
Building	210,534,364	10,531,164	(85,340)	(11,001,047)	-	5,907,623	(2,323,936)	213,562,828	
Structures	7,789,079	872,514	-	(688,555)	-	1,726,897	(69,159)	9,630,776	
Machinery	560,459,379	75,631,822	(2,450,456)	(117,988,758)	(100,900)	49,378,585	(8,795,089)	556,134,583	
Vehicles	858,809	243,836	(55,289)	(238,300)	-	123,258	17,342	949,656	
Tools, equipment and others	79,150,431	39,055,065	(5,589,024)	(36,742,604)	-	12,386,152	(559,473)	87,700,547	
Office equipment	8,799,368	3,129,041	(77,137)	(3,809,015)	-	2,544,152	74,709	10,661,118	
Lease									
Improvements	633,912	356,575	(39,280)	(218,507)	-	136,218	(16,932)	851,986	
Machinery in transit	6,432,345	4,399,851	-	-	-	(5,896,823)	(16,509)	4,918,864	
Construction in progress	<u>6,432,345</u>	<u>112,015,236</u>	<u>(4,868,927)</u>	<u>-</u>	<u>-</u>	<u>(73,012,998)</u>	<u>(2,693,210)</u>	<u>142,375,083</u>	
	<u>1,052,774,068</u>	<u>246,298,272</u>	<u>(13,204,919)</u>	<u>(170,686,786)</u>	<u>(100,900)</u>	<u>(6,706,936)</u>	<u>(15,657,222)</u>	<u>1,092,715,577</u>	

¹ Includes increase of ₩30,118,856 thousand from the business combination.

² For the year ended December 31, 2016 and 2015, the depreciation expense of ₩2,108,548 thousand and ₩917,867 thousand, respectively, were transferred to the development cost (intangible assets) and other accounts.

³ For the year ended December 31, 2015, Hanon Beijing had reclassified ₩6,506,663 thousand from construction-in-progress to advance payments.

Line items including depreciation in the statements of income for the years ended December 31, 2016 and 2015, are as follows:

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(in thousands of Korean won)

	2016	2015
Cost of sales	165,899,536	159,663,459
Selling and administrative expenses	9,918,326	10,105,460
	175,817,862	169,768,919

14. Intangible assets

- (1) Changes in carrying amounts of property, plant and equipment for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of
Korean won)

	2016							
	Beginning balance	Additions	Disposals	Depreciation ¹ & Impairment		Exchange differences	Transferred to disposal group classified as held-for-sale	
				Transfer ²	Ending balance			
Goodwill	147,885,851	90,215,389	-	-	-	221,427	(29,628,720)	208,693,947
Development costs	30,261,244	65,294,786	-	(3,592,750)	5,386,700	412,234	-	97,762,214
Memberships	4,983,191	-	(456,174)	-	-	(5,184)	-	4,521,833
Industrial rights	7,817,418	382,506	-	(1,209,787)	-	-	-	6,990,137
Other intangibles	16,437,823	20,040,725	(246,054)	(6,486,092)	2,717,868	(162,146)	(4,551)	32,297,573
	207,385,527	175,933,406	(13,204,919)	(11,288,629)	8,104,568	466,331	(29,633,271)	350,265,704

in thousands of
Korean won)

	2015						
	Beginning balance	Additions	Disposals	Depreciation ¹ & Impairment		Ending balance	
				Transfer ²	Exchange differences		
Goodwill	148,590,582	-	-	-	-	(704,731)	147,885,851
Development costs	-	29,322,204	(1,691,499)	(96,511)	2,772,519	(45,469)	30,261,244
Memberships	5,310,035	5,918	(334,421)	-	-	1,659	4,983,191
Industrial rights	7,845,301	1,161,603	-	(1,189,486)	-	-	7,817,418
Other intangibles	10,071,539	9,608,624	(51,520)	(3,429,038)	200,273	37,945	16,437,823
	171,817,457	40,098,349	(2,077,440)	(4,715,035)	2,972,792	(710,596)	207,385,527

¹ For the year ended December 31, 2016 and 2015, the amortization expense of ₩591,937 thousand and ₩603,982 thousand, respectively, were transferred to the development cost.

- (2) Line items including depreciation in the statements of income for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)

	2016	2015
Cost of sales	5,112,778	438,326
Selling and administrative expenses(including R&D cost)	5,258,574	3,672,727
	10,371,352	4,111,053

- (3) For the year ended December 31, 2016 and 2015, the Group recognized ₩155,062,828

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thousand and ₩189,494,230 thousand, respectively, as expenses for research and development activities.

(4) Impairment Tests for Goodwill

Management reviews the operating results and performance of the automobile parts business and the goodwill of Hanon Systems is identified as a single cash-generating unit (or CGU), thus, management did not allocate the goodwill accordingly.

The recoverable amount of all CGUs has been determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by management covering a five-year period. Cash flows beyond the five-year period are extrapolated using the estimated growth rates stated below. The growth rate does not exceed the long-term average growth rate included in industry report specific to the industry in which the CGU operates.

The table below summarizes goodwill allocation for each cash-generating unit.

(in thousands of Korean won)	2016	2015
Hanon Systems ¹	90,215,389	-
Hanon Beijing	28,540,909	28,540,909
HASI	54,830,990	84,459,710
Hanon Alabama	24,952,249	24,952,249
Thermal management and emissions	7,338,580	7,074,456
Hanon Nanjing	2,815,830	2,858,527
	208,693,947	147,885,851

¹ For the year ended December 31, 2016, the Group acquired the automotive climate control business segment from the one of its subcontractors, of which acquired assets comprised of ₩667,217 thousand of inventories and ₩30,118,856 thousand of property, plant and equipment. The Group accounted the difference between consideration transferred and the fair value of identifiable net asset as the goodwill of the climate control CGU. After acquisition date, the acquired climate control business segment marked ₩7,815,090 thousand of sales and ₩87,740 thousand of net losses. See Note 21 for summary of the litigation for the business combination.

Goodwill allocation reviews are undertaken annually. Impairment tests suggest that the carrying value of cash generating unit does not exceed the recoverable amount. The recoverable amounts of cash-generating units have been determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by management covering a five-year period. The growth rate assumption for the five-year period and permanent growth rate for the period beyond are as follows:

Key Assumptions	Hanon					Thermal management				
	Systems	Hanon Beijing	HASI		Hanon Alabama	and emissions		Hanon Nanjing		
	2016	2016	2015	2016	2015	2016	2015	2016	2015	
OP Margin	7.95%	10.29%	10.31%	5.03%	6.06%	3.90%	2.85%	2.40%	10.43%	12.10%
Growth rate	4.41%	3.97%	4.82%	9.98%	15.66%	0.76%	2.06%	19.69%	12.99%	10.80%
Permanent rate	1.00%	1.50%	1.00%	3.00%	3.00%	0.00%	0.00%	1.00%	1.00%	1.00%
Discount rate	11.83%	21.56%	14.81%	20.14%	16.11%	16.89%	17.52%	25.91%	24.06%	21.31%
										15.98%

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The Group determines sales growth rate based on expectation of market development. The applied discount rate is pre-tax discount rate that reflects specific risk of the relevant segment.

The sensitivity of value-in-use

The impairment losses could be recognized when the value in use are changed by following key assumptions:

Changes in key assumptions	Hanon Systems	Hanon Beijing	HANON HASI	HANON Alabama	Thermal management and emissions	HANON Nanjing
Average OP margin declined to ¹	3.76%	2.19%	4.61%	2.65%	1.69%	10.77%
Average growth rate declined to ²	(-)5.08%	(-)19.32%	6.97%	(-)5.40%	12.82%	8.23%
Pre-tax discount rate rises to ³	26.50%	157.22%	22.06%	27.33%	34.57%	23.78%

¹ OP margin: Decrease in demand can lead to a decline in OP margin.

² Growth rate: Management recognizes that the speed of technology change and the likelihood of other competitors entering the market can have a significant impact on growth rates.

³ Pre-tax discount rate: The pre-tax discount rate may change due to changes in risk-free interest rates, risk premiums, and target capital structure of cash-generating units

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15. Other Current Payables and other Non-Current Payables

	2016		2015	
	Current	Non-current	Current	Non-current
(in thousands of Korean won)				
Other payables	164,712,991	-	107,371,748	-
Accrued expenses	136,053,794	-	156,952,775	-
Deposits received	758,623	-	240,000	-
Dividend payable to non-controlling interest holders	-	-	8,424,256	-
Other long-term payables	-	15,156,856	-	14,241,728
	<u>301,525,408</u>	<u>15,156,856</u>	<u>272,988,779</u>	<u>14,241,728</u>

16. Other Current Liabilities and other Non-Current Liabilities

	2016		2015	
	Current	Non-current	Current	Non-current
(in thousands of Korean won)				
Advances from customer	4,919,822	-	5,936,354	-
VAT withheld	7,153,870	-	9,147,883	-
Withholdings	12,775,093	-	10,627,459	-
Unearned revenues and other	16,825,224	-	8,536,873	-
Other post-employment benefit liabilities	-	16,358,858	-	15,832,462
Long-term unearned revenues	-	8,880,780	-	11,592,645
	<u>41,674,009</u>	<u>25,239,638</u>	<u>34,248,569</u>	<u>27,425,107</u>

17. Other Provisions

Other provisions consist of warranty provisions and other provisions, and changes in other provisions for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016	2015
Beginning balance	28,276,287	29,668,360
Provisions for the year	56,222,688	17,374,327
Payments for the year	(46,478,581)	(18,335,116)
Reclassification	4,101,390	-
Exchange differences	(123,279)	(431,284)
Reclassification as liabilities held-for-sale	(689,633)	-
Ending balance	<u>41,308,872</u>	<u>28,276,287</u>

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18. Post-employment Benefits

Details of net defined benefit liabilities recognized in the statements of financial position as of December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016	2015
Present value of defined benefit obligations	220,202,913	196,267,116
Fair value of plan assets	(159,983,266)	(136,102,683)
Total	60,219,647	60,164,433

Changes in the defined benefit obligations for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016	2015
Beginning balance	196,267,116	184,565,881
Current service cost	28,231,814	21,793,513
Interest expense	5,728,508	5,412,212
Remeasurements:		
- Actuarial gains and losses arising from changes in demographic assumptions	(111,443)	(66,374)
- Actuarial gains and losses arising from changes in financial assumptions	9,836,666	(3,941,626)
- Actuarial gains and losses arising from experience adjustments	(3,064,965)	(3,272,258)
Payments from plans		
- Benefit payments	(10,889,714)	(8,025,092)
Exchange differences	(5,795,069)	(199,140)
Ending balance	220,202,913	196,267,116

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

(in thousands of Korean won)	2016	2015
Beginning balance	136,102,683	116,640,769
Interest income	4,281,438	4,041,772
Remeasurements:		
- Return on plan assets (excluding amounts included in interest income)	3,800,575	(958,859)
Contributions:		
- Employers	26,827,771	22,061,795
Payments from plans		
- Benefit payments	(6,755,910)	(4,068,420)
Exchange differences	(4,273,291)	(1,614,374)
Ending balance	159,983,266	136,102,683

The actuarial return on plan assets for the year ended December 31, 2016 amounts to ₩ 8,082,013 thousand (2015: ₩ 3,082,913 thousand).

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The amounts recognized in the consolidated statements of profit or loss for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016	2015
Current service cost	25,280,604	21,793,513
Net interest cost	1,310,926	1,370,440
Expenses included in salaries ¹	26,591,530	23,163,953

¹ For the year ended December 31, 2016, defined benefit expense amounting to ₩3,087,354 thousand was transferred into the development cost and other accounts.

Plan assets as of December 31, 2016 and 2015, consist of:

(in thousands of Korean won)	2016	2015
Quoted price	21,374,552	25,123,782
Unquoted price	138,608,714	110,978,901
- Corporate bonds	28,881,241	55,656,745
- Bank deposits	47,533,683	22,214,769
- Cash and cash equivalent	21,785,705	17,137
- Others	40,408,085	33,090,250
	159,983,266	136,102,683

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

(in percentage)	2016	2015
Discount rate	2.8%	3.0%
Salary growth rate	4.5%	4.5%

The sensitivity of the defined benefit obligations as of December 31, 2016, to changes in the weighted principal assumptions is:

(in percentage)	Effect on defined benefit obligation		
	Changes in principal assumption	Increase in principal assumption	Decrease in principal assumption
Discount rate	1.0%	(32,705,636)	41,772,666
Salary growth rate	1.0%	21,514,889	(18,777,732)

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. The sensitivity of the defined benefit obligation to changes in principal actuarial assumptions is calculated using the projected unit credit method, the same method applied when calculating the defined benefit obligations recognized on the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous period.

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The Group reviews the funding level on an annual basis and has a policy of eliminating deficit from the fund. Expected contributions to post-employment benefit plans for the year ending December 31, 2017, are ₩22,688,513 thousand.

Expected maturity analysis of undiscounted pension benefits as of December 31, 2016, is as follows:

(in thousands of Korean won)	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Total
Pension benefits	3,697,630	4,625,199	22,486,423	90,237,573	121,046,825

The weighted average duration of the defined benefit obligations is 15.9 years.

For the year ended December 31, 2016, the Group recognized ₩2,062,456 thousand (2015: ₩2,818,416 thousand) as post-employment benefit cost under the defined contribution pension plan.

Changes in other post-employment benefit liabilities for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016	2015
Beginning balance	15,832,462	17,435,868
Service cost	1,175,978	1,345,037
Net interest expense	351,463	372,487
Re-measurement gain (loss)	312,058	(54,108)
Benefits paid	(1,335,244)	(3,144,323)
Exchange differences	22,141	(122,499)
Ending balance	16,358,858	15,832,462

The principal actuarial assumption on other post-employment benefit liabilities as of December 31, 2016 and 2015, is as follows:

(in percentage)	2016	2015
Discount rate	2.6%	2.6%

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19. Share-based Payments

The establishment of the Group's share option was approved by shareholders at the annual general meeting and, share options were granted to directors and selected employees. Details are as follows:

- Type of shares issued through share option: registered common stock
- Grant method: the Company can choose among issuance of shares, distributing treasury stock, and cash settlement
- Vesting period: May 09, 2016
- Vesting condition: 25%, 50%, 75% and 100% will be respectively vested on 1, 2, 3 and 4 years after grant date
- Exercisable condition: The options are exercisable when the largest shareholder changes or eight years after the grant date.(whereas, if the employees have not served for more than two years from the grant date, it can be canceled by resolution of the Board of Directors)

Changes in the number of share options outstanding and their related weighted average exercise prices as of December 31, 2016, are as follows:

(in Korean won and in number of shares)	Options (unit: share)	Average exercise price per share option
Beginning balance	-	-
Granted	2,030,000	10,200
Ending balance	2,030,000	10,200

As of December 31, 2016, there are no options exercisable.

Compensation costs of share options granted during the years ended December 31, 2016 and 2015, are calculated by applying a fair value approach using a binomial model. The related assumptions and variables to calculate the compensation costs are as follows:

	2016
Weighted average fair value of share options granted during the year	₩2,196.1
Weighted average share price at grant date	₩10,900
Price volatility ¹	19.9%
Dividend yield	2.0%
Option maturity	10 years
Annual risk-free interest rate	1.4%

¹ The volatility is measured by converting annual historical volatility over the past 180 days.

For the year ended December 31, 2016, the Group recognized ₩1,282,320 thousand as expenses for share-based payments, which related to cash-settled share-based payments.

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20. Borrowings and Debentures

Details of short-term borrowings as of December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	Financial institution	Interest rate		
		December 31, 2016	2016	2015
Account receivable financing	KEB Hana Bank and others	LIBOR + 0.8% ~ 0.9%	16,098,652	22,236,134
Short-term borrowings in Korean won	KEB Hana Bank	3M CD + 1.2%	40,000,000	100,000,000
	KDB	3M CD + 0.9%	50,000,000	-
	Bank of America	LIBOR + 1.5~3.0%	96,950,079	140,414,505
	Raiffeisen Bank	1M Euro Libor + 1.2% 3M Euro Libor + 1.0%.	31,690,000	19,221,009
Short-term borrowings in foreign currency	Tatra Bank	1M Euribor + 1.0%	25,352,000	23,065,211
	Citi Bank	1M Euribor + 1.0%	25,352,000	-
	Deutsche Bank	11.8%	15,827,999	15,531,368
	Komerconi Bank	-	-	12,814,006
	HDFC Bank	9.3%	70,236	1,337,447
Short-term financial lease liabilities	Praxair	19.6%	90,105	128,601
	FINSA	9.5%	1,789,025	1,577,643
	Air Product	8.0%	194,681	196,496
			<u>303,414,777</u>	<u>336,522,420</u>

When the transferred or discounted account receivables do not meet the de-recognition criteria for a financial instrument (for instance, when the Company is the obligor due to the right of recourse), the un-matured amounts are recognized as short-term borrowings.

Details of long-term borrowings as of December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	Financial institution	Interest rate		
		December 31, 2016	2016	2015
Debentures ¹	7-1 unsecured	2.0%	159,646,359	-
	7-2 unsecured	2.3%	139,626,935	-
	Bank of America	-	-	28,421,255
Long-term borrowings in foreign currency	JCS	1.6%	12,026,069	16,232,460
	Federal Development Loans	0.0%	1,672,280	1,184,332
	Komerconi Bank	1M Euribor + 1.0%	12,673,250	-
Long-term financial lease liabilities	Praxair	19.6%	3,042	90,352
	FINSA	9.5%	15,429,184	16,692,120
	Air Product	8.0%	1,723,219	1,940,181
			<u>342,800,338</u>	<u>64,560,700</u>

¹ The Group has issued 7-1 and 7-2 unsecured debentures amounting to ₩160,000,000 thousand and ₩140,000,000 thousand, respectively, in order to obtain operating fund and repay borrowings which matured within 2016.

Changes in carrying amounts of borrowings and debentures for the years ended December 31, 2016 and 2015, are as follows:

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<i>(in thousands of Korean won)</i>	2016	2015
Beginning balance	401,083,120	401,365,328
Increase in bank borrowings	240,701,754	292,347,942
Repayment of bank borrowings	(291,822,228)	(296,165,496)
Issuance of debentures	299,030,200	-
Transferred to disposal group classified as held-for-sale	(2,464,974)	-
Exchange differences and others	(312,757)	3,535,346
Ending balance	646,215,115	401,083,120

21. Commitments and contingencies

- (1) As of December 31, 2016, loan agreements of controlling company with financial institutions are as follows:

(in thousands of Korean won and foreign currency)

Principal financial institution	Agreement	Currency	Details		Remarks
			Amount	Equivalents of Korean won	
KEB Hana Bank	Bank overdrafts	KRW	20,000,000	20,000,000	Credit Line
	Export-import financing, trade financing, general loans and others	KRW	130,000,000	130,000,000	
	Account receivable financing	KRW	195,000,000	195,000,000	
	Forward contract	USD	120,000	145,020,000	
Woori Bank	Guarantee in foreign currency	USD	6,500	7,855,250	
		ZAR	15,000	1,331,250	
KDB Bank	Export-import financing	USD	20,000	24,170,000	
	Forward contract	USD	50,000	60,425,000	
KDB Bank	General loans	KRW	50,000,000	50,000,000	
Bank of America	Forward contract	USD	100,000	120,850,000	
Shinhan Bank	Forward contract	USD	25,000	30,212,500	
Kookmin Bank	Forward contract	USD	25,000	30,212,500	

- (2) As of December 31, 2016, Hanon Nanjing has payment guarantees of USD 19,006 thousand provided by JCS, an affiliate of the Group.
- (3) Loan agreements that the subsidiaries have entered into with financial institutions as of December 31, 2016 are as follows:

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(in thousands of Korean won and foreign currency)

	Principal financial institution	Details	Currency	Credit Limit	
				Amount	Equivalents of Korean won
China Group Facility ¹	Bank of America	Loan agreement	USD	14,000	16,919,000
Europe Group Facility ²	Bank of America	Loan agreement	EUR	70,000	88,732,000
America Group Facility ³	Bank of America	Loan agreement	USD	60,000	72,510,000
Hanon Beijing	Bank of China	Loan agreement	CNY	100,000	17,326,000
Hanon Dalian	KEB Hana Bank Woori Bank	Loan agreement	USD CNY	15,000 50,000	18,127,500 8,663,000
Hanon Jinan	Bank of America	Loan agreement	USD	4,000	4,834,000
Hanon Shanghai	Bank of America	Loan agreement	CNY	12,000	2,079,120
Hanon Nanjing	Bank of America	Loan agreement	USD	8,000	9,668,000
Hanon South Africa	Nedbank Ltd HDFC Bank	Loan agreement	ZAR INR	15,000 500,000	1,331,250 8,895,000
HASI	Citi Bank	Loan agreement	INR	250,000	4,447,500
Hanon Bhiwadi	HDFC Bank	Loan agreement	INR	80,000	1,423,200
Hanon Slovakia	Tatra Bank Citi Bank	Loan agreement	EUR USD	20,000 15,000	25,352,000 18,127,500
Hanon Netherlands	Bank of America Raiffeisenbank Yapi Kredi Bank	Loan agreement	EUR EUR TRY	15,000 10,000 15,000	19,014,000 12,676,000 5,142,300
Hanon Turkey	Citi Bank Deutsche Bank	Loan agreement	TRY EUR	20,000 15,000	6,856,400 19,014,000
Hanon Alba	Citi Bank	Loan agreement	EUR	30,000	38,028,000
Hanon Autopal & Hanon Autopal Service	Raiffeisen Bank Komercni bank Komercni bank Bank of America	Loan agreement	EUR EUR EUR USD	15,000 10,000 2,000 10,000	19,014,000 12,676,000 2,535,200 12,085,000
Hanon Canada	Federal Economic Development Agency for Southern Ontario	Government grant (Interest free loan)	CAD	2,175	1,946,016

¹ China Group Facility: Hanon Dalian and 6 other Chinese affiliates have been provided with loan facilities with a limit of USD 14 million for the purpose of operating funds.

² Europe Group Facility: Hanon Netherlands and other 2 affiliates have been provided with loan facilities with a limit of EUR 70 million for the purpose of operating funds.

³ America Group Facility: Hanon Alabama and other 5 affiliates have been provided with loan facilities with a limit of USD 60 million for the purpose of operating funds.

- (4) The Company is a defendant in an ongoing litigation related to alleged patent infringement on certain components used in the manufacture of compressors. The lawsuit was filed by Toyota Jido Shokki Corp. against the Company to the Seoul Central District Court on March 18, 2014 and against Hanon Japan to the Tokyo District Court on December 26, 2014. On January 16, 2015, the Seoul Central District Court ruled against the Group and its parent entity for patent infringement. The Company filed an appeal against the decision of the court on January 23, 2015 and received favorable adjudication from the Seoul High Court on January 21, 2016. Appellate procedure by Toyota Jido Shokki Corp. to the Supreme Court is still in progress accordingly. On May 1, 2015, Hanon Japan filed the invalidation trial for the subject patent with Japanese Patent Office, and on January 5, 2016, Japanese Patent Office preliminarily judged Japanese patent invalid, yet on March 7, 2016, Toyota Jido Shokki Corp. requested a patent

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correction for maintaining the validity of patent. Meanwhile, Japanese patent infringement lawsuit relating to Hanon Japan is currently in progress. As at the end of the current reporting period, the Group cannot reliably determine the outcome of the appeal procedures, so that no provisions to settle potential contingent liabilities have been recognized accordingly.

- (5) Employees of the Company filed the lawsuits against the Company for ordinary wages on May 24, 2013. During the current period, the court had ordered the Company to pay ₩34.4 billion with its additional interests and the Company paid settlement to 884 employees according to settlement agreement. The estimated losses for 7 employees who refused to accept the settlement are recognized against current profit (loss) and other provisions.
- (6) For the year ended December 31, 2016, the Group acquired the automotive climate control business segment from the one of its subcontractors. However, the Group filed criminal charges against the CEO of the subcontractor for his illegal action and put the acquisition cost paid by the Group under the provisional seizure. The Supreme Prosecutors' Office of Korea prosecuted the case to the court on July 29, 2016. Details of the litigation have not been disclosed since it might put significant impact on ongoing dispute.
- (7) HASI, a subsidiary of the Group, has been informed of the results from tax investigation on transfer prices and other items from the Indian tax authorities during the current period. HASI is in the process of filing tax appeal.
- (8) As of December 31, 2016, the Group holds a restricted Corporate Partnership Deposit amounting to ₩7,500,000 thousand.
- (9) As of December 31, 2016, the Group holds technical license agreements with its associate and receives royalties of 0.5% ~ 3.0% on net sales under the terms of these agreements during the contract period.

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22. Derivatives

- (1) Details of financial position of outstanding derivative instruments of the Group as of December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)

2016				
Transaction purpose	Derivatives	Assets	Liabilities	Accumulated other comprehensive income
Cash Flow hedges	Forward foreign exchange	5,232,978	(30,067,787)	(17,492,230)
Fair value hedges	Forward foreign exchange	938,200	(488,589)	-

(in thousands of Korean won)

2015				
Transaction purpose	Derivatives	Assets	Liabilities	Accumulated other comprehensive income
Cash Flow hedges	Forward foreign exchange	8,623,215	(9,275,765)	(1,807,267)
Fair value hedges	Forward foreign exchange	60,468	(98,700)	-

Cash flows hedge transactions include forward foreign exchange that the Group uses to manage exposures to fluctuations in cash flows relating to the revenues in foreign currencies. In addition, fair value hedge transactions include forward foreign exchange contracts that the Group uses to manage exposures to fluctuations in fair value of loan receivables in foreign currencies.

By applying cash flows hedge accounting, the longest expected period of exposure to cash flows fluctuation is until July 2019. Gain (loss) from valuation of cash flow hedge for accumulated other comprehensive income is all expected to be recognized as a gain (loss) within the current period.

- (2) Gain (loss) on derivatives for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)

2016					
Transaction purpose	Derivatives	Sales	Cost of sales	Gain of valuation	Gain of transaction
Cash Flow hedges	Forward foreign exchange	1,946,427	4,315,503	(1,882,191)	1,929,412
Fair value hedges	Forward foreign exchange	-	-	477,149	1,032,450

(in thousands of Korean won)

2015					
Transaction purpose	Derivatives	Sales	Cost of sales	Gain of valuation	Gain of transaction
Cash Flow hedges	Forward foreign exchange	(4,005,213)	2,965,026	(860,947)	(10,293,255)
Fair value hedges	Forward foreign exchange	-	-	(215,938)	1,439,955

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23. Earnings per Share

- (1) Issued shares for the years ended December 31, 2016 and 2015, are as follows:

<i>(In Korean won, except number of shares)</i>	2016	2015
Profit for the year attributable to common stock owners of the Company ¹	292,125,004,918	230,509,316,538
Weighted average number of outstanding common shares ²	533,800,000	533,800,000
Basic earnings per share	547	432

¹ Details of the profit for the year attributable to common stock owners of the Company:

Due to the fact that there is no adjustment for this reporting period, the profit for the year attributable to common stock owners of the Company equals to the profit for the year attributable to equity holders of the parent company on the consolidated statements of profit or loss.

² For the year ended December 31, 2016, the number of shares increased due to the stock-split. In order to apply retroactively the number of shares to the earnings per share for the year ended December 31, 2015, the weighted average number of outstanding common shares has been adjusted.

- (2) The diluted earnings per share for the years ended December 31, 2016 and 2015 are identical to the basic earnings per share, as the Group has no dilutive shares for years ended December 31, 2016 and 2015.

24. Selling and Administrative Expenses

Selling and administrative expenses for the years ended December 31, 2016 and 2015, are as follows:

<i>(in thousands of Korean won)</i>	2016	2015
Salaries	92,612,512	103,531,678
Employee retirement benefits	6,013,388	3,524,450
Other long-term employee benefits	141,449	233,711
Employee welfare expenses	18,871,870	24,000,854
Taxes and dues	8,751,098	8,185,298
Freight cost	54,645,735	54,362,053
Warranty	40,403,029	15,082,381
Depreciation	5,471,344	5,528,992
Amortization	2,684,328	3,073,389
Bad debts expenses	2,656,950	3,189,468
Travel expenses	8,669,293	7,056,578
Service fees	50,401,011	51,122,446
Research and development costs	155,062,828	189,494,230

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Others	29,935,597	33,143,580
	<u>476,320,432</u>	<u>501,529,108</u>

25. Financial Income and Expense

Financial income and expenses for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016	2015
Financial income		
Interest income	5,571,581	7,255,848
Gain on foreign currency transactions	554,006	1,522,191
Gain on foreign currency translation	1,077,362	1,031,978
	<u>7,202,949</u>	<u>9,810,017</u>
Financial expenses		
Interest expenses	20,864,007	13,478,743
Loss on foreign currency transactions	5,221,600	3,752,078
Loss on foreign currency translation	3,090,785	9,207,227
	<u>29,176,392</u>	<u>26,438,048</u>

26. Other Non-operating Income and Expenses

Other non-operating income and expenses for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016	2015
Other non-operating income		
Gain on foreign currency translation	47,463,029	42,335,975
Gain on foreign currency transactions	66,571,476	45,179,980
Gain on disposal of property, plant and equipment	737,440	727,523
Gain on disposal of intangible assets	4,545	11,818
Gain on transactions of derivative instruments	11,352,352	5,081,752
Gain on valuations of derivative instruments	938,200	-
Others	12,869,418	20,941,757
	<u>139,936,460</u>	<u>114,278,805</u>
Other non-operating expenses		
Loss on foreign currency translation	37,883,767	40,600,162
Loss on foreign currency transactions	72,614,042	47,115,211
Loss on disposal of property, plant and equipment	1,275,466	2,326,742
Loss on disposal of intangible assets	136,866	121,239
Impairment loss on property, plant and equipment	1,079,028	100,900

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Loss on transactions of derivative instruments	8,390,490	13,935,052
Loss on valuations of derivative instruments	2,343,242	1,076,885
Others	10,160,538	18,799,858
	<hr/> 133,883,439	<hr/> 124,076,049

27. Expenses by Nature

Expenses by nature for the years ended December 31, 2016 and 2015, are as follows:

(in thousands of Korean won)	2016	2015
Changes in inventories excluding raw materials, merchandises and supplies	(4,693,587)	17,296,050
Purchase of raw materials and merchandises	3,674,469,443	3,644,963,044
Salaries	616,908,528	592,189,487
Employee retirement benefits	28,653,986	25,982,369
Employee welfare expenses	108,841,230	105,022,219
Depreciation	175,817,862	169,768,919
Amortization	10,371,353	4,111,053
Freight cost	132,810,346	133,981,987
Research and development costs	29,258,706	43,824,124
Service fees	159,707,717	153,298,490
Others	<hr/> 349,020,845	<hr/> 308,092,987
Total amount of cost of goods sold and selling, general and administrative expenses	<hr/> 5,281,166,429	<hr/> 5,198,530,729

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28. Tax Expense and Deferred Tax

Income tax expense for the years ended December 31, 2016 and 2015, consists of:

<i>(in thousands of Korean won)</i>	2016	2015
Current tax:		
Current tax on profits for the year	125,925,344	94,501,293
Adjustments in respect of prior years (Tax refund due to tax appeal and reassessment)	<u>(1,913,951)</u>	<u>5,817,585</u>
Deferred tax:		
Origination and reversal of temporary differences	(18,432,156)	4,808,680
Deferred tax recognized in other comprehensive income	<u>6,317,449</u>	<u>(2,814,475)</u>
Income tax expense	<u>111,896,686</u>	<u>102,313,083</u>

Income tax effects related to components of other comprehensive income (expenses) for the years ended December 31, 2016 and 2015, are as follows:

<i>(in thousands of Korean won)</i>	2016			2015		
	Before tax	Tax effect	After tax	Before tax	Tax effect	After tax
Gain (loss) on cash flow hedge derivative instruments	(20,693,170)	5,008,207	(15,684,963)	9,133,115	(2,091,298)	7,041,817
Remeasurement of the net defined benefit liability	<u>(2,859,683)</u>	<u>1,309,242</u>	<u>(1,550,441)</u>	<u>6,321,399</u>	<u>(723,177)</u>	<u>5,598,222</u>
	<u>(23,552,853)</u>	<u>6,317,449</u>	<u>(17,235,404)</u>	<u>15,454,514</u>	<u>(2,814,475)</u>	<u>12,640,039</u>

A reconciliation of income taxes applicable to profit before income taxes at the Korea statutory tax rate to provision for income taxes at the effective income tax rate of the Company are as follows:

<i>(in thousands of Korean won)</i>	2016	2015
Income before income tax expenses (A)	415,652,552	345,684,068
Tax at the applicable income tax rate (B)	104,804,019	102,322,484
Adjustments:		
Non-deductible expenses	725,557	9,726,779
Non-taxable income	(1,083,523)	(72,600)
Tax credit	<u>(20,740,288)</u>	<u>(15,467,514)</u>
Subsidiaries/Associates' results reported net of tax	9,419,851	-
Results tax investigation and others	4,877,925	(2,230,807)
Unrecognized tax deficit	5,780,699	-
Others	<u>8,112,446</u>	<u>8,034,741</u>
Sub-total (C)	<u>7,092,667</u>	<u>(9,401)</u>
Income before income tax expenses (D=B+C)	<u>111,896,686</u>	<u>102,313,083</u>

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The analysis of deferred tax assets and liabilities as of December 31, 2016 and 2015, is as follows:

<i>(in thousands of Korean won)</i>	2016	2015
Deferred tax assets		
Deferred tax asset to be recovered later than 12 months	59,275,791	52,875,231
Deferred tax asset to be recovered within 12 months	<u>42,324,707</u>	<u>10,701,122</u>
	<u>101,600,498</u>	<u>63,576,353</u>
Deferred tax liabilities		
Deferred tax liability to be settled later than 12 months	46,919,862	30,878,645
Deferred tax liability to be settled within 12 months	<u>2,548,762</u>	<u>1,229,582</u>
	<u>49,468,624</u>	<u>32,108,227</u>
Deferred tax assets (liabilities), net	<u>52,131,874</u>	<u>31,468,126</u>

Changes in deferred tax assets and liabilities for the years ended December 31, 2016 and 2015, without taking into consideration the offsetting of balances within the same tax jurisdiction, are as follows:

<i>(in thousands of Korean won)</i>	2016				
	Beginning balance	Statement of income	Other comprehensive income	Others	Ending balance
Deferred income tax assets(liabilities)					
Net defined benefit liabilities	3,410,512	7,268,803	1,309,242	-	11,988,557
Accrued expenses	7,418,761	21,890,871	-	-	29,309,632
Warranty provision	3,907,065	2,325,202	-	-	6,232,267
Inventory	1,248,172	2,917,864	-	-	4,166,036
Depreciation	1,122,739	(4,943,262)	-	-	(3,820,523)
Foreign exchange translation	2,409,646	(3,911,008)	-	-	(1,501,362)
Other employment-benefit liability	8,260,920	(5,125,559)	-	-	3,135,361
Adjustment on sales	728,061	(357,257)	-	-	370,804
Accrued income	7,620,251	(8,397,499)	-	-	(777,248)
Derivatives	110,309	646,442	5,008,207	-	5,764,958
Investments in subsidiaries	(30,202,032)	15,681,001	-	-	(14,521,031)
Tax credit	11,041,090	(9,985,768)	-	-	1,055,322
Other	<u>14,392,632</u>	<u>(5,895,122)</u>	<u>-</u>	<u>2,231,591</u>	<u>10,729,101</u>
	<u>31,468,126</u>	<u>12,114,708</u>	<u>6,317,449</u>	<u>2,231,591</u>	<u>52,131,874</u>

<i>(in thousands of Korean won)</i>	2015				
	Beginning balance	Statement of income	Other comprehensive income	Others	Ending balance
Deferred income tax assets(liabilities)					
Net defined benefit liabilities	(353,704)	4,487,393	(723,177)	-	3,410,512
Accrued expenses	5,614,014	1,804,747	-	-	7,418,761
Warranty provision	4,175,034	(267,969)	-	-	3,907,065
Inventory	2,527,405	(1,279,233)	-	-	1,248,172

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<i>(in thousands of Korean won)</i>	2015				
	Beginning balance	Statement of income	Other comprehensive income	Others	Ending balance
Depreciation	5,412,434	(4,289,695)	-	-	1,122,739
Foreign exchange translation	1,052,786	1,356,860	-	-	2,409,646
Other employment-benefit liability	5,372,173	2,888,747	-	-	8,260,920
Adjustment on sales	209,088	518,973	-	-	728,061
Accrued income	(940,231)	8,560,482	-	-	7,620,251
Derivatives	2,465,094	(263,487)	(2,091,298)	-	110,309
Investments in subsidiaries	(25,681,694)	(4,520,338)	-	-	(30,202,032)
Tax credit	11,834,269	(793,179)	-	-	11,041,090
Other	24,590,138	(10,197,506)	-	-	14,392,632
	36,276,806	(1,994,205)	(2,814,475)	-	31,468,126

Details of deductible (taxable) temporary differences which were not recognized as deferred tax assets (liabilities) as of December 31, 2016 and 2015, are as follows:

<i>(in thousands of Korean won)</i>	2016	2015	Reason
Interests in subsidiary	200,230,923	181,515,796	No plan for disposal

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29. Cash Generated from Operations

- (1) Cash generated from operations for the years ended December 31, 2016 and 2015, are as follows:

<i>(In thousands of Korean won)</i>	2016	2015
Adjustment for		
Interest expenses	20,864,007	13,478,743
Interest income	(5,571,581)	(7,255,848)
Income tax expense	111,896,686	102,313,083
Bad debts expenses	2,656,950	3,189,468
Other bad debt expenses	3,357,988	26,243
Loss on foreign currency translation	40,974,552	49,807,389
Loss on valuation of inventories	14,081,763	14,362,421
Depreciation	175,817,862	169,768,919
Loss on disposal of property, plant and equipment	1,275,466	2,326,742
Loss on disposal of intangible assets	136,866	121,239
Amortization	10,371,353	4,111,053
Impairment loss on property, plant and equipment	1,079,028	100,900
Loss on transaction of derivative instruments	8,390,490	13,935,052
Loss on valuation of derivative instruments	2,343,242	1,076,885
Severance benefits	26,591,530	23,163,953
Other long-term employee benefits	1,814,487	1,663,416
Shared based payment	1,282,320	-
Recognition of other provisions	56,222,688	17,374,327
Gain on transactions of derivative instruments	(11,352,352)	(5,081,752)
Gain on valuations of derivative instruments	(938,200)	-
Gain on foreign currency translation	(48,540,391)	(43,367,953)
Gain on disposal of property, plant and equipment	(737,440)	(727,523)
Gain on disposal of intangible assets	(4,545)	(11,818)
Share of profit in associates	(9,024,826)	(12,559,201)
	<hr/> <u>402,987,943</u>	<hr/> <u>347,815,738</u>

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<i>(In thousands of Korean won)</i>	2016	2015
Changes in operating assets and liabilities		
Decrease (increase) in trade receivables	58,694,906	(17,983,818)
Increase in other receivables	(91,788,826)	(24,227,629)
Decrease (increase) in other current assets	(29,030,722)	3,506,613
Increase in other non-current receivables	-	52,057
Decrease (increase) in derivative financial assets	11,406,747	(9,223,288)
Increase in inventories	(68,880,112)	(29,570,137)
Decrease (increase) in other non-current assets	228,862	(626,120)
Increase (decrease) in trade payables	(5,493,792)	39,428
Increase (decrease) in other payables	(5,705,888)	63,683,097
Increase in other current liabilities	13,478,331	2,058,934
Decrease in derivative financial liabilities	(7,164,785)	(3,797,647)
Increase (decrease) in other non-current payables	781,242	(1,603,295)
Increase (decrease) in other non-current liabilities	(3,973,190)	2,402,153
Decrease in other provisions	(46,478,581)	(18,335,116)
Benefits paid	(10,889,714)	(8,025,092)
Decrease in pension plan assets	(20,071,861)	(17,993,375)
	<hr/>	<hr/>
	(204,887,383)	(59,643,235)

(2) Significant transactions not affecting cash flows for the years ended December 31, 2016 and 2015, are as follows:

<i>(In thousands of Korean won)</i>	2016	2015
Reclassification of construction in-progress to property, plant and equipment	103,626,027	9,446,236
Other payables related to acquisition of property, plant and equipment	59,995,748	45,950,548
Other payables related to acquisition of intangible assets	15,000	-
Payment of other payable related to acquisition of property, plant and equipment from prior year	12,731,402	26,587,116
Reclassification to the development cost	5,386,700	2,727,420

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30. Issued capital and reserves

Issued shares for the years ended December 31, 2016 and 2015, are as follows:

<i>(In Korean won and in number of shares)</i>	2016	2015
Authorized shares	1,000,000,000 units	450,000,000 units
Issued shares	533,800,000 units	106,760,000 units
Par value per share	100	500
Issued capital	<u>53,380,000,000</u>	<u>53,380,000,000</u>

Details of equity components for the years ended December 31, 2016 and 2015, are as follows:

<i>(In thousands of Korean won)</i>	2016	2015
Share premium	48,060,000	48,060,000
Other components of equity	<u>(71,131,343)</u>	<u>(71,131,343)</u>
	<u>(23,071,343)</u>	<u>(23,071,343)</u>

31. Accumulated Other Comprehensive Income

Changes in accumulated other comprehensive income for the years ended December 31, 2016 and 2015, are as follows:

<i>(in thousands of Korean won)</i>	2016			
	Beginning balance	Increase (Decrease)	Reclassification to profit or loss	Ending balance
Cash flow hedges	(1,807,267)	(9,423,033)	(6,261,930)	(17,492,230)
Exchange differences on translation of foreign operations	(108,272,610)	(9,877,438)	-	(118,150,048)
Change in equity of associates	(5,170,975)	1,500,778	-	(3,670,197)
	<u>(115,250,852)</u>	<u>(17,799,693)</u>	<u>(6,261,930)</u>	<u>(139,312,475)</u>

<i>(in thousands of Korean won)</i>	2015			
	Beginning balance	Increase (Decrease)	Reclassification to profit or loss	Ending balance
Cash flow hedges	(8,849,084)	6,001,630	1,040,187	(1,807,267)
Exchange differences on translation of foreign operations	(93,032,834)	(15,239,776)	-	(108,272,610)
Change in equity of associates	(6,991,636)	1,820,661	-	(5,170,975)
	<u>(108,873,554)</u>	<u>(7,417,485)</u>	<u>1,040,187</u>	<u>(115,250,852)</u>

Changes in accumulated other comprehensive income represent net of tax effect amounts.

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32. Retained Earnings

Retained earnings as of December 31, 2016 and 2015, consist of:

(In thousands of Korean won)	2016	2015
Legal reserve		
Reserve for earned surplus ¹	26,690,000	26,690,000
Reserve for industrial growth ²	2,500,000	2,500,000
	29,190,000	29,190,000
Voluntary reserve		
Reserve for business expansion ³	1,081,705,953	1,135,281,002
Reserve for business rationalization ⁴	27,976,480	27,976,480
	1,109,682,433	1,163,257,482
Unappropriated retained earnings	797,717,348	637,194,935
	1,936,589,781	1,829,642,417

¹ In accordance with the Korean Commercial Code, an amount equal to at least 10% of cash dividends is required to be appropriated as a legal reserve until the reserve equals 50% of issued capital. The legal reserve may not be stylized for cash dividends but may only be used to offer a deficit, if any, or be transferred to capital.

² In accordance with the Korean Corporate Tax, the Company appropriated reserve for industrial growth which is deducted from excessive earnings over the legally accepted reserved earnings, which is based upon the calculation of accumulated earnings tax. The reserve for industrial growth may only be used to offer a deficit, if any, or be transferred to capital.

³ Reserve for business expansion is one of the voluntary reserve for the purpose of business expansion in the future.

⁴ Pursuant to the Regulation of Tax Reduction and Exemption Act (RTREA), the Company was required to appropriate, as a reserve for business rationalization, an amount equal to the tax reduction under the RTREA, and this reserve is regarded as a voluntary reserve due to abolition of relevant regulation.

The Company paid ₩103,557,200 thousand of dividend in respect of the year ended December 31, 2015, in April, 2016 (2015: ₩103,557,200 thousand). Board of Directors approved 3 times of interim dividends of ₩50 per share in current period, the total interim dividends of ₩80,070,000 thousand was paid in May, August and November 2016.

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Notes to the Financial Statements

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33. Related Party Transactions

- (1) The controlling company of the Group is Hahn & Co Auto Holdings Co., Ltd. and the company that has a significant effect on the Group is Hankook Tire Co., Ltd. As of December 31, 2016, the company's related companies are Bonaire and two other companies.
- (2) Sales and purchases with related parties for the years ended December 31, 2016 and 2015, are as follows:

(In thousands of Korean won)		2016		
Relationship	Company names	Sales	Dividends	Purchases
Associates	Bonaire and two other companies	86,802,504	4,731,779	10,531,215

(In thousands of Korean won)		2015		
Relationship	Company names	Sales	Dividends	Purchases
Ultimate parent company	Visteon Corporation and one other company ¹	972,396	-	43,340,665
Associates	Bonaire and two other companies	96,611,879	5,214,689	7,406,137
Entities under common control	Visteon Argentina and one other company	20,723,101	-	21,565,332
		118,307,376	5,214,689	72,312,134

¹ Transactions between Visteon and subsidiaries are included until the shareholders deal closed.

- (3) Receivables and payables to related parties as of December 31, 2016 and 2015, are as follows:

(In thousands of Korean won)		2016	
Relationship	Company names	Receivables	Payables ¹
Associates	Bonaire and two other companies	15,916,981	13,495,405

¹ As of December 31, 2016, the amount of payables includes the borrowings amounting to ₩12,026,069 thousand (2015: ₩16,232,460 thousand). The Group redeemed ₩4,651,196 thousand of borrowings during current period.

(In thousands of Korean won)		2015	
Relationship	Company names	Receivables	Payables
Associates	Bonaire and two other companies	15,481,289	17,259,815

- (4) For the years ended December 31, 2016 and 2015, the details of compensation to key management officers are as follows:

(In thousands of Korean won)		2016	2015
Executive compensation		4,016,765	3,402,025

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Severance benefits	484,530	115,041
	4,501,295	3,517,066

Key management includes the directors and internal auditors who are responsible for plan, operation and control of the Group.

34. Non-current Assets and Liabilities Held-for-sale

The Group decided to sell the electronic equipment product group of HASI (newly incorporated entity as VEIPL) with the approval of the Board of Directors and shareholders. The disposal has been approved by the local court, and the process is still going on.

The assets and liabilities related to the electronic equipment product group of HASI are presented as held-for-sale. The Board of Directors finally approved the sale of the electronic equipment product group of HASI to Visteon on February 14, 2017. The deal will be closed within March 2017. The profit and loss of VEIPL are not presented as discontinued operations as it does not represent a separate major line of the business.

Details of assets and liabilities of disposal group classified as held-for-sale as of December 31, 2016, are as follows:

(in thousands of Korean won)	<u>December 31, 2016</u>
Assets of disposal group	
Cash and cash equivalents	2,350,074
Trade receivable	9,393,176
Inventories	7,548,087
Property, plant and equipment	32,408,802
Intangible assets	29,633,271
Other assets	8,218,379
	<u>89,551,789</u>
Liabilities of disposal group	
Trade payables	13,767,994
Other liabilities	14,490,733
	<u>28,258,727</u>

Cumulative income or expense recognized in other comprehensive income related to the disposal group classified as held-for-sale as of December 31, 2016, are as follows:

(in thousands of Korean won)	<u>December 31, 2016</u>
Foreign currency translation adjustments	(9,729,925)

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35. Events after the Reporting Period

- (1) On February 10, 2017, the Company issued the unsecured corporate bond which amounts to ₩300,000,000 thousand for the purpose of repayment of long-term borrowings and other payables, which will mature in February 2017. The details of the bond issuance are as follows:

<i>(in thousands of Korean won)</i>	Type	Amount	Maturity
8-1	Unsecured, general	50,000,000	Feb 10, 2020
8-2	Unsecured, general	190,000,000	Feb 10, 2022
8-3	Unsecured, general	60,000,000	Feb 10, 2024
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300,000,000			

- (2) On February 14, 2017, the Company decided to grant 3,795,000 shares of options to purchase common stock, of which exercise price is ₩10,200 with approval of Board of Directors, and the actual grant date will be specified in the stock option agreement.