

# **Hanon Systems and Subsidiaries**

**Consolidated Financial Statements**

**December 31, 2017 and 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 at December 31, 2017 and 2016, and the consolidated statements of income, comprehensive income, changes in equity and cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies and other explanatory information.

### ***Management's Responsibilities for the Financial Statements***

Management is responsible for the preparation and fair presentation of the consolidated 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 Responsibilities***

Our responsibility is to express an opinion on the consolidated financial statements based on our audits. We conducted our audits 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 consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

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

***Opinion***

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of Hanon Systems and its subsidiaries as at December 31, 2017 and 2016, and their consolidated financial performance and their consolidated cash flows for the years then ended in accordance with the Korean IFRS.

***Other Matters***

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 22, 2018

Seoul, Korea

This report is effective as at March 22, 2018, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that 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, 2017 and 2016**

<i>(in Korean won)</i>	<u>Notes</u>	<u>2017</u>	<u>2016</u>
<b>Assets</b>			
<b>Current assets</b>			
Cash and cash equivalents	6	567,258,577,099	425,160,400,983
Other financial assets	6,21	7,500,000,000	7,500,000,000
Derivative financial assets	5,6,22	47,134,417,436	2,494,817,003
Trade receivables	6,8,33	883,122,373,128	930,890,053,852
Other current receivables	6,9,33	80,481,377,193	113,332,716,106
Other current assets	10	180,208,002,790	152,328,106,294
Inventories	11	468,642,506,848	429,724,145,263
Non-current assets held-for-sale	34	6,916,877,600	89,551,788,974
Total current assets		<u>2,241,264,132,094</u>	<u>2,150,982,028,475</u>
<b>Non-current assets</b>			
Long-term financial assets	6	42,507,835	28,006,940
Available-for-sale financial assets	6	1,000,000	1,000,000
Held-to-maturity investments	5,6	3,285,000	17,120,000
Derivative financial assets	5,6,22	21,861,567,000	3,676,361,000
Other non-current receivables	6,9,33	8,649,684,032	9,990,720,269
Investments in associates	12	96,627,728,289	94,962,046,530
Property, plant and equipment	13	1,262,003,089,633	1,178,144,090,379
Intangible assets	14	437,652,618,816	350,265,704,291
Deferred tax assets	28	45,495,184,633	67,042,595,274
Other non-current assets	10	5,980,113,008	4,627,848,148
Total non-current assets		<u>1,878,316,778,246</u>	<u>1,708,755,492,831</u>
<b>Total assets</b>		<u>4,119,580,910,340</u>	<u>3,859,737,521,306</u>

**Hanon Systems and Subsidiaries**  
**Consolidated Statements of Financial Position**  
**December 31, 2017 and 2016**

<i>(in Korean won)</i>	<u>Notes</u>	<u>2017</u>	<u>2016</u>
<b>Liabilities</b>			
<b>Current liabilities</b>			
Trade payables	4,6,33	732,889,386,093	700,310,343,905
Other current payables	4,6,15,33	297,101,200,268	301,525,408,313
Short-term borrowings	4,6,20	135,867,991,073	303,414,777,004
Current tax liabilities		73,262,308,536	69,455,719,471
Derivative financial liabilities	4,5,6,22	2,151,040,013	13,700,235,265
Other current liabilities	16	48,617,788,198	41,674,009,096
Other provisions	17	9,431,498,199	5,090,962,583
Non-current liabilities held-for-sale	34	169,094,393	28,258,726,809
Total current liabilities		<u>1,299,490,306,773</u>	<u>1,463,430,182,446</u>
<b>Non-current liabilities</b>			
Other non-current payables	4,6,15	15,503,775,237	15,156,856,209
Long-term borrowings	4,5,6,20,33	22,108,108,787	43,527,043,465
Debentures	4,5,6,20	598,900,394,012	299,273,294,246
Derivative financial liabilities	4,5,6,22	1,245,574,000	16,856,141,000
Net defined benefit liabilities	18	62,815,484,953	60,219,647,037
Other non-current provisions	17	32,046,691,842	36,217,909,673
Deferred tax liabilities	28	32,216,586,429	14,910,721,660
Other non-current liabilities	16	23,808,847,964	25,239,638,410
Total non-current liabilities		<u>788,645,463,224</u>	<u>511,401,251,700</u>
<b>Total liabilities</b>		<u>2,088,135,769,997</u>	<u>1,974,831,434,146</u>
<b>Equity</b>			
<b>Equity attributable to owners of the Parent Company</b>			
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	(70,457,253,167)	(71,131,343,144)
Accumulated other comprehensive income (loss)	31	(126,129,801,388)	(139,312,474,868)
Retained earnings	32	2,073,817,232,435	1,936,589,780,717
		<u>1,978,670,177,880</u>	<u>1,827,585,962,705</u>
<b>Non-controlling interest</b>		<u>52,774,962,463</u>	<u>57,320,124,455</u>
<b>Total equity</b>		<u>2,031,445,140,343</u>	<u>1,884,906,087,160</u>
<b>Total liabilities and equity</b>		<u>4,119,580,910,340</u>	<u>3,859,737,521,306</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, 2017 and 2016**

<i>(In Korean won)</i>	<b>Notes</b>	<b>2017</b>	<b>2016</b>
<b>Sales</b>	7,33	5,585,673,304,390	5,703,714,576,919
<b>Cost of sales</b>	27,33	<u>4,639,441,988,628</u>	<u>4,804,845,996,828</u>
<b>Gross profit</b>		<u>946,231,315,762</u>	<u>898,868,580,091</u>
Selling, general and administrative expenses	24,27	<u>477,794,628,361</u>	<u>476,320,431,807</u>
<b>Operating profit</b>		<u>468,436,687,401</u>	<u>422,548,148,284</u>
Financial income	6,25	13,005,876,744	7,202,948,757
Financial expenses	6,25	<u>26,677,255,499</u>	<u>29,176,391,538</u>
Other non-operating income	6,26	142,182,523,467	139,936,459,516
Other non-operating expenses	6,26	<u>183,950,011,224</u>	<u>133,883,439,015</u>
Share of profit in associates	12	<u>8,507,552,375</u>	<u>9,024,825,921</u>
<b>Profit before income taxes</b>		<u>421,505,373,264</u>	<u>415,652,551,925</u>
Income tax expense	28	<u>123,102,185,030</u>	<u>111,896,685,614</u>
<b>Profit for the year</b>		<u>298,403,188,234</u>	<u>303,755,866,311</u>
Profit for the year attributable to equity holders of the parent company		288,563,135,146	292,125,004,918
Profit for the year attributable to non-controlling interest		9,840,053,088	11,630,861,393
<b>Earnings per share attributable to the equity holders of the parent company for the year</b>			
Basic and diluted earnings per share of common stock	23	541	547

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, 2017 and 2016**

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<i>(In Korean won)</i>	<u>Notes</u>	<u>2017</u>	<u>2016</u>
<b>Profit for the year</b>		298,403,188,234	303,755,866,311
<b>Other comprehensive income (loss) for the year, after tax</b>		18,912,314,314	(26,673,959,137)
<b>Items that may be subsequently reclassified to profit or loss:</b>			
Gain (loss) on cash flow hedge derivative instruments	22,31	63,224,013,083	(15,684,963,332)
Foreign currency translation adjustments	31	(47,902,145,005)	(10,939,333,059)
Accumulated other comprehensive income (loss) from investment in associates, net	12,31	(5,213,870,336)	1,500,778,611
<b>Items that will not be reclassified subsequently to profit or loss:</b>			
Remeasurement of the net defined benefit liabilities	18	<u>8,804,316,572</u>	<u>(1,550,441,357)</u>
<b>Total comprehensive income for the year</b>		<u>317,315,502,548</u>	<u>277,081,907,174</u>
<b>Attributable to :</b>			
Equity holders of the Company		310,550,125,198	266,512,940,548
Non-controlling interests		6,765,377,350	10,568,966,626

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, 2017 and 2016**

		Attributable to equity holders of the parent company						
				Other components of equity	Accumulated other comprehensive income(loss)	Retained earnings	Non-controlling interests	Total Equity
(in Korean won)	Notes	Issued Capital	Share Premium					
<b>Balances at January 1, 2016</b>		<b>53,380,000,000</b>	<b>48,060,000,000</b>	<b>(71,131,343,144)</b>	<b>(115,250,851,855)</b>	<b>1,829,642,417,156</b>	<b>54,741,031,056</b>	<b>1,799,441,253,213</b>
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
<b>Comprehensive income(loss)</b>		-	-	-	<b>(24,061,623,013)</b>	<b>290,574,563,561</b>	<b>10,568,966,626</b>	<b>277,081,907,174</b>
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
<b>Transactions with equity holders of the Company</b>		-	-	-	-	<b>(183,627,200,000)</b>	<b>(7,989,873,227)</b>	<b>(191,617,073,227)</b>
<b>Balances at December 31, 2016</b>		<b>53,380,000,000</b>	<b>48,060,000,000</b>	<b>(71,131,343,144)</b>	<b>(139,312,474,868)</b>	<b>1,936,589,780,717</b>	<b>57,320,124,455</b>	<b>1,884,906,087,160</b>

**Hanon Systems and Subsidiaries**  
**Consolidated Statements of Changes in Equity**  
**Years Ended December 31, 2017 and 2016**

		Attributable to equity holders of the parent company						
				Other components of equity	Accumulated other comprehensive income(loss)	Retained earnings	Non-controlling interests	Total Equity
(in Korean won)	Notes	Issued Capital	Share Premium					
<b>Balances at January 1, 2017</b>		<b>53,380,000,000</b>	<b>48,060,000,000</b>	<b>(71,131,343,144)</b>	<b>(139,312,474,868)</b>	<b>1,936,589,780,717</b>	<b>57,320,124,455</b>	<b>1,884,906,087,160</b>
Profit for the year		-	-	-	-	288,563,135,146	9,840,053,088	298,403,188,234
Remeasurement of net defined benefit liabilities	18	-	-	-	-	8,804,316,572	-	8,804,316,572
Gain on cash flow hedge derivative instruments	22,31	-	-	-	63,224,013,083	-	-	63,224,013,083
Translation of foreign currency financial statements	31	-	-	-	(44,827,469,267)	-	(3,074,675,738)	(47,902,145,005)
Share of other comprehensive profit of associates	12	-	-	-	(5,213,870,336)	-	-	(5,213,870,336)
<b>Comprehensive income</b>		-	-	-	<b>13,182,673,480</b>	<b>297,367,451,718</b>	<b>6,765,377,350</b>	<b>317,315,502,548</b>
Cash dividends	32	-	-	-	-	(160,140,000,000)	(11,310,539,342)	(171,450,539,342)
Share-based Payments		-	-	674,089,977	-	-	-	674,089,977
<b>Transactions with equity holders of the Company</b>		-	-	<b>674,089,977</b>	-	<b>(160,140,000,000)</b>	<b>(11,310,539,342)</b>	<b>(170,776,449,365)</b>
<b>Balances at December 31, 2017</b>		<b>53,380,000,000</b>	<b>48,060,000,000</b>	<b>(70,457,253,167)</b>	<b>(126,129,801,388)</b>	<b>2,073,817,232,435</b>	<b>52,774,962,463</b>	<b>2,031,445,140,343</b>

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, 2017 and 2016**

(in Korean won)

	Notes	2017	2016
<b>Cash flows from operating activities</b>			
Cash generated from operations		682,810,374,724	501,856,426,086
Profit for the year		298,403,188,234	303,755,866,311
Adjustments to reconcile profit for the year to net cash provided by operating activities	29	415,792,524,354	402,987,943,183
Changes in operating assets and liabilities	29	(31,385,337,864)	(204,887,383,408)
Interest received		6,711,428,812	6,269,164,897
Interest paid		(16,227,548,557)	(19,621,968,121)
Dividend received		4,393,717,080	5,718,066,860
Income tax paid		(111,037,292,679)	(105,051,838,987)
<b>Net cash inflow from operating activities</b>		<b>566,650,679,380</b>	<b>389,169,850,735</b>
<b>Cash flows from investing activities</b>			
<b>Cash inflows from investing activities</b>		<b>94,540,527,524</b>	<b>22,422,848,124</b>
Collection of short-term loans		11,563,657,353	2,694,156,216
Collection of long-term loans		60,000,000	-
Disposal of long-term financial instruments		3,000,000	500,000
Disposal of held-to-maturity investments		13,835,000	-
Cash inflow from derivative instrument transactions		1,467,000,000	-
Disposal of property, plant and equipment		29,385,498,911	19,158,284,233
Disposal of intangible assets		237,236,260	569,907,675
Disposal of assets held-for-sale		51,810,300,000	-
<b>Cash outflows from investing activities</b>		<b>(441,049,978,760)</b>	<b>(474,300,457,627)</b>
Increase in short-term loans receivable		(7,460,126,454)	(10,581,552,608)
Increase in long-term loans receivable		(300,000,000)	(2,000,000,000)
Acquisition of short-term financial instruments		-	(2,500,000,000)
Acquisition of long-term financial instruments		(17,250,794)	-
Cash outflow from derivative instrument transactions		-	(679,350,000)
Acquisition of investment in associates		(2,765,716,800)	-
Acquisition of property, plant and equipment	13	(322,132,161,141)	(249,726,731,829)
Acquisition of intangible assets	14	(105,115,547,303)	(85,703,017,143)
Cash outflow from business combination		-	(123,109,806,047)
Cash outflow due to changes in scope for consolidation		(3,259,176,268)	-
<b>Net cash outflow from investing activities</b>		<b>(346,509,451,236)</b>	<b>(451,877,609,503)</b>
<b>Cash flows from financing activities</b>			
<b>Cash inflows from financing activities</b>		<b>567,191,411,755</b>	<b>543,420,670,183</b>
Increase in short-term borrowings	20	267,897,832,743	240,292,756,629
Increase in long-term borrowings	20	77,097,481	408,996,984
Proceeds from issuance of debentures	20	299,216,481,531	299,030,200,000
Capital inflow from non-controlling interests		-	2,716,716,570
Cash inflow from derivative instrument transactions		-	972,000,000
<b>Cash outflows from financing activities</b>		<b>(623,414,096,839)</b>	<b>(495,108,609,300)</b>
Repayment of short-term borrowings	20	(439,125,818,547)	(287,171,032,640)
Repayment of long-term borrowings	20	(12,837,738,950)	(4,651,195,680)
Dividends paid	32	(160,140,000,000)	(183,627,200,000)
Dividends paid to non-controlling interests		(11,310,539,342)	(19,659,180,980)
<b>Net cash inflow (outflow) from financing activities</b>		<b>(56,222,685,084)</b>	<b>48,312,060,883</b>

**Hanon Systems and Subsidiaries**  
**Consolidated Statements of Cash Flows**  
**Years Ended December 31, 2017 and 2016**

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(in Korean won)

	<u>Notes</u>	<u>2017</u>	<u>2016</u>
<b>Net increase (decrease) in cash and cash equivalents</b>		<b>163,918,543,060</b>	<b>(14,395,697,885)</b>
Beginning of the year		425,160,400,983	447,114,126,189
Effect of exchange rate on cash and cash equivalents		(19,167,033,037)	(5,207,953,531)
Cash and cash equivalents classified as assets held-for-sale	34	<u>(2,653,333,907)</u>	<u>(2,350,073,790)</u>
<b>End of the year</b>		<b><u>567,258,577,099</u></b>	<b><u>425,160,400,983</u></b>

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

**Hanon Systems and Subsidiaries**  
**Notes to the Financial Statements**  
**December 31, 2017 and 2016**

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**1. General Information**

Hanon Systems (the “Company”) and its subsidiaries (collectively “the Group”) have been 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 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 at December 31, 2017. The Company’s major shareholders and their respective equity ownership as at December 31, 2017 and 2016, are as below.

Shareholders	December 31, 2017		December 31, 2016	
	Number of shares	Equity ownership (%)	Number of shares	Equity ownership (%)
Hahn & Co Auto Holdings Co., Ltd.	269,569,000	50.50	269,569,000	50.50
Hankook Tire Co., Ltd,	104,031,000	19.49	104,031,000	19.49
Others	160,200,000	30.01	160,200,000	30.01
	<b>533,800,000</b>	<b>100.00</b>	<b>533,800,000</b>	<b>100.00</b>

# Hanon Systems and Subsidiaries

## Notes to the Financial Statements

### December 31, 2017 and 2016

#### 1.1 Consolidated Subsidiaries

Subsidiaries included in the consolidated financial statements as at December 31, 2017 and 2016, are as follows:

Subsidiaries <sup>1</sup>	Location	Percentage of ownership (%)		Year end	Main business
		2017	2016		
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 <sup>2</sup>	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	China	66.60	66.60	December	Production and sales of vehicle components
HASI	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	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 Coclisla	Mexico	100.00	100.00	December	Production and sales of vehicle components
Hanon Mexicana	Mexico	100.00	100.00	December	Production and sales of vehicle components
Hanon Brazil	Brazil	100.00	100.00	December	Production and sales of vehicle components
Hanon Brasil Holdings	Brazil	100.00	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

# Hanon Systems and Subsidiaries

## Notes to the Financial Statements

### December 31, 2017 and 2016

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<sup>1</sup> 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 <sup>2</sup>	Halla Visteon Climate Control (Jinan) Co., Ltd.
Hanon Shanghai	Hanon Systems (Shanghai) Co., Ltd.
Hanon Chongqing	Hanon Systems (Chongqing) Co., Ltd.
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	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.

<sup>2</sup> During the year ended December 31, 2017, the Group is in the process of disposing of its stake in Hanon Jinan. The assets and liabilities related to Hanon Jinan were disclosed as held-for-sale (Note 34).

# Hanon Systems and Subsidiaries

## Notes to the Financial Statements

### December 31, 2017 and 2016

#### 1.2 Summary of financial information of subsidiaries

The summarized financial information of subsidiaries as at and for the years ended December 31, 2017 and 2016, is as follows:

( in thousands of  
Korean won)

Subsidiary	2017					
	Assets	Liabilities	Equity	Sales	Profit (loss) for the year	Total comprehensive income (loss)
Hanon Beijing	279,077,304	166,792,558	112,284,746	392,366,875	29,120,607	21,362,019
Hanon Dalian	157,956,092	50,672,727	107,283,365	189,655,226	17,479,997	10,946,871
Hanon Jinan	10,310,668	169,094	10,141,574	401,004	(238,986)	(842,806)
Hanon Shanghai	12,911,672	9,758,893	3,152,779	11,476,790	1,054,257	907,006
Hanon Chongqing	65,787,860	28,250,053	37,537,807	89,898,838	9,114,804	6,631,702
Hanon Nanchang	59,966,104	27,195,609	32,770,495	78,695,694	7,442,413	5,587,838
Hanon Nanjing	33,458,033	14,174,713	19,283,320	33,601,350	4,028,056	3,035,196
Hanon Yancheng	42,167,623	32,566,951	9,600,672	43,951,110	(529,580)	(1,111,701)
Hanon New Chongqing	26,415,098	13,451,272	12,963,826	9,030,145	(2,238,973)	(3,077,793)
HASI	166,514,154	106,682,701	59,831,453	277,507,916	6,075,202	2,555,706
Hanon Bhiwadi	40,751,723	9,321,831	31,429,892	60,518,092	6,339,221	4,346,460
VEIPL	-	-	-	21,841,731	5,947,395	3,948,928
Hanon Japan	28,539,062	18,340,343	10,198,719	83,834,194	2,051,713	1,169,474
Hanon Thailand	105,770,170	35,750,164	70,020,006	150,355,871	7,886,889	5,616,410
Hanon Slovakia	250,389,051	114,429,174	135,959,877	430,997,208	11,495,998	12,654,976
Hanon Turkey	71,295,215	34,781,550	36,513,665	212,263,112	11,788,545	5,155,005
Hanon Portugal	113,847,520	35,814,348	78,033,172	152,782,383	3,771,659	4,456,325
Hanon Autopal Service	20,365,516	7,821,597	12,543,919	25,212,816	2,282,360	2,380,878
Hanon Autopal	198,611,619	124,498,606	74,113,013	363,179,550	12,324,565	12,910,606
Hanon Charleville	75,589,437	75,239,069	350,368	182,349,401	(11,455,607)	(11,374,705)
Hanon Hungary	182,585,312	95,787,074	86,798,238	211,865,236	5,596,485	6,344,804
Hanon UK	3,044,701	5,627,496	(2,582,795)	6,212,869	(358,791)	(300,701)
Hanon Deutschland	102,176,413	94,055,546	8,120,867	126,347,563	17,330,635	17,294,671
Hanon Southern Germany	4,142,799	3,115,502	1,027,297	6,253,161	(587,034)	(573,636)
Hanon Netherlands	340,189,685	330,818,936	9,370,749	887,465,673	2,785,363	2,523,020
Hanon Russia	5,902,423	11,484,350	(5,581,927)	536,618	(1,220,603)	(841,878)
Hanon Alabama	152,825,349	54,748,828	98,076,521	441,855,609	11,401,883	(365,303)
Hanon USA	176,400,686	117,778,795	58,621,891	253,484,621	13,956,598	7,430,831
Hanon Canada	81,715,010	19,629,861	62,085,149	132,155,652	1,602,186	(1,415,637)
Hanon Coclisla	44,148,619	27,513,477	16,635,142	95,411,249	6,542,106	5,132,408
Hanon Mexicana	70,018,970	69,179,906	839,064	118,381,053	(4,291,849)	(4,238,355)
Hanon Brazil	31,555,134	15,729,616	15,825,518	40,185,757	76,647	3,056,161
Hanon Brasil Holdings	54,233	5,486,847	(5,432,614)	-	(3,613,678)	(2,982,574)
Hanon South Africa	13,705,412	8,351,815	5,353,597	30,167,829	2,724,944	2,727,334



# Hanon Systems and Subsidiaries

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( in thousands of Korean won)

2016

Subsidiary	Assets	Liabilities	Equity	Sales	Profit (loss) for the year	Total comprehensive income (loss)
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	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 Coclisá	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

**Hanon Systems and Subsidiaries**  
**Notes to the Financial Statements**  
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**1.3 Changes in Scope for Consolidation**

There is no subsidiary newly included in the consolidation for the year ended December 31, 2017, and subsidiary excluded for the year ended December 31, 2017, are as follows:

Subsidiaries	Reason
VEIPL	During this period, the Group disposed the shares of Visteon Electronics India Private Limited (VEIPL, the electronic equipment product group of HASI), in order to increase efficiency in operation and enhance long-term value of the entity by focusing on the automotive climate control business segment <sup>1</sup> .

<sup>1</sup>Total consideration is USD 46,500 thousand, and, the loss on disposal of net assets held-for-sale amounting to ₩14,310,719 thousand was recognized in statement of comprehensive income for the period, considering foreign currency translation adjustments (accumulated other comprehensive income) amounting to ₩10,702,918 thousand incurred from translation of VEIPL's foreign currency financial statements.

**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.

# Hanon Systems and Subsidiaries

## Notes to the Financial Statements

### December 31, 2017 and 2016

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#### 2.2 Changes in Accounting Policy and Disclosures

##### *(1) 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, 2017, and this application does not have a material impact on the financial statements:

##### - Amendments to Korean IFRS 1007 *Statement of Cash Flows*

Amendments to Korean IFRS 1007 *Statement of Cash flows* require to provide disclosures that enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash flows (Note 29).

##### - Amendments to Korean IFRS 1012 *Income Tax*

Amendments to Korean IFRS 1012 clarify how to account for deferred tax assets related to debt instruments measured at fair value. Korean IFRS 1012 provides requirements on the recognition and measurement of current or deferred tax liabilities or assets. The amendments issued clarify the requirements on recognition of deferred tax assets for unrealized losses, to address diversity in practice.

##### - Amendments to Korean IFRS 1112 *Disclosures of Interests in Other Entities*

Amendments to Korean IFRS 1112 clarify when an entity's interest in a subsidiary, a joint venture or an associate is classified as held for sales in accordance with Korean IFRS 1105, the entity is required to disclose other information except for summarized financial information in accordance with Korean IFRS 1112.

##### *(2) 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, 2017, and which are not early adopted are enumerated below.

##### - Amendment to Korean IFRS 1028, *Investments in Associates and Joint Ventures*

When an investment in an associates or a joint ventures is held by, or it held indirectly through, an entity that is a venture capital organization, or a mutual fund, unit trust and similar entities including investment-linked insurance funds, the entity may elect to measure that investment at fair value through profit or loss in accordance with Korean IFRS 1109. The amendments clarify that an entity shall make this election separately for each associate of joint venture, at initial recognition of the associate or joint venture. The Group will apply these amendments retrospectively for annual periods beginning on or after January 1, 2018, and early adoption is permitted. The Group does not expect the amendments to have a significant impact on the consolidated financial statements.

## Hanon Systems and Subsidiaries

### Notes to the Financial Statements

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##### - Amendment to Korean IFRS 1040 *Transfers of Investment Property*

Paragraph 57 of Korean IFRS 1040 clarifies that a transfer to, or from, investment property, including property under construction, can only be made if there has been a change in use that is supported by evidence, and provides a list of circumstances as examples. The amendment will be effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The Group does not expect the amendment to have a significant impact on the financial statements.

##### - Amendment to Korean IFRS 1102, *Share-based Payment*

Amendments to IFRS 1102 clarifies accounting for a modification to the terms and conditions of a share-based payment that changes the classification of the transaction from cash-settled to equity-settled. And also, clarifies that the measurement approach should treat the terms and conditions of a cash-settled award in the same way as for an equity-settled award. The Group will apply the amendments for annual periods beginning on or after January 1, 2018 with early application permitted. The Group does not expect the amendments to have a significant impact on the consolidated financial statements.

##### - Enactments to Interpretation 2122 *Foreign Currency Transaction and Advance Consideration*

According to these enactments, the date of the transaction for the purpose of determining the exchange rate to use on initial recognition of the related asset, expense or income (or part of it) is the date on which an entity initially recognizes the non-monetary asset or non-monetary liability arising from the payment or receipt of advance consideration. If there are multiple payments or receipts in advance, the entity shall determine a date of the transaction for each payment or receipt of advance consideration. These enactments will be effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The Group does not expect the enactments to have a significant impact on the consolidated financial statements.

##### - Enactment of Korean IFRS 1116 *Leases*

Korean IFRS 1116 *Leases* issued on May 22, 2017 is effective for annual periods beginning on or after January 1, 2019, with early adoption permitted. This standard will replace Korean IFRS 1017 *Leases*, Interpretation 2104 *Determining whether an Arrangement contains a Lease*, Interpretation 2015 *Operating Leases-Incentives*, and Interpretation 2027 *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*.

At inception of a contract, the Group assesses whether the contract is, or contains, a lease. Also, at the date of initial application, the Group assesses whether the contract is, or contains, a lease in accordance with the standard. However, the Group will not need to reassess all contracts with applying the practical expedient because the Group elected to apply the practical expedient only to contracts entered before the date of initial application.

For a contract that is, or contains, a lease, the entity shall account for each lease component within the contract as a lease separately from non-lease components of the contract. A lessee is required to recognize a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments. The lessee may elect not

## Hanon Systems and Subsidiaries

### Notes to the Financial Statements

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to apply the requirements to short-term lease and low value assets. In addition, as a practical expedient, the lessee may elect, by class of underlying asset, not to separate non-lease components from lease components, and instead account for each lease component and any associated non-lease components as a single lease component.

#### *Lessee accounting*

A lessee shall apply this standard to its leases either:

- retrospectively to each prior reporting period presented applying Korean IFRS 1008 *Accounting Policies, Changes in Accounting Estimates and Errors* (Full retrospective application); or
- retrospectively with the cumulative effect of initially applying the standard recognized at the date of initial application.

The Group has not yet elected the application method.

The Group is analyzing the effects on the financial statements; however, it is difficult to provide reasonable estimates of financial effects until the analyses is complete.

#### *Lessor accounting*

The Group expects the effect on the financial statements applying the new standard will not be significant as accounting for the Group, as a lessor.

Korean IFRS 1116 *Leases* is effective for annual periods beginning on or after January 1, 2019, with early adoption permitted. The Group will choose early adoption of Korean IFRS 1116 for annual periods beginning on or after January 1, 2018.

#### - Korean IFRS 1109 *Financial Instruments*

The new standard for financial instruments issued on September 25, 2015 are effective for annual periods beginning on or after January 1, 2018 with early application 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.

The standard requires retrospective application with some exceptions. For example, an entity is not required to restate prior period in relation to classification and measurement (including impairment) of financial instruments. The standard requires prospective application of its hedge accounting requirements for all hedging relationships except the accounting for time value of options and other exceptions.

Korean IFRS 1109 *Financial Instruments* requires all financial assets to be classified and measured on the basis of the entity's business model for managing financial assets and the contractual cash flow characteristics of the financial assets. A new impairment model, an expected credit loss model, is introduced and any subsequent changes in expected credit losses will be recognized in profit or loss. Also, hedge accounting rules amended to extend the hedging relationship, which consists only of eligible hedging instruments and hedged items, qualifies for

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hedge accounting.

An effective implementation of Korean IFRS 1109 requires preparation processes including financial impact assessment, accounting policy establishment, accounting system development and the system stabilization. The impact on the Group's financial statements due to the application of the standard is dependent on judgements made in applying the standard, financial instruments held by the Group and macroeconomic variables.

The Group performed an impact assessment to identify potential financial effects of applying Korean IFRS 1109. The assessment was performed based on available information as at December 31, 2017, and the results of the assessment are explained as below. The Group plans to perform more detailed analyses on the financial effects based on additional information in the future; therefore, the results of the assessment may change due to additional information that the Group may obtain after the assessment.

*(a) Classification and Measurement of Financial Assets*

When implementing Korean IFRS 1109, the classification of financial assets will be driven by the Group's business model for managing the financial assets and contractual terms of cash flow. The following table shows the classification of financial assets measured subsequently at amortized cost, at fair value through other comprehensive income and at fair value through profit or loss. If a hybrid contract contains a host that is a financial asset, the classification of the hybrid contract shall be determined for the entire contract without separating the embedded derivative.

<b><i>Business model for the contractual cash flows characteristics</i></b>	<b><i>Solely represent payments of principal and interest</i></b>	<b><i>All other</i></b>
<i>Hold the financial asset for the collection of the contractual cash flows</i>	Measured at amortized cost <sup>1</sup>	
<i>Hold the financial asset for the collection of the contractual cash flows and trading</i>	Recognized at fair value through other comprehensive income <sup>1</sup>	Recognized at fair value through profit or loss <sup>2</sup>
<i>Hold for trading</i>	Recognized at fair value through profit or loss	

<sup>1</sup> A designation at fair value through profit or loss is allowed only if such designation mitigates an accounting mismatch (irrevocable).

<sup>2</sup> Equity investments not held for trading can be recorded in other comprehensive income (irrevocable).

With the implementation of Korean IFRS 1109, the criteria to classify the financial assets at amortized cost or at fair value through other comprehensive income are more strictly applied than the criteria applied with Korean IFRS 1039. Accordingly, the financial assets at fair value through profit or loss may increase by implementing Korean IFRS 1109 and may result an extended fluctuation in profit or loss.

As at December 31, 2017, the Group owns loans and receivables of ₩1,547,055 million, financial assets held-to-maturity of ₩ 3 million, available-for-sale financial assets of ₩ 1 million, and financial assets at fair value through profit or loss of ₩ 6,801 million.

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According to Korean IFRS 1109, a debt instrument is measured at amortized cost if: a) the objective of the business model is to hold the financial asset for the collection of the contractual cash flows, and b) the contractual cash flows under the instrument solely represent payments of principal and interest.

Based on results from the impact assessment of Korean IFRS 1109, the application of the new standard as at December 31, 2017 does not have a material impact on the Group's financial statements. This is because the Group holds the majority of financial assets measured at amortized cost that meets the both criteria: a) the contractual terms of the financial assets that the Group holds give rise to cash flows that are solely payments of principal and interest on the principal amount outstanding on a specified date, and b) the Group holds the financial assets in order to collect contractual cash flow.

According to Korean IFRS 1109, a debt instrument is measured at fair value through other comprehensive income if the objective of the business model is achieved both by collecting contractual cash flows and selling financial assets; and the contractual cash flows represents solely payments of principal and interest on a specific date under contract terms.

Based on results from the impact assessment of Korean IFRS 1109, if Korean IFRS 1109 is applied for the above debt instruments classified as financial assets available-for-sale, the Group expects the majority of the financial assets to be measured at fair value through other comprehensive income.

According to Korean IFRS 1109, equity instruments that are not held for trading, the Group can make an irrevocable election at initial recognition to classify the instruments as assets measured at fair value through other comprehensive income, which all subsequent changes in fair value being recognized in other comprehensive income and not recycled to profit or loss.

Based on results from the impact assessment of Korean IFRS 1109, the Group plans to designate equity instruments, which are classified in financial assets available-for-sale, as instruments measured at fair value through other comprehensive income for long-term investment purpose. Therefore, the Group expects the application of Korean IFRS 1109 on these financial assets will not have a material impact on the financial statements.

According to Korean IFRS 1109, debt instruments those contractual cash flows do not represent solely payments of principal and interest and held for trading, and equity instruments that are not designated as instruments measured at fair value through other comprehensive income are measured at fair value through profit or loss.

Based on results from the impact assessment, if the Group applies Korean IFRS 1109 to the financial assets measured at fair value through profit or loss as at December 31, 2017, the application will not have a material impact on the financial statements because the majority of the financial assets will still be classified as at fair value through profit or loss.

#### *(b) Classification and Measurement of Financial Liabilities*

Korean IFRS 1109 requires the amount of the change in the liability's fair value attributable to changes in the credit risk to be recognized in other comprehensive income, unless this treatment

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**Notes to the Financial Statements**  
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of the credit risk component creates or enlarges a measurement mismatch. Amounts presented in other comprehensive income are not subsequently transferred to profit or loss.

Under Korean IFRS 1039, all financial liabilities designated at fair value through profit or loss recognized their fair value movements in profit or loss. However, under Korean IFRS 1109, certain fair value movements will be recognized in other comprehensive income and as a result profit or loss from fair value movements may decrease.

Based on results from the impact assessment, the financial liabilities in applying Korean IFRS 1109 may not be expected to have a material impact on the financial statements because the majority of financial liabilities designated as at fair value through profit or loss as at December 31, 2017 have short maturities and insignificant fluctuations in their credit risks.

*(c) Impairment: Financial Assets and Contract Assets*

Korean IFRS 1109 sets out a new forward looking 'expected loss' impairment model which replaces the incurred loss model under Korean IFRS 1039 that impaired assets if there is an objective evidence and applies to:

- Financial assets measured at amortized cost
- Debt investments measured at fair value through other comprehensive income, and
- Certain loan commitments and financial guaranteed contracts.

Under Korean IFRS 1109 'expected loss' model, a credit event (or impairment 'trigger') no longer has to occur before credit losses are recognized. The Group will always recognize (at a minimum) 12-month expected credit losses in profit or loss. Lifetime expected losses will be recognized on assets for which there is a significant increase in credit risk after initial recognition.

Stage <sup>1</sup>	Loss allowance
1 No significant increase in credit risk after initial recognition <sup>2</sup>	12-month expected credit losses (expected credit losses that result from those default events on the financial instrument that are possible within 12 months after the reporting date)
2 Significant increase in credit risk after initial recognition	Lifetime expected credit losses (expected credit losses that result from all possible default events over the life of the financial instrument)
3 Credit-impaired	

<sup>1</sup> A loss allowance for lifetime expected credit losses is required for a financial instrument if the credit risk on that financial instrument has increased significantly since initial recognition. It is also required for contract assets or trade receivables that are not, according to Korean IFRS 1115 *Revenue from Contracts with Customers*, considered to contain a significant financing component. Additionally, the Group can elect an accounting policy of recognizing lifetime expected credit losses for all contract assets and/or all trade receivables, including those that contain a significant financing component.

<sup>2</sup> If the financial instrument has low credit risk at the reporting date, the Group may assume that the credit risk has not increased significantly since initial recognition.



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Under Korean IFRS 1109, the asset that is credit-impaired at initial recognition would recognize all changes in lifetime expected credit losses since the initial recognition as a loss allowance with any changes recognized in profit or loss.

#### *(d) Hedge Accounting*

Hedge accounting mechanics (fair value hedges, cash flow hedges and hedge of net investments in a foreign operations) required by Korean IFRS 1039 remains unchanged in Korean IFRS 1109, however, the new hedge accounting rules will align the accounting for hedging instruments more closely with the Group's risk management practices. As a general rule, more hedge relationships might be eligible for hedge accounting, as the standard introduces a more principles-based approach. Korean IFRS 1109 allows more hedging instruments and hedged items to qualify for hedge accounting, and relaxes the hedge accounting requirement by removing two hedge effectiveness tests that are a prospective test to ensure that the hedging relationship is expected to be highly effective and a quantitative retrospective test (within range of 80-125 %) to ensure that the hedging relationship has been highly effective throughout the reporting period.

With implementation of Korean IFRS 1109, volatility in profit or loss may be reduced as some items that were not eligible as hedged items or hedging instruments under Korean IFRS 1039 are now eligible under Korean IFRS 1109.

Furthermore, when the Group first applies Korean IFRS 1109, it may choose as its accounting policy choice to continue to apply all of the hedge accounting requirements of Korean IFRS 1039 instead of the requirements of Korean IFRS 1109.

Based on results from the impact assessment of Korean IFRS 1109, the application of the new standard as at December 31, 2017 does not have a material impact on the Group's financial statements.

#### *- Korean IFRS 1115, Revenue from Contracts with Customers*

Korean IFRS 1115 Revenue from Contracts with Customers issued on November 6, 2015 will be effective for annual reporting periods beginning on or after January 1, 2018 with early adoption 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, and will elect the modified retrospective approach which will recognize the cumulative impact of initially applying the revenue standard as an adjustment to retained earnings as at January 1 2018, the period of initial application.

Korean IFRS 1018 and other current revenue standard identify revenue as income that arises in the course of ordinary activities of an entity and provides guidance on a variety of different types of revenue, such as, sale of goods, rendering of services, interest, dividends, royalties and construction contracts. However, 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

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replaces the existing notion of risks and rewards. A new five-step process must be applied before revenue from contract with customers 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 at December 31, 2017, for the preparation of adopting Korean IFRS 1115, the Group organized a task force comprising financial department, IT department and other related department to perform preliminary assessment of potential impact on consolidated financial statement

Based on current environment and available information as at December 31, 2017, the Group made a preliminary assessment of the potential impact on the consolidated financial statements for the year ended 31 December 2017 as a result of applying Korean IFRS 1115. As at December 31, 2017, the results of the preliminary impact assessment are subject to change based on additional information available to the Group. Based on results from the impact assessment of Korean IFRS 1115, the application of the new standard as at December 31, 2017 does not have a material impact on the Group's financial statements.

*(a) To identify performance obligation*

The Group consists of a single operating segment, which is manufacturing and supplying the OEM (original equipment manufacturer) automotive thermal management system.

With adoption of Korean IFRS 1115, the Group identifies performance obligations from the contract with a customer such as (a) automotive parts development, (b) automotive parts sales, (c) additional guarantee services and (d) other services. The timing of revenue recognition may vary with whether performance obligation is fulfilled at once or over a period.

*(b) To allocate the transaction price*

With adoption of Korean IFRS 1115, the Group allocates the transaction price to the performance obligations in the contract by reference to the relative standalone selling prices of the goods or services being provided to a customer. The Group determines the standalone selling price for each separate performance obligation by using 'expected cost plus a margin approach' to estimate expected cost with a reasonable margin.

*(c) Variable consideration*

With adoption of Korean IFRS 1115, the Group estimates variable consideration by using the expected value with which the Group is able to predict the amount of consideration. The Group recognizes revenue with transaction price including variable consideration only to the extent that it is highly probable that its inclusion will not result in a significant revenue reversal against cumulative revenue when the refund period elapses.

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#### 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.

#### 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

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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. 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.

#### *(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

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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.

The Group applies cash flow hedge accounting to hedge the price risk associated with forecast sales and inventory purchase. The effective portion of changes in fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income, and the ineffective portion is recognized in 'other non-operating income (expenses)'. When the forecast transaction that is hedge results in the recognition of a non-financial asset, the gains and losses previously deferred in other comprehensive income are reclassified from other comprehensive income and included in the initial measurement of the cost of the assets. The deferred amounts are ultimately recognized in profit or loss as cost of goods sold. When a forecast transactions no longer to occur, the cumulative gain or loss that was reported in other comprehensive income is immediately reclassified to profit or loss within 'other non-operating income (expenses)'.

The Group applies fair value hedge accounting to hedge the fixed interest rate risk associated with loans and receivables and borrowings. Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in profit or loss, together with any changes in the fair

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value of the hedged asset or liability that are attributable to the hedged risk. The gain or loss relating to the effective portion of interest rate swaps hedging fixed rate borrowings is recognized in profit or loss within 'finance costs', together with changes in the fair value of the hedged fixed rate borrowings attributable to interest rate risk. The gain or loss relating to the ineffective portion is recognized in profit or loss within 'other non-operating income (expenses)'. Meanwhile, changes in the fair value of the hedged item due to the hedged risk are recognized in 'finance costs'.

**2.7 Inventories**

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

<b>Inventories</b>	<b>Method</b>
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:

	<b>Useful lives</b>
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.

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#### 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 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.

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. The Company recognized the expenditure incurred during the pre-production stages which are vehicle development phase, such as demo car (trial car), proto and pilot, as intangible asset. Expenditures incurred prior to vehicle development phase are treated as a current expense.

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:

	<u>Useful lives</u>
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.

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#### 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.

##### *(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.



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#### 2.16 Current and Deferred Tax

The tax expense for the period consists of current and deferred tax. Current and deferred tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

The tax expense is measured at the amount expected to be paid to the taxation 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 that at the time of the transaction affects neither accounting nor taxable profit or 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 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 have been paid. The contribution are recognized as employee benefit expense when they are due.

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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. Remeasurement gains and losses arising from 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.

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.

Under cash-settled share based payment plan, the Group compensates the difference of the fair value and exercise price of option as the consideration for employee services received. Total expense that will be recognized over the vesting period is determined by reference to the fair value of the option granted. Until the liability is settled, the Group is required to remeasure the fair value of the liability at the end of each reporting period and at the date of settlement, with any changes in value recognized in profit or loss for the year.

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

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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, such as time-and-materials contracts. The contract terms are generally less than one year to two years.

### **2.19 Approval of Issuance of the Financial Statements**

The consolidated financial statements 2017 were approved for issue by the Board of Directors on February 9, 2018 and are subject to change with the approval of shareholders at their Annual General Meeting.

### **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. Accordingly, the

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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 at December 31, 2017, and determined the provisions using the estimation based on past experience. In addition, the Group accounted for 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 significantly 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 exchange 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.

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The Group's monetary assets and liabilities denominated in foreign currencies as at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017		2016	
	Assets	Liabilities	Assets	Liabilities
USD	502,921,609	(255,008,105)	410,782,693	(308,022,640)
EUR	151,449,198	(26,541,370)	82,826,110	(26,388,443)
Others	33,860,013	(22,564,031)	27,864,298	(25,103,843)
	688,230,820	(304,113,506)	521,473,101	(359,514,926)

The impacts on the Group's profit before tax due to 5% changes in foreign exchange rates as at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017		2016	
	5% increase	5% decrease	5% increase	5% decrease
USD	9,921,116	(9,921,116)	1,935,478	(1,935,478)
EUR	3,637,001	(3,637,001)	(287,373)	287,373
Others	1,407,358	(1,407,358)	138,023	(138,023)
	14,965,475	(14,965,475)	1,786,128	(1,786,128)

The sensitivity analysis as at December 31, 2017 and 2016 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 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 ₩133,829,753 thousand and ₩314,014,216 thousand as at December 31, 2017 and 2016, 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 at December 31, 2017 and 2016:

<i>(in thousands of Korean won)</i>	2017		2016	
	1% increase	1% decrease	1% increase	1% decrease
Interest expense	1,338,298	(1,338,298)	3,140,142	(3,140,142)

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**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, 2017, there were neither significant indications for impairment nor trade receivables and loans or other account receivables past due which are included in the other financial assets. As at December 31, 2017, the Group assessed that the possibility of default is low.

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.

**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 at December 31, 2017 and 2016 are as follows:

*(in thousands of Korean won)*

	2017				
	Book value	Contractual cash flow	Less than 1 year	1-5 years	Over 5 years
Borrowings(Debentures)	756,876,494	809,128,380	152,512,460	586,140,354	70,475,566
Trade payables	732,889,386	732,889,386	732,889,386	-	-
Other payables	312,604,975	312,604,975	297,101,200	15,503,775	-
Derivative financial liabilities	586,883	586,883	586,883	-	-

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(in thousands of Korean won)

	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	-	-

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 26 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:

(in thousands of Korean won)

	2017	2016
Contractual cash inflows	1,060,180,857	1,525,337,980
Contractual cash outflows	1,000,781,023	1,548,039,949

#### 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 at December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017	2016
Liabilities	2,088,135,770	1,974,831,434
Equity	2,031,445,140	1,884,906,087
Debt to equity ratio	102.8%	104.8%

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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 at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017		2016	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets				
Derivative financial instruments	68,995,984	68,995,984	6,171,178	6,171,178
Held-to-maturity financial assets	3,285	3,285	17,120	17,120
Financial liabilities				
Debentures	598,900,394	597,015,170	299,273,294	301,695,950
Borrowings	22,108,109	22,048,684	43,527,044	43,353,243
Derivative financial instruments	3,396,614	3,396,614	30,556,376	30,556,376

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 at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017			
	Level 1	Level 2	Level 3	Total
Financial instruments measured at fair value				
Derivative financial instruments	-	68,995,984	-	68,995,984
Derivative financial instruments	-	3,396,614	-	3,396,614
Financial instruments with fair value disclosed				
Held-to-maturity financial assets	-	3,285	-	3,285
Debentures	-	597,015,170	-	597,015,170
Borrowings	-	22,048,684	-	22,048,684



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<i>(in thousands of Korean won)</i>	2016			
	Level 1	Level 2	Level 3	Total
Financial instruments measured at fair value				
Derivative financial instruments	-	6,171,178	-	6,171,178
Derivative financial instruments	-	30,556,376	-	30,556,376
Financial instruments with fair value disclosed				
Held-to-maturity financial assets	-	17,120	-	17,120
Debentures	-	301,695,950	-	301,695,950
Borrowings	-	43,353,243	-	43,353,243

**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 at December 31, 2017 and 2016 are as follows:

<i>(in thousands of Korean won)</i>	2017				
	Fair value	Level	Valuation techniques	Inputs	Range of inputs (weighted average)
Derivative financial assets	68,995,984	2	Present value technique	N/A	N/A
Derivative financial liabilities	3,396,614	2	Present value technique	N/A	N/A
Held-to-maturity financial assets	3,285	2	Present value technique	N/A	N/A
Debentures	597,015,170	2	Present value technique	N/A	N/A
Long-term borrowings	22,048,684	2	Present value technique	N/A	N/A

<i>(in thousands of Korean won)</i>	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
Derivative financial liabilities	30,556,376	2	Present value technique	N/A	N/A
Held-to-maturity financial assets	17,120	2	Present value technique	N/A	N/A
Debentures	301,695,950	2	Present value technique	N/A	N/A
Long-term borrowings	43,353,243	2	Present value technique	N/A	N/A

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**6. Financial Instruments by Category**

Categorizations of financial assets and liabilities as at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017					Total
	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	
Cash and cash equivalents	567,258,577	-	-	-	-	567,258,577
Other financial instruments	7,500,000	-	-	-	-	7,500,000
Trade receivables	883,122,373	-	-	-	-	883,122,373
Other receivables	89,131,061	-	-	-	-	89,131,061
Derivative financial assets	-	6,800,709	62,195,275	-	-	68,995,984
Long-term financial instruments	42,508	-	-	-	-	42,508
Available-for-sale financial assets	-	-	-	1,000	-	1,000
Held-to-maturity financial assets	-	-	-	-	3,285	3,285
	<u>1,547,054,519</u>	<u>6,800,709</u>	<u>62,195,275</u>	<u>1,000</u>	<u>3,285</u>	<u>1,616,054,788</u>

<i>(in thousands of Korean won)</i>	2017			Total
	Financial liabilities measured at amortized cost	Financial liabilities at fair value	Financial liabilities used for hedging purposes	
Trade payables	732,889,386	-	-	732,889,386
Other payables	312,604,975	-	-	312,604,975
Derivative financial liabilities	-	586,883	2,809,731	3,396,614
Borrowings(Debentures)	<u>756,876,494</u>	<u>-</u>	<u>-</u>	<u>756,876,494</u>
	<u>1,802,370,855</u>	<u>586,883</u>	<u>2,809,731</u>	<u>1,805,767,469</u>

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	2016					Total
	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	
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>

	2016			Total
	Financial liabilities measured at amortized cost	Financial liabilities at fair value	Financial liabilities used for hedging purposes	
(in thousands of Korean won)				
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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Net gains or net losses on each category of financial instruments for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017				
	Financial assets at fair value through profit or loss	Loans and receivables	Available-for-sale financial assets	Held-to-maturity financial assets	Total
Interest income	-	8,654,309	-	349	8,654,658
Gain on foreign exchange transactions	-	(22,114,817)	-	-	(22,114,817)
Gain on foreign currency translation	-	(23,121,476)	-	-	(23,121,476)

<i>(in thousands of Korean won)</i>	2017		
	Financial liabilities at fair value through profit or loss	Financial liabilities measured at amortized cost	Total
Interest expenses	-	(19,779,955)	(19,779,955)
Loss on foreign exchange transactions	-	3,222,918	3,222,918
Loss on foreign currency translation	-	15,552,599	15,552,599

<i>(in thousands of Korean won)</i>	2016				
	Financial assets at fair value through profit or loss	Loans and receivables	Available-for-sale financial assets	Held-to-maturity financial assets	Total
Interest income	-	5,571,119	-	462	5,571,581
Loss on foreign exchange transactions	-	(3,337,928)	-	-	(3,337,928)
Gain on foreign currency translation	-	11,056,137	-	-	11,056,137

<i>(in thousands of Korean won)</i>	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)

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, 2017 and 2016 are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Sales of finished goods	5,554,999,864	5,680,582,283
Other revenue	30,673,440	23,132,294
	<u>5,585,673,304</u>	<u>5,703,714,577</u>

(3) Sales by geographic information for the years ended December 31, 2017 and 2016 are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Korea (Location of the Company)	1,585,363,198	1,519,663,813
Asia	1,252,635,780	1,505,308,973
America	904,004,174	900,808,997
Europe	1,843,670,152	1,777,932,794
	<u>5,585,673,304</u>	<u>5,703,714,577</u>

(4) Non-current assets by geographic information as at December 31, 2017 and 2016 are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Korea (Location of the Company)	637,316,367	596,517,900
Asia	398,136,906	353,445,271
America	192,969,954	148,734,455
Europe	477,212,594	434,340,017
	<u>1,705,635,821</u>	<u>1,533,037,643</u>

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, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Company A	1,079,323,891	1,094,487,080
Company B	1,166,267,217	1,295,811,235
Company C	1,127,496,114	1,074,101,898
	<u>3,373,087,222</u>	<u>3,464,400,213</u>

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**8. Trade Receivables**

Details of trade receivables as at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Trade receivables	904,283,605	937,708,403
Allowance for doubtful accounts	(21,161,232)	(6,818,349)
	<u>883,122,373</u>	<u>930,890,054</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 at December 31, 2017 and 2016, is as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Neither past due nor impaired	817,408,731	866,845,391
Past due but not impaired		
Less than 3 months	54,011,136	51,473,836
Less than 6 months	4,299,379	8,003,156
Over 6 months	7,403,127	4,567,671
	<u>65,713,642</u>	<u>64,044,663</u>
Past due and impaired	21,161,232	6,818,349
Total amount of receivables	904,283,605	937,708,403
Allowance	(21,161,232)	(6,818,349)
Book Value	<u>883,122,373</u>	<u>930,890,054</u>

Changes in the allowance for doubtful accounts of trade receivables for the years ended December 31, 2017 and 2016, are as follows

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Beginning balance	6,818,349	6,082,314
Bad debt expense for impaired receivables	16,220,172	2,656,950
Transferred to disposal group classified as held-for-sale	(72,507)	(722,743)
Foreign exchange differences	(1,804,782)	(1,198,172)
Ending balance	<u>21,161,232</u>	<u>6,818,349</u>

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

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**9. Other Receivables and Other Non-current Receivables**

Details of other receivables as at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017		2016	
	Current	Non-current	Current	Non-current
Non-trade receivables	52,784,956	-	33,358,590	-
Accrued revenues	2,294,729	-	608,312	-
Other receivables	6,366,078	120,000	10,346,109	-
Certificate of deposits	19,035,614	8,529,684	69,019,705	9,990,720
	<u>80,481,377</u>	<u>8,649,684</u>	<u>113,332,716</u>	<u>9,990,720</u>

**10. Other Current Assets and Other Non-Current Asset**

Other current and non-current assets as at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017		2016	
	Current	Non-current	Current	Non-current
Advance payment	74,725,887	-	52,320,247	-
VAT prepaid	75,057,928	-	77,848,222	-
Prepaid expense	30,424,188	-	22,159,637	-
Long-term prepaid expenses and others	-	4,079,431	-	4,627,848
Net defined benefit assets <sup>1</sup>	-	1,900,682	-	-
	<u>180,208,003</u>	<u>5,980,113</u>	<u>152,328,106</u>	<u>4,627,848</u>

<sup>1</sup>The excess amount of certain plans in the Group has not been offset because it has no right or intention to settle the defined benefit obligations of other plans.

**11. Inventories**

(1) Details of inventories as at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017			2016		
	Acquisition	Less valuation	Book value	Acquisition	Less valuation	Book value
	cost	allowance		cost	allowance	
Merchandises	14,966,949	(298,096)	14,668,853	11,656,179	(692,264)	10,963,915
Finished goods	109,449,411	(2,723,057)	106,726,354	105,289,910	(3,031,584)	102,258,326
Goods partly processed	20,997,377	(139,325)	20,858,052	15,943,037	(282,505)	15,660,532
Work in process	20,194,957	(449,619)	19,745,338	23,098,447	(173,394)	22,925,053
Raw material	233,559,746	(8,717,525)	224,842,221	205,118,815	(12,350,630)	192,768,185
Supplies	20,703,243	(2,745,195)	17,958,048	16,688,157	(1,612,105)	15,076,052
Materials-in-transit	63,843,642	-	63,843,642	70,072,082	-	70,072,082
	<u>483,715,325</u>	<u>(15,072,817)</u>	<u>468,642,508</u>	<u>447,866,627</u>	<u>(18,142,482)</u>	<u>429,724,145</u>

(2) The Company recognized loss on inventory valuation of ₩18,900,149 thousand and ₩27,078,761 thousand for the years ended December 31, 2017 and 2016, respectively. The amount of loss on inventory has been included in cost of sales. In addition, the Company

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excluded the beginning balance of inventory valuation amounting to ₩18,142,482 thousand and ₩12,996,998 thousand from the cost of sales for the years ended December 31, 2016 and 2015, respectively.

#### 12. Investments in Associates

Investments in associates as at December 31, 2017 and 2016, are as follows:

Company <sup>1</sup>	Country	Year end	Ownership (%)		Book value	
			2017	2016	2017	2016
Bonaire	China	December	37.5	37.5	32,436,617	33,020,982
JCS	Japan	March	33.3	33.3	37,473,751	37,250,420
FHTS	China	December	50.0	50.0	24,812,585	24,690,645
BBHS <sup>2</sup>	China	December	49.0	-	1,904,775	-
					<u>96,627,728</u>	<u>94,962,047</u>

<sup>1</sup> 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	FAWER Hanon Thermal Systems (Changchun) Company Ltd
BBHS <sup>2</sup>	Beijing BHAP Hanon Systems Co., LTD

<sup>2</sup> The Group have established a new joint venture with China BHAP (Bohai Piston) in order to acquire new customers

Changes in carrying amounts of investment in associates for the years ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017					
	Beginning balance	Acquisition	Equity in earnings of associates	Changes in equity of associates	Dividends	Ending balance
Bonaire	33,020,982	-	2,730,469	(850,784)	(2,464,050)	32,436,617
JCS	37,250,420	-	5,494,853	(3,341,855)	(1,929,667)	37,473,751
FHTS	24,690,645	-	1,040,938	(918,998)	-	24,812,585
BBHS	-	2,765,717	(758,708)	(102,234)	-	1,904,775
	<u>94,962,047</u>	<u>2,765,717</u>	<u>8,507,552</u>	<u>(5,213,871)</u>	<u>(4,393,717)</u>	<u>96,627,728</u>

(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	23,040,169	2,090,596	(440,120)	-	24,690,645
	<u>89,168,221</u>	<u>9,024,826</u>	<u>1,500,779</u>	<u>(4,731,779)</u>	<u>94,962,047</u>



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Summary of condensed financial information of major associates as at and for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017					
	Assets	Liabilities	Equity	Sales	Profit (loss) for the year	Total comprehensive income (loss)
Bonaire	98,762,093	61,865,139	36,896,954	91,828,422	7,435,755	5,166,998
JCS	180,879,354	68,345,567	112,533,787	308,256,122	16,503,974	6,445,794
FHTS	82,381,442	49,845,522	32,535,920	107,519,687	2,098,726	260,812
BBHS	6,071,613	2,184,318	3,887,295	4,710	(1,548,383)	(1,757,025)

<i>(in thousands of Korean won)</i>	2016					
	Assets	Liabilities	Equity	Sales	Profit (loss) for the year	Total 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	86,612,146	54,337,038	32,275,108	98,975,570	4,212,630	3,338,794

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, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017					
	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	36,896,954	37.5%	13,836,357	16,022,106	2,578,154	32,436,617
JCS	112,533,787	33.3%	37,473,751	-	-	37,473,751
FHTS	32,535,920	50.0%	16,267,959	8,680,903	(136,277)	24,812,585
BBHS	3,887,295	49.0%	1,904,775	-	-	1,904,775

<i>(in thousands of Korean won)</i>	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	32,275,108	50.0%	16,137,554	8,680,903	(127,812)	24,690,645

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**13. Property, Plant and Equipment**

Details of property, plant and equipment as at December 31, 2017 and 2016, are as follows:

*(in thousands of Korean won)*

	<b>2017</b>		
	<b>Cost</b>	<b>Accumulated depreciation<sup>1</sup></b>	<b>Book value</b>
Land	75,032,089	(123,244)	74,908,845
Building	361,302,505	(130,741,088)	230,561,417
Structures	19,204,515	(6,879,735)	12,324,780
Machinery	1,698,580,872	(1,087,760,793)	610,820,079
Vehicles	6,091,777	(3,648,785)	2,442,992
Tools, equipment and others	458,415,095	(358,128,092)	100,287,003
Office equipment	59,384,344	(42,880,160)	16,504,184
Lease Improvements	2,713,600	(1,332,423)	1,381,177
Machinery in transit	3,723,802	-	3,723,802
Construction in progress	209,048,811	-	209,048,811
	<u>2,893,497,410</u>	<u>(1,631,494,320)</u>	<u>1,262,003,090</u>

*(in thousands of Korean won)*

	<b>2016</b>		
	<b>Cost</b>	<b>Accumulated depreciation<sup>1</sup></b>	<b>Book value</b>
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
	<u>2,743,250,389</u>	<u>(1,565,106,299)</u>	<u>1,178,144,090</u>

<sup>1</sup> Accumulated impairment losses are included.

# Hanon Systems and Subsidiaries

## Notes to the Financial Statements

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Changes in carrying amounts of property, plant and equipment for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017							Transferred to disposal group classified as held-for-sale	Ending balance
	Beginning balance	Additions	Disposals	Depreciation <sup>2</sup>	Impairment	Transfer	Exchange differences		
Land	76,855,902	823,455	(959,506)	-	(234,257)	49,492	(295,812)	(1,330,429)	74,908,845
Building	226,225,359	14,069,201	(2,260,640)	(12,197,002)	(135,252)	9,844,789	(3,600,564)	(1,384,474)	230,561,417
Structures	12,160,777	1,396,416	-	(921,427)	-	75,644	(386,630)	-	12,324,780
Machinery	566,010,325	100,740,776	(3,470,796)	(118,243,614)	(426,676)	78,734,462	(12,523,577)	(821)	610,820,079
Vehicles	1,305,710	1,207,694	(52,346)	(641,810)	-	670,161	(46,417)	-	2,442,992
Tools, equipment and others	103,602,832	41,892,152	(7,771,397)	(42,586,254)	(136,256)	6,936,688	(1,648,591)	(2,171)	100,287,003
Office equipment	17,392,009	5,389,421	(29,554)	(6,979,809)	(743)	1,401,907	(667,578)	(1,469)	16,504,184
Lease Improvements	1,306,195	621,238	(5,379)	(464,809)	-	11,030	(87,098)	-	1,381,177
Machinery in transit	4,810,617	503,295	-	-	-	(1,487,569)	(102,541)	-	3,723,802
Construction in progress	168,474,364	158,570,000	(11,527,504)	(746,198)	-	(97,721,125)	(8,000,726)	-	209,048,811
	<u>1,178,144,090</u>	<u>325,213,648</u>	<u>(26,077,122)</u>	<u>(182,780,923)</u>	<u>(933,184)</u>	<u>(1,484,521)</u>	<u>(27,359,534)</u>	<u>(2,719,364)</u>	<u>1,262,003,090</u>

  

<i>(in thousands of Korean won)</i>	2016							Transferred to disposal group classified as held-for-sale	Ending balance
	Beginning balance	Additions <sup>1</sup>	Disposals	Depreciation <sup>2</sup>	Impairment	Transfer	Exchange differences		
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>

<sup>1</sup> Includes increase of ₩30,118,856 thousand from the business combination in last year.

<sup>2</sup> For the year ended December 31, 2017 and 2016, the depreciation expense of ₩2,163,540 thousand and ₩2,108,548 thousand, respectively, were transferred to the development cost (intangible assets) and other accounts.

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Line items including depreciation in the statements of income for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Cost of sales	167,815,921	165,899,536
Selling and administrative expenses	12,801,462	9,918,326
	<u>180,617,383</u>	<u>175,817,862</u>

The total of future minimum lease payments to the lessor at the end of the reporting period are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>
Within one year	20,545,152
Later than one year but not later than five years	49,266,727
Later than five years	37,906,330
	<u>107,718,209</u>

For the year ended December 31, 2017, the lease payments of ₩ 40,781,796 thousand was recognized as an expense.

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**14. Intangible assets**

(1) Changes in carrying amounts of property, plant and equipment for the years ended December 31, 2017 and 2016, are as follows:

(in thousands of Korean won)

	2017							Ending balance
	Beginning balance	Additions	Disposals	Depreciation <sup>1</sup> & Impairment	Transfer	Exchange differences	Transferred to disposal group classified as held-for-sale	
Goodwill	208,693,947	-	-	-	-	(270,593)	-	208,423,354
Development costs	97,762,214	99,347,141	-	(11,647,689)	5,101,764	(3,136,779)	-	187,426,651
Memberships	4,521,833	-	(241,240)	-	-	(9,545)	-	4,271,048
Industrial rights	6,990,137	986,902	-	(1,249,790)	-	345	-	6,727,594
Other intangibles	<u>32,297,573</u>	<u>4,781,504</u>	<u>(103,593)</u>	<u>(8,218,484)</u>	<u>3,279,648</u>	<u>(417,351)</u>	<u>(815,325)</u>	<u>30,803,972</u>
	<u>350,265,704</u>	<u>105,115,547</u>	<u>(344,833)</u>	<u>(21,115,963)</u>	<u>8,381,412</u>	<u>(3,833,923)</u>	<u>(815,325)</u>	<u>437,652,619</u>

(in thousands of Korean won)

	2016							Ending balance
	Beginning balance	Additions	Disposals	Depreciation <sup>1</sup> & Impairment	Transfer	Exchange differences	Transferred to disposal group classified as held-for-sale	
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	<u>16,437,823</u>	<u>20,040,725</u>	<u>(246,054)</u>	<u>(6,486,092)</u>	<u>2,717,868</u>	<u>(162,146)</u>	<u>(4,551)</u>	<u>32,297,573</u>
	<u>207,385,527</u>	<u>175,933,406</u>	<u>(702,228)</u>	<u>(11,288,629)</u>	<u>8,104,568</u>	<u>466,331</u>	<u>(29,633,271)</u>	<u>350,265,704</u>

<sup>1</sup> For the year ended December 31, 2017 and 2016, the amortization expense of ₩222,844 thousand and ₩917,276 thousand, respectively, were transferred to the development cost.

(2) Carrying amount and remaining amortization period of major development projects as at December 31, 2017 are as follows:

(in thousands of Korean won)	Name of separate asset	Carrying amount	Remaining amortization period <sup>1</sup>	
Development costs	Project A	9,777,115	-	
	Domestic	Project B	7,409,232	-
		Project C	4,750,934	-
		Project D	4,494,245	4.7
		Project E	5,240,410	-
	Overseas	Project F	5,046,837	-
		Project G	4,161,600	-
		Project H	3,756,695	4.8

<sup>1</sup> The remaining amortization period are only applicable for the project of which amortization has begun.

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(3) Line items including depreciation in the statements of income for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<u>2017</u>	<u>2016</u>
Cost of sales	13,562,596	5,112,778
Selling and administrative expenses(including R&D cost)	7,330,523	5,258,574
	<u>20,893,119</u>	<u>10,371,352</u>

(4) For the year ended December 31, 2017 and 2016, the Group recognized ₩157,217,515 thousand and ₩155,062,828 thousand, respectively, as expenses for research and development activities.

(5) 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), 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.

<i>(in thousands of Korean won)</i>	<u>2017</u>	<u>2016</u>
Hanon Systems <sup>1</sup>	90,215,389	90,215,389
Hanon Beijing	28,540,909	28,540,909
HASI	54,830,990	54,830,990
Hanon Alabama	24,952,249	24,952,249
Thermal management and emission	7,146,593	7,338,580
Hanon Nanjing	2,737,224	2,815,830
	<u>208,423,354</u>	<u>208,693,947</u>

<sup>1</sup> 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 assumptions for the five-year period and

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permanent growth rate for the period beyond are as follows:

Key Assumptions	Hanon Systems		Hanon Beijing		HASI		Hanon Alabama		Thermal management and emission		Hanon Nanjing	
	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017	2016
OP Margin	7.69%	7.95%	10.95%	10.29%	9.01%	5.03%	4.16%	3.90%	6.41%	2.40%	13.11%	12.10%
Growth rate	3.82%	4.41%	8.56%	3.97%	8.84%	9.98%	3.89%	0.76%	6.79%	19.69%	11.35%	10.80%
Permanent rate	1.00%	1.00%	1.50%	1.50%	3.00%	3.00%	0.00%	0.00%	1.00%	1.00%	1.00%	1.00%
Discount rate	15.04%	11.83%	16.52%	21.56%	17.89%	20.14%	15.50%	16.89%	18.26%	25.91%	16.72%	21.31%

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	HASI	Hanon Alabama	Thermal management and emission	Hanon Nanjing
Average OP margin declined to <sup>1</sup>	4.27%	2.25%	5.08%	2.80%	2.32%	8.17%
Average growth rate declined to <sup>2</sup>	(4.93%)	(26.41%)	(2.04%)	-2.71%	5.63%	3.40%
Pre-tax discount rate rises to <sup>3</sup>	27.83%	93.41%	31.81%	24.70%	53.98%	27.71%

<sup>1</sup> OP margin: Decrease in demand can lead to a decline in OP margin.

<sup>2</sup> 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.

<sup>3</sup> 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**

<i>(in thousands of Korean won)</i>	2017		2016	
	Current	Non-current	Current	Non-current
Other payables	174,045,903	-	164,712,991	-
Accrued expenses	122,215,297	-	136,053,794	-
Deposits received	840,000	-	758,623	-
Other long-term payables	-	15,503,775	-	15,156,856
	<u>297,101,200</u>	<u>15,503,775</u>	<u>301,525,408</u>	<u>15,156,856</u>

**16. Other Current Liabilities and other Non-Current Liabilities**

<i>(in thousands of Korean won)</i>	2017		2016	
	Current	Non-current	Current	Non-current
Advances from customer	6,971,989	-	4,919,822	-
VAT withheld	9,271,151	-	7,153,870	-
Withholdings	12,146,989	-	12,775,093	-
Unearned revenues and other	20,227,659	-	16,825,224	-
Other post-employment benefit liabilities	-	16,918,194	-	16,358,858
Long-term unearned revenues	-	6,890,654	-	8,880,780
	<u>48,617,788</u>	<u>23,808,848</u>	<u>41,674,009</u>	<u>25,239,638</u>

**17. Other Provisions**

Other provisions consist of warranty provisions and other provisions, and changes in other provisions for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	2017	2016
<b>Beginning balance</b>	41,308,872	28,276,287
Provisions for the year	29,252,996	56,222,688
Payments for the year	(28,559,211)	(46,478,581)
Reclassification	-	4,101,390
Exchange differences	(492,780)	(123,279)
Reclassification as liabilities held-for-sale	(31,687)	(689,633)
<b>Ending balance</b>	<u>41,478,190</u>	<u>41,308,872</u>



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**18. Post-employment Benefits**

Details of net defined benefit liabilities recognized in the statements of financial position as at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<u>2017</u>	<u>2016</u>
Present value of defined benefit obligations	231,267,756	220,202,913
Fair value of plan assets	(170,352,953)	(159,983,266)
Total	<u>60,914,803</u>	<u>60,219,647</u>

The excess amount of ₩ 1,900,682 thousand is included in the defined benefit assets in the consolidated financial statements.

Changes in the defined benefit obligations for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<u>2017</u>	<u>2016</u>
Beginning balance	220,202,913	196,267,116
Current service cost	24,621,774	28,231,814
Interest expense	6,010,281	5,728,508
Remeasurements:		
- Actuarial gains and losses arising from changes in demographic assumptions	-	(111,443)
- Actuarial gains and losses arising from changes in financial assumptions	(5,470,218)	9,836,666
- Actuarial gains and losses arising from experience adjustments	(4,327,031)	(3,064,965)
Payments from plans		
- Benefit payments	(8,485,617)	(10,889,714)
Exchange differences	(1,284,346)	(5,795,069)
Ending balance	<u>231,267,756</u>	<u>220,202,913</u>

Changes in the fair value of plan assets for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<u>2017</u>	<u>2016</u>
Beginning balance	159,983,266	136,102,683
Interest income	4,699,766	4,281,438
Remeasurements:		
- Return on plan assets (excluding amounts included in interest income)	1,518,491	3,800,575
Contributions:		
- Employers	10,925,288	26,827,771
Payments from plans		
- Benefit payments	(6,092,180)	(6,755,910)
Exchange differences	(681,678)	(4,273,291)
Ending balance	<u>170,352,953</u>	<u>159,983,266</u>

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The actual return on plan assets for the year ended December 31, 2017 amounts to ₩6,218,257 thousand (2016: ₩ 8,082,013 thousand).

The amounts recognized in the consolidated statements of profit or loss for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Current service cost	21,933,585	25,280,604
Net interest cost	1,310,369	1,310,926
Expenses included in salaries <sup>1</sup>	23,243,954	26,591,530

<sup>1</sup> For the year ended December 31, 2017, defined benefit expense amounting to ₩2,688,335 (2016: ₩3,087,354) thousand was transferred into the development cost and other accounts.

Plan assets as at December 31, 2017 and 2016, consist of:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Quoted price	22,913,306	21,374,552
Unquoted price	147,439,647	138,608,714
- Corporate bonds	27,004,765	28,881,241
- Bank deposits	34,198,356	47,533,683
- Cash and cash equivalent	3,243,262	21,785,705
- Others	82,993,264	40,408,085
	170,352,953	159,983,266

The principal actuarial assumptions as at December 31, 2017 and 2016, are as follows:

<i>(in percentage)</i>	<b>2017</b>	<b>2016</b>
Discount rate	2.8%	2.8%
Salary growth rate	4.3%	4.5%

The sensitivity of the defined benefit obligations as at December 31, 2017, to changes in the weighted principal assumptions is:

<i>(in percentage)</i>	<b>Effect on defined benefit obligation</b>		
	<b>Changes in principal assumption</b>	<b>Increase in principal assumption</b>	<b>Decrease in principal assumption</b>
Discount rate	1.0%	(33,179,304)	42,284,509
Salary growth rate	1.0%	20,771,676	(18,304,254)

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.

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

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, 2018, are ₩19,631,934 thousand.

Expected maturity analysis of undiscounted pension benefits as at December 31, 2017, is as follows:

<i>(in thousands of Korean won)</i>	<b>Less than 1 year</b>	<b>Between 1 and 2 years</b>	<b>Between 2 and 5 years</b>	<b>Between 5 and 10 years</b>	<b>Total</b>
Pension benefits	4,443,367	5,414,425	27,198,633	97,712,681	134,769,106

The weighted average duration of the defined benefit obligations is 15.35 years.

For the year ended December 31, 2017, the Group recognized ₩2,908,032 thousand (2016: ₩2,062,456 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, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Beginning balance	16,358,858	15,832,462
Service cost	1,270,795	1,175,978
Net interest expense	336,794	351,463
Re-measurement gain	89,735	312,058
Benefits paid	(1,160,484)	(1,335,244)
Exchange differences	22,496	22,141
Ending balance	16,918,194	16,358,858

The principal actuarial assumption on other post-employment benefit liabilities as at December 31, 2017 and 2016, is as follows:

<i>(in percentage)</i>	<b>2017</b>	<b>2016</b>
Discount rate	2.8%	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 are granted to directors and selected employees. Details are as follows:

- 1st stock option
  - Type of shares issued through share option: registered share capital
  - Grant method: the Company can choose among issuance of shares, distributing treasury stock, and cash settlement
  - Grant date: May 9, 2016
  - Vesting condition : 25% 1 year after grant date, 50% 2 years after grant date, 75% 3 years after grant date, 100% 4 years after grant date
  - Exercisable condition : The options are exercisable when the largest shareholder change transaction occurs 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)
- 2nd stock option
  - Type of shares issued through share option: registered share capital
  - Grant method: issuance of shares or distributing treasury stock
  - Grant date: February 14, 2017
  - Vesting condition : 25% 1 year after grant date, 50% 2 years after grant date, 75% 3 years after grant date, 100% 4 years after grant date
  - Exercisable condition : The options are exercisable when the largest shareholder change transaction occurs 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)

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Changes in the number of share options outstanding and their related weighted average exercise prices for the years ended December 31, 2017, are as follows:

	Options (unit: share)		Average exercise price per share option	
	First	Second	First	Second
<b>Beginning balance</b>	2,030,000	-	10,200	-
Granted	-	3,795,000	-	10,200
Eliminated	(610,000)	(50,000)	10,200	10,200
<b>Ending balance</b>	1,420,000	3,745,000	10,200	10,200

At the end of the reporting period, there is no available option to exercise.

Compensation costs of share options granted during the years ended December 31, 2017 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:

	First	Second
Weighted average fair value of share options granted during the year	₩4,207.86	₩1,128.24
Share price <sup>1</sup>	₩13,900	₩9,270
Price volatility <sup>2</sup>	16.8%	17.1%
Dividend yield	1.7%	2.1%
Risk-free interest rate	2.2%	1.6%

<sup>1</sup> The share price at valuation date for the 1<sup>st</sup> stock option, and the share price at grant date for the 2<sup>nd</sup> stock option.

<sup>2</sup> The volatility is measured by converting annual historical volatility over the past 180 days.

For the year ended December 31, 2017, the Group recognized ₩1,118,802 (2016: ₩1,282,320) thousand as expenses for share-based payments.

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**20. Borrowings and Debentures**

Details of short-term borrowings as at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<b>Financial institution</b>	<b>Interest rate December 31, 2017</b>	<b>2017</b>	<b>2016</b>
Account receivable financing	KEB Hana Bank and others	LIBOR + 0.65%~1%	10,735,430	16,098,652
Short-term borrowings in Korean won	KEB Hana Bank	-	-	40,000,000
	KDB	-	-	50,000,000
	Bank of America	LIBOR + 0.85%	22,210,153	96,950,079
	Raiffeisen Bank	-	-	31,690,000
Short-term borrowings in foreign currency	Tatra Bank	-	-	25,352,000
	Citi Bank	1M Euribor + 0.6%	81,872,000	25,352,000
		3M Euribor + 0.55%		
		12M Euribor + 0.55%		
	Deutsche Bank	TRLIBOR + 0.62%	6,219,670	15,827,999
	Komerčni Bank	1M Euribor + 0.97%	12,792,500	-
HDFC Bank	-	-	70,236	
Short-term financial lease liabilities	Praxair	-	-	90,105
	FINSA	9.5%	1,838,179	1,789,025
	Air Product	8.0%	200,059	194,681
			<b>135,867,991</b>	<b>303,414,777</b>

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 at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<b>Financial institution</b>	<b>Interest rate December 31, 2017</b>	<b>2017</b>	<b>2016</b>
Debentures <sup>1</sup>	7-1 unsecured	2.0%	159,816,648	159,646,359
	7-2 unsecured	2.3%	139,726,015	139,626,935
	8-1 unsecured	1.9%	49,895,263	-
	8-2 unsecured	2.3%	189,611,809	-
	8-3 unsecured	2.8%	59,850,659	-
Long-term borrowings in foreign currency	JCS	1.6%	7,548,154	12,026,069
	Federal Development Loans	0.0%	1,669,141	1,672,280
	Komerčni Bank	-	-	12,673,250
Long-term financial lease liabilities	Praxair	-	-	3,042
	FINSA	9.5%	11,359,075	15,429,184
	Air Product	8.0%	1,531,739	1,723,219
			<b>621,008,503</b>	<b>342,800,338</b>

<sup>1</sup> The Group has issued 8-1, 8-2 and 8-3 unsecured debentures amounting to ₩50,000,000 thousand, ₩190,000,000 thousand and ₩60,000,000 thousand, respectively, in order to obtain operating fund and repay borrowings which matured within 2017.

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Changes in carrying amounts of borrowings and debentures for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
<b>Beginning balance</b>	646,215,115	401,083,120
Increase in bank borrowings	267,974,930	240,701,754
Repayment of bank borrowings	(451,963,557)	(291,822,228)
Issuance of debentures	299,216,482	299,030,200
Transferred to disposal group classified as held-for-sale	-	(2,464,974)
Exchange differences and others	(4,566,476)	(312,757)
<b>Ending balance</b>	<b>756,876,494</b>	<b>646,215,115</b>

**21. Commitments and contingencies**

(1) As at December 31, 2017, loan agreements of controlling company with financial institutions are as follows:

*(in thousands of Korean won and foreign currency)*

<b>Principal financial institution</b>	<b>Agreement</b>	<b>Details</b>			<b>Remarks</b>
		<b>Currency</b>	<b>Amount</b>	<b>Equivalents of Korean won</b>	
	Bank overdrafts	KRW	10,000,000	10,000,000	
KEB Hana Bank	Export-import financing, trade financing, general loans and others	KRW	140,000,000	140,000,000	Credit Line
	Account receivable financing	KRW	195,000,000	195,000,000	
	Forward contract	USD	150,000	160,710,000	
	Guarantee in foreign currency	USD	6,000	6,428,400	
Woori Bank	Export-import financing	USD	20,000	21,428,000	
	Forward contract	USD	50,000	53,570,000	
KDB Bank	General loans	KRW	100,000,000	100,000,000	
Bank of America	Forward contract	USD	100,000	107,140,000	
Shinhan Bank	Forward contract	USD	25,000	26,785,000	
Kookmin Bank	Forward contract	USD	25,000	26,785,000	

(2) As at December 31, 2017, Hanon Nanjing has payment guarantees of USD 7,059 thousand provided by JCS, an affiliate of the Group.

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- (3) Loan agreements that the subsidiaries have entered into with financial institutions as at December 31, 2017 are as follows:

(in thousands of Korean won and foreign currency)

	Principal financial institution	Details	Credit Limit		
			Currency	Amount	Equivalents of Korean won
China Group Facility <sup>1</sup>	Bank of America	Loan agreement	USD	34,000	36,427,600
Europe Group Facility <sup>2</sup>	Bank of America	Loan agreement	EUR	85,000	108,736,250
America Group Facility <sup>3</sup>	Bank of America	Loan agreement	USD	70,000	74,998,000
Hanon Beijing	Bank of China	Loan agreement	CNY	100,000	16,365,000
Hanon Dalian	KEB Hana Bank	Loan agreement	USD	15,000	16,071,000
	Woori Bank	Loan agreement	CNY	50,000	8,182,500
Hanon Jinan	Bank of America	Loan agreement	USD	4,000	4,285,600
Hanon Shanghai	Bank of America	Loan agreement	CNY	12,000	1,963,800
Hanon Nanjing	Bank of America	Loan agreement	USD	8,000	8,571,200
HASI	HDFC Bank	Loan agreement	INR	500,000	8,360,000
	Citi Bank	Loan agreement	INR	250,000	4,180,000
Hanon Bhiwadi	HDFC Bank	Loan agreement	INR	80,000	1,337,600
Hanon South Africa	Citi Bank	Loan agreement	ZAR	15,000	1,302,900
Hanon Slovakia	Citi Bank	Loan agreement	EUR	19,000	24,305,750
	Citi Bank	Loan agreement	USD	15,000	16,071,000
Hanon Netherlands	Raiffeisenbank	Loan agreement	EUR	20,000	25,585,000
	Yapi Kredi Bank	Loan agreement	TRY	15,000	4,253,250
Hanon Turkey	Citi Bank	Loan agreement	TRY	20,000	5,671,000
	Deutsche Bank	Loan agreement	EUR	15,000	19,188,750
Hanon Hungary	Citi Bank	Loan agreement	EUR	30,000	38,377,500
	Komercni bank	Loan agreement	EUR	10,000	12,792,500
Hanon Autopal & Hanon Autopal Service	Komercni bank	Loan agreement	EUR	2,000	2,558,500
	Citi Bank	Loan agreement	EUR	35,000	44,773,750
Hanon Canada	Federal Economic Development Agency for Southern Ontario	Government grant (Interest free loan)	CAD	2,175	1,854,601

<sup>1</sup> China Group Facility: Hanon Dalian and 6 other Chinese affiliates have been provided with loan facilities with a limit of USD 34 million for the purpose of operating funds.

<sup>2</sup> Europe Group Facility: Hanon Netherlands and other 2 affiliates have been provided with loan facilities with a limit of EUR 85 million for the purpose of operating funds.

<sup>3</sup> America Group Facility: Hanon Alabama and other 5 affiliates have been provided with loan facilities with a limit of USD 70 million for the purpose of operating funds.

- (4) 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. On December 20, 2017, the CEO of the subcontractor was sentenced to 9 years in prison, and both the CEO of the subcontractor and prosecutor appealed to High Court. Details of the litigation have not been disclosed since it might put significant impact on ongoing dispute.
- (5) 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



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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 correction for maintaining the validity of patent. Hanon Japan lost the appeal on October 26, 2017, and made an appeal on November 9, 2017. Meanwhile, Hanon Japan had lost Japanese patent infringement lawsuit on April 21, 2017 and had appealed to the Court of Appeals on May 10, 2017, but it lost again on November 28, 2017. The case was appealed for the final judgement in the Supreme Court on December 13, 2017 and it is currently in progress. In addition, Toyota Jido Shokki Corp. filed a damage claim for compensation against Hanon Japan to the Tokyo District Court on August 31, 2017, and it is still in progress. As at the end of the current reporting period, the Group cannot reliably determine the outcome of the appeal procedures since Toyota Jido Shokki Corp. did not provide reasonable basis of calculation regarding the damage claim for compensation of approx. JPY 100 million and allegation of patent infringement is still in dispute, so that no provisions to settle potential contingent liabilities have been recognized accordingly.

- (6) As at December 31, 2017, the Group holds a restricted Corporate Partnership Deposit amounting to ~~¥~~7,500,000 thousand.
- (7) As at December 31, 2017, 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 at December 31, 2017 and 2016, are as follows:

*(in thousands of Korean won)*

Transaction purpose	Derivatives	2017		
		Assets	Liabilities	Accumulated other comprehensive income
Cash Flow hedges	Forward foreign exchange	68,995,984	(2,345,795)	45,731,783
Fair value hedges	Forward foreign exchange	-	(1,050,819)	-

*(in thousands of Korean won)*

Transaction purpose	Derivatives	2016		
		Assets	Liabilities	Accumulated other comprehensive loss
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)	-

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 exposure to cash flows fluctuation is until February, 2020. The amount of valuation of cash flow hedge for accumulated other comprehensive income is all expected to be recognized as a gain within the same period.

(2) Gain (loss) on derivatives for the years ended December 31, 2017 and 2016, are as follows:

*(in thousands of Korean won)*

Transaction purpose	Derivatives	2017			
		Sales	Cost of sales	Gain (loss) of valuation	Gain of transaction
Cash Flow hedges	Forward foreign exchange	3,620,381	24,634,001	829,722	3,235,985
Fair value hedges	Forward foreign exchange	-	-	(1,050,819)	237,137

*(in thousands of Korean won)*

Transaction purpose	Derivatives	2016			
		Sales	Cost of sales	Gain (loss) 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

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**23. Earnings per Share**

(1) Issued shares for the years ended December 31, 2017 and 2016, are as follows:

<i>(In Korean won, except number of shares)</i>	<b>2017</b>	<b>2016</b>
Profit for the year attributable to common stock owners of the Company <sup>1</sup>	288,563,135,146	292,125,004,918
Weighted average number of common shares in issue	533,800,000	533,800,000
Basic earnings per share	<u>541</u>	<u>547</u>

<sup>1</sup> 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) Diluted earnings per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares. The Group has only one category of dilutive potential ordinary shares: share options. The share options, a calculation is done to determine the number of shares that could have been acquired at fair value (determined as the average annual market share price of the Group's shares) based on the monetary value of the subscription rights attached to outstanding share options. The number of shares calculated as above is compared with the number of shares that would have been issued assuming the share options are exercised. The Group's basic earnings per share is identical to diluted earnings per share.

The diluted earnings per share for the years ended December 31, 2017 and 2016 are identical to the basic earnings per share, as the Group has no dilutive shares for years ended December 31, 2017 and 2016.

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**24. Selling and Administrative Expenses**

Selling and administrative expenses for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Salaries	95,148,910	92,612,512
Employee retirement benefits	6,491,291	6,013,388
Other long-term employee benefits	202,685	141,449
Employee welfare expenses	19,098,410	18,871,870
Taxes and dues	5,224,341	8,751,098
Freight cost	47,115,550	54,645,735
Warranty	17,805,707	40,403,029
Depreciation	6,884,617	5,471,344
Amortization	2,094,660	2,684,328
Bad debts expenses	16,220,172	2,656,950
Travel expenses	8,775,745	8,669,293
Service fees	70,803,147	50,401,011
Research and development costs	157,217,515	155,062,828
Others	24,711,878	29,935,597
	<u>477,794,628</u>	<u>476,320,432</u>

**25. Financial Income and Expense**

Financial income and expenses for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
<b>Financial income</b>		
Interest income	8,654,658	5,571,581
Gain on foreign currency transactions	2,824,113	554,006
Gain on foreign currency translation	1,527,106	1,077,362
	<u>13,005,877</u>	<u>7,202,949</u>
<b>Financial expenses</b>		
Interest expenses	19,779,955	20,864,007
Loss on foreign currency transactions	2,169,908	5,221,600
Loss on foreign currency translation	4,727,392	3,090,785
	<u>26,677,255</u>	<u>29,176,392</u>

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**26. Other Non-operating Income and Expenses**

Other non-operating income and expenses for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
<b>Other non-operating income</b>		
Gain on foreign currency translation	56,776,397	47,463,029
Gain on foreign currency transactions	62,544,439	66,571,476
Gain on disposal of property, plant and equipment	6,019,718	737,440
Gain on disposal of intangible assets	-	4,545
Gain on transactions of derivative instruments	10,380,323	11,352,352
Gain on valuations of derivative instruments	841,673	938,200
Others	5,619,973	12,869,418
	<u>142,182,523</u>	<u>139,936,460</u>
<b>Other non-operating expenses</b>		
Loss on foreign currency translation	61,144,988	37,883,767
Loss on foreign currency transactions	82,090,541	72,614,042
Loss on disposal of property, plant and equipment	2,711,341	1,275,466
Loss on disposal of intangible assets	107,616	136,866
Impairment loss on property, plant and equipment	933,184	1,079,028
Loss on transactions of derivative instruments	6,907,201	8,390,490
Loss on valuations of derivative instruments	1,062,770	2,343,242
Loss on disposal of assets held-for-sale	14,310,719	-
Others	14,681,651	10,160,538
	<u>183,950,011</u>	<u>133,883,439</u>

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**27. Expenses by Nature**

Expenses by nature for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Changes in inventories excluding raw materials, merchandises and supplies	(6,485,832)	(4,693,587)
Purchase of raw materials and merchandises	3,541,970,629	3,674,469,443
Salaries	539,909,684	616,908,528
Employee retirement benefits	26,151,986	28,653,986
Employee welfare expenses	134,673,858	108,841,230
Depreciation	180,617,383	175,817,862
Amortization	20,893,119	10,371,353
Freight cost	151,848,508	132,810,346
Research and development costs	28,006,668	29,258,706
Service fees	207,114,914	159,707,717
Others	292,535,700	349,020,845
Total amount of cost of goods sold and selling, general and administrative expenses	<u>5,117,236,617</u>	<u>5,281,166,429</u>

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**28. Tax Expense and Deferred Tax**

Income tax expense for the years ended December 31, 2017 and 2016, consists of:

<i>(in thousands of Korean won)</i>	<u>2017</u>	<u>2016</u>
Current tax:		
Current tax on profits for the year	106,625,244	125,925,344
Adjustments in respect of prior years (Tax refund due to tax appeal and reassessment)	<u>405,905</u>	<u>(1,913,951)</u>
Deferred tax:		
Origination and reversal of temporary differences	38,853,276	(18,432,156)
Deferred tax recognized in other comprehensive income	<u>(22,782,240)</u>	<u>6,317,449</u>
Income tax expense	<u>123,102,185</u>	<u>111,896,686</u>

Income tax effects related to components of other comprehensive income (expenses) for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<u>2017</u>			<u>2016</u>		
	<u>Before tax</u>	<u>Tax effect</u>	<u>After tax</u>	<u>Before tax</u>	<u>Tax effect</u>	<u>After tax</u>
Gain (loss) on cash flow hedge derivative instruments	83,494,830	(20,270,817)	63,224,013	(20,693,170)	5,008,207	(15,684,963)
Remeasurement of the net defined benefit liability	<u>11,315,740</u>	<u>(2,511,423)</u>	<u>8,804,317</u>	<u>(2,859,683)</u>	<u>1,309,242</u>	<u>(1,550,441)</u>
	<u>94,810,570</u>	<u>(22,782,240)</u>	<u>72,028,330</u>	<u>(23,552,853)</u>	<u>6,317,449</u>	<u>(17,235,404)</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>	<u>2017</u>	<u>2016</u>
Income before income tax expenses (A)	421,505,373	415,652,552
Tax at the applicable income tax rate (B)	103,068,694	104,804,019
Adjustments:		
Non-deductible expenses	5,074,146	725,557
Non-taxable income	(1,557,865)	(1,083,523)
Tax credit	(21,264,740)	(20,740,288)
Subsidiaries/Associates' results reported net of tax	19,573,412	9,419,851
Results tax investigation and others	-	4,877,925
Unrecognized tax deficit	4,787,455	5,780,699
Others	<u>13,421,083</u>	<u>8,112,446</u>
Sub-total (C)	<u>20,033,491</u>	<u>7,092,667</u>
Income before income tax expenses (D=B+C)	<u>123,102,185</u>	<u>111,896,686</u>

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The analysis of deferred tax assets and liabilities as at December 31, 2017 and 2016, is as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
<b>Deferred tax assets</b>		
Deferred tax asset to be recovered later than 12 months	86,499,644	59,275,791
Deferred tax asset to be recovered within 12 months	29,489,222	42,324,707
	<u>115,988,866</u>	<u>101,600,498</u>
<b>Deferred tax liabilities</b>		
Deferred tax liability to be settled later than 12 months	82,873,904	46,919,862
Deferred tax liability to be settled within 12 months	19,836,364	2,548,762
	<u>102,710,268</u>	<u>49,468,624</u>
Deferred tax assets (liabilities), net	<u>13,278,598</u>	<u>52,131,874</u>

Changes in deferred tax assets and liabilities for the years ended December 31, 2017 and 2016, without taking into consideration the offsetting of balances within the same tax jurisdiction, are as follows:

<i>(in thousands of Korean won)</i>	<b>2017</b>				
	<b>Beginning balance</b>	<b>Statement of income</b>	<b>Other comprehensive income</b>	<b>Others</b>	<b>Ending balance</b>
<b>Deferred income tax assets(liabilities)</b>					
Net defined benefit liabilities	11,988,557	2,241,531	(2,511,423)	-	11,718,665
Accrued expenses	29,309,632	(10,046,009)	-	-	19,263,623
Warranty provision	6,232,267	(944,849)	-	-	5,287,418
Inventory	4,166,036	2,580,925	-	-	6,746,961
Depreciation	(3,820,523)	1,150,097	-	-	(2,670,426)
Foreign exchange translation	(1,501,362)	3,868,614	-	-	2,367,252
Other employment-benefit liability	3,135,361	(3,455)	-	-	3,131,906
Adjustment on sales	370,804	468,687	-	-	839,491
Accrued income	(777,248)	776,804	-	-	(444)
Derivatives	5,764,958	(1,460,744)	(20,270,817)	-	(15,966,603)
Investments in subsidiaries	(14,521,031)	7,034,291	-	-	(7,486,740)
Tax credit	1,055,322	(3,855,290)	-	-	(2,799,968)
Other	10,729,101	(17,881,638)	-	-	(7,152,537)
	<u>52,131,874</u>	<u>(16,071,036)</u>	<u>(22,782,240)</u>	<u>-</u>	<u>13,278,598</u>

<i>(in thousands of Korean won)</i>	<b>2016</b>				
	<b>Beginning balance</b>	<b>Statement of income</b>	<b>Other comprehensive income</b>	<b>Others</b>	<b>Ending balance</b>
<b>Deferred income tax assets(liabilities)</b>					
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	14,392,632	(5,895,122)	-	2,231,591	10,729,101
	<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>



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Details of deductible (taxable) temporary differences which were not recognized as deferred tax assets (liabilities) as at December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<u>2017</u>	<u>2016</u>	<u>Reason</u>
Interests in subsidiary	264,565,663	200,230,923	No plan for disposal

**29. Cash Generated from Operations**

(1) Cash generated from operations for the years ended December 31, 2017 and 2016, are as follows:

<i>(In thousands of Korean won)</i>	<u>2017</u>	<u>2016</u>
<b>Adjustment for</b>		
Interest expenses	19,779,955	20,864,007
Interest income	(8,654,658)	(5,571,581)
Income tax expense	123,102,185	111,896,686
Loss on valuation of inventories	757,667	14,081,763
Severance benefits	23,243,954	26,591,530
Other long-term employee benefits	1,567,672	1,814,487
Shared based payment	1,118,802	1,282,320
Depreciation	180,617,383	175,817,863
Amortization	20,893,119	10,371,352
Bad debt expenses	16,220,172	2,656,950
Other bad debt expenses	40,836	3,357,988
Recognition of other provisions	29,252,996	56,222,688
Impairment loss on property, plant and equipment	933,184	1,079,028
Loss on disposal of property, plant and equipment	2,711,341	1,275,466
Loss on disposal of intangible assets	107,616	136,866
Gain on disposal of property, plant and equipment	(6,019,719)	(737,440)
Gain on disposal of intangible assets	-	(4,545)
Loss on foreign currency translation	65,872,380	40,974,552
Gain on foreign currency translation	(58,303,503)	(48,540,391)
Loss on transaction of derivative instruments	6,907,201	8,390,490
Loss on valuation of derivative instruments	1,062,770	2,343,242
Gain on transaction of derivative instruments	(10,380,323)	11,352,352
Gain on valuation of derivative instruments	(841,673)	(938,200)
Share of profit in associates	(8,507,552)	(9,024,826)
Loss on disposal of assets held-for-sale	14,310,719	-
	<u>415,792,524</u>	<u>402,987,943</u>

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<i>(In thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
<b>Changes in operating assets and liabilities</b>		
Decrease (increase) in trade receivables	(23,741,680)	58,694,906
Decrease (increase) in other receivables	18,088,060	(91,788,826)
Increase in other current assets	(10,029,603)	(29,030,722)
Decrease in derivative financial assets	4,183,107	11,406,747
Increase in inventories	(56,328,464)	(68,880,112)
Decrease in other non-current assets	432,855	228,862
Increase (decrease) in trade payables	76,933,575	(5,493,792)
Increase (decrease) in other payables	7,354,208	(5,705,888)
Increase in other current liabilities	1,451,259	13,478,331
Decrease in derivative financial liabilities	(8,863,786)	(7,164,785)
Increase in other non-current payables	1,261,023	781,242
Decrease in other non-current liabilities	(247,956)	(3,973,190)
Decrease in other provisions	(28,559,211)	(46,478,581)
Benefits paid	(8,485,617)	(10,889,714)
Decrease in pension plan assets	(4,833,108)	(20,071,861)
	<u>(31,385,338)</u>	<u>(204,887,383)</u>

(2) Significant transactions not affecting cash flows for the years ended December 31, 2017 and 2016, are as follows:

<i>(In thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Reclassification of construction in-progress to property, plant and equipment	97,721,125	103,626,027
Other payables related to acquisition of property, plant and equipment as at December 31, 2017	63,077,235	59,995,748
Other payables related to acquisition of intangible assets as at December 31, 2017	11,800	15,000
Other payables related to acquisition of property, plant and equipment as at December 31, 2016	59,995,748	12,731,402
Reclassification to the development cost	5,101,764	5,386,700

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**30. Issued capital and reserves**

Issued shares for the years ended December 31, 2017 and 2016, are as follows:

<i>(In Korean won and in number of shares)</i>	<u>2017</u>	<u>2016</u>
Authorized shares	1,000,000,000units	1,000,000,000units
Issued shares	533,800,000 units	533,800,000 units
Par value per share	100	100
Issued capital	<u>53,380,000,000</u>	<u>53,380,000,000</u>

Details of equity components for the years ended December 31, 2017 and 2016, are as follows:

<i>(In thousands of Korean won)</i>	<u>2017</u>	<u>2016</u>
Share premium	48,060,000	48,060,000
Other components of equity	(71,131,343)	(71,131,343)
Share-based Payments	674,090	
	<u>(22,397,253)</u>	<u>(23,071,343)</u>

**31. Accumulated Other Comprehensive Income**

Changes in accumulated other comprehensive income for the years ended December 31, 2017 and 2016, are as follows:

<i>(in thousands of Korean won)</i>	<u>2017</u>			
	<u>Beginning balance</u>	<u>Increase (Decrease)</u>	<u>Reclassification to profit or loss</u>	<u>Ending balance</u>
Cash flow hedges	(17,492,230)	91,478,395	(28,254,382)	45,731,783
Exchange differences on translation of foreign operations	(118,150,048)	(55,530,387)	10,702,918	(162,977,517)
Change in equity of associates	(3,670,197)	(5,213,870)	-	(8,884,067)
	<u>(139,312,475)</u>	<u>30,734,138</u>	<u>(17,551,464)</u>	<u>(126,129,801)</u>

<i>(in thousands of Korean won)</i>	<u>2016</u>			
	<u>Beginning balance</u>	<u>Increase (Decrease)</u>	<u>Reclassification to profit or loss</u>	<u>Ending balance</u>
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>

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

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**32. Retained Earnings**

Retained earnings as at December 31, 2017 and 2016, consist of:

<i>(In thousands of Korean won)</i>	<u>2017</u>	<u>2016</u>
Legal reserve		
Reserve for earned surplus <sup>1</sup>	26,690,000	26,690,000
Reserve for industrial growth <sup>2</sup>	2,500,000	2,500,000
	<u>29,190,000</u>	<u>29,190,000</u>
Voluntary reserve		
Reserve for business expansion <sup>3</sup>	1,118,923,987	1,081,705,953
Reserve for business rationalization <sup>4</sup>	27,976,480	27,976,480
	<u>1,146,900,467</u>	<u>1,109,682,433</u>
Unappropriated retained earnings	897,726,765	797,717,348
	<u>2,073,817,232</u>	<u>1,936,589,781</u>

<sup>1</sup> In accordance with the Korean Commercial Code, an amount equal to at least 10% of cash dividends in 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.

<sup>2</sup> 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 is one of the voluntary reserve.

<sup>3</sup> Reserve for business expansion is one of the voluntary reserve for the purpose of business expansion in the future.

<sup>4</sup> 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 ₩40,035,000 thousand of dividend in respect of the year ended December 31, 2016, in April, 2017 (2016: ₩103,557,200 thousand). Board of Directors approved 3 times of interim dividends of ₩75 per share in current period, the interim dividends of ₩40,035,000 thousand was paid in May, August and November 2017, respectively.

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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 at December 31, 2017, the company's related companies are Bonaire and three other companies.

(2) Sales and purchases with related parties for the years ended December 31, 2017 and 2016, are as follows:

*(In thousands of Korean won)*

		<b>2017</b>		
<b>Relationship</b>	<b>Company names</b>	<b>Sales</b>	<b>Dividends</b>	<b>Purchases</b>
Associates	Bonaire and three other companies	83,354,703	4,393,717	10,435,937

*(In thousands of Korean won)*

		<b>2016</b>		
<b>Relationship</b>	<b>Company names</b>	<b>Sales</b>	<b>Dividends</b>	<b>Purchases</b>
Associates	Bonaire and two other companies	86,802,504	4,731,779	10,531,215

(3) Receivables and payables to related parties as at December 31, 2017 and 2016, are as follows:

*(In thousands of Korean won)*

		<b>2017</b>	
<b>Relationship</b>	<b>Company names</b>	<b>Receivables</b>	<b>Payables<sup>1</sup></b>
Associates	Bonaire and two other companies	30,886,543	8,459,618

<sup>1</sup>As at December 31, 2017, the amount of payables includes the borrowings amounting to ₩7,548,154 thousand (2016: ₩12,026,069 thousand). The Group redeemed ₩ 3,328,582 thousand (2016: ₩ 4,651,196 thousand) of borrowings during current period.

*(In thousands of Korean won)*

		<b>2016</b>	
<b>Relationship</b>	<b>Company names</b>	<b>Receivables</b>	<b>Payables</b>
Associates	Bonaire and two other companies	15,916,981	13,495,405

(4) For the years ended December 31, 2017 and 2016, the details of compensation to key management officers are as follows:

*(In thousands of Korean won)*

	<b>2017</b>	<b>2016</b>
Executive compensation	4,675,040	4,016,765
Severance benefits	426,917	484,530
	<u>5,101,957</u>	<u>4,501,295</u>

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

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

(1) Disposal of VEIPL

The Group has disposed the shares of Visteon Electronics India Private Limited (VEIPL, the electronic equipment product group of HASI) with the approval of the Board of Directors, in order to increase efficiency in operation and enhance long-term value of the entity by focusing on the automotive climate control business segment.

(2) Disposal of Hanon Jinan

The Group has decided to sell its entire shares of Hanon Jinan, and the sale is expected to be completed in the first half of 2018. The assets and liabilities of Hanon Jinan are reclassified as assets held-for-sale and liabilities held-for-sale, and Hanon Jinan does not form a significant line of business, the related gain or loss is not presented as discontinued operations.

(3) Disposal of property, plant and equipment of Hanon Portugal

The Group has decided to sell a portion of its tangible assets in Hanon Portugal, which is expected to be completed in the first half of 2018.

(4) Details of assets and liabilities held-for-sale as at December 31, 2017 and 2016, are as follows.

<i>(In thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Assets held-for-sale		
Cash and cash equivalents	2,653,334	2,350,074
Trade receivables	42,759	9,393,176
Inventories	-	7,548,087
Property, plant and equipment	2,719,364	32,408,802
Intangible assets	815,325	29,633,271
Other assets	686,096	8,218,379
Liabilities held-for-sale		
Trade payables	76,829	13,767,994
Other liabilities	92,265	14,490,733

(5) Accumulated other comprehensive income (loss) recognized related to assets and liabilities held-for-sale for the years ended December 31, 2017 and 2016, are as follows.

<i>(In thousands of Korean won)</i>	<b>2017</b>	<b>2016</b>
Foreign currency translation adjustments	(560,926)	(9,729,925)

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**35. Events after the Reporting Period**

(1) Grant of stock options

On February 9, 2018, the Company resolved to grant additional 1,830,000 shares of common stock purchase option with the exercise price of ~~¥~~ 13,100, and the actual grant date is the date specified in the grant contract.

(2) Signed a contract to establish an joint venture in China

On January 22, 2018, the Company entered into a contract with FAWER of China FAW Group to establish a joint venture company (FHAC, 55%) for the production of electric vehicle parts.

(3) Completion of establishment of joint venture company

On January 15, 2018, the Company established a joint venture company (50%) with Chongqing Construction Motor and Chongqing Construction, subsidiaries of China Southern Industrial Group (CSGC).