Hyosung Corporation and Subsidiaries

Consolidated Financial Statements December 31, 2017 and 2016

Hyosung Corporation and Subsidiaries Index

December 31, 2017 and 2016

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Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

To the Board of Directors and Shareholders of Hyosung Corporation

We have audited the accompanying consolidated financial statements of Hyosung Corporation and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as at December 31, 2017 and 2016, and the consolidated statements of profit or loss, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of 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 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 the consolidated 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 Korean Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on 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 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 Hyosung Corporation and its subsidiaries as at December 31, 2017 and 2016, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with Korean IFRS.

Emphasis Matters¹

Without qualifying our opinion, we draw attention to the following area of focus.

(1) Auditor's emphasis on the area of focus on construction contracts.

Area of focus on construction contracts in accordance with the Practical Guidance of Auditing Standard 2016-1 are those matters that, in the auditor's professional judgment and communication with those charged with governance, were of most significance in the audit of the consolidated financial statements of the current period. These matters were addressed in the context of the audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have addressed the output of the audit process for the area of focus as below in forming an audit opinion on the consolidated financial statements of Hyosung Corporation and its subsidiaries as a whole.

A. General Information

Common information applied to the area of focus on construction contract described in this audit report are as follows:

As explained in the Note 2 to the consolidated financial statements (Significant Accounting Policies), the Group recognizes contract revenue and contract costs associated with the construction contract as revenue and expense respectively based on the percentage of completion of the contract activity at the end of the reporting period when the outcome of a construction contract can be estimated reliably. The percentage of completion of the contract activity is the proportion that costs incurred to date, excluding any contract cost that does not reflect the work performed, bear to the estimated total costs of the contract. The Group presents the gross amount due from customers for contract work as an asset for all contracts in progress for which costs incurred plus recognized profits (less recognized losses) exceed progress billings, and presents the gross amount due to customers for contract work as a liability for all contracts in progress for which progress billings exceed costs incurred plus recognized profits (less recognized losses). The Group's operating segments which apply accounting policies of construction contract are construction segment and part of heavy industrial segment.

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¹ This paragraph is being included in accordance with the Practical Guidance of Auditing Standard 2016-1, Practical Guidance for Special Consideration in Auditing Construction Contracts, prescribed by Korean Institute of Certified Public Accountants, and should not be considered as a communication of key audit matter described in the International Standards on Auditing 700 (Revised).

B. Input method

As explained in the Note 3 to the consolidated financial statements (Critical Accounting Estimates and Assumptions), total contract revenue is measured based on the initial amount of revenue agreed in the contract. However, the measurement of contract revenue is affected by a variety of uncertainties that depend on the outcome of future event; for example, the amount of contract revenue may increase as a result of variations in contract work, claims and incentive payments, on the other hand, the amount of contract revenue may decrease as a result of penalties arising from delays caused by the Group in the completion of the contract. The measurement of contract revenue is also affected by the percentage of completion measured based on the aggregated amount costs incurred. Total contract costs are estimated based on future estimates of material costs, labor costs, construction period and others.

Uncertainty of estimating total contract revenue and the changes in estimated total contract revenue and costs may have negative impacts on the profit or loss for the current period (or for the succeeding year); therefore, we identified revenue recognition based on the input method as a significant risk.

As at December 31, 2017, in respect of the Group's revenue recognition based on the input method, we have performed the following audit procedures.

- We assessed whether the accounting policy of revenue recognition is appropriate.
- We reviewed major contract terms and conditions.
- We reviewed the Group's internal control over reviews and approvals of new contracts by personnel with appropriate authority.

C. Uncertainty of estimated total contract costs (or estimated construction costs)

As explained in the Note 3 to the consolidated financial statements (Critical Accounting Estimates and Assumptions) and in the Note 29 to the consolidated financial statements (Construction Contracts), total contract costs are estimated based on future estimates of material costs, labor costs, construction period and others. When the estimated total contract costs increase by 5%, profit before income tax and net assets before income tax effects would decrease by \mathbb{W} 126,924 million.

The measurement of estimated contract costs is affected by variety of uncertainties such as changes in the specifications or design, changes in construction environment, the extension of construction period, fluctuation of material cost, and others. The impacts of changes in estimated total contract costs on the profit or loss for the current period (or for the succeeding year) are considered; therefore, we identified uncertainty of estimated total contract costs as a significant risk.

As at December 31, 2017, in respect of the Group's uncertainty of estimated total contract costs, we have performed the following audit procedures.

- We tested for the internal control activity to approve of total contract cost.
- We compared and performed analytical review procedures to determine the rate of cost of sales (total construction cost / total contract revenue) of each construction site.
- We checked whether there were final approvals of the total estimated contract costs and compared the amounts with the total contract cost in the Group's financial information systems.
- We reviewed the cause of change for projects with significant fluctuations in total contract costs.
- We made inquiries about the cause of the significant difference in the estimated total contract cost at the end of 2016 and the final cumulative cost incurred of the project which ended during 2017.

D. Measurement of percentage of completion

The construction costs incurred of one site can be transferred to another site due to the variance in profit margins of sites and the identified factors causing the increase in the estimation of contract costs may not be reflected in the contract costs timely; therefore, we identified measurement of percentage of completion as a significant risk.

As at December 31, 2017, in respect of the Group's estimated total contract costs and aggregated cost incurred that have impacts on the measurement of percentage of completion, we have performed the following audit procedures.

- We tested the completeness and appropriateness of the aggregate costs incurred.
- We reviewed the journal entries prepared for the transfer of incurred expenses between construction sites.
- We tested whether costs are attributed to the corresponding construction sites.
- We recalculated the percentage of completion for construction contracts.
- We tested internal control of the Group in relation to approval and reporting process of cost incurred.

E. Collectability of the gross amount due from customers for contract work

As the collectability of the gross amount due from customers for contract work is in doubt in case of the increase of unsold housing due to the real estate market situation or the deterioration of the financial condition of customers, we identified collectability of the gross amount due from customers for contract work as a significant risk.

As at December 31, 2017, in respect of the contact that has a significant increase in the gross amount due from customers for contract work, we have performed the following audit procedures.

- We identified contacts with significant differences between percentage of completion for accounting purpose and actual construction billing ratio in accordance with contractual right to demand for payment, and inquired about reasons of delays in billings and tested based on external evidences.
- We performed impairment test for the contracts with uncertainties in collectability.

F. Accounting treatment regarding variations in contract work

As explained in Note 3 to the consolidated financial statements (Critical Accounting Estimates and Assumptions), as at December 31, 2017, the Group measures total contract revenue at the initial amount of revenue agreed in the contract; however, the measurement of contract revenue is affected by a variety of uncertainties that depend on the outcome of future events such as increase in contract revenue due to variations in contract work, claims and incentive payment; or decrease contract revenue as a result of penalties arising from delay caused by the Group in the completion of the contract. A variation is included in contract revenue when the amount of revenue can be reliably measured.

As explained in the Note 29 to the consolidated financial statements (Construction Contracts), changes in total contract revenue have occurred and while the total contract revenue is increased due to changes in specifications, estimated construction costs may not be timely updated. Accordingly there are risk of misstatements in contract revenue; therefore, we identified accounting treatment regarding variations in contract work as a significant risk.

As at December 31, 2017, in respect of accounting treatment regarding variations in contract work, we have performed the following audit procedures.

- We inquired on the Group's accounting policy for accounting treatment with regard to variations in contracts.
- In respect of construction contracts with changes in terms and conditions, we performed reconciliation for total contract revenue based on the Group's Financial Information Systems and external evidences.
- We determined whether additional contract cost estimated based on the variation in the contract has been reflected in measurement of estimated total contract cost and percentage of completion.

(2) Restatement of Prior Year Financial Statements

As explained in the Note 41, the Group has restated its prior year consolidated financial statements to correct the understatement of impairment losses on available-for-sale financial assets for the year ended December 31, 2013. As a result, the retained earnings and other comprehensive income as at December 31, 2016, decreased and increased respectively by $\mbox{$\mathbb{W}$}$ 24,403 million and there is no impact on the prior year's consolidated statement of profit or loss.

Other Matter

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.

Seoul, Korea

February 26, 2018

This report is effective as of February 26, 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.

(Attachment) Consolidated Financial Statements

Hyosung Corporation and Subsidiaries

The 63th period

From January 1st, 2017 to December 31st, 2017

The 62th period

From January 1st, 2016 to December 31st, 2016

"The attached consolidated financial statements were prepared by the Company."

CEO Kyu-Young Kim of Hyosung Corporation

The seat of

Road name

119 Mapo-daero, Mapo-gu, Seoul, Korea.

headquarter:

address

Phone number (02) 707-7000

Hyosung Corporation and Subsidiaries Consolidated Statements of Financial Position December 31, 2017 and 2016

(in millions of Korean won)	Notes		2017		2016
Assets					
Current assets					
Cash and cash equivalents	4, 7, 8, 9	₩	501,133	₩	431,707
Trade and other receivables	4, 6, 7, 10, 19		2,013,675		1,736,071
Due from customers for contract work	4, 7, 29		140,355		116,982
Other financial assets	4, 7, 11		82,976		50,326
Other current assets	13		190,579		169,152
Inventories	14		1,679,932		1,524,770
Current tax assets			22,330		19,438
			4,630,980		4,048,446
Non-current assets	4 7 40 40		242.040		205.040
Long-term trade and other receivables	4, 7, 10, 19		313,040		305,046
Property, plant and equipment	5, 15 5, 16		5,663,176		5,845,022
Investment property Intangible assets	5, 16 5, 17		550,217 318,130		628,823 420,070
Investments in associates	18, 19		117,238		115,373
Other financial business assets	4, 7, 12		2,240,413		2,091,145
Other non-current financial assets	4, 7, 9, 11		580,452		552,834
Other non-current assets	13		65,686		62,766
Deferred tax assets	23		55,646		51,276
20.000 (a), 00000			9,903,998		10,072,355
Total assets		₩	14,534,978	₩	14,120,801
			, ,		, , ,
Liabilities					
Current liabilities					
Trade and other payables	4, 7, 19, 21	₩	2,073,793	₩	1,786,517
Due to customers for contract work	29		78,409		98,278
Borrowings	4, 6, 7, 20		4,916,997		4,380,424
Other financial liabilities	4, 7, 11		4,088		29,504
Current tax liabilities			83,601		150,204
Other current liabilities	24		444,292		438,150
			7,601,180		6,883,077
Non-current liabilities	4 7 40 04		400 400		070 400
Long-term trade and other payables	4, 7, 19, 21		400,492		376,166
Long-term borrowings	4, 7, 20 22		2,345,089		2,662,171 43,499
Post-employment benefit obligation Deferred tax liabilities	23		23,275 174,324		234,631
Other non-current financial liabilities	4, 7, 11		593		7,226
Other non-current liabilities	24		126,744		72,815
Curer non current habilities	2-1		3,070,517		3,396,508
Total liabilities			10,671,697	-	10,279,585
			, ,		
Equity					
Equity attributable to owners of the Pare	nt Company				
Share capital	25		175,587		175,587
Share premium			130,826		130,826
Retained earnings	26		3,143,153		2,996,260
Other components of equity	11, 23, 27		203,950		316,536
			3,653,516		3,619,209
Non-controlling interest	39		209,765		222,007
Total equity			3,863,281	***	3,841,216
Total liabilities and equity		₩	14,534,978	₩	14,120,801

The above consolidated statements of financial position should be read in conjunction with the accompanying notes.

Hyosung Corporation and Subsidiaries Consolidated Statements of Profit or Loss Years Ended December 31, 2017 and 2016

(in millions of Korean won, except per share amounts)	Notes		2017		2016
Revenue	5, 19, 28, 29	₩	12,546,410	₩	11,929,113
Cost of sales	19, 29, 30		(10,654,352)		(9,770,994)
Gross profit			1,892,058		2,158,119
Selling and administrative expenses Research and development expenses	30, 31, 32 30		(1,003,612) (117,639)		(1,025,169) (116,604)
Operating profit	5		770,807		1,016,346
Other income Other expenses	33 33		66,841 (395,203)		66,276 (185,300)
Finance income Finance expenses	34 34		442,823 (509,378)		450,963 (680,086)
Share of profit of associates accounted for using the equity method, net	18		6,938		28,315
Profit before income tax Income tax expense	23		382,828 (41,989)		696,514 (221,112)
Profit for the year		₩	340,839	₩	475,402
Profit is attributable to: Owners of the Parent Company Non-controlling interests	35 39	₩	325,574 15,265 340,839	₩	455,526 19,876 475,402
Earnings per share attributable to the equity holders of the Parent Company					
Basic earnings per share	35	₩	9,786	₩	13,692

The above consolidated statements of profit or loss should be read in conjunction with the accompanying notes.

Hyosung Corporation and Subsidiaries Consolidated Statements of Comprehensive Income Years Ended December 31, 2017 and 2016

(in millions of Korean won)	Notes		2017		2016
Profit for the year		₩	340,839	₩	475,402
Other comprehensive income			_		_
Items that will not be reclassified to profit or loss					
Remeasurements of net defined benefit liability	22		14,004		(2,814)
Share of remeasurements of net defined benefit liabilities of associates			(742)		(295)
Items that may be subsequently reclassified to profit or loss					
Change in the fair value of available-for-sale financial assets	11, 27		(34,114)		15,360
Share of other comprehensive income of associates	18, 27		96		(111)
Exchange differences	27		(110,817)		19,170
Other comprehensive income for the year, net of tax			(131,573)		31,310
Total comprehensive income for the year		₩	209,266	₩	506,712
Total comprehensive income for the year is attributable to:					
Owners of the Parent Company		₩	202,781	₩	483,932
Non-controlling interest			6,485		22,780
		₩	209,266	₩	506,712

				Attributab	ole to own	ners of the Parent	Company							
								Other						
					1	Retained	Co	mponents			Non	-controlling		Total
(in millions of Korean won)	Sha	re capital	Share	e premium	I	Earnings	0	f Equity		Total		Interest		Equity
Balance at January 1, 2016	₩	175,587	₩	130,826	₩	2,636,042	₩	315,803	₩	3,258,258	₩	213,855	₩	3,472,113
Total comprehensive income														
Profit for the year		-		-		455,526		-		455,526		19,876		475,402
Remeasurements of net defined benefit liability		_		-		(1,618)		-		(1,618)		(1,196)		(2,814)
Share of remeasurements of net defined benefit liabilities of associates		_		-		(295)		-		(295)		-		(295)
Change in fair value of available-for-sale financial assets		_		-		_		14,402		14,402		959		15,361
Share of other comprehensive income of associates		_		-		_		(111)		(111)		-		(111)
Exchange differences		-		-		_		16,029		16,029		3,141		19,170
Transactions with owners														
Dividends paid		-		-		(116,440)		-		(116,440)		(18,480)		(134,920)
Changes in other additional capital		-		-		-		(27)		(27)		-		(27)
Others		-		-		(1,358)		(5,156)		(6,514)		3,852		(2,662)
Balance at December 31, 2016	₩	175,587	₩	130,826	₩	2,971,857	₩	340,940	₩	3,619,210	₩	222,007	₩	3,841,217
Balance at January 1, 2017	₩	175,587	₩	130,826	₩	2,971,857	₩	340,940	₩	3,619,210	₩	222,007	₩	3,841,217
Total comprehensive income														
Profit for the year		-		-		325,574		-		325,574		15,265		340,839
Remeasurements of net defined benefit liability		-		-		13,384		-		13,384		620		14,004
Share of remeasurements of net defined benefit liabilities of associates		-		-		(742)		-		(742)		-		(742)
Change in fair value of available-for-sale financial assets		-		-		-		(33,940)		(33,940)		(174)		(34,114)
Share of other comprehensive income of associates		-		-		-		96		96		-		96
Exchange differences		-		-		-		(101,591)		(101,591)		(9,226)		(110,817)
Transactions with owners														
Dividends paid		-		-		(166,343)		-		(166,343)		(20,130)		(186,473)
Changes in other additional capital		-		-		-		(149)		(149)		-		(149)
Others		-		-		(577)		(1,405)		(1,982)		1,403		(579)
Balance at December 31, 2017	₩	175,587	₩	130,826	₩	3,143,153	₩	203,951	₩	3,653,517	₩	209,765	₩	3,863,282

The above consolidated statements of changes in equity should be read in conjunction with the accompanying notes.

Hyosung Corporation and Subsidiaries Consolidated Statements of Cash Flows

Years Ended December 31, 2017 and 2016

(in millions of Korean won)	Notes		2017		2016
Cash flows from operating activities					
Cash generated from operations	37	₩	857,417	₩	1,993,923
Income taxes paid			(151,873)		(142,842)
Interest paid			(179,904)		(191,771)
Interest received			150,841		141,127
Dividends received			8,141		12,501
Net cash inflow from operating activities			684,622		1,812,938
Cash flows from investing activities					
Proceeds from sale of other receivables			3,751		54,966
Proceeds from sale of other financial assets			100,125		130,927
Proceeds from sale of long-term other receivables			101,855		155,892
Proceeds from sale of property, plant and equipment			7,136		48,730
Government grants received			343		1,269
Proceeds from sale of investment property			56,419		5,416
Proceeds from sale of intangible assets			1,670		7,471
Proceeds from sale of investments in associates			724		2,958
Proceed from acquistion of subsidiaries, net of cash owened			(497)		_
Proceeds from sale of other non-current assets			. ,		9
Acquisition of other receivables			(29,791)		(96,317)
Acquisition of other financial assets			(119,546)		(102,172)
Acquisition of long-term other receivables			(183,009)		(52,253)
Acquisition of other non-current financial assets			(191,926)		(115,295)
Payments for property, plant and equipment			(704,262)		(903,271)
Payments for investment properties			(780)		(4,326)
Payments for intangible assets			(11,626)		(33,287)
Acquisition of investments in associates			(700)		(8,750)
Acquisition of other non-current assets			(89)		(300)
Net cash outflow from investing activities			(970,203)		(908,333)
Cash flows from financing activities					
Proceeds from short-term borrowings			10,856,705		11,927,716
Proceeds from long-term borrowings and issuance of debentures	5		1,575,293		2,394,653
Government grants received			1,830		2,598
Proceeds from long-term deposit received			15,670		_
Repayment of short-term borrowings			(10,367,253)		(12,647,162)
Repayment of long-term borrowings and debentures			(1,525,308)		(2,540,099)
Dividends paid			(166,343)		(116,440)
Change in non-controlling interest			(20,130)		(18,480)
Repayment of government grants			(1,849)		(1,134)
Repayment of deposit received			-		(739)
Net cash inflow (outflow) from financing activities			368,615		(999,087)
Effects of exchange rate changes on cash and cash equivalents			(13,608)		12,927
Net increase (decrease) in cash and cash equivalents			69,426		(81,555)
Cash and cash equivalents at the beginning of the financial year	r		431,707		513,262
Cash and cash equivalents at the end of the year in the consolidated statements of financial position		₩	501,133	₩	431,707

The above consolidated statements of cash flows should be read in conjunction with the accompanying notes.

1. General Information

Hyosung Corporation (the "Company") and its subsidiaries (collectively referred to as the "Group") primarily manufactures and sells synthetic fiber products and electronic products, and is engaged in construction, financial business, and other related business activities.

As at December 31, 2017, the Group has plants in Ulsan, Anyang, Yongyeon, Icheon, Jincheon, Gumi, Daegu, Changwon, and Daejeon. In addition, the Group has subsidiaries and branches all over the world.

As at December 31, 2017, the Group's major shareholders are Cho Hyun Joon (14.27%), and Cho Hyun Sang (12.21%) and Cho Seok Rae (10.18%).

1.1 Consolidated Subsidiaries

Details of the consolidated subsidiaries as at December 31, 2017 are as follows:

Doroontogo

Subsidiaries	Percentage of Ownership ¹	Location	Reporting month	Main business
Gongdeokgyeongwoo development corporation	73.33%	Korea	December	Construction
Forza Motors Korea Corp.	100%	Korea	December	Automotive sale and service
Pohang Renewable Energy, Inc.	100%	Korea	December	Power plant engineering
Somesevit Corparation	57.83%	Korea	December	Service of real estate
Taeansolarfarm Corp.	100%	Korea	December	Solar power generation
HanaLandchip Private Real Estate Investment Trust No.39	77.01%	Korea	December	Service of real estate
Hyosung Goodsprings, Inc.	100%	Korea	December	Manufacture of liquid pump
Hyosung Capital Co., Ltd.	97.15%	Korea	December	Finance factoring
Nautilus Hyosung Inc.	54.02%	Korea	December	Manufacture of ATM
ATM PLUS	28.69%	KOREA	December	CD VAN BUSINESS
NAUTILUS HYOSUNG CMS INC.	54.02%	Korea	December	Cash-in-transit of ATM
NAUTILUS HYOSUNG TECH INC.	54.02%	Korea	December	Maintenance and interior of ATM
Hyosung FMS Inc.	54.02%	Korea	December	Electronic payment agency
Nautilus Hyosung America Inc.	54.02%	USA	December	Sale and maintenance of ATM
Hyosung Financial System (Huizhou) Co., Ltd.	54.02%	China	December	Office machinery and equipment manufacturing
Hyosung Capital the 18th Securitization Specialty Co., Ltd. ²	0.49%	Korea	December	Other
Hyosung Capital the 20th Securitization Specialty Co., Ltd. ²	0.49%	Korea	December	Other
Hyosung Capital the 21th Securitization Specialty Co., Ltd. ²	0.49%	Korea	December	Other
Hyosung Capital the 22th Securitization Specialty Co., Ltd. ²	0.49%	Korea	December	Other
Hyosung Capital the 23th Securitization Specialty Co., Ltd. ²	0.49%	Korea	December	Other
Hyosung Capital the 24th Securitization Specialty Co., Ltd. ²	0.49%	Korea	December	Other
Hyosung Capital the 25th Securitization Specialty Co., Ltd. ²	0.49%	Korea	December	Other
HSC the 1st Co., Ltd. ²	-	Korea	December	Other
HSC the 3rd Co., Ltd. ²	0.97%	Korea	December	Other
HSCS the 1st Co., Ltd. ²	-	Korea	December	Other

Subsidiaries	Percentage of Ownership ¹	Location	Reporting month	Main business
Hyosung Investment & Development Corporation	58.75%	Korea	December	Real estate development business
Hyosung Trans World Co., Ltd	100%	Korea	December	Intermodal transport arrangements
Baoding Hyosung Tianwei Transformer Co., Ltd.	80%	China	December	Transformer manufacturing
Central Trade Investment Ltd.3	-	China	December	Other
CONSORCIOHYOSUNG-VIMAC,S.A.	100%	Panama	December	Power & systems Performance Unit consortium
GST Global GmbH	100%	Germany	December	Germany holding company
Global Safety Textiles GmbH	100%	Germany	December	Manufacture and Sale of Air-bag cushion and Fabric
Global Safety Textiles LLC	100%	USA	December	Manufacture and sale of air-bag cushion and fabric
GST Safety Textiles RO S.R.L.	100%	Romania	December	Manufacture and sale of air-bag cushion and fabric
Global Safety Textiles U.S. Holdings, Inc.	100%	USA	December	U.S.A holding company
GST Automotive Safety Components International LLC	100%	USA	December	Manufacture and sale of air-bag cushion and fabric
GST Automotive Safety Components International LLC S.A.de C.V.	100%	Mexico	December	Manufacture and sale of air-bag cushion and fabric
GST Automotive Safety Poland Sp.z.oo	100%	Poland	December	Manufacture and sale of air-bag cushion and fabric
GST Automotive Safety RO S.R.L.	100%	Romania	December	Manufacture and sale of air-bag cushion and fabric
GST Automotive Safety South Africa (Proprietary) Limited	100%	South Africa	December	Manufacture and sale of air-bag cushion and fabric
GST Automotive Safety UK Limited	100%	UK	December	England holding company
GST Automotive Safety (Changshu) Co., Ltd.	100%	China	December	Manufacture and sale of air-bag cushion and fabric
GST China Investment Limited	100%	China	December	Hong Kong holding company
GST SAFETY TEXTILES MEXICO S. de R.L. de C.V.	100%	Mexico	December	Manufacture and sale of air-bag cushion and fabric
Hyosung Mexico S. de R.L. de C.V.	100%	Mexico	December	Manufacture and sale of air-bag cushion and fabric
HICO America Sales & Tech.	100%	USA	December	General trading
Hyosung (H.K) LIMITED	100%	China	December	General trading
Hyosung Brasil industria e comericio de fibras LTDA	100%	Brazil	December	Manufacture of spandex
Hyosung Brasil Participacoes Brasil LTDA	100%	Brazil	December	Manufacture and sale of tire cords
Hyosung Chemical Fiber (Jiaxing) Co., Ltd.	100%	China	December	Manufacture of polyesters thread and T/C
Hyosung Chemicals (Jiaxing) Co., Ltd.	100%	China	December	Manufacture of chemical product
Hyosung Corporation India Private Limited	100%	India	December	General trading
Hyosung RUS	100%	Russia	December	General trading
Hyosung Europe SRL	100%	Italy	December	General trading
Hyosung (Taiwan) Corporation	100%	Taiwan	December	General trading
Hyosung Holdings USA	100%	USA	December	U.S.A holding company
Hyosung International Trade (Jiaxing) Co., Ltd.	100%	China	December	General trading
Hyosung International (HK) Ltd.	100%	China	December	General trading
Hyosung Istanbul TEKSTIL LTD.STI	76.66%	Turkey	December	Manufacture and sale of spandex
Hyosung Japan Co., Ltd.	100%	Japan	December	General trading
Hyosung Luxembourg S.A	100%	Luxembourg	December	Manufacture and sale of tire cords
Hyosung Resource (Australia) PTY Ltd.	100%	Australia	December	Resources development
Hyosung Singapore PTE Ltd.	100%	Singapore	December	General trading
Hyosung Spandex (GuangDong) Co., Ltd.	100%	China	December	Manufacture and sale of spandex
Hyosung Spandex (Jiaxing) Co., Ltd.	100%	China	December	Manufacture and sale of spandex
Hyosung Spandex (Zhuhai) Co., Ltd.	75%	China	December	Manufacture and sale of spandex

Subsidiaries	Percentage of Ownership ¹	Location	Reporting month	Main business
Hyosung SRL	100%	Romania	December	Manufacture and sale of tire cords
Hyosung Sumiden Steel Cord (Nanjing) Co., Ltd.	100%	China	December	Manufacture and sale of steel cord
Hyosung Steel Cord (Qingdao) Co., Ltd.	100%	China	December	Manufacture and sale of steel cord
Hyosung USA Inc.	100%	USA	December	Manufacture and sale of tire cords
Hyosung Vietnam Co., Ltd.	88.21%	Vietnam	December	Manufacture of tire cord, Manufacture and sales of spandex
Hyosung DongNai Co., Ltd.	76.66%	Vietnam	December	Manufacture of tire cords and spandex
Hyosung Spandex (Quzhou) Co., Ltd.	88.34%	China	December	Manufacture and sale of spandex
Hyosung New Material & High Technology (Quzhou) Co. Ltd.	88.16%	China	December	Manufacture of chemical product
Hyosung T&D India Pvt Ltd.	100%	India	December	Manufacture and sale of breaker
Luckfaith Investment LTD.3	-	China	December	Other
Nantong Hyosung Transformer Co., Ltd.	100%	China	December	Manufacture and sale of transformer
Hyosung South Africa (PTY) Ltd.	50%	South Africa	December	Electric power sale
PT.HYOSUNG JAKARTA	99.90%	Indonesia	December	General trading
Zhangjiagang Xiaosha Coil Service Co., Ltd.	64.50%	China	December	Steel manufacturing and processing

¹ Percentage of ownership is the effective percentage of ownership considering ownership ratio of subsidiaries.

² Although the Group's owns is less than 50% of voting rights, the Group has ability to materially impact the returns of the investees and is exposed to variable returns of the investees. Accordingly, the Group is considered to have substantive power over the entities.

³ These subsidiaries are included in the scope of consolidation due to de facto control.

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

31, 2017 and 2010, is as follows.

(in millions of Korean won)	2017						
	Asset	Liability	Equity	Revenue	Profit(loss) for the year	Total comprehensive income(loss)	
Hyosung Capital Co., Ltd. ¹	2,705,369	2,303,396	401,973	222,286	26,532	14,910	
Hyosung Vietnam Co., Ltd.	780,870	466,376	314,494	1,224,618	108,650	68,716	
Hyosung DongNai Co,Ltd.	648,997	573,052	75,945	523,710	27,303	19,442	
Nautilus Hyosung Inc. 1	608,172	324,486	283,686	605,005	7,056	7,072	
GST Global GmbH ¹	438,130	380,348	57,782	407,547	(5,863)	(19,602)	
Hyosung Chemical Fiber (Jiaxing) Co., Ltd.	310,987	146,817	164,170	287,893	20,696	11,786	
Hyosung Spandex (Quzhou) Co., Ltd.	259,888	223,579	36,309	72,185	2,145	92	
Hyosung Spandex (GuangDong) Co., Ltd.	257,837	151,333	106,504	221,975	7,413	864	
Hyosung Spandex (Jiaxing) Co., Ltd.	232,983	112,484	120,499	152,898	27,618	20,216	
Hyosung USA Inc.	215,440	123,226	92,214	567,574	8,031	(3,287)	
Hyosung Goodsprings, Inc.	207,372	139,620	67,752	250,705	129	256	
HICO America Sales & Tech.	196,925	164,530	32,395	216,263	5,178	1,480	
HanaLandchip Private Real Estate Investment Trust No.39	191,941	159,950	31,991	8,087	1,943	1,943	
Nantong Hyosung Transformer Co., Ltd.	183,156	191,944	(8,788)	122,335	209	784	
Gongdeokgyeongwoo development corporation	182,521	202,030	(19,509)	4,539	(18,246)	(18,206)	
Hyosung Holdings USA	181,765	99,976	81,789	115,648	(6,182)	(8,556)	
Hyosung Istanbul TEKSTIL LTD.STI.	169,067	84,601	84,466	145,260	21,888	(22,909)	
Hyosung Steel Cord (Qingdao) Co., Ltd	138,860	140,451	(1,591)	107,709	(16,513)	(16,955)	
Hyosung Chemicals (Jiaxing) Co., Ltd.	116,718	59,915	56,803	192,116	8,375	4,567	
Forza Motors Korea Corp.	110,229	88,751	21,478	293,161	5,833	5,726	
Hyosung International Trade (Jiaxing) Co., Ltd.	102,233	96,662	5,571	342,997	2,516	2,303	
Hyosung Japan Co., Ltd.	96,984	84,525	12,459	430,326	(1,683)	(2,938)	
Hyosung Luxembourg S.A	85,015	41,107	43,908	153,021	2,480	2,112	
Hyosung Brasil industria e comericio de fibras LTDA	74,988	31,305	43,683	115,429	16,131	10,059	
Hyosung Trans World Co., Ltd.	39,051	28,992	10,059	187,536	3,337	3,424	
Hyosung Singapore PTE Ltd.	7,208	6,926	282	214,029	27	16	

¹ Consolidated financial information.

(in millions of Korean won)	2016						
	Asset	Liability	Equity	Revenue	Profit(loss) for the year	Total comprehensive income(loss)	
Hyosung Capital Co., Ltd. ¹	2,477,524	2,090,460	387,064	189,467	8,157	16,910	
Hyosung Vietnam Co., Ltd.	966,444	583,687	382,757	1,131,331	148,795	169,927	
Nautilus Hyosung Inc. 1	559,086	282,471	276,615	693,424	25,998	24,317	
Hyosung DongNai Co,Ltd.	500,070	443,567	56,503	157,208	16,316	16,976	
GST Global GmbH. ¹	434,311	356,927	77,384	404,344	(16,663)	(14,889)	
Hyosung Chemical Fiber (Jiaxing) Co., Ltd.	294,892	142,508	152,384	283,711	(3,301)	(8,392)	
Hyosung Spandex (GuangDong) Co., Ltd.	276,203	157,115	119,088	212,400	(9,375)	(13,440)	
Doomi Construction Co. Ltd.	261,086	308,118	(47,032)	13,097	(17,440)	(17,424)	
Hyosung Spandex (Jiaxing) Co., Ltd.	247,747	123,647	124,100	140,572	21,705	17,385	
Hyosung USA Inc.	214,543	119,042	95,501	586,074	4,248	7,162	
Hyosung Goodsprings, Inc.	208,461	137,366	71,095	268,018	6,707	6,568	
Nantong Hyosung Transformer Co., Ltd.	194,063	203,634	(9,571)	122,519	(14,317)	(14,406)	
HanaLandchip Private Real Estate Investment Trust No.39	191,944	159,950	31,994	8,065	1,945	1,945	
Hyosung Istanbul TEKSTIL LTD.STI	185,267	92,844	92,423	160,142	30,847	34,899	
Hyosung Holdings USA	185,093	86,223	98,870	74,116	267	973	
Gongdeokgyeongwoo development corporation	174,770	176,074	(1,304)	-	(1,297)	(1,298)	
Hyosung Steel Cord (Qingdao) Co., Ltd.	174,736	159,372	15,364	128,977	(19,407)	(20,095)	
HICO America Sales & Tech.	152,134	121,216	30,918	240,125	6,815	7,838	
Hyosung Chemicals (Jiaxing) Co., Ltd.	116,426	44,833	71,593	152,320	3,298	1,347	
Forza Motors Korea Corp.	104,857	89,066	15,791	188,643	1,323	1,323	
Hyosung Japan Co., Ltd.	95,718	80,320	15,398	421,716	388	1,616	
Hyosung International Trade (Jiaxing) Co., Ltd.	95,551	92,283	3,268	313,963	(1,718)	(1,773)	
Hyosung Brasil industria e comericio de fibras LTDA	81,847	41,291	40,556	105,962	21,628	27,848	
Hyosung Luxembourg S.A	47,920	10,599	37,321	150,408	4,936	4,552	
Hyosung Trans World Co., Ltd.	35,644	26,309	9,335	188,086	3,558	3,630	
Hyosung Singapore PTE Ltd.	4,650	4,383	267	209,914	69	70	

¹ Consolidated financial information.

1.2 Changes in Scope for Consolidation

Subsidiaries newly included in the consolidation for the year ended December 31, 2017, are as follows:

Subsidiary	Description
Pohang Renewable Energy, Inc.	Nowly cognized
Hyosung Capital the 25st Securitization Specialty Co., Ltd.	Newly acquired Newly acquired
Hyosung South Africa (PTY) Ltd.	Establishment

Subsidiaries excluded from the consolidation for the year ended December 31, 2017, are as follows:

Subsidiary	Description
Hyosung Capital the 11th Securitization Specialty Co., Ltd.	Liquidated
Hyosung Capital the 12th Securitization Specialty Co., Ltd.	Liquidated
Hyosung Capital the 13th Securitization Specialty Co., Ltd.	Liquidated
Hyosung Capital the 14th Securitization Specialty Co., Ltd.	Liquidated
Hyosung Capital the 15th Securitization Specialty Co., Ltd.	Liquidated
Lloyd Dynamowerke GmbH.	Liquidated
Hyosung Engineering Co., Ltd.	Merger
Doomi Construction Co., Ltd.	Merger
SYHS the 1st co., Ltd.	Liquidated
Galaxia Photonics Co., Ltd.	Liquidated
Hyosung Capital the 17th Securitization Specialty Co., Ltd.	Liquidated
Hyosung Capital the 19th Securitization Specialty Co., Ltd.	Liquidated
Hyosung Wire Luxembourg S.A.	Merger
HSC the 2nd Co., Ltd.	Liquidated

¹ During 2017, the Group recognize a gain of disposal of ₩ 233 million due to the loss of control and disposal of the subsidiaries.

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 involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 3.

2.2 Changes in Accounting Policy and Disclosures

(a) New and amended standards adopted by the Group

The Group has applied the following standards and amendments for the first time for their annual reporting period commencing January 1, 2017. The adoption of these amendments did not have any material impact on the consolidated 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 consolidated financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash flows (Note 37).

- Amendments to Korean IERS 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.

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

Certain new accounting standards and interpretations that have been published that are not mandatory for annual reporting period commencing January 1, 2017 and have not been early adopted by the Group are set out below.

- Amendments to Korean IFRS 1028 Investments in Associates and Joint Ventures

When an investment in an associate or a joint venture is held by, or its 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. These amendments will be effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The Group does not expect the amendments

to have a significant impact on the consolidated financial statements because the Group is not a venture capital organization.

- 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 consolidated financial statements.

- Amendments to Korean IFRS 1102 Share-based Payment

Amendments to Korean IFRS 1102 clarify 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. Amendments also clarify 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 amendments will be effective for annual periods beginning on or after January 1, 2018, with early adoption permitted. The Group does not expect the amendments to have a significant impact on the consolidated financial statements.

- Enactment of Interpretation 2122 Foreign Currency Transaction and Advance Consideration

According to the enactment, 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. The enactment 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 entity shall assess whether the contract is, or contains, a lease. Also, at the date of initial application, the entity shall assess whether the contract is, or contains, a lease in accordance with the standard. However, the entity will not need to reassess all contracts with

applying the practical expedient because the entity 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 to apply the requirements to short-term lease (a lease term of 12 months or less at the commencement date) and low value assets (e.g. underlying assets below \$ 5,000). 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 will perform an impact assessment to identify financial effects of applying Korean IFRS 1116 during 2018. It is difficult to provide reasonable estimates of financial effects until the analyses are complete

Lessor accounting

The Group is in the process of analyzing the financial effects on the consolidated financial statements applying Korean IFRS 1116 as a lessor.

- Enactment of 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 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 consolidated 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.

As at December 31, 2017, the Group is in the process of analyzing the financial effects on the consolidated financial statements applying Korean IFRS 1109. The following areas are likely to be affected consolidated financial statements in general.

(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.

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

¹ A designation at fair value through profit or loss is allowed only if such designation mitigates an accounting mismatch (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 $\mbox{$\mathbb{W}$}$ 5,371,031 million, financial assets available-for-sales of $\mbox{$\mathbb{W}$}$ 477,598 million and financial assets at fair value through profit or loss of $\mbox{$\mathbb{W}$}$ 23,416 million.

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. As at December 31, 2017, the Group measured loans and receivables of \text{\text{\text{\text{W}}5,371,031million}} at amortized costs. However, in the case of debt instruments (loans and receivables), which are the main contracts of compound instruments, the contractual cash flows do not consist of payments of principal and interest on the principal amount outstanding. Therefore, it is probable that the instrument classified fair value through profit or loss and may result an extended fluctuation in profit or loss.

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

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. As at December 31, 2017, the Group holds debt instruments of \mathbb{W} 1,110 million classified as financial assets available-for-sale.

Based on results from the preliminary 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 non-finance segment of Group expects the majority of the financial assets to be measured at fair value through other comprehensive income. However, when applied to debt instruments classified as available-for-sale financial assets in the finance segment of Group, most of them are classified as investment securities and beneficiary certificates, and the contractual cash flows do not consist of payments of principal and interest on the principal amount outstanding. Therefore, it is probable that the instrument classified fair value through profit or loss and may result an extended fluctuation in profit or loss.

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. As at December 31, 2017, the Group holds equity instruments of \mathbb{W} 476,488 million classified as financial assets available-for-sale and recycled unrealized gain or loss of \mathbb{W} (8,305) million arose from the equity instruments to profit or loss.

Based on results from the preliminary 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 or collecting bonds purpose. Also, listed stocks held for investment are likely to be classified as fair value through profit or loss and may result an extended fluctuation in profit or loss.

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. As at December 2017, the Group holds equity instruments classified as financial assets at fair value through profit or loss that amount to \mathbb{W} 23,416 million.

(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 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. However, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability recognized with other comprehensive income would create or enlarge an accounting mismatch, the Group recognizes all gains or losses on that liability in 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.

(c) Impairment: Financial Assets and Contract Assets

The new impairment model requires the recognition of impairment provisions based on expected credit losses (ECL) rather than only incurred credit losses as is the case under Korean IFRS 1039. It applies to financial assets classified at amortized cost, debt instruments measured at fair value through other comprehensive income, lease receivables, contract assets, loan commitments and certain financial guarantee 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 ¹		Loss allowance	
1	No significant increase in credit risk after initial recognition ²	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 losse	
3	Credit-impaired	that result from all possible default events over the life of the financial instrument)	

¹A 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.

² If the financial instrument has low credit risk at the end of the reporting period, the Group may assume that the credit risk has not increased significantly since initial recognition.

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.

As at December 31, 2017, the Group owns debt investment carried at amortized cost of $\mbox{$\mathbb{W}$}$ 5,621,115 million (loans and receivables of $\mbox{$\mathbb{W}$}$ 5,621,115 million). And the Group recognized loss allowance of $\mbox{$\mathbb{W}$}$ (250,084) million for these assets.

- Enactment of 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 replaces the existing notion of risks and rewards. A new five-step process must be applied before revenue from contract with customer can be recognized:

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

As at December 31, 2017, the Group has prepared for improvement of internal management process or initiated to adjust accounting system in relation to implementation of Korean IFRS 1115.

Also, the Group is in the process of analyzing effects on consolidated financial statements of applying the standard. The Group has identified the impact of applying the new standard.

(a) Identify performance obligation

With implementation of Korean IFRS 1115, the Group have to identify the performance obligations in the contract with customer. The Group's recognition timing of revenue may change whether each performance obligation satisfies over time or satisfies at a point in time.

(b) A performance obligation is satisfied over time

In accordance with Korean IFRS 1115, the revenue is recognized over time by measuring progress only if the Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced or the Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

(c) Incremental costs of obtaining a contract

In accordance with Korean IFRS 1115, the Group shall recognize as an asset the incremental costs of obtaining a contract with a customer if the Group expects to recover those costs. Incremental costs of obtaining a contract are those costs that an entity incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained. Costs to obtain a contract that would have been incurred regardless of whether the contract was obtained shall be recognized as an expense when incurred, unless those costs are explicitly chargeable to the customer regardless of whether the contract is obtained.

(d) Variable consideration

With implementation of Korean IFRS 1115, the Group estimates an amount of variable consideration by using the expected value which the Group expects to better predict the amount of consideration. The Group recognize revenue with transaction price including variable consideration only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the refund period has lapsed. The refund liability is measured at the amount of consideration received (or receivable) for which the Group does not expect to be entitled.

(e) Significant financing component in the contract

With implementation of Korean IFRS 1115, In determining the transaction price, if the timing of payments agreed to by the parties to the contract provides the customer or the entity with a significant benefit of financing the transfer of goods or services to the customer, the Group recognize revenue at an amount that reflects the prices that a customer would have paid for the promised goods or services if the customer had paid cash for those goods or services.

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 Group has control. The Group 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 Group obtains control of a subsidiary and ceases when the Group 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 all 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 Segment Reporting

Information of each segment is reported in a manner consistent with the internal reporting provided to the chief operating decision-maker (Note 5). The chief operating decision-maker is responsible for allocating resources and assessing performance of the operating segments.

2.5 Foreign Currency Translation

(a) Functional and presentation currency

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

(b) Transactions and balances

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

2.6 Financial Assets

(a) Classification and measurement

The Group classifies its financial assets in 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 purchases and sales of financial assets are recognized on the trade date.

Regular purchases and sales of financial assets are recognized on the trade date. At initial recognition, financial assets are measured at fair value plus, in the case of financial assets not carried at fair value through profit or loss, transaction costs. Transaction costs of financial assets carried at fair value through profit or loss are expensed in the statements of profit or loss. After the initial recognition, available-for-sale financial assets and financial assets at fair value through profit or loss are subsequently carried at fair value. Loans and receivables, and held-to-maturity investments are subsequently carried at amortized cost using the effective interest rate method.

Changes in fair value of financial assets at fair value through profit or loss are recognized in profit or loss and changes in fair value of available-for-sale financial assets are recognized in other comprehensive income. When the available-for-sale financial assets are sold or impaired, the fair value adjustments recorded in equity are reclassified into profit or loss.

(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. Impairment 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 objective evidence that a financial asset is impaired includes significant financial difficulty of the issuer or obligor; a breach of contract, such as a default or delinquency in interest or principal payments; or the disappearance of an active market for that financial asset because of financial difficulties. In addition, a significant decline in the fair value of an available-for-sale equity instrument from its cost or a prolonged decline below its cost is also objective evidence of impairment.

(c) Derecognition

If the Group transfers a financial asset and the transfer does not result in derecognition because the Group has retained substantially all the risks and rewards of ownership of the transferred asset due to a recourse in the event the debtor defaults, the Group continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received. The related financial liability is classified as 'borrowings or long-term borrowings' in the statement of financial position (Note 6).

(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.

2.7 Derivative Instruments

Derivatives are initially recognized at fair value on the date when a derivative contract is entered into and are subsequently re-measured at their fair value. Changes in the fair value of the derivatives that are not qualified for hedge accounting are recognized in the statement of profit or loss within 'other income (expenses)' according to the nature of transactions.

2.8 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the moving-weighted average method (the gross-weighted average method or the first-in, first-out (FIFO) method in some subsidiaries) except for in-transit inventories which are determined using the specific identification method.

2.9 Property, Plant and Equipment

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

Land is not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate the difference between their cost and their residual values over their estimated useful lives, as follows:

Estimated Useful Lives			Estimated Useful Lives		
Buildings	10 - 60	years	Vehicles	3 - 10	years
Structures	5 - 40	years	Tools and equipment	3 - 15	years
Machinery	3 - 30	years	Others	2 - 10	years

The depreciation method, residual values and useful lives of property, plant and equipment are reviewed at the end of each reporting period and, if appropriate, accounted for as changes in accounting estimates.

2.10 Borrowing Costs

Borrowing costs incurred in the acquisition or construction of a qualifying asset are capitalized in the period when it is prepared for its intended use, and investment income earned on the temporary investment of borrowings made specifically for the purpose obtaining a qualifying asset is deducted from the borrowing costs eligible for capitalization during the period. Other borrowing costs are recognized as expenses for the period in which they are incurred.

2.11 Government Grants

Government grants are recognized at their fair values when there is reasonable assurance that the grant will be received and the Group will comply with the conditions attaching to it. Government grants related to assets are presented by deducting the grants in arriving at the carrying amount of the assets, and grants related to income are deferred and presented by deducting the related expenses for the purpose of the government grants.

2.12 Intangible Assets

Goodwill is measured as explained in Note 2.3.(1) and carried at its cost less accumulated impairment losses.

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

Internally generated software development costs are the aggregate costs recognized after meeting the asset recognition criteria, including technical feasibility, and determined to have future economic benefits. Membership rights are regarded as intangible assets with indefinite useful life and not amortized because there is no foreseeable limit to the period over which the assets are expected to be utilized. Intangible assets with definite useful life that are amortized using the straight-line method over their estimated useful lives, are as follows:

Estimated Useful Lives

Industrial rights
Other intangible assets

5 - 20 years

3 - 50 years

2.13 Investment Property

Property held to earn rentals or for capital appreciation or both is classified as investment property. Investment property is measured initially at its cost. After recognition as an asset, investment property is carried at cost less accumulated depreciation and impairment losses. Investment property, except for land, is depreciated using the straight-line method over 40 years.

2.14 Lease

A lease is an agreement, whereby the lessor conveys to the lessee, in return for a payment or series of payments, the right to use an asset for an agreed period of time. Leases where all the risks and rewards of ownership are not transferred to the Group are classified as operating leases. Lease payments under operating leases are recognized as expenses on a straight-line basis over the lease term.

Leases where the Group has substantially all the risks and rewards of ownership are classified as finance leases and recognized as lease assets and liabilities at the lower of the fair value of the leased property and the present value of the minimum lease payments on the opening date of the lease period.

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership at the inception of the lease. A lease other than a finance lease is classified as an operating lease. Lease income from operating leases is recognized in income on a straight-line basis over the lease term. Initial direct costs incurred by the lessor in negotiating and arranging an operating lease is added to the carrying amount of the leased asset and recognized as an expense over the lease term on the same basis as the lease income.

2.15 Impairment of Non-financial Assets

Goodwill or intangible assets with indefinite useful lives are not subject to amortization and are tested annually for impairment. Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. 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 costs to sell and value in use. Non-financial assets, other than goodwill, that suffered impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

2.16 Financial Liabilities

(a) Classification and measurement

Financial liabilities at fair value through profit or loss are financial instruments held for trading. Financial liabilities are classified in this category if incurred principally for the purpose of repurchasing them in the near term. Derivatives that are not designated as hedges or bifurcated from financial instruments containing embedded derivatives are also categorized as 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 presented as '(long-term) trade payables', '(long-term) borrowings', and 'other (non-current) financial liabilities' in the statement of financial position.

Preferred shares that provide for a mandatory redemption at a particular date are classified as liabilities. Interest expenses on these preferred shares calculated using the effective interest method are recognized in the statement of profit or loss as 'finance expenses', together with interest expenses recognized on other financial liabilities.

(b) Derecognition

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

2.17 Financial Guarantee Contracts

Financial guarantees contracts provided by the Group are initially measured at fair value on the date the guarantee was given. Subsequent to initial recognition, the Group's liabilities under such guarantees are measured at the higher of the amounts below and recognized as 'trade and other payables':

- (a) The amount determined in accordance with Korean IFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets*; or
- (b) The initial amount, less accumulated amortization recognized in accordance with Korean IFRS1018 *Revenue*.

2.18 Provisions

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation and the increase in the provision due to passage of time is recognized as interest expense.

2.19 Current and Deferred Tax

The tax expense for the period consists of current and deferred tax. Tax is recognized on the profit for the year in the statement of profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity.

The tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period.

Management periodically evaluates tax policies that are applied in tax returns in which applicable tax regulation is subject to interpretation. The Group recognizes current income tax on the basis of the amount expected to be paid to the tax authorities.

Deferred tax is recognized for temporary differences arising between the tax bases of assets and liabilities and their carrying amounts as expected tax consequences at the recovery or settlement of the carrying amounts of the assets and liabilities. However, deferred tax assets and liabilities are not recognized if they arise 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 to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences can be utilized.

Deferred tax liability is recognized for taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint ventures, except to the extent that the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary

difference will not reverse in the foreseeable future. In addition, deferred tax asset is recognized for 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 against current tax liabilities and when the deferred income taxes assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

2.20 Employee Benefits

(a) Post-employment benefits

The Group has both defined contribution and defined benefit plans.

A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The contributions are recognized as employee benefit expense when an employee has rendered service.

A defined benefit plan is a pension plan that is not a defined contribution plan. Typically defined benefit plans define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation. 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 and that have terms to maturity approximating to the terms of the related pension obligation. The remeasurements of the net defined benefit liability are recognized in other comprehensive income.

If any plan amendments, curtailments, or settlements occur, past service costs or any gains or losses on settlement are recognized as profit or loss for the year.

Hyosung Corporation and Subsidiaries Notes to Consolidated Financial Statements

December 31, 2017 and 2016

2.21 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 activities of the Group. It is stated as net of value added taxes, returns, rebates and discounts, after elimination of intra-company transactions.

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

(a) Sale of goods

Revenue from the sale of goods is recognized when products are delivered to the purchaser.

(b) Rendering of services

When the outcome of the transaction involving the rendering of services can be estimated reliably, revenue is recognized using the percentage of completion. When the outcome of the transaction involving the rendering of services cannot be estimated reliably, revenue is recognized only to the extent of the expenses recognized that are recoverable.

(c) Royalty income

Royalty income is recognized on an accrual basis in accordance with the substance of the relevant agreements.

(d) Interest income

Interest income is recognized using the effective interest method according to the time passed. When a loan and receivable is impaired, the Group reduces the carrying amount to its recoverable amount and continues unwinding the discount as interest income. Interest income on impaired loans and receivables is recognized using the original effective interest rate.

(e) Dividend income

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

2.22 Construction Contracts

A construction contract is defined by Korean IFRS 1011 *Construction Contracts*, as a contract specifically negotiated for the construction of an asset.

When the outcome of a construction contract can be estimated reliably and it is probable that the

contract will be profitable, contract revenue is recognized over the period of the contract by reference to the stage of completion. Contract costs are recognized as expenses by reference to the stage of completion of the contract activity at the end of the reporting period. When it is probable that total contract costs will exceed total contract revenue, the expected loss on the construction contract is immediately recognized as an expense.

When the outcome of a construction contract cannot be estimated reliably, contract revenue is recognized only to the extent of contract costs incurred that are likely to be recoverable. The contract revenue is included if it is probable that the customer will approve the amount of revenue arising from the variation and the amount of revenue can be reliably measured. Contract costs are recognized as an expense in the period in which they are incurred.

The Group uses the 'percentage-of-completion method' to determine the appropriate amount to recognize in a given period. The stage of completion is measured by reference to the contract costs incurred up to the end of the reporting period as a percentage of total estimated costs for each contract. Costs incurred in the year in connection with future activity on a contract are excluded from contract costs in determining the stage of completion. These amounts are recognized as inventory, advance payments or other assets.

On the statement of financial position, the Group reports the net contract position for each contract as either an asset or a liability. A contract represents an asset where costs incurred plus recognized profits (less recognized losses) exceed progress billings (due from customers for contract work); a contract represents a liability where the opposite is the case (due to customers for contract work).

Meanwhile, profits from off-plan sales are recognized by using the percentage-of-completion method according to Q&A of Korea Accounting Institute, 2011-I-KQA. This accounting standard is applicable for Companies that have adopted Korean IFRS of Laws on External Audit of a Corporation (Article 13, Section 1 and Paragraph 1).

2.23 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.

2.24 Approval of Issuance of the Financial Statements

The issuance of the December 31, 2017 consolidated financial statements of the Group was approved by the Board of Directors on February 22, 2018, which is subject to change with the approval of the shareholders at their annual shareholders' meeting.

3. Critical Accounting Estimates and Assumptions

The Group makes estimates and assumptions concerning the future. Estimations 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 impairment of goodwill

The Group tests annually whether goodwill has suffered any impairment. The recoverable amounts of cash-generating units have been determined based on value-in-use calculations (Note 17).

(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 23).

If certain portion of the taxable income is not used for investments or increase in wages or dividends in accordance with the Tax System For Recirculation of Corporate Income, the Group is liable to pay additional income tax calculated based on the tax laws. The new tax system is effective for three years from 2015. Accordingly, the measurement of current and deferred income tax is affected by the tax effects from the new tax system. As the Group's income tax is dependent on the investments, increase in wages and dividends, there is an uncertainty 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 4).

(d) Provisions

As described in Note 24, the Group recognizes provisions for warranties, repairs and estimated returns as at the reporting date. The amounts are estimated based on historical data.

(e) Net defined benefit liabilities

The present value of net defined benefit liabilities depends on a number of factors that are determined on an actuarial basis using a number of assumptions including the discount rate (Note 22).

(f) Uncertainty of the estimated total contract revenue

Total contract revenue is measured based on contractual amount initially agreed. The contract revenue can be increased by additional contract work, claims and incentive payments in the course of construction, or decreased by the penalty when the completion of contract is delayed due to the Group's fault. Therefore, this measurement of contract revenue is affected by the uncertainty of the occurrence of future events. The change in contract revenue is recognized when it is probable that the customer will approve the increase in revenue due to the changes in contract work, or when it is probable that the Group will be able to satisfy the performance requirements, and the amount can be estimated reliably.

(g) Estimated total contract costs

Construction revenue is recognized according to the percentage of completion, which is measured on the basis of the gross amount incurred to date. Total contract costs are estimated based on future estimates of material costs, labor costs, construction period and others.

4. Financial Risk Management

4.1 Financial Risk Factors

The Group's activities expose it to a variety of financial risks: market risk (including currency risk, price risk and interest rate risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Group's financial performance. The Group uses derivative financial instruments to hedge certain risk exposures.

Risk management is carried out under policies approved by the Board of Directors. The Board reviews and approves written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity.

(a) Market risk

i) Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar, Europe Euro, Chinese yuan and other currencies; such as, the Japanese yen, Turkish lira and Singapore dollar. Foreign exchange risk arises from future commercial transactions, recognized assets and liabilities and net investments in foreign operations.

Management has set up a policy to require group companies to manage their foreign exchange risk against their functional currency.

The Group has certain investments in foreign operations, whose net assets are exposed to foreign currency translation risk.

The impact of weakened/strengthened Korean won by 10% against foreign currencies with all other variables held constant on the pre-tax profit for the year as at December 31, 2017 and 2016, is as follows:

(in millions of Korean won)		Impact on pre-tax profit					
			2017	2016			
HCD	Strengthened	₩	(109,678) ₩	(101,364)			
USD	Weakened		109,678	101,364			
EUR	Strengthened		(23,178)	(26,020)			
LUK	Weakened		23,178	26,020			
JPY	Strengthened		(2,794)	(7,770)			
JF I	Weakened		2,794	7,770			
Others	Strengthened		2,637	1,238			
	Weakened		(2,637)	(1,238)			

ii) Price risk

The Group is exposed to equity securities price risk because of investments held by the Group and classified on the consolidated statement of financial position either as available-for-sale or at fair value through profit or loss.

The Group's investments in equity of other entities that are publicly traded are included in one of the following two equity indexes: KOSPI equity index and KOSDAQ equity index.

As at December 31, 2017 and 2016, the impact of increases/decreases of the stock price by 30% with all other variables held constant on the Group's equity is as follows:

(in millions of Korean won)		Impact on equity					
			2016				
KOSPI	Increase	₩	40,654 ₩	52,703			
	Decrease		(40,654)	(52,703)			
KOSDAQ	Increase		2,038	1,665			
	Decrease		(2,038)	(1,665)			

iii) Interest rate risk

Interest rate risk is defined as the risk that the interest income or expenses arising from deposits and borrowings will fluctuate because of changes in future market interest rate. The interest rate risk mainly arises through floating rate deposits and borrowings. The objective of interest rate risk management lies in maximizing corporate value by minimizing uncertainty caused by fluctuations in interest rates and minimizing net interest expense.

The Group is exposed to interest rate risk due to its borrowings in fixed and floating interest rates. Borrowings issued at variable rates expose the Group to cash flow interest rate risk which is partially offset by cash held at variable rates. The Group's policy is to review on interest rate fluctuation periodically so that they can manage whether to repay or renew the borrowings.

The impact of 100 basis points higher/lower of interest rate with all other variables held constant on the Group's pre-tax profit for the years as at December 31, 2017 and 2016, is as follows:

(in millions of Korean won)	Impact on post-tax profit					
		2017	2016			
Increase	₩	(28,717) ₩	(30,147)			
Decrease		28,717	30,147			

(b) Credit Risk

Credit risk is managed on a group basis. Credit risk arises from cash and cash equivalents, financial assets and outstanding receivables, etc. If customers are independently rated, these ratings are used. If there is no independent rating, the credit quality of the customer is evaluated taking into account its financial position, past experience and other factors. The utilization of credit limits is regularly monitored. See Note 10 for further disclosure on credit risk.

The maximum exposure to credit risk as at December 31, 2017 and 2016, is as follows:

(in millions of Korean won)		2017		2016		
Cash and cash equivalents ¹	₩	494,621	₩	427,398		
Trade and other receivables		2,013,676		1,736,072		
Due from customers for contract work		140,355		116,982		
Other financial assets		82,976		50,326		
Long-term trade and other receivables		313,040		305,046		
Other financial business assets		2,240,413		2,091,145		
Other non-current financial assets		580,452		552,834		

¹ The difference between 'cash and cash equivalents' presented in the consolidated statements of financial position is cash on hand held by the Group.

Except for the above, the maximum exposure to credit risk related to guarantee provided by the Group is equal to the maximum guarantee amount (Note 38).

(c) Liquidity Risk

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 committed borrowing facilities at all times so that the Group does not breach borrowing limits or covenants (where applicable) on any of its borrowing facilities. Such forecasting takes into consideration the Group's short-term and long-term debt financing plans, covenant compliance and compliance with internal financial ratio targets.

Details of the Group's liquidity risk analysis as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		Less than 1 year	Between 1 and 5 years		Ove	r 5 years	Total	
2017								
Trade and other payables	₩	2,071,812	₩	407,220	₩	14,062	₩	2,493,094
Borrowings(including interest expense)		5,064,704		2,475,929		19,972		7,559,696
Derivative liabilities ¹		4,681		<u>-</u>				4,681
	₩	7,141,197	₩	2,882,240	₩	34,034	₩	10,057,471
2016								
Trade and other payables	₩	1,788,737	₩	373,963	₩	25,286	₩	2,187,986
Borrowings(including interest expense)		4,535,176		2,819,783		18,845		7,373,804
Derivative liabilities ¹		36,730		-		-		36,730
	₩	6,360,643	₩	3,193,746	₩	44,131	₩	9,598,520

¹ Trading portfolio derivative instruments have been included at their fair value of ₩ 4,681 million (2016: ₩ 36,730 million) within the less than 1 year time bucket. This is because the contractual maturities are not essential for an understanding of the timing of the cash flows. These contracts are managed on a net fair value basis rather than by maturity date.

Except for the above, the Group has provided into payment guarantee agreements and capital supplement agreements. Therefore, an additional payment obligation may arise within one year if the guarantor fails to fulfill the obligation (Note 38).

Certain amount of borrowings and PF guarantees could be adjusted for interest rates, maturities, etc. immediately when the Group's credit rating is decreased below a certain level or if it does not meet certain financial ratios. The Group determined that the possibility of the events is not high.

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.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

The Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings (including 'short and long-term borrowings' as shown in the consolidated statement of financial position) less cash and cash equivalents. Total capital is calculated as 'equity' as shown in the consolidated statement of financial position plus net debt.

The gearing ratio as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		2017	2016		
Total borrowings	₩	7,262,086	₩	7,042,595	
Less: cash and cash equivalents		(501,133)		(431,707)	
Net debt (A)		6,760,953		6,610,888	
Total equity (B)		3,863,282		3,841,216	
Total capital (A+B=C)	₩	10,624,235	₩	10,452,104	
Gearing ratio (A/C)		63.64%		63.25%	

4.3 Fair Value

4.3.1 Fair Value of Financial Instruments by Category

The carrying amount of financial instruments approximates to their fair value except for available-for-sale financial assets that are measured at cost as they do not have a quoted market price in an active market and their fair value cannot be measured reliably.

4.3.2 Financial Instruments Measured at Cost

Details of financial instruments measured at cost as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)

•			2017		2016
Available-for-sale financial assets	Oksan Ochang Highway Corporation	₩	14,970	₩	14,970
(unlisted)	Kumho & Company Incorporation		10,000		10,000
	TransLink Capital Partners 1, L.P.		1,364		1,364
	Doosan Capital Inc.		-		537
	The Korea Economic Daily		1,354		1,354
	Others		6,764		2,559
Available-for-sale financial assets (investment in capital)	Hyosung Creative Economy Fund		10,000		10,000
	Construction Guarantee Cooperative		4,552		3,498
, ,	Machinery Financial Cooperative		4,614		4,410
	Korea Software Financial Cooperative		700		700
	Korea Specialty Contractor Financial Cooperative		277		277
	Korea Electrical Manufacturers' Cooperative		156		156
	Others		9,218		1,715
Government Bonds			1,110		689
		₩	65,079	₩	52,229

The above equity instruments are measured at cost because they do not have quoted prices in an active market and their fair value cannot be measured reliably. The Group has no intention to dispose of the aforementioned equities in the near future. These equities will be measured at fair value when the Group can develop a reliable estimate of the fair value.

4.3.3 Fair Value Hierarchy

Assets measured at fair value or for 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 assets and financial liabilities that are measured at fair value or its fair value is disclosed as at December 31, 2017 and 2016, are as follows:

	2017									
(in millions of Korean won)	Level 1		Level 2			Level 3	Total			
Assets										
Available-for-sale financial assets	₩	187,417	₩	-	₩	225,102	₩	412,519		
Derivative assets		-		19,684		3,731		23,415		
Other financial assets		-		30,080		1,000		31,080		
	₩	187,417	₩	49,764	₩	229,833	₩	467,014		
Liabilities						·		·		
Derivative liabilities	₩	-	₩	4,681	₩	-	₩	4,681		
	₩	-	₩	4,681	₩	-	₩	4,681		
				20)16					
(in millions of Korean won)	L	_evel 1		Level 2	Level 3			Total		
Assets Available-for-sale financial										
assets	₩	238,772	₩	-	₩	179,602	₩	418,374		
Derivative assets		80		5,176		875		6,131		
Other financial assets		-		155		1,170		1,325		
	₩	238,852	₩	5,331	₩	181,647	₩	425,830		
Liabilities										
Derivative liabilities	₩	-	₩	36,730	₩	-	₩	36,730		
	₩	-	₩	36,730	₩	_	₩	36,730		

4.3.4 Details of changes in Level 3 of the fair value hierarchy for the recurring fair value measurements are as follows:

(in millions of Korean won)	A	Available-for-sale financial assets				Derivative assets			
	2017 2016		2017		2016				
Beginning balance	₩	179,602	₩	143,587	₩	875	₩	875	
Purchases (disposal)		60,992		55,865		(875)		-	
Amount recognized in other comprehensive income		(10,777)		1,759		-		-	
Others		(4,715)		(21,609)		3,731		-	
Ending balance	₩	225,102	₩	179,602	₩	3,731	₩	875	

There were no transfers between fair value hierarchy levels of recurring fair value measurements for the years ended December 31, 2017 and 2016.

4.3.5 Valuation Technique and the Inputs

Valuation techniques and inputs used in levels 2 and 3 fair value measurements are as follows:

(in millions of Korean won)	2017									
,	Fair value	Level	Valuation techniques	Inputs	Level 3 range of inputs (weighted average)					
Other financial assets	₩ 31,080	2, 3	DCF method and others	Discount rate, Exchange rate and others	NA					
Available-for-sale financial assets	225,102	3	DCF method, Comparable company analysis Risk-adjusted discount rate model	Discount rate Growth rate	5.90%~17.88% 1%					
Derivatives				Discount and						
Derivative asset	19,684	2	Market approach	Discount rate, Exchange rate and others	NA					
	3,731	3	Binominal model and others	Underlying asset Volatility and others	NA					
Derivative liabilities	4,681	2	Market approach	Exchange rate and others	NA					

4.3.6 Valuation Processes for Fair Value Measurements Categorized Within Level 3

The Group measures recurring, non-recurring fair value measurements and disclosed fair values categorized within Level 3 of the fair value hierarchy at the end of every reporting period. The Group discusses valuation processes and results with the chief financial officer (CFO).

4.3.7 Sensitivity analysis for Recurring Fair Value Measurements Categorized as Level 3

Sensitivity analysis of financial instruments is performed to measure favorable and unfavorable changes in the fair value of financial instruments which are affected by the unobservable parameters, using a statistical technique. When the fair value is affected by more than two input parameters, the most favorable or most unfavorable amounts are presented.

The results of the sensitivity analysis for the effect on profit or loss from changes in inputs for each financial instrument that categorized as level 3 and subject to sensitivity analysis, are as follows:

(in millions of Korean won)	2017								
	Profit or loss					Other comprehensive income of loss			
	Favorable changes		Unfavorable changes		Favorable changes		Unfavorable changes		
Other financial assets(include derivative financial instruments)	₩	4	₩	(2)	₩	_	₩	-	
Available-for-sale financial assets		_		_		18,862		(10,643)	
	₩	4	₩	(2)	₩	18,862	₩	(10,643)	

5. Operating Segment Information

(a) Operating segment information

The management which makes strategic decisions has determined the operating segments. The management makes strategic decisions on allocation of resources to segments and assesses the performance of operating segments based on the operating profit. Product separation units in terms of type of goods were separated as fabric, industrial materials, chemicals, heavy industrial, construction, trading and others.

The Group's operating segment information for the years ended and as at December 31, 2017 and 2016, is as follows:

					2017				
(in millions of Korean won)	Fabric	Industrial materials	Chemical	Heavy industrial	Construction	Trading	Others	Consolidation adjustment	Total
Total revenue	₩ 2,148,953	₩ 2,411,355	₩ 1,660,579	₩ 2,252,072	₩ 1,158,359	₩ 2,533,444	₩ 823,277	₩ -	₩ 12,988,039
Inter-segment revenue	(11,535)	(1,092)	(159,561)	(3,402)	(5,389)	(253,046)	(7,604)		(441,629)
	2,137,418	2,410,263	1,501,018	2,248,670	1,152,970	2,280,398	815,673	-	12,546,410
Operating income(loss) Depreciation and	249,797	167,602	130,645	66,049	106,760	15,468	48,082	(13,596)	770,807
amortization Assets	191,500	156,772	175,439	45,141	6,482	7,153	68,578	13,483	664,548
Current assets	1,298,995	1,264,168	393,964	1,303,024	206,957	249,382	551,997	(637,506)	4,630,981
Non-current assets Investments in	1,031,868	1,882,661	1,368,126	966,290	327,272	181,525	5,964,875	(1,816,620)	9,903,997
associates Acquisition of non-current	-	14,328	14,230	14,361	-	-	74,319	-	117,238
assets	316,990	176,019	132,212	24,211	18,025	3,887	275,687	1,010	948,041
Liabilities									
Current liabilities Non-current	884,460	1,003,979	384,296	983,081	331,564	528,603	4,061,873	(576,677)	7,601,179
liabilities	156,931	164,629	97,249	173,305	243,448	23,538	2,223,183	(11,765)	3,070,518

						2016				
(in millions of Korean won)	Fabric	Industrial materials	Chemical	Heavy industrial	Con	struction	Trading	Others	Consolidation adjustment	Total
Total revenue Inter-segment	₩ 1,980,757	₩ 2,383,859	₩ 1,320,572	₩ 2,580,477	₩	900,490	₩ 2,290,517	₩ 886,733	₩ -	₩ 12,343,405
revenue	(1,653)	-	(126,320)	(23,033)		(8,245)	(251,772)	(3,269)	-	(414,292)
	1,979,104	2,383,859	1,194,252	2,557,444		892,245	2,038,745	883,464	-	11,929,113
Operating										
income(loss) Depreciation and	313,002	218,484	148,276	185,365		81,729	8,945	72,780	(12,234)	1,016,347
amortization	147,506	199,220	144,908	47,157		5,557	5,604	69,928	3,483	623,363
Assets										
Current assets	990,909	1,169,622	303,805	1,180,435		310,297	295,809	512,179	(714,609)	4,048,447
Non-current assets Investments in	1,151,498	2,009,720	1,446,222	1,132,734		732,416	94,114	5,398,861	(1,893,210)	10,072,355
associates Acquisition of	-	15,311	14,969	12,333		-	-	72,760	-	115,373
non-current assets	391,366	224,621	279,058	67,146		89,596	7,542	74,374	(132,243)	1,001,460
Liabilities										
Current liabilities Non-current	912,549	891,676	296,493	986,765		324,195	295,936	3,710,688	(535,225)	6,883,077
liabilities	111,529	259,636	51,717	154,350		480,548	11,537	2,474,058	(146,867)	3,396,508

(b) Geographical segment information

Geographical segment information of revenue and other for the years ended December 31, 2017 and 2016, is as follows:

(in millions of		2017										
Korean won)	Domestic	North and Central America	Asia	Europe	Others	Total						
Revenue	₩ 8,545,330	₩ 888,928	₩ 2,108,702	₩ 885,861	₩ 117,589	₩ 12,546,410						
Non-current assets ¹	₩ 4,393,550	₩ 66,996	₩ 1,714,982	₩ 321,669	₩ 34,326	₩ 6,531,523						
(in millions of	2016											
Korean won)	Domestic	North and Central America	Asia	Europe	Others	Total						
Revenue Non-current assets 1	₩ 8,898,526 ₩ 4,760,083	₩ 664,154 ₩ 53,520	₩ 1,440,320 ₩ 1,699,648	₩ 821,290 ₩ 333,435	₩ 104,823 ₩ 47,229	₩ 11,929,113 ₩ 6,893,915						

¹ Sum of property, plant and equipment, intangible assets, and investment properties.

There is no external customer, who contribute more than 10% of the Group's revenue for the years ended December 31, 2017and 2016.

6. Transfers of Financial Assets

Trade receivables have been discounted through factoring agreements with banks for the years ended December 31, 2017 and 2016. In case of the customer's default, the Group has an obligation to pay the related amounts to the bank. As a result, this transaction, which is treated as a transaction with recourse, has been accounted for as a collateralized borrowing (Notes 10, 20 and 38).

Details of transferred financial assets that are not derecognized in their entirety as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)	2	2017	2016		
Loan and receivables					
Carrying amount of assets	₩	672,846	₩	658,902	
Carrying amount of associated liabilities		(690,626)		(658,902)	
Net position	₩	(17,780)	₩	-	

7. Financial Instruments by Category

Categorizations of financial instruments as at December 31, 2017 are as follows:

2017										
_		sale	financial	fair valu	ie through		Total			
₩	501,133	₩	-	₩	-	₩	501,133			
	2,013,676		-		-		2,013,676			
	140,355		-		-		140,355			
	64,671		-		18,305		82,976			
	313,040		-		-		313,040			
	2,240,413		-		-		2,240,413			
	97,743		477,598		5,111		580,452			
₩	5,371,031	₩	477,598	₩	23,416	₩	5,872,045			
	w	2,013,676 140,355 64,671 313,040 2,240,413 97,743	Loans and receivables	Loans and receivables W 501,133	Loans and receivables Available-forsale financial assets Financia fair value profit ₩ 501,133 ₩ - ₩ 2,013,676 - - 140,355 -	Loans and receivables Available-forsale financial assets Financial assets at fair value through profit or loss ₩ 501,133 ₩ - ₩ - 2,013,676 - - - 140,355 - - - 64,671 - 18,305 313,040 - - 2,240,413 - - 97,743 477,598 5,111	Loans and receivables Available-forsale financial assets Financial assets at fair value through profit or loss ₩ 501,133 ₩ - ₩ - ₩ 2,013,676 - - - - - 140,355 - <			

(in millions of Korean won)	2017										
	Financial liabilities at amortized cost		Other financial liabilities ¹		Financial liabilities at fair value through profit or loss		Total				
Liabilities											
Trade and other payables	₩	2,071,568	₩	2,224	₩	-	₩	2,073,792			
Borrowings		4,226,371		690,626		-		4,916,997			
Other financial liabilities		-		-		4,088		4,088			
Long-term trade and other payables		400,492		-		-		400,492			
Long-term borrowings		2,345,089		-		-		2,345,089			
Other non-current financial liabilities		-		-		593		593			
	₩	9,043,520	₩	692,850	₩	4,681	₩	9,741,051			

¹ Other financial liabilities include financial liabilities that are not subject to the categorizations such as financial liabilities related to transfer transactions not qualified for derecognition, financial payment guarantees and others.

Categorizations of financial instruments as at December 31, 2016 are as follows:

(in millions of Korean won)		2016									
,	Loans and receivables		Available-for- sale financial assets		Financial assets at fair value through profit or loss			Total			
Assets											
Cash and cash equivalents	₩	431,707	₩	-	₩	-	₩	431,707			
Trade and other receivables		1,736,072		-		-		1,736,072			
Due from customers for contract work		116,982		-		-		116,982			
Other financial assets		45,586		-		4,740		50,326			
Long-term trade and other receivables		305,046		-		-		305,046			
Other non-current financial business assets		2,049,066		-		-		2,049,066			
Other non-current financial assets		80,840		470,603		1,391		552,834			
	₩	4,765,299	₩	470,603	₩	6,131	₩	5,242,033			

(in millions of Korean won)	2016										
	Financial liabilities at amortized cost		Other financial liabilities ¹		Financial liabilities at fair value through profit or loss		Total				
Liabilities											
Trade and other payables	₩	1,786,516	₩	-	₩	-	₩	1,786,516			
Borrowings		3,721,523		658,902		-		4,380,425			
Other financial liabilities		-		-		29,504		29,504			
Long-term trade and other payables		376,166		-		-		376,166			
Long-term borrowings		2,662,171		-		-		2,662,171			
Other non-current financial liabilities		-		-		7,226		7,226			
	₩	8,546,376	₩	658,902	₩	36,730	₩	9,242,008			

¹ Other financial liabilities include financial liabilities that are not subject to the categorizations such as financial liabilities related to transfer transactions not qualified for derecognition, financial payment guarantees and others.

Net gains or net losses on each category of financial instruments for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		2017	2016	
Loans and receivables				
Gain (loss) on disposal (profit or loss)	₩	(1,758)	₩	(2,025)
Interest income		4,535		7,306
Gain on foreign currency translation		(68,647)		16,386
Bad debts expense		(120,912)		(53,441)
Reversal of allowance for bad debt		941		129
Available-for-sale financial assets				
Gain on valuation (other comprehensive income(loss))		(38,534)		16,696
Gain on disposal (profit or loss) ¹		795		13,814
Impairment loss (profit or loss)		(17,052)		(1,492)
Interest income		22		5
Dividend income		422		188
Financial liabilities at amortized cost				
Interest expenses		(167,022)		(161,264)
Gain (loss) on foreign currency translation		132,914		(102,527)
Other financial liabilities ²				
Interest expenses		(8,359)		(9,022)
Gain (loss) on foreign currency translation		-		8,156
Derivative assets and liabilities				
Loss on valuation (profit or loss)		24,357		(19,324)
Gain (loss) on transactions (profit or loss)		32,026		19,526

¹ The amount reclassified from other comprehensive income to profit or loss.

² Other financial liabilities include financial liabilities that are not subject to the categorizations such as financial liabilities related to transfer transactions not qualified for derecognition, financial payment guarantees and others.

8. Cash and Cash Equivalents

Cash and cash equivalents in the consolidated statements of financial position as at December 31, 2017 and 2016, are identical to the cash and cash equivalents in the consolidated statements of cash flows:

(in millions of Korean won)		2017	2016		
Cash on hand Bank deposits	₩	6,512 494,621	₩	4,309 427,398	
·	₩	501,133	₩	431,707	

9. Restricted Financial Instruments

Restricted financial instruments as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)	Description		2017		2016
Cash and cash equivalents	Pledge for borrowings Others	₩	3,766 9,172	₩	1,278 12,883
Other non-current financial assets	Restricted for current deposits and lease deposits received Pledge for borrowings		8,051 4,401		1,655 2,369
		₩	25,390	₩	18,185

10. Trade and Other Receivables

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

	2017							
(in millions of Korean won)	Receivable amounts		-	rovisions for impairment	Net book value			
Trade receivables	₩	1,839,840	₩	(72,485)	₩	1,767,355		
Other receivables		249,641		(3,320)		246,321		
Long-term trade receivables		25,480		(10,727)		14,753		
Long-term other receivables		417,035		(118,748)		298,287		
-	₩	2,531,996	₩	(205,280)	₩	2,326,716		

	2016							
(in millions of Korean won)		eceivable amounts		ovisions for npairment	Net book value			
Trade receivables	₩	1,593,080	₩	(49,142)	₩	1,543,938		
Other receivables		195,436		(3,303)		192,133		
Long-term trade receivables		24,484		(10,725)		13,759		
Long-term other receivables		352,804		(61,517)		291,287		
	₩	2,165,804	₩	(124,687)	₩	2,041,117		

The Group sells trade receivables at a discount to the financial institutions for the years ended December 31, 2017 and 2016. The amount of transferred financial assets that are not derecognized in their entirety as at December 31, 2017 is \forall 672,846million (2016: \forall 658,902 million). The Group may retain an obligation to compensate a financial institution for debtors' failure to make payment when they become due, an obligation known as a 'recourse obligation'. Recourse obligations related to the sales of receivables with recourse are accounted for as collateralized borrowings (Notes 6, 20 and 38)

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

(in millions of Korean won)		2017		2016
Other receivables				
Non-trade receivables	₩	189,690	₩	165,003
Short-term loans		11,624		4,209
Accrued income		10,368		9,552
Deposits provided		34,639		13,369
		246,321		192,133
Long-term other receivables Long-term non-trade				
receivables		2,294		2
Long-term loans(Note 38)		112,250		63,254
Deposits provided		183,743		228,031
		298,287		291,287
	₩	544,608	₩	483,420

The fair value of long-term trade and other receivables is calculated by discounting nominal value of expected future cash inflow at discount rate which reflects credit risk.

2017 2016 Discount rate 1.60%~7.10% 1.80% ~ 5.00%

The aging analysis of trade and other receivables as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)				2017						
		Past due but not impaired								
	Receivables not past due	Up to 3 months	4 to 6 months	7 to 12 months	Over 12 months	Impaired	Total			
Trade receivables	₩ 1,368,446	₩ 245,126	₩ 54,788	₩ 47,954	₩ 75,331	₩ 48,195	₩ 1,839,840			
Other receivables	236,788	1,841	1,080	2,368	3,448	4,116	249,641			
Long-term trade receivables	4,274	-	-	-	-	21,446	25,720			
Long-term other receivables	213,253	382	-	-	14	204,929	418,578			
	₩ 1,822,761	₩ 247,349	₩ 55,868	₩ 50,322	₩ 78,793	₩ 278,686	₩ 2,533,779			

(in millions of Korean won)				2016			
	Receivables not past due	Up to 3 months	4 to 6 months	7 to 12 months	Over 12 months	Impaired	Total
Trade receivables	₩ 927,927	₩ 312,206	₩ 54,506	₩ 38,387	₩ 209,430	₩ 50,624	₩ 1,593,080
Other receivables	164,324	1,241	790	2,538	7,711	18,832	195,436
Long-term trade receivables	3,297	-	-	-	-	21,446	24,743
Long-term other receivables	277,039	-	-	90	10	78,116	355,255
	₩ 1,372,587	₩ 313,447	₩ 55,296	₩ 41,015	₩ 217,151	₩ 169,018	₩ 2,168,514

The above amounts do not reflect the present value discount and provision for impairment.

The individually impaired receivables are mainly related to the customers under unexpected economic difficulties, and part of trade receivables are expected to be collected. Other receivables, for which impairment loss were not recognized under the individual review, are collectively reviewed for impairment.

Changes in provision for impairment of trade and other receivables for the years ended December 31, 2017 and 2016, are as follows:

2017											
Beginning		Provision for impairment		Reversal		Changes in scope of consolidation		Others		E	Ending
₩	59,867	₩	38,551	₩	-	₩	17	₩	(15,223)	₩	83,212
	64,820		82,360		(941)		(596)		(23,575)		122,068
₩	124,687	₩	120,911	₩	(941)	₩	(579)	₩	(38,798)	₩	205,280
					2						
Beg	ginning			Rev	versal	sco	pe of	(Others	E	Ending
₩	40,757	₩	38,696	₩	-	₩	-	₩	(19,586)	₩	59,867
	50,749		14,745		(129)		_		(545)		64,820
₩	91,506	₩	53,441	\ A/	(120)	14/	_	\ A/	(20 121)	144	124,687
	₩ ₩ Beç	₩ 59,867 64,820 ₩ 124,687 Beginning ₩ 40,757 50,749	# 59,867 ₩ 64,820 ₩ 124,687 ₩ Beginning Proving imp # 40,757 ₩ 50,749	Beginning impairment ₩ 59,867 64,820 ₩ 38,551 82,360 ₩ 124,687 ₩ 120,911 Beginning Provision for impairment ₩ 40,757 50,749 ₩ 38,696 14,745	Beginning impairment Re ₩ 59,867 ₩ 38,551 ₩ 64,820 82,360 ₩ ₩ 124,687 ₩ 120,911 ₩ Beginning Provision for impairment Rev ₩ 40,757 ₩ 38,696 ₩ 50,749 14,745	Beginning Provision for impairment Reversal ₩ 59,867 ₩ 38,551 ₩ - 64,820 ½ 124,687 ₩ 120,911 ₩ (941) Beginning Provision for impairment Reversal ₩ 40,757 ₩ 38,696 ₩ - 50,749 14,745 (129)	Beginning Provision for impairment Reversal Chase conservation set conservations. ₩ 59,867 ₩ 38,551 ₩ - W ₩ - W 64,820 82,360 (941) ₩ 124,687 ₩ 120,911 ₩ (941) ₩ Provision for impairment impairment Reversal Chare second conservations. ₩ 40,757 ₩ 38,696 ₩ - W - W 50,749 14,745 (129)	Beginning Provision for impairment Reversal Changes in scope of consolidation ₩ 59,867 ₩ 38,551 ₩ - ₩ 17 ₩ 17 64,820 82,360 (941) (596) ₩ 124,687 ₩ 120,911 ₩ (941) ₩ (579) 2016 Changes in scope of consolidation ₩ 40,757 ₩ 38,696 ₩ - ₩ - ₩ - 50,749 ₩ - 1,745 (129) 1	Beginning Provision for impairment Reversal Changes in scope of consolidation ₩ 59,867 ₩ 38,551 ₩ - ₩ 17 ₩ 17 ₩ 17 ₩ 17 ₩ 124,687 ₩ 120,911 ₩ (941) ₩ (579) ₩ 2016 Changes in scope of consolidation Changes in scope of consolidation № (941) ₩ (941) ₩ (579) ₩ 40,757 ₩ 38,696 ₩ - ₩ - ₩ - ₩ - ₩ - ₩ 50,749 14,745 (129) - ₩ - ₩	Beginning Provision for impairment Reversal Changes in scope of consolidation Others ₩ 59,867 ₩ 38,551 ₩ - W 17 ₩ (15,223) 64,820 82,360 (941) (596) (23,575) ₩ 124,687 ₩ 120,911 ₩ (941) ₩ (579) ₩ (38,798) 2016 Changes in scope of impairment Reversal Consolidation Others ₩ 40,757 ₩ 38,696 ₩ - W - W - W - W (19,586) 50,749 14,745 (129) - (545)	Beginning Provision for impairment Reversal Changes in scope of consolidation Others E ₩ 59,867 ₩ 38,551 ₩ - W 17 ₩ (15,223) ₩ (15,223) ₩ (23,575) ₩ (23,575) ₩ (241) ₩ (579) ₩ (38,798) ₩ ₩ 124,687 ₩ 120,911 ₩ (941) ₩ (579) ₩ (38,798) ₩ Changes in scope of impairment Reversal Consolidation Others E ₩ 40,757 ₩ 38,696 ₩ - W - W - W (19,586) ₩ 50,749 14,745 (129) - (545)

The maximum exposure of trade and other receivables to credit risk at the end of the reporting period is the carrying value of each type of receivable mentioned above.

The creation and release of provision for impaired trade receivables and other receivables have been included in 'selling and administrative expenses' (Note 32) and 'other income and other expenses' (Note 33) in the statements of profit or loss, respectively. Amounts charged to the allowance account are generally written off, when there is no expectation of recovering additional cash.

11. Other Financial Assets and Liabilities

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

(in millions of Korean won)		2017	2016		
Other financial assets					
Loans and receivables	₩	162,415	₩	126,427	
Available-for-sale financial assets		477,598		470,603	
Derivative assets		23,415		6,131	
		663,428		603,161	
Less: Current portion		(82,976)		(50,326)	
	₩	580,452	₩	552,835	
Other financial liabilities					
Derivative liabilities	₩	4,681	₩	36,730	
Less: Current portion		(4,088)		(29,504)	
	₩	593	₩	7,226	

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

(in millions of Korean won)		2017	2017		
Short-term financial instruments Long-term financial instruments	₩	64,672 97,743	₩	45,587 80,840	
•	₩	162,415	₩	126,427	

Available-for-sale financial assets as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		20	2016		
Equity securities					
Listed	₩	187,417	₩	238,772	
Unlisted		38,228		37,750	
Equity investment		214,471		170,826	
Beneficiary certificates		36,372		22,566	
Debt securities					
Government bond		1,110		689	
		477,598		470,603	
Less: Current portion		-		-	
	₩	477,598	₩	470,603	

Equity securities in which the Group has more than 20% of voting rights but are not significantly influenced by the Group as at December 31, 2017 and 2016, are as follows:

(in millions of	f Korean won)			2016						
	Investee	Percentage of ownership (%)	Acquisition cost		Acquisition		Во	ok value	Вс	ok value
Listed stock	Chin Hung International Inc.1,	48.17	₩	181,893	₩	135,141	₩	155,320		
Unlisted stock	OKSAN OCHANG Highway Corporation ²	30.00		14,970		14,970		14,970		
			₩	196,863	₩	150,111	₩	170,290		

¹ The shares have been provided as collateral to the Committee of Creditor Banks of Chin Hung International Inc. in accordance with the special agreement for plans for normalization of the business of Chin Hung International Inc. (Note 38). Also, although the Group holds more than 20% of total interest, the Group does not have significant influence over Chin Hung International Inc. in accordance with the special agreement for plans for normalization of the business of Chin Hung International Inc. Therefore, the shares are classified as available-for-sale financial assets.

Changes in available-for-sale financial assets for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		2017		2016		
Beginning balance	₩	470,603	₩	462,942		
Acquisition		146,025		76,842		
Disposals		(75,130)		(62,134)		
Impairment loss of available-for-sale financial assets		(17,053)		(1,492)		
Net gains (losses) transfer to equity		(38,534)		16,696		
Net gains (losses) transfer from equity		(8,305)		-		
Others		(8)		(22,251)		
Ending balance	₩	477,598	₩	470,603		
Short-term available-for-sale financial assets	₩	-	₩			
Long-term available-for-sale financial assets		477,598		470,603		

Changes in unrealized gain or loss on valuation of available-for-sale financial assets according to valuation of their fair values for the years ended from December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		2017		2016
Beginning balance Gain(loss) on valuation	₩	38,353 (46,839)	₩	23,951 16,696
Tax effects and Non-controlling Interests		12,900		(2,294)
Ending balance	₩	4,414	₩	38,353

² Although the Group owns 30% ownership in Oksan Ochang Highway Corporation, considered that the Group does not have significant influence over the entity since the decision for financial and operating policy is under the government's control. Therefore, the investment was classified as available-for-sale financial assets.

Details of derivatives assets and liabilities as at December 31, 2017 and 2016, are as follows:

	2017					2016			
(in millions of Korean won)		Assets		Liabilities		Assets		bilities	
Current									
Forward exchange contracts	₩	18,246	₩	4,088	₩	3,707	₩	23,140	
Currency swaps		59		-		890		6,364	
Other		_		-		143		-	
		18,305		4,088		4,740		29,504	
Non-current									
Forward exchange contracts		1,272		-		466		6,466	
Currency swaps		_		584		-		-	
Other		3,838		9		925		760	
		5,110		593		1,391		7,226	
	₩	23,415	₩	4,681	₩	6,131	₩	36,730	

12. Other Financial Business Assets

Details of other financial business assets as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		2017		2016
Loans and receivables	₩	2,207,668	₩	2,049,066
Operating lease assets		32,745		42,079
	₩	2,240,413	₩	2,091,145

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

(in millions of Korean won)		2017		2016
Loans and receivables	₩	2,252,472	₩	2,105,416
Less: Provision for impairment		(44,804)		(56,350)
	₩	2,207,668	₩	2,049,066

The aging analysis of loans and receivables as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)			2016		
Up to 1 year	₩	254,048	₩	312,180	
1 to 5 years		1,998,424		1,793,236	
	₩	2,252,472	₩	2,105,416	

The above amounts do not reflect the present value discount and provision for impairment.

Movements on the provision for impairment of trade receivables for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)			2016		
Beginning balance	₩	56,350	₩	33,554	
Provision for impairment		50,753		45,964	
Write-off		(68,354)		(20,775)	
Others		6,055		(2,393)	
Ending balance	₩	44,804	₩	56,350	

The aging analysis of loans and receivables as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		2017		2016		
Loans and receivables						
Receivables not past due	₩	2,060,754	₩	1,896,792		
Past due but not impaired		43,434		38,927		
Impaired		145,494		166,105		
Total	₩	2,249,682	₩	2,101,824		

13. Other Assets

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

(in millions of Korean won)	2017			2016	
Other current assets					
Advance payments	₩	142,841	₩	126,095	
Provision for impairment		(290)		(290)	
Prepaid expenses		46,490		41,358	
Other		1,538		1,989	
		190,579		169,152	
Other non-current assets					
Long-term advance payments		7,225		-	
Long-term prepaid expenses		23,943		28,426	
Other investments		34,518		34,340	
		65,686		62,766	
	₩	256,265	₩	231,918	

14. Inventories

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

		2017						
(in millions of Korean won)	Acquisition cost		Pr	ovision		Net book amount		
Merchandise	₩	320,708	₩	(2,532)	₩	318,176		
Finished goods		614,995		(43,057)		571,938		
Semi-finished goods		188,074		(8,018)		180,056		
Work-in-process		91,461		(605)		90,856		
Processing materials on trust		22		-		22		
Raw materials		265,671		(8,257)		257,414		
Sub-materials		53,350		(2,001)		51,349		
Supplies		14,032		(556)		13,476		
Packaging		8,778		(235)		8,543		
Goods in transit		179,189		-		179,189		
Cost accrued on construction contract		6,030		-		6,030		
Temporary installations		65		-		65		
Sites		4,920		(2,101)		2,819		
	₩	1,747,295	₩	(67,362)	₩	1,679,933		

	2016							
(in millions of Korean won)	Ac	equisition cost		Provision		let book amount		
Merchandise	₩	351,539	₩	(6,629)	₩	344,910		
Finished goods		419,082		(20,799)		398,283		
Semi-finished goods		176,821		(3,654)		173,167		
Work-in-process		102,506		-		102,506		
Processing materials on trust		26		-		26		
Raw materials		249,951		(7,938)		242,013		
Sub-materials		43,937		-		43,937		
Supplies		11,421		-		11,421		
Packaging		8,441		-		8,441		
Goods in transit		175,799		-		175,799		
Cost accrued on construction contract		6,532		-		6,532		
Temporary installations		65		-		65		
Sites		25,945		(8,275)		17,670		
	₩	1,572,065	₩	(47,295)	₩	1,524,770		

15. Property, Plant and Equipment

Property, plant and equipment as at December 31, 2017 and 2016, are as follows:

				2017		
(in millions of Korean won)	Acq	uisition cost		ccumulated preciation ¹	Net I	oook amount
Land	₩	1,570,058	₩	-	₩	1,570,058
Building		1,744,262		(484,532)		1,259,730
Structures		374,894		(107,572)		267,322
Machinery		6,522,950		(4,515,089)		2,007,861
Vehicles		48,356		(36,695)		11,661
Tool and equipment		600,403		(449,293)		151,110
Others		164,322		(61,989)		102,333
Construction in progress		282,303		-		282,303
Machinery in transit		10,798				10,798
	₩	11,318,346	₩	(5,655,170)	₩	5,663,176
				2016		
(in millions of Korean won)	Acquisition cost			ccumulated preciation ¹	Net l	oook amount
Land	₩	1,562,977	₩	-	₩	1,562,977
Building		1,546,771		(452,205)		1,094,566
Structures		357,496		(99,673)		257,823
Machinery		6,303,220		(4,160,054)		2,143,166
Vehicles		50,089		(36,860)		13,229
Tool and equipment		538,413		(406,280)		132,133
Others		174,302		(39,455)		134,847
Construction in progress		487,344		-		487,344
Machinery in transit		18,937				18,937
	₩	11,039,549	₩	(5,194,527)	₩	5,845,022

¹Accumulated impairment losses are included

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

					2	017				
(in millions of Korean won)	Land	Building	Structure	Machinery	Vehicle	Tool and equipment	Others	Construction in progress	Machinery in transit	Total
Beginning balance	₩1,562,977	₩ 1,094,566	₩ 257,823	₩ 2,143,166	₩ 13,229	₩ 132,133	₩ 134,847	₩ 487,344	₩ 18,937	₩ 5,845,022
Acquisition	7,572	4,785	1,964	43,786	2,250	44,463	3,799	535,019	85,516	729,154
Disposal	(1,211)	(469)	(389)	(577)	(625)	(3,543)	(2,179)	(8,997)	-	(17,970)
Depreciation and others ¹ Impairment loss ²	-	(51,975)	(10,457) (178)	(467,507) (80,415)	(4,596) -	(49,964) (1,824)	(6,009) (23,338)	- (827)	-	(590,508) (106,582)
Transfers ³	5,673	255,563	22,601	469,203	2,124	31,943	(372)	(717,635)	(92,560)	(23,460)
Government grants received	-	(1,707)	-	(1,585)	-	(113)	-	-	-	(3,405)
Others (changes in exchange rate) Changes in scope of	(1,435)	(40,800)	(3,879)	(97,143)	(648)	(1,997)	(2,326)	(12,601)	(1,095)	(161,924)
consolidation	(3,518)	(233)	(163)	(1,087)	(73)	12	(2,089)			(7,151)
Ending balance	₩1,570,058	₩1,259,730	₩ 267,322	₩2,007,861	₩11,661	₩ 151,110	₩ 102,333	₩ 282,303	₩ 10,798	₩ 5,663,176

¹ Depreciation and others include ₩ 796 million of shrinkage loss from others and ₩ 947 million of supplies expenses.

² Due to the accumulated operating loss, the Group has performed impairment test in order to review the recoverable amount of the cash-generating unit. As a result, the carrying amount of property, plant and equipment exceeded the recoverable amounts and recognized an impairment loss of POK business for ₩ 27,593 million, optical film segment for ₩ 8,695 million, carbon material business for ₩ 36,125 million, Wellington business for ₩ 23,338 million and Tire cords - Eongyang factory for ₩ 10,847 million. The impairment loss is presented as other expenses in the consolidated statement of profit or loss. The amount includes impairment loss of intangible assets of ₩ 72 million and presented in other expenses in the consolidated statement of profit or loss. The recoverable amount of the cash-generating unit is determined based on the fair value less costs of disposal or value in use. The estimate of the fair value less costs of disposal to be received for the disposal of an asset at the end of period is the amount that an entity expects to obtain from the disposal of the asset in an arm's length transaction between knowledgeable, willing parties, after deducting the estimated costs of disposal. Value in use is determined by discounting expected future cash flows from continuing use of the assets. The value of use is calculated by discounting the estimated future cash flow at an appropriate discount rate and using an independent external valuation report.

³ Transfers include construction in progress, machinery in transit and investment property.

					20	16				
(in millions of Korean won)	Land	Building	Structure	Machinery	Vehicle	Tool and equipment	Others	Construction in progress	Machinery in transit	Total
Beginning balance	₩1,553 ,291	₩ 1,066,230	₩ 246,087	₩ 2,098,030	₩ 12,255	₩ 136,414	₩ 94,608	₩ 419,372	₩ 2,556	₩ 5,628,843
Acquisition	7,998	22,987	2,111	37,662	3,427	26,511	4,898	639,902	130,221	875,717
Disposal	(1,493)	(24,449)	(1,811)	(9,445)	(877)	(3,426)	(3,093)	(1,949)	-	(46,543)
Depreciation and others ¹ Impairment loss ²	-	(44,488) (11,886)	(9,417) (1,423)	(438,446) (25,448)	(4,507) (6)	(50,575) (425)	(10,066)	(3)	-	(557,502) (39,188)
Transfers ³	2,279	92,841	25,115	488,606	2,814	23,994	47,891	(573,625)	(114,040)	(4,125)
Government grants received Others (changes in	-	(8,010)	-	(11,278)	-	(370)	-	-	-	(19,658)
exchange rate) Changes in scope of	902	3,465	982	7,669	136	215	609	3,647	200	17,825
consolidation		(2,124)	(3,821)	(4,184)	(13)	(205)				(10,347)
Ending balance	₩1,562,977	₩ 1,094,566	₩ 257,823	₩ 2,143,166	₩ 13,229	₩ 132,133	₩ 134,847	₩ 487,344	₩ 18,937	₩ 5,845,022

¹ Depreciation and others include ₩ 1,105 million of shrinkage loss from others and ₩ 1,772 million of supplies expenses.

Depreciation expense of \forall 552,699 million (2016: \forall 516,536 million) has been charged to 'cost of sales', \forall 24,133 million (2016: \forall 25,306 million) to 'selling and administrative expenses', and \forall 11,934 million (2016: \forall 12,783 million) to 'research and development expenses' for the year ended December 31, 2017.

The Group has capitalized borrowing costs amounting to \forall 2,753 million (2016: \forall 11,473 million) on qualifying assets for the year ended December 31, 2017. The capitalization rate of borrowings used to determine the amount of borrowing costs eligible for capitalization is 2.99~4.58 % (2016: 2.76~4.58%) for the year ended December 31, 2017.

Certain amount of property, plant and equipment are provided as collaterals to financial institutions for borrowings (Notes 20 and 38).

² Due to the accumulated operating loss in the optical film segment, a separate cash-generating unit in the operating segment of chemicals, the Group recognized impairment loss, amounting to \(\psi \) 23,798 million, as other expenses.

³ Transfers include construction in progress, machinery in transit and investment property.

Details of minimum lease payments in relation to non-cancellable operating leases that are payable at the end of the reporting periods are as follows:

(in millions of Korean won)		2017			
Up to 1 year	₩	24,152 ₩	∀ 40,275		
1 to 5 years		57,700	46,071		
Later than 5 years		315	221		
	₩	82,167 ₩	∀ 86,567		

Rental payments of $\mbox{$\mathbb{W}$}$ 45,312 million (2016: $\mbox{$\mathbb{W}$}$ 40,098 million) under the above operating lease are recognized in the consolidated statement of profit or loss

In connection with the development of Polyketone materials and other national research projects, the Group entered into development agreements with the participants of the agreement, including the Korea Evaluation Institute of Industrial Technology, and is conducting R & D activities.

As at December 31, 2017, the government grants related to assets is $\mbox{$\mathbb{W}$}$ 29,957 million (2016 : $\mbox{$\mathbb{W}$}$ 34,006 million) and government grants related to liabilities is $\mbox{$\mathbb{W}$}$ 19,124 million (2016 : $\mbox{$\mathbb{W}$}$ 19,739 million).

16. Investment Property

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

			20	17			
(in millions of Korean won)	Acquis	sition cost		umulated reciation ¹	Net book value		
Land Building	₩	353,760 256,123	₩	(3,485) (56,182)	₩	350,275 199,941	
-	₩	609,883	₩	(59,667)	₩	550,216	
			20	16			
(in millions of Korean won)	Acquis	sition cost		umulated reciation ¹	Net b	oook value	
Land Building	₩	384,149 299,901	₩	(3,485) (51,742)	₩	380,664 248,159	

¹ Accumulated depreciation includes accumulated impairment loss.

Changes in investment property for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)	2017					2016						
		Land		Building		Total			Land		Building	Total
Beginning balance	₩	380,664	₩	248,159	₩	628,823	∀	٧	366,571	₩	253,433 ₩	620,004
Acquisition		-		780		780			3,366		960	4,326
Disposal		(33,429)		(32,160)		(65,589)			(4,208)		(2,408)	(6,616)
Depreciation		-		(20,072)		(20,072)			-		(5,106)	(5,106)
Transfer		3,040		3,234		6,274			14,935		1,280	16,215
Ending balance	₩	350,275	₩	199,941	₩	550,216	∀	٧	380,664	₩	248,159 ₩	628,823

During 2017, rental income from investment property is \forall 40,238 million (2016: \forall 38,192 million), and operating expenses (including depreciation) arising from investment property that generated rental income for the year are \forall 41,468 million (2016: \forall 21,937 million).

Fair value of investment properties as at December 31, 2017 is \$ 695,271 million (2016: \$ 777,489 million). The valuation of investment properties is based on the official land price.

17. Intangible Assets

Changes in intangible assets for the years ended December 31, 2017 and 2016, are as follows:

						2017				
(in millions of										
Korean won)	Goodwill		property		Others		Memberships		Total	
Beginning balance	₩	129,623	₩	7,243	₩	272,092	₩	11,112	₩	420,070
Acquisition		496		933		8,579		226		10,234
Transfer ¹		-		1,823		377		17		2,217
Disposals		-		-		(313)		(1,839)		(2,152)
Amortization		-		(1,669)		(38,334)		(38)		(40,041)
Impairment loss ²		-		(72)		(54,256)		(141)		(54,469)
Others		(3,306)		-		(14,865)		1,140		(17,031)
Changes in scope of consolidation		-		-		(698)		_		(698)
Ending balance	₩	126,813	₩	8,258	₩	172,582	₩	10,477	₩	318,130

¹ Transfers include transfer from or to intangible assets, etc.

² The Group recognized impairment loss on the intangible assets for W 54,256 million since the cash flow of operating facility of Somesevit Corporation is determined to be decreased. The impairment loss is presented as other expenses in the consolidated statement of profit or loss.

						2016				
(in millions of Korean won)	Goodwill		Industrial property Others			Others	Mem	berships		Total
Beginning balance	₩	130,329	₩	7,680	₩	297,661	₩	16,986	₩	452,656
Acquisition		-		1,677		30,842		768		33,287
Transfer ¹		-		261		4,744		(20)		4,985
Disposals		-		-		(2,497)		(5,701)		(8,198)
Amortization		-		(1,590)		(46,775)		(1)		(48,366)
Impairment loss		(1,364)		-		(12,876)		(933)		(15,173)
Others		658		(785)		1,552		13		1,438
Changes in scope of consolidation		-		-		(559)				(559)
Ending balance	₩	129,623	₩	7,243	₩	272,092	₩	11,112	₩	420,070

¹ Transfers include transfer from or to intangible assets, etc.

Amortization of \forall 18,753 million (2016: \forall 20,267 million) is included in 'cost of sales', \forall 716 million (2016: \forall 1,236 million) in 'research and development expenses', and \forall 20,572 million (2016: \forall 26,863 million) is included in 'selling and administrative expenses' in the consolidated statement of profit or loss for the year ended December 31, 2017.

Impairment tests for goodwill

Goodwill is monitored by the management at the operating segment or cash generating level. There is no changes in goodwill allocation method in 2017 and 2016. The following is a summary of goodwill allocation for each operating segment.

	2017											
							Impa	irment		Other		
(in millions of Korean won)	Ве	ginning	Incr	ease	Dispo	osals	lo	ss	adjı	ustments	E	inding
Fabric	₩	6,654	₩	_	₩	_	₩	_	₩	_	₩	6,654
Industrial Materials		44,027		-		-		-		(3,306)		40,721
Heavy industrial		-		496		-		-		-		496
Trading		2,216		-		-		-		-		2,216
Others		76,726		-		-		-		-		76,726
	₩	129,623	₩	496	₩	_	₩	_	₩	(3,306)	₩	126,813

	2016											
(in millions of Korean won)	Beginning		Increase		Disposals		Impairment loss		Other adjustments		Ending	
Fabric Industrial Materials Trading Others	₩	6,654 44,041 2,216 77,418	₩	- - -	₩	- - -	₩	(581) - (783)	₩	567 - 91	₩	6,654 44,027 2,216 76,726
Others	₩	130,329	₩	-	₩		₩	(1,364)	₩	658	₩	129,623

Goodwill impairment reviews are undertaken annually. As a result of Impairment test, the carrying value of other operating segments does not exceed the recoverable amounts. The recoverable amounts have been determined based on value-in-use calculations. These calculations use pretax cash flow projections based on financial budgets approved by management covering a five-year period. Gross rate used for the projection of five-year period and perpetual growth rate used for the period after are stated below. The growth rates do not exceed the long-term average growth rate for the business in which the CGU operates.

The key assumptions used for value-in-use calculations in 2017 are as follows:

	Industrial			
	materials ¹	Others		
Gross margin	21.79%	46.94%		
Growth rate ²	9.63%	5.71%		
Perpetual growth rate ³	3.00%	1.00%		
Pre-tax discount rate ⁴	12.0%~15.5%	9.60%		

¹ It is applicable to particular cash-generating-unit in industrial materials department.

² The average revenue growth rate, which is computed based on historical growth rate, is used to forecast five years of cash flow.

³ Projected growth rate over five years.

⁴ Pre-tax discount rate applied to the cash flow projections.

18. Investments in Associates

Details of associates of the Group as at December 31, 2017 and 2016, are as follows:

		tage of rship³	Location	Date of financial statements	
	2017	2016			
Shinwha intertek Co., Ltd. ¹	15.26	15.26	Korea	December 31	
Taebaek Wind Power Co., Ltd.	35.00	35.00	Korea	December 31	
Pyeongchang Wind Power Co., Ltd.4	42.00	42.00	Korea	December 31	
Hyosung Information System Co., Ltd.	50.00	50.00	Korea	December 31	
Hyosung Toyota Corp.	40.00	40.00	Korea	December 31	
Hyosung ITX Co., Ltd.	34.99	34.99	Korea	December 31	
Soonchon Eco Green Corporation ²	29.50	29.50	Korea	December 31	
Smilegate 2016KVF	25.15	27.76	Korea	December 31	
The Kwangjuilbo	49.00	49.00	Korea	December 31	
PT. Papua Agro Lestari1	15.00	15.00	Indonesia	December 31	
PT. GELORA MANDIRI MEMBANGUN ¹	15.00	15.00	Indonesia	December 31	

¹ Although the Group holds less than 20% of the associate's equity shares, the Group has significant influence over associate as the Group has involved in making decision and management communication.

² The equity method was discontinued due to capital impairment.

³ Percentage of ownership is effective percentage of ownership that reflects the equity owned by subsidiaries.

⁴ The Group has pledged its shares of Pyeongchang Wind Power Co., Ltd. as collateral for borrowings of Pyeongchang Wind Power Co., Ltd. (Note 38).

Changes in investments in associates for the years ended December 31, 2017 and 2016, are as follows:

			Valuation	Valuation of equity method in 2017						
(in millions of Korean won)	Beginning	Acquisition (Disposal)	Gain or loss on equity method investments	Other comprehensive income or loss	Others¹	Ending				
Shinwha intertek Co., Ltd. Taebaek Wind Power	14,969	-	(371)	(85)	(283)	14,230				
Co., Ltd.	6,650	-	762	-	-	7,412				
Pyeongchang Wind										
Power Co., Ltd.	5,683	-	1,266	-	-	6,949				
Hyosung Information										
System Co., Ltd.	46,581	-	1,969	-	(2,438)	46,112				
Hyosung Toyota Corp.	-		553	-	16	569				
Hyosung ITX Co., Ltd.	18,328	-	3,513	1,219	(1,623)	21,437				
PT. Papua Agro Lestari	10,767	-	69	(917)	-	9,919				
PT. GELORA MANDIRI										
MEMBANGUN	4,544	-	2	(137)	-	4,409				
The Kwangjuilbo	4,007	-	(430)	-	(16)	3,561				
Others	3,844	(268)	(151)		(785)	2,640				
	₩ 115,373	₩ (268)	₩ 7,182	₩ 80	₩ (5,129)	₩ 117,238				

¹Includes dividends, remeasurement of net defined benefit liability and others.

(in millions of Korean won)	Beginning	Acquisition (Disposal)	Gain or loss on equity method investments	Other comprehensive income or loss	Others ¹	Ending	
Shinwha intertek Co., Ltd.	₩ 14,404	₩ -	₩ 562	₩ 5	₩ (2)	₩ 14,969	
Taebaek Wind Power Co., Ltd. Pyeongchang Wind	8,302	-	(1,652)	-	-	6,650	
Power Co., Ltd. Hyosung Information	5,715	-	(31)	-	(1)	5,683	
System Co., Ltd.	47,971	-	2,128	-	(3,518)	46,581	
Hyosung ITX Co., Ltd. Sumiden Hyosung Steel Cord (Thailand) Co.,	17,616	-	2,637	(315)	(1,610)	18,328	
Ltd.	179	(183)	2	2	-	-	
PT. Papua Agro Lestari PT. GELORA MANDIRI	6,598	4,111	(107)	165	-	10,767	
MEMBANGUN	4,407	-	79	58	-	4,544	
The Kwangjuilbo	3,885	-	137	(15)	-	4,007	
Others	1,864	2,774	(796)	1	1	3,844	
	₩ 110,941	₩ 6,702	₩ 2,959	₩ (99)	₩ (5,130)	₩ 115,373	

¹Includes dividends, remeasurement of net defined benefit liability and others.

Summary of condensed financial information of major associates, details of adjustments from the book amount of investments in associates, and dividends received from associates as at and for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)				2017		
			Non-	current	Current	Non-current
	Current assets		as	sets	liabilities	liabilities
Shinwha intertek Co., Ltd.	₩	71,055	₩	125,213	₩ 95,420	₩ 7,595
Taebaek Wind Power Co., Ltd.		4,745		34,330	2,511	15,385
Pyeongchang Wind Power Co., Ltd.		9,123		67,886	880	59,583
Hyosung Information System Co., Ltd.		127,795		17,708	48,511	4,768
Hyosung Toyota Corp.		10,026		7,595	10,896	5,304
Hyosung ITX Co., Ltd.		105,202		36,472	72,732	7,541
PT. Papua Agro Lestari		31,951		30,862	4,013	13,949
PT. GELORA MANDIRI MEMBANGUN		1,998		44,303	4,214	35,493
The Kwangjuilbo		4,130		18,068	10,697	4,235

(in millions of Korean won)		2017								
	_	Revenue		Profit (loss) from continuing operations		Other comprehensive income		Total comprehensive income (loss)		Dividends received from associates
Shinwha intertek Co., Ltd.	₩	176,569	₩	(1,879)	₩	(557)	₩	(2,436)	₩	(222)
Taebaek Wind Power Co., Ltd.		7,056		2,215		-		2,215		-
Pyeongchang Wind Power Co., Ltd.		11,907		3,038		-		3,038		-
Hyosung Information System Co., Ltd. ¹		197,460		5,318		-		5,318		(2,595)
Hyosung Toyota Corp		79,022		3,235		-		3,235		-
Hyosung ITX Co., Ltd. 1		395,062		10,013		3,486		13,499		(874)
PT. Papua Agro Lestari		3,074		84		7		91		-
PT. GELORA MANDIRI MEMBANGUN		-		(434)		12		(422)		-
The Kwangjuilbo		8,329		(738)		-		(738)		-

(in millions of Korean won)

PT. Papua Agro Lestari

The Kwangjuilbo

PT. GELORA MANDIRI MEMBANGUN

,	, , , , , , , , , , , , , , , , , , ,		rent	assets	Non-current s assets		Current liabilities		Non-current liabilities		t
Shinwha intertek Co., Ltd.		+	₩	75,435	₩	∀ 131,404		₩ 98,450		₩ 10,3	304
Taebaek Wind Power Co., Ltd	d.			6,408		36,622		2,405		21,6	
Hyosung Information System	Co., l	Ltd.		179,697		19,294		101,025		,	306
Hyosung ITX Co., Ltd.				94,334		32,289		66,960		-	218
PT. Papua Agro Lestari				39,518		23,538		3,007			544
PT. GELORA MANDIRI MEM	BAN	GUN		4,197		39,101		1,083		34,7	723
Pyeongchang Wind Power Co	o., Ltc	l.		2,707		72,621		298		61,5	500
The Kwangjuilbo				3,191		19,475		10,224		4,2	265
(in millions of Korean won)						2016					
	_	Revenue		Profit (loss) from continuing operations		Other comprehensive income		Total comprehensive income (loss)		Dividends received from associates	
Shinwha intertek Co., Ltd.	₩	215,890	₩	(9,629)	₩	8,260	₩	(1,369)	₩	-	
Taebaek Wind Power Co., Ltd.		5,741		(4,721)		-		(4,721)		-	
Pyeongchang Wind Power Co., Ltd.		226,817		4,256		432		4,688		(3,460)	
Hyosung Information System Co., Ltd. ¹		342,188		7,537		3,832		11,369		(439)	
Hyosung Toyota Corp		7,591		(712)		(1,500)		(2,212)		-	
Hyosung ITX Co., Ltd. 1		2,601		528		449		977		_	

(75)

280

(9,629)

3,997

8,103

215,890

2016

8,260

(75)

280

(1,369)

Details of adjustments from financial information of major associates to the book amount of investments in associates for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)	2017										
			Percentage o		erests in		In	iter-grou	ıp		Book
	Net a	issets (a)	ownership (b))	(axb)	Goody		nsactio		ers	amount
Shinwha intertek Co., Ltd.	₩	93,252	15.26%	₩	14,230	₩	_	₩	- ₩	_ +	₩ 14,230
Taebaek Wind Power Co., Ltd.		21,178	35.00%		7,412		-		-	-	7,412
Pyeongchang Wind Power Co., Ltd.		16,546	42.00%		6,949		-		-	-	6,949
Hyosung Information System Co.,											
Ltd.		92,224	50.00%		46,112		-		-	-	46,112
Hyosung Toyota Corp		1,422	40.00%		569		-		-		569
Hyosung ITX Co., Ltd.		61,400	34.99%		21,484		-		- (4	47)	21,437
PT. Papua Agro Lestari		44,851	15.00%		6,728	3	191		-	-	9,919
PT. GELORA MANDIRI		0.505	15.00%		000	•	400				4 400
MEMBANGUN The Kwangjuilbo		6,595 7,266	49.00%		989 3,561	3	420		-	-	4,409 3,561
(in millions of Korean won)			Percentage		201	6					
			of	Inter	ests in						
			ownership		ssets		Inte	r-group			Book
	Net a	issets (a)	(b)		xb)	Goodwil		actions	Others		mount
Shinwha intertek Co., Ltd.	₩	98,086	15.26%	₩ 1	4,969	₩	- ₩	_	₩	- ₩	14,969
Taebaek Wind Power Co., Ltd.		19,001	35.00%		6,650		-	-			6,650
Hyosung Information System Co., Ltd.		93.161	50.00%	,	6.581						46,581
Hyosung ITX Co., Ltd.		52,445	34.99%		8,351		_	_	(23		18,328
PT. Papua Agro Lestari		50,505	15.00%	,	7,576	3,19)1	-	-	-	10,767
PT. GELORA MANDIRI											
MEMBANGUN Pyeongchang Wind Power Co.,		7,492	15.00%		1,124	3,42	20	-	,	-	4,544
Ltd.		13,531	42.00%		5,683		-	-		-	5,683
The Kwangjuilbo		8,177	49.00%		4,007		-	-		-	4,007

Fair value of marketable investments in associates as at December 31, 2017 and 2016, is as follows:

	2017									
(in millions of Korean won, except per market price per share)	Number of shares	Market price per share (in Korean won)	Fair value (in millions of Korean won)	Book value (in millions of Korean won)						
Shinwha intertek Co., Ltd.	4,446,227	₩ 2,415	₩ 10,738	₩ 14,230						
Hyosung ITX Co., Ltd.	4,349,000	12,600	54,797	21,437						

	2016									
(in millions of Korean won, except per market price per share)	Number of shares	pe	ket price er share orean won)	Fa	ir value	Book value				
Shinwha intertek Co., Ltd.	4,446,227	₩	3,675	₩	16,340	₩	14,969			
Hyosung ITX Co., Ltd.	4,349,000		11,700		50,883		18,328			

Accumulated unrecognized changes in equity due to discontinued use of equity method for the year ended December 31, 2017, are as follows:

(In millions of Korean won)	2017						
		cognized loss	Unrecognized accumulated losses				
Soonchon Eco Green Corporation	₩	(392)	₩	(392)			

19. Related Party Transactions

Details of associates and other related parties as at December 31, 2017, are as follows:

Associates

Location	Name of entity
	Soonchon Eco Green Corporation, Shinwha intertek Co., Ltd., The Kwangjuilbo, Taebaek
Domostio	Wind Power Co., Ltd., Pyeongchang Wind Power Co., Ltd.,
Domestic	Hyosung Information System Co., Ltd., Hyosung Toyota Corp., Hyosung ITX Co., Ltd.,
	Smilegate2016KVF, Pathfinder Youth's Investment Foundation Association
Asia	PT. Papua Agro Lestari, PT. Gelora Mandiri Membangun(GMM)

Other related parties

Location	Name of entity
Domestic	Galaxia Co., Ltd., Galaxia device Co., Ltd., Galaxia Micropayment Co., Ltd., Galaxia Electronics Co., Ltd., Gongdeok Development Corporation, The Class Hyosung Corporation, The premium Hyosung Co., Ltd., Dong Ryung Co., Ltd., Shin Dong Jin Co., Ltd., A-SEUNG AUTOMOTIVE GROUP, ITX Marketing Co., Ltd., ITX M&S Co., Ltd., Trinity Asset Managemernt, Haengbokdoodrimi Co., Ltd., Hyosung Premier Motors, ASC Co. Ltd., and others
China	Tianjin Galaxia Device Electronics. Co., Ltd., Huizhou Galaxia Device Electronics. Co. Ltd., Qingdao Galaxia Device Electronics. Co., Ltd., SHINWHA INTERTEK (SUZHOU) CO.,LTD, DONGGUAN SHINWHA INTERTEK CORP, DNS Technology Co., Ltd, Weihai newsolim Electronics Co., Ltd and others
Asia	Galaxia Japan, Shinwha Intertek Corp and others
Europe	Shinwha Intertek Slovakia S.R.O and others
Others ¹	Name of entity
Location	Hame of endry
Domestic	Gabi Inc., Galaxia SM Inc., Galaxia Communications Co., Ltd., Shinsung Motors, Chin Hung International Inc., TAEUK CONSTRUCTION CO.,LTD., EveryShow Co., Ltd. and others
China	IB China. Ltd. and others
Asia	Galaxia Media Co., Ltd. and others
America	IB America, Inc. and others

¹ Although the entity is not the related party of the Group in accordance with Korean IFRS 1024, the entity belongs to the Large Enterprise Group to which the Group also belongs in accordance with the Monopoly Regulation and Fair Trade Act.

Significant transactions with related parties

Significant transactions for the years ended December 31, 2017 and 2016, are as follows:

	2017								
	Revenue and others ¹		Div	idends		rchases I others ¹	of	uisition fixed	
(in millions of Korean won)							a	ssets	
Associates									
Shinwha intertek Co., Ltd.	₩	13,180	₩	222	₩	27	₩	-	
Hyosung ITX Co., Ltd.		12,004		874		6,652		777	
Hyosung Information System Co., Ltd.		231		2,595		148		1,593	
Others		1,323		36		946		-	
		26,738		3,727		7,773		2,370	
Other related parties		<u> </u>							
Galaxia Device Co., Ltd.		229		-		13,687		-	
Galaxia Electronics Co., Ltd.		40,501		-		20,258		1,255	
Gongdeok Development Corporation		19		-		9,035		-	
Shin Dong Jin Co., Ltd.		-		-		6,347		-	
Huizhou Galaxia Device Electronics. Co., Ltd.		358		-		110,440		466	
Others		4,610		-		461		991	
		45,717		-		160,228		2,712	
Others									
Galaxia SM Inc.		5		-		6,607		-	
Chin Hung International Inc.		3,099		-		-		2,000	
Others		1,059		-		12		-	
		4,163		-		6,619		2,000	
	₩	76,618	₩	3,727	₩	174,620	₩	7,082	

¹ Revenue, rental income, interest income and others are included in revenue and others. Purchase of raw materials, export fees, service fees, interest expense and others are included in purchases and others.

	2016							
		evenue others ¹	Div	idends		rchases d others ¹		uisition f fixed
(in millions of Korean won)							а	ssets
Associates								
Shinwha intertek Co., Ltd.	₩	10,061	₩	-	₩	5	₩	-
Hyosung ITX Co., Ltd.		12,526		439		5,522		380
Hyosung Information System Co., Ltd.		246		3,460		502		1,073
Others		4,869		-		2,635		-
		27,702		3,899		8,664		1,453
Other related parties								
Galaxia device Co., Ltd.		458		-		16,804		13
Galaxia Electronics		15,118		-		22,105		5,358
Gongdeok Development Corporation		-		-		8,904		-
Huizhou Galaxia Device Electronics. Co., Ltd.		8,893		-		75,621		222
Others		3,102				6,688		541
		27,571				130,122		6,134
Others								
Galaxia Communications Co., Ltd.		1,134		-		52		-
Chin Hung International Inc.		22,982		-		51,803		62,265
Others						1,182		102
		24,116		-		53,037		62,367
	₩	79,389	₩	3,899	₩	191,823	₩	69,954

¹ Revenue, rental income, interest income and others are included in revenue and others. Purchase of raw materials, export fees, service fees, interest expense and others are included in purchases and others.

	Trade	Other	Trade	Other	
(in millions of Korean won)	receivables	receivables	¹ payables	payables ¹	
Associates			144		
The Kwangjuilbo	₩ -	₩ 7,72	7 ₩ -	₩ 55	
Shinwha intertek Co., Ltd.	2,718			2,499	
Hyosung ITX Co., Ltd.	958		- 1,157	2,746	
PT. GELORA MANDIRI	-	4,73	8 -	-	
MEMBANGUN Others	504	00	0 000	4 470	
Others	521	96	_	4,173	
Other related marting	4,197	13,42	7 1,480	9,473	
Other related parties	20.417	10	0 1 504	40	
Galaxia Electronics	20,417	12	•		
Gongdeok Development Corporation	-	4,63		20	
The Class Hyosung	85		5 -	5,733	
Shin Dong Jin Co., Ltd.	-	4,20	-	596	
Huizhou Galaxia Device Electronics. Co., Ltd.	4,214	1,67	1 14,314	272	
Others	61	2,88	5 2,078		
	24,777	13,53	1 17,976	6,661	
Others					
Galaxia SM Inc.	-	1	9 1,978	1,329	
Chin Hung International Inc.	1	17,29	2 -	20,113	
Others	16		<u> </u>	693	
	17	17,31		22,135	
	₩ 28,991	₩ 44,26	9 ₩ 21,437	₩ 38,269	
			2016		
	Trade	Other	Trade	Other	
(in millions of Korean won) Associates	receivables	receivables	¹ payables	payables ¹	
The Kwangjuilbo	₩ -	₩ 7,48	2 ₩ -	₩ 22	
Shinwha intertek Co., Ltd.	4,806	·	2 -	102	
Hyosung ITX Co., Ltd.	703		2 681	1,415	
PT. GELORA MANDIRI					
MEMBANGUN	-	5,34	5 -	-	
Others	2,350	11	8 235	313	
	7,859	12,94	9 916	1,852	
Other related parties		-			
Galaxia Electronics Co., Ltd.	3,265	1	7 6,292	3,466	
Gongdeok Development Corporation	-	4,63		7	
- · · · · · · · · · · · · · · · · · · ·					
Shin Dong Jin Co., Ltd.	-	3,99	ŏ -	461	
Shin Dong Jin Co., Ltd. Huizhou Galaxia Device Electronics.	-	3,99			
-	- 8,019	3,99 2,21		461 104	
Huizhou Galaxia Device Electronics.	8,019 81		1 9,648		
Huizhou Galaxia Device Electronics. Co. Ltd.		2,21	1 9,648 8 1,219	104	
Huizhou Galaxia Device Electronics. Co. Ltd.	81	2,21 59	1 9,648 8 1,219	104 902	
Huizhou Galaxia Device Electronics. Co. Ltd. Others	81	2,21 59	1 9,648 8 1,219	104 902 4,940 1,209	
Huizhou Galaxia Device Electronics. Co. Ltd. Others Others Galaxia Communications Co., Ltd. Chin Hung International Inc.	81 11,365	2,21 59	1 9,648 8 1,219 1 17,159	104 902 4,940	
Huizhou Galaxia Device Electronics. Co. Ltd. Others Others Galaxia Communications Co., Ltd.	11,365 124 1,915	2,21 59 11,46	1 9,648 8 1,219 1 17,159 - 5 8 16,762 - 29	104 902 4,940 1,209 29,665 254	
Huizhou Galaxia Device Electronics. Co. Ltd. Others Others Galaxia Communications Co., Ltd. Chin Hung International Inc.	81 11,365 124	2,21 59 11,46	1 9,648 8 1,219 1 17,159 - 5 8 16,762 - 29 8 16,796	104 902 4,940 1,209 29,665	

2017

¹ Non-trade receivables, loans, deposits provided and others are included in other receivables. Non-trade payables, deposit received and others are included in other payables.

Fund transactions with related parties for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)			201	17		
	Beginning balance	Loan	Collection	Translation exchange differences	Ending balance	Equity contributions in cash
Associates						
The Kwangjuilbo Soonchon Eco Green Corporation	7,149	924	-	-	7,149 924	-
Pathfinder Youth's Investment Foundation	-	924	-	-	924	-
Association. PT. Gelora Mandiri	-	-	-	-	-	700
membangun Other related parties	5,345	-	-	(607)	4,738	-
The Class Hyosung Corporation	44	130	(127)	-	47	-
A-seung Automotive Group	100	-	-	-	100	-
Others						
Chin Hung International Inc.	-	-	-	-	-	28,400
(in millions of Korean won)						
		Loa	n transaction			- Equity
	Beginning balance	Loan	Collection	Translation exchange differences	Ending balance	contributions in cash
Associates						
The Kwangjuilbo	7,149	-	-	-	7,149	-
Papua Agro Lestari PT. Gelora Mandiri	-	-	-	-	-	4,111
Membangun Other related parties	5,183	-	-	162	5,345	-
The Class Hyosung Corporation	-	174	(130)	-	44	-
A-seung Automotive Group	-	100	-	-	100	-

The Group has transferred all of its contract performance guarantee deposits to Suncheon Eco Green Corporation as a loan. As at December 31, 2017, the Group has provided allowance for bad debts amounting to $\mbox{$\mathbb{W}$}$ 924 million and $\mbox{$\mathbb{W}$}$ 924 million is recognized for bad debt expenses for the year ended December 31, 2017.

The compensation paid or payable to key management for employee services for the years ended December 31, 2017 and 2016, consists of:

(in millions of Korean won)		2017		2016
Short-term employee benefits Post-employment benefits	₩	5,843 383	₩	9,098 980
	₩	6,226	₩	10,078

Details of collaterals provided by the Group for the related parties as at December 31, 2017, are as follows:

(in millions of	С	arrying	Se	cured	Secured		Am	ount of	
Korean won)	а	mount	ar	nount	asset	Details	bor	rowings	Creditor
Soonchon Eco Green Corporation ¹		-		-	Equity securities	Operating capital and others		39,391	IBK and others
Pyeongchang WindPower Co., Ltd.	₩	6,949	₩	6,510	Equity securities	Facility loan and others	₩	59,407	Woori bank and others
Hyosung Toyota Corp. ²		31,469		3,200	PP&E	Operating capital and others		-	Toyota Motor Korea Co., Ltd.
Chin Hung International Inc. ³		135,141		135,141	Equity securities	-		-	The Committee of Creditor Banks of Chin Hung International Inc.
	₩	173,120	₩	144,851			₩	98,798	

¹ In addition to providing the equity securities as described above, the Group has provided contractual execution guarantees (₩ 45,391 million) and supplementary financing arrangements (₩ 3,000 million) and two pledged checks to Soonchon Eco Green Corporation (Note 38).

Chin Hung International Inc. provides its shares of Somesevit Corporation as collateral for the Group amounting to $\mbox{$\mathbb{W}$}$ 56,000 million relating to Somesevit Corporation's borrowing of $\mbox{$\mathbb{W}$}$ 79,900 million (Note 38).

² Certain amounts of property, plant and equipment are provided as collaterals to TOYOTA Motor KOREA Co., Ltd. in relation to the inventory financing of Hyosung Toyota Corp. Also, the Group provides capital supplement agreement of W2,000 million for borrowing of Hyosung Toyota Corp. (Notes 15 and 38).

³ The equity shares of Chin Hung International Inc. are provided as collateral to the Committee of Creditor Banks of Chin Hung International Inc. in accordance with the special agreement for plans for normalization of the business of Chin Hung International Inc.(Notes 11 and 38).

20. Borrowings

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

(in millions of Korean won)	2017		2016	
Borrowings				
Short-term borrowings	₩	3,323,341	₩	2,738,096
Current portion of long-term borrowings		1,593,656		1,642,329
		4,916,997		4,380,425
Long-term borrowings				
Long-term borrowings		1,179,017		1,434,308
Debentures		1,166,072		1,227,863
		2,345,089		2,662,171
	₩	7,262,086	₩	7,042,596

Borrowings are collateralized with the Group's available-for-sale financial assets and property, plant and equipment, and others (Notes 15 and 38).

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

		Interest rate as at Dec. 31,				
(in millions of Korean won)	Creditor	2017 (%)		2017		2016
Bank overdrafts	Hana Bank Osaka	1.30	₩	6,427	₩	4,875
General loan	Woori Bank and others	0.58 ~ 10.25		2,368,711		1,377,619
Collateralized borrowings ¹	Woori Bank and others	0.80 ~ 3.44		690,626		658,902
Others	Woori Bank and others	1.60 ~ 3.48		257,577		696,700
			₩	3,323,341	₩	2,738,096

¹ The Group sold trade receivables denominated in foreign currencies at a discount to the financial institutions for the years ended December 31, 2017 and 2016. The Group may retain an obligation to compensate a financial institution for debtors' failure to make payment when they become due, an obligation known as a `recourse obligation'. Recourse obligations related to the sales of receivables with recourse are accounted for as collateralized borrowings (Notes 6 and 38).

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

(in millions of Korean won)	Creditor	Interest rate as at Dec. 31, 2017 (%)		2017		2016
Hyosung Corp.						
Local currency	Korea Development Bank and others	0.75 ~ 4.12	₩	419,947	₩	692,699
Foreign currency	Korea Development Bank and others	1.97 ~ 3.59		219,334		246,726
Subsidiaries						
Local currency	The Export-Import Bank of Korea and others	2.30 ~ 8.55		867,765		520,517
Foreign currency	The Export-Import Bank of	2.00 0.00		001,100		020,017
r oreign currency	Korea and others	2.17 ~ 4.76	_	165,303		800,423
				1,672,349		2,260,365
Less:	Current portion			(492,982)		(825,529)
Presen	t value discounts			(350)		(528)
			₩	1,179,017	₩	1,434,308

Above long-term borrowings are subject to installment repayment or lump-sum repayment at maturity date. Borrowings are collateralized with the Group's available-for-sale financial assets and property, plant and equipment, and others (Notes 11, 15 and 38).

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

(in millions of Korean won)	Maturity date	Interest rate as at Dec. 31, 2017 (%)	2017	2016
Hyosung Corp.				
251-2 nd Public subscription bond	2017-02-07	-	-	60,000
253-2 nd Public subscription bond	2018-02-21	3.75	30,000	30,000
254 th Private bond	2017-05-02	-	-	30,000
256-1st Public subscription bond	2017-02-25	-	-	50,000
256-2 nd Public subscription bond	2018-02-25	3.28	100,000	100,000
256-3 rd Public subscription bond	2020-02-25	3.76	50,000	50,000
257-1st Public subscription bond	2018-06-26	2.90	130,000	130,000
257-2 nd Public subscription bond	2020-06-26	3.97	70,000	70,000
258 th Private bond	2018-12-29	0.70	28,473	31,104
259-1st Public subscription bond	2019-04-25	2.78	102,000	102,000
259-2 nd Public subscription bond	2021-04-25	3.43	98,000	98,000
260-1st Public subscription bond	2019-12-27	2.70	120,000	120,000
260-2 nd Public subscription bond	2021-12-28	3.44	30,000	30,000

(in millions of Korean won)	Maturity date	Interest rate as at Dec. 31, 2017 (%)	2017	2016
Hyosung Capital Co., Ltd.				
86 th Debenture	2017-02-24	-	-	30,000
90-2 nd Debenture	2017-05-25	-	-	30,000
95 th Debenture	2017-09-26	-	-	10,000
105 th Debenture	2017-04-04	-	-	20,000
110 th Debenture	2018-01-02	4.61	15,000	15,000
117 th Debenture	2017-04-10	-	-	20,000
118-2 nd Debenture	2017-05-21	-	-	5,000
119 th Debenture	2017-05-26	-	-	20,000
121-2 nd Debenture	2017-06-22	-	-	20,000
122-2 nd Debenture	2017-06-29	-	-	10,000
126th Debenture	2017-09-30	-	-	20,000
127 th Debenture	2017-10-29	-	-	20,000
128th Debenture	2018-12-31	4.19	3,000	3,000
129 th Debenture	2018-03-28	4.01	20,000	20,000
130 th Debenture	2018-04-23	4.12	20,000	20,000
132 nd Debenture	2017-06-07	_	_	8,000
133-1st Debenture	2018-06-14	4.06	20,000	20,000
133-2 nd Debenture	2018-06-14	4.06	9,000	9,000
134 th Debenture	2017-06-16	-	-	29,000
135 th Debenture	2017-03-23	_	_	8,000
136 th Debenture	2018-06-24	4.08	20,000	20,000
137 th Debenture	2018-06-28	4.00	20,000	20,000
138 th Debenture	2017-07-04	-		14,000
139 th Debenture	2018-07-18	4.00	10,000	10,000
140 th Debenture	2017-01-23	-	-	22,000
141-1 st Debenture	2017-08-01	_	_	20,000
141-2 nd Debenture	2017-02-01	_	_	5,000
142 nd Debenture	2017-11-04	_	_	10,000
143 rd Debenture	2017-08-08	_	_	10,000
144 th Debenture	2017-11-12	_	_	10,000
145-1 st Debenture	2017-11-12	_		30,000
145-2 nd Debenture	2017-08-22	_		14,000
145-3 rd Debenture	2017-09-22	_	_	10,000
146-1 st Debenture	2017-11-20	_	_	10,000
146-2 nd Debenture		3.83	3,000	3,000
146-3 rd Debenture	2018-01-30	3.90	15,000	15,000
147-1 st Debenture	2018-02-28		15,000	10,000
147-1 nd Debenture	2017-09-05	-	-	10,000
	2017-11-06	-	10.000	10,000
147-3 rd Debenture	2018-03-05	3.90	10,000	•
148 th Debenture	2018-03-09	3.90	15,000	15,000
149 th Debenture	2018-03-20	3.90	18,000	18,000
150-1 st Debenture	2017-09-29	-	-	20,000
150-2 nd Debenture	2018-03-30	4.01	20,000	20,000
151st Debenture	2018-04-05	3.90	15,000	15,000
152-1 st Debenture	2017-10-11	-	45.000	5,000
152-2 nd Debenture	2018-01-11	3.97	15,000	15,000
153-1 st Debenture	2017-12-28	-	45.000	20,000
153-2 nd Debenture	2018-01-14	3.92	15,000	15,000
154-1 st Debenture	2017-10-26	-	-	20,000
154-2 nd Debenture	2018-01-26	3.95	20,000	20,000

(in millions of Korean won)	Maturity date	Interest rate as at Dec. 31, 2017 (%)	2017	2016
155-1st Debenture	2017-05-02	-	-	6,000
155-2 nd Debenture	2018-02-02	3.95	5,000	5,000
156th Debenture	2018-02-19	3.95	15,000	15,000
157-1st Debenture	2017-11-22	-	-	5,000
157-2 nd Debenture	2018-02-22	3.95	15,000	15,000
158th Debenture	2018-02-23	3.95	20,000	20,000
159th Debenture	2017-11-28	-	-	10,000
160 th Debenture	2018-06-05	3.99	17,000	17,000
161st Debenture	2018-03-13	3.85	5,000	5,000
162 nd Debenture	2017-12-19	-	-	10,000
163 rd Debenture	2017-12-22	-	-	12,000
164 th Debenture	2018-01-11	3.75	21,000	-
165 th Debenture	2018-01-23	3.70	10,000	-
167 th Debenture	2018-02-01	3.70	30,000	-
168th Debenture	2018-02-06	3.68	10,000	-
169th Debenture	2018-05-08	3.85	6,200	-
170th Debenture	2018-05-16	3.80	5,000	-
171th Debenture	2018-05-23	3.80	10,000	-
172-1st Debenture	2018-03-08	3.68	10,000	-
172-2 nd Debenture	2018-06-08	3.80	20,000	-
173-1st Debenture	2018-03-13	3.65	20,000	-
173-2 nd Debenture	2018-06-13	3.80	20,000	-
174 th Debenture	2018-06-17	3.80	5,000	-
175 th Debenture	2018-07-03	3.75	10,000	-
176-1st Debenture	2018-04-04	3.60	20,000	-
176-2 nd Debenture	2018-07-04	3.75	10,000	-
176-3 rd Debenture	2018-09-28	3.85	10,000	-
176-4 th Debenture	2018-10-04	3.85	20,000	-
176-5 th Debenture	2019-04-04	4.03	1,500	-
177 th Debenture	2019-05-10	4.01	20,000	-
178th Debenture	2019-05-24	3.96	20,000	-
179th Debenture	2018-11-25	3.55	10,000	-
180-1 st Debenture	2019-05-26	3.95	8,000	-
180-2 nd Debenture	2019-11-26	4.24	20,000	-
181 th Debenture	2019-05-30	3.91	20,000	-
182-1st Debenture	2018-12-07	3.60	20,000	-
182-2 nd Debenture	2019-06-07	3.94	20,000	-
183-1 st Debenture	2018-12-14	3.60	5,000	-
183-2 nd Debenture	2019-06-14	3.87	5,000	-
183-3 rd Debenture	2019-09-16	4.04	15,000	-
184-1 st Debenture	2019-03-22	3.69	20,000	-
184-2 nd Debenture	2019-06-24	3.83	10,000	-
184-3 rd Debenture	2019-12-22	4.24	20,000	-
185-1 st Debenture	2018-10-01	3.29	10,000	-
185-2 nd Debenture	2019-07-01	3.78	5,000	-
185-3 rd Debenture	2019-12-29	4.24	10,000	-
186 th Debenture	2019-07-04	3.75	30,000	-
187-1st Debenture	2019-07-19	3.73	22,000	-
187-2 nd Debenture	2019-10-19	4.02	10,000	-
188-1st Debenture	2019-01-31	3.31	10,000	-
188-2 nd Debenture	2019-07-31	3.68	20,000	-

(in millions of Korean won)	Maturity date	Interest rate as at Dec. 31, 2017 (%)	2017	2016
188-3 rd Debenture	2019-10-31	3.91	10,000	-
188-4 th Debenture	2020-01-31	4.08	5,000	-
189-1st Debenture	2019-08-08	3.67	10,000	-
189-2 nd Debenture	2019-11-08	3.91	10,000	-
189-3 rd Debenture	2020-02-07	4.10	10,000	-
190-1st Debenture	2020-02-17	4.18	10,000	-
190-2 nd Debenture	2020-08-17	4.62	10,000	-
191-1st Debenture	2019-11-22	3.98	10,000	-
191-2 nd Debenture	2020-02-21	4.19	10,000	-
192 nd Debenture	2019-11-25	4.01	10,000	-
193 rd Debenture	2020-08-31	4.57	10,000	-
194-1st Debenture	2019-09-05	3.59	10,000	-
194-2 nd Debenture	2020-03-05	4.01	3,000	-
195 th Debenture	2019-09-13	3.40	10,000	-
196th Debenture	2020-03-22	3.97	10,000	-
197 th Debenture	2019-03-26	3.10	20,000	-
198-1st Debenture	2019-07-10	3.32	2,000	-
198-2 nd Debenture	2019-10-10	3.58	4,000	-
198-3 rd Debenture	2020-04-10	4.33	20,000	-
199-1st Debenture	2019-04-24	3.48	10,000	-
199-2 nd Debenture	2019-10-24	3.87	13,000	-
200th Debenture	2019-04-26	3.47	20,000	-
201-1st Debenture	2019-04-30	3.56	20,000	-
201-2 nd Debenture	2020-04-30	4.64	20,000	-
202th Debenture	2019-05-06	3.59	17,000	-
203th Debenture	2019-11-21	4.18	19,000	-
204th Debenture	2019-11-25	4.09	20,000	-
205-1 st Debenture	2018-11-28	3.28	20,000	-
205-2 nd Debenture	2019-11-28	4.04	20,000	-
206th Debenture	2019-12-09	3.94	20,000	-
207th Debenture	2019-06-22	3.35	10,000	-
208-1st Debenture	2019-12-26	3.83	20,000	-
208-2 nd Debenture	2020-06-26	4.49	10,000	-
18 th ABS	2017-09-11	-	· -	25,000
19 th ABS	2017-09-26	-	-	10,000
20 th ABS	2017-01-15	-	-	10,000
20 th ABS	2017-03-15	-	-	10,000
20 th ABS	2017-06-15	-	-	10,000
20 th ABS	2017-09-15	-	-	10,000
20 th ABS	2017-12-15	-	-	10,000
22th ABS	2018-01-26	-	-	45,000
24 th ABS	2018-11-16	2.09~ 2.62	35,000	110,000
25 th ABS	2018-01-17	1.90	6,000	-
25 th ABS	2018-02-14	1.97	5,000	-
25 th ABS	2018-03-16	2.02	5,000	-
25 th ABS	2018-04-17	2.07	5,000	_
25 th ABS	2018-06-15	2.11	5,000	_
25 th ABS	2018-07-17	2.13	5,000	-
25 th ABS	2018-08-17	2.14	5,000	-
25 th ABS	2018-09-17	2.16	5,000	-
	_5.5 55 17	· · -	-,	

(in millions of Korean won)	Maturity date	Interest rate as at Dec. 31, 2017 (%)	2017	2016
25 th ABS	2018-10-17	2.17	5.000	_
25 th ABS	2018-10-17	2.17	5,000	_
25 th ABS			•	_
	2019-01-17	2.33	5,000	-
25 th ABS	2019-03-15	2.44	5,000	-
Asset Backed Short-Term Bond	2017-01-06	-	-	8,800
Asset Backed Short-Term Bond	2017-01-06	-	-	4,000
Asset Backed Short-Term Bond	2017-03-02	-	-	2,000
Asset Backed Short-Term Bond	2018-02-08	2.20	15,000	-
Asset Backed Short-Term Bond	2018-02-08	2.20	5,000	-
Asset Backed Short-Term Bond	2018-02-12	2.10	10,000	-
Asset Backed Short-Term Bond	2018-02-19	2.50	10,000	-
Asset Backed Short-Term Bond	2018-02-22	2.50	10,000	-
Asset Backed Short-Term Bond	2018-02-23	2.20	7,000	-
Asset Backed Short-Term Bond	2018-03-13	2.30	7,000	-
			2,270,173	2,048,904
Less: Current portion			(1,100,673)	(816,800)
Discount on bonds payable			(3,428)	(4,241)
			₩ 1,166,072	₩ 1,227,863

21. Trade and Other Payables

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

(in millions of Korean won)	2017		2016		
Trade payables	₩	1,417,474	₩	1,072,263	
Other payables		656,318		714,253	
Long-term other payables		400,493		376,167	
	₩	2,474,285	₩	2,162,683	

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

(in millions of Korean won)	2017			2016
Other payables				
Non-trade payables	₩	439,806	₩	517,983
Accrued expenses		118,223		112,127
Withholdings		64,491		55,782
Deposits received		33,798		28,361
		656,318		714,253
Long-term other payables				
Non-trade payables		20,247		23,657
Accrued expenses		6,156		6,488
Deposits received		374,090		346,022
		400,493		376,167
	₩	1,056,811	₩	1,090,420

The fair value of long-term other payables is calculated by discounting nominal value of expected future cash inflow at discount rate which reflects credit risk.

	2017	2016
Discount rate	1.60%~5.00%	1.80%~5.00%

22. Post-employment benefits

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

(in millions of Korean won)		2017		2016
Present value of defined benefit obligations	₩	456,270	₩	437,373
Fair value of plan assets ¹		(432,995)		(393,874)
Net defined benefit liabilities	₩	23,275	₩	43,499

¹ The contributions to the National Pension Fund of ₩ 462 million are included in the fair value of plan assets as at December 31, 2017 (2016: ₩497 million).

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

(in millions of Korean won)	2017			2016
Current service cost	₩	60,780	₩	60,836
Interest expenses		9,723		8,537
Interest income		(11,304)		(10,143)
Past service cost and gains(losses)				
arising from settlements		6		-
	₩	59,205	₩	59,230

Line items including total expenses in the consolidated statements of profit or loss for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		2017		2016
Cost of sales	₩	32,984	₩	34,965
Selling and administrative expenses Research and development expenses		22,900 3.321		21,307 2,958
research and development expenses	₩	59,205	₩	59,230

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

(in millions of Korean won)		2017		2016
Beginning balance	₩	437,373	₩	394,832
Current service cost	VV	,	V V	ŕ
		60,780		60,836
Interest expenses		9,723		8,537
Past service cost and gain (loss) arising from				
settlements		6		-
Benefits payment		(26,423)		(26,689)
Remeasurements:				
Changes in demographic assumptions		-		1,019
Changes in financial assumptions		(20,340)		(6,076)
Experience adjustments		(4,303)		4,465
Transfer in (out) of associates		(529)		(177)
Changes in scope of consolidation		(76)		-
Others (changes in exchange rate and others)		59		626
Ending balance	₩	456,270	₩	437,373

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

(in millions of Korean won)		2017		2016
Beginning balance	₩	393,874	₩	359,266
Interest income		11,304		10,143
Employer contribution		60,778		51,491
Benefits payments		(24,114)		(21,581)
Effect of settlement of the Policy				-
Remeasurements		(6,031)		(4,377)
Increase (decrease) due to changes in scope				
of consolidation		(85)		-
Others (changes in exchange rate and others)		(2,731)		(1,068)
Ending balance	₩	432,995	₩	393,874

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

(in millions of Korean won)		2017		2016
Deposits	₩	320,864	₩	293,218
Debt instruments		112,131		100,656
	₩	432,995	₩	393,874

Remeasurements of net defined benefit liabilities recognized as other comprehensive income for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		2017		2016
Before income tax effects	₩	18,612	₩	(3,784)
Income tax effects		(4,608)		970
After income tax effects	₩	14,004	₩	(2,814)

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

	2017	2016
Discount rate	0.3%~3.39%	0.32%~2.82%
Salary growth rate	1.02%~4.57%	1.02%~4.32%

The sensitivity of the defined benefit liability to changes in the weighted principal assumptions is:

	Changes in principal assumption	Effect on defined benefit liability
		1.44%~8.39% decrease/
Discount rate	1.0% increase/decrease	1.48%~9.85% increase
		1.47%~9.83% increase/
Salary growth rate	1.0% increase/decrease	1.46%~8.52% decrease

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. The sensitivity of the defined benefit liability to changes in principal actuarial assumptions is calculated using the projected unit credit method, the same method applied when calculating the defined benefit liabilities recognized on the consolidated statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis were not changed 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 \forall 50,003 million.

Expected maturity analysis of undiscounted pension benefits as at December 31, 2018, is as follows:

(in millions of Korean won)		than 1 ear		etween 1 Between 2 d 2 years and 5 years Over				r 5 years	Т	otal
Pension benefits	₩	33,417	₩	27,987	₩	90,997	₩	750,024	₩	902,425

The weighted average duration of the defined benefit obligation is 1.75~10.4 years.

Recognized expense related to the defined contribution plan for the year ended December 31, 2017, is \forall 5,870 million (2016: \forall 5,471 million).

23. Tax Expense and Deferred Tax

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

(in millions of Korean won)		2017	2016
Current tax:			
Current tax on profit for the year	₩	197,023	₩ 235,190
Adjustments in respect of prior years		(92,439)	11,764
Total current tax		104,584	246,954
Deferred tax :			
Origination and reversal of temporary			
differences		(66,760)	(25,847)
Impact of change in tax rate		2,082	5
Total deferred tax		(64,677)	(25,842)
Income tax expense	₩	41,989	₩ 221,112

The tax on the Group's profit before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to profits of the consolidated entities as follows:

(in millions of Korean won)		2017		2016
Profit before income tax	₩	382,829	₩	696,514
Tax calculated at domestic tax rates applicable to profits in the respective countries		139,358		203,408
Tax effects of:				
Income not subject to tax		(5,451)		(5,548)
Expenses not deductible for tax purposes		27,104		27,516
Adjustment in respect of prior year		(92,439)		11,763
Tax credits		(33,743)		(38,099)
Others		5,078		22,067
Impact of change in the tax rate		2,082		5
Income tax expense	₩	41,989	₩	221,112

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

(in millions of Korean won)		2017				
			After			After
	Before tax	Tax effect	tax	Before tax	Tax effect	tax
Gain (loss) on valuation of						
available-for-sale financial assets	₩ (2,060)	₩ 6,474	₩ 4,414	₩ 44,778	₩ (6,425)	₩ 38,353
Remeasurements of net defined benefit liabilities	(29,694)	15,907	(13,787)	(48,306)	20,515	(27,791)
Gain (loss) on valuation of derivatives	809	(196)	613	809	(196)	613
Change in equity from applying equity method	4,430	(736)	3,694	1,142	2,456	3,598
Cumulative effect of foreign currency translation	(84,229)	561	(84,790)	22,165	(5,364)	16,801

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

(in millions of Korean won)		2017	2016		
Deferred tax assets					
Deferred tax asset to be recovered after more than 12 months	₩	327,986	₩	293,084	
Deferred tax asset to be recovered within 12 months		46,505		46,288	
		374,491		339,372	
Deferred tax liabilities		_		_	
Deferred tax liability to be recovered after more than 12 months		(495,647)		(537,706)	
Deferred tax liability to be recovered within 12 months		2,479		14,980	
		(493,168)		(522,726)	
Deferred tax assets (liabilities), net	₩	(118,677)	₩	(183,354)	

The movements in the deferred income tax account for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		2017		2016
Beginning balance	₩	(183,354)	₩	(209,196)
Tax charged (credited) to components of profit				
and loss		53,653		(34,238)
Tax charged (credited) to components of other				
comprehensive income		11,024		8,396
Ending balance	₩	(118,677)	₩	(183,354)

Changes in deferred income 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:

	2017								
(in millions of Korean won)						Other			
			Statement of		com	prehensive			
	В	eginning	profit or	loss	İ	income		Ending	
Deferred tax liabilities									
Gains on revaluation of land	₩	(285,743)	₩	4,201	₩	-	₩	(281,542)	
Investments in associates		(59,411)		-		-		(59,411)	
Defined benefit pension plan assets		(83,766)	((9,784)		1,254		(92,296)	
Reserve for research and human resource development		(12,467)		8.067		-		(4,400)	
Gain (loss) from fire insurance policy		(546)		-		-		(546)	
Others		(80,793)		7,214		8,212		(65,367)	
		(522,726)		9,698		9,466		(503,562)	
Deferred tax assets									
Available-for-sale financial assets		89,757		(4,127)		12,900		98,530	
Provision for severance pension benefits		88,038		15,443		(5,862)		97,619	
Provision for impairment		24,985		-		-		24,985	
Government grants		7,733		(2,303)		-		5,430	
Loss on valuation of inventories		7,662		7,307		-		14,969	
Impairment loss on property, plant and equipment		13,342		25,497		-		38,839	
Provision for guarantees		224		-		-		224	
Accrued compensated absences		2,167		573		-		2,740	
Provision for construction loss		3,558		-		-		3,558	
Long-term employment allowance		1,551		(532)		-		1,019	
Provision for warranties		11,601		512				12,113	
Others		88,754		1,585		(5,480)		84,859	
		339,372		43,955		1,558		384,885	
	₩	(183,354)	₩	53,653	₩	11,024	₩	(118,677)	

	2016								
(in millions of Korean won)	Other								
			Statement of	comprehensive					
	В	eginning	profit or loss	income		Ending			
Deferred tax liabilities									
Gains on revaluation of land	₩	(285,743)	₩ -	₩ -	₩	(285,743)			
Investments in associates		(38,836)	(11,362)	(9,213)		(59,411)			
Defined benefit pension plan assets		(76,270)	(7,509)	13		(83,766)			
Reserve for research and human resource development		(23,760)	11,293	-		(12,467)			
Gain (loss) from fire insurance policy		(546)	-	-		(546)			
Others		(84,761)	4,885	(917)		(80,793)			
		(509,916)	(2,693)	(10,117)		(522,726)			
Deferred tax assets									
Available-for-sale financial assets		87,211	3,888	(1,342)		89,757			
Provision for severance pension benefits		78,901	8,188	949		88,038			
Provision for impairment		19,461	5,524	-		24,985			
Government grants		6,371	1,362	-		7,733			
Loss on valuation of inventories		6,917	6,425	-		13,342			
Impairment loss on property, plant and equipment		11,214	(3,552)	-		7,662			
Provision for guarantees		1,760	(1,536)	-		224			
Accrued compensated absences		1,584	583	-		2,167			
Provision for construction loss		4,318	(760)	-		3,558			
Long-term employment allowance		1,428	123	-		1,551			
Provision for warranties		10,096	1,505	-		11,601			
Others		71,459	15,182	2,113		88,754			
		300,720	36,932	1,720		339,372			
	₩	(209,196)	₩ 34,239	₩ (8,397)	₩	(183,354)			

The ability to realize deferred tax asset depends on various components; such as, the Group's ability to generate taxable income for period of the temporary difference realization, general economic environment and industrial expectation, and others. The Group periodically assesses its ability to realize deferred tax assets, and as at December 31, 2017, the Group recognized deferred tax assets for all deductible temporary difference except for the difference relating to investment in associates, which are unrealizable, amounted to \forall 698,566 million (2016: \forall 641,990 million).

Deferred income tax assets are recognized for tax loss carryforwards to the extent that the realization of the related tax benefit through future taxable profits is probable. The Group did not recognize deferred income tax assets of $\forall 17,953$ million (2016: $\forall 63,888$ million). Unused tax losses carryforwards expire through 2027.

24. Other Liabilities

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

	2017		2016
₩	412,328	₩	367,731
	19,631		20,241
	12,332		50,178
	444,291		438,150
	19,600		17,106
	107,144		55,709
	126,744		72,815
₩	571,035	₩	510,965
		₩ 412,328 19,631 12,332 444,291 19,600 107,144 126,744	₩ 412,328 ₩ 19,631 12,332 444,291 19,600 107,144 126,744

¹The Group accrued provision for warranties in relation to construction contract for the foreseeable expenses; such as, defect repairs based on past experience. The Group also accrued provision for guarantees for the foreseeable expenses relating to PF guarantees (Note 38).

Changes in the Group's provision for the years ended December 31, 2017 and 2016, are as follows:

	2017							
(in millions of Korean won)		rision for ranties	Provision for guarantees		(Others	Total	
Beginning balance Increase	₩	50,522 21,578	₩	1,164 266	₩	54,201 67,087	₩	105,887 88,931
Decrease Other		(17,423)		- (1,168)		(54,289) (2,462)		(71,712) (3,630)
Ending balance	₩	54,677	₩	262	₩	64,537	₩	119,476
				2016				
(in millions of Korean won)	_	vision for rranties		vision for irantees	C	Others		Total
Beginning balance	₩	40,693	₩	-	₩	22,033	₩	62,726
Increase		31,137		1,164		56,301		88,602
Decrease		(21,308)				(24,133)		(45,441)
Ending balance	₩	50,522	₩	1,164	₩	54,201	₩	105,887

25. Share Capital

The Group is authorized to issue 200,000 thousand shares with the par value per share of \forall 5,000. As at December 31, 2017, the Group has issued 35,117,455 ordinary shares. There were no changes in share capital for the years ended December 31, 2017 and 2016.

26. Retained Earnings

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

(in millions of Korean won)	2017	2016			
Legal reserve ¹	₩	67,059	₩	42,402	
Discretionary reserve					
Research and development reserves ²		50,000		96,667	
Business stabilization reserves		985		-	
Facility reserves		2,522,199		2,121,000	
Retained earnings before appropriation		502,910		711,788	
	₩	3,143,153	₩	2,971,857	

¹ The Commercial Code of the Republic of Korea requires the Group to appropriate for each financial period, as a legal reserve, an amount equal to a minimum of 10% of cash dividends paid until such reserve equals 50% of its issued capital stock. The reserve is not available for cash dividends payment, but may be transferred to capital stock or used to reduce accumulated deficit. When the accumulated legal reserves (the sum of capital reserves and earned reserves) are greater than 1.5 times the paid-in capital amount, the excess legal reserves may be distributed (in accordance with a resolution of the shareholders' meeting).

Changes in retained earnings for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		2017	2016		
Beginning balance Profit for the year	₩	2,971,857 325,574	₩	2,636,043 455,526	
Remeasurements of defined benefit		13,384		(1,618)	
Remeasurements of defined benefit liability of associates		(742)		(295)	
Dividends		(166,343)		(116,440)	
Others		(577)		(1,359)	
Endings balance	₩	3,143,153	₩	2,971,857	

² The Group appropriates a certain portion of its retained earnings as a reserve for research and development which are provided in order to obtain tax benefits under the Special Tax Treatment Control Law. Among these reserves, the reserved amount according to the terms of related tax laws may be transferred to discretionary reserve and distributed as dividends.

27. Other Components of Equity

Other components of equity as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		2017		2016		
Other capital surplus	₩	315,975	₩	317,532		
Treasury shares ¹		(34,204)		(34,204)		
Gain (loss) on valuation of available-for- sale financial assets		4,414		38,353		
Gain (loss) on valuation of derivatives		613		613		
Change in equity from applying the equity method		3,694		3,598		
Cumulative effect of foreign currency translation		(84,790)		16,801		
Other capital adjustments		(1,752)		(1,754)		
	₩	203,950	₩	340,939		

¹ The 1,848,851 treasury shares were acquired through a merger in 1998 and are expected to be sold in the future.

28. Revenue

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

(in millions of Korean won)		2017	2016			
Merchandise	₩	4,075,933	₩	3,791,690		
Finished goods		6,521,007		6,424,360		
Construction		1,387,216		1,104,631		
Housing		46,572		127,317		
Others		515,682		481,115		
	₩	12,546,410	₩	11,929,113		

29. Construction Contracts

Changes in the remaining balance of construction contracts for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)	2017											
	E	Beginning balance	Changes ¹		Recognized construction revenue	Ending balance						
Construction	₩	4,479,904	₩	1,137,463	₩	(1,134,412)	₩	4,482,955				
Heavy industrial		536,116		183,506		(273,553)		446,069				
	₩	5,016,020	₩	1,320,969	₩	(1,407,965)	₩	4,929,024				

¹ In 2017, the increase in subcontracted amount, such as revenue from initial contracts, and decrease in subcontracted amount, such as alterations in the original contract work, amount to ₩ 1,371,048 million and ₩ 50,079 million, respectively.

(in millions of Korean won)	2016										
	I	Beginning balance		Changes ¹		Recognized construction revenue	Ending balance				
Construction	₩	3,499,562	₩	1,845,565	₩	(865,223)	₩	4,479,904			
Heavy industrial		639,706		241,008		(344,598)		536,116			
	₩	4,139,268	₩	2,086,573	₩	(1,209,821)	₩	5,016,020			

¹ In 2016, the increase in subcontracted amount, such as revenue from initial contracts, and decrease in subcontracted amount, such as alterations in the original contract work, amount to ₩ 2,275,309 million and ₩ 188,736 million, respectively.

Details of ongoing construction contracts such as recognized construction profit or loss as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)					20	17					
	Accumulated construction revenue			Accumulated construction cost		Accumulated profit or loss		Advance received		Retention ¹	
Construction	₩	1,439,580	₩	1,328,466	₩	111,114	₩	42	₩	-	
Heavy industrial		1,331,366		1,277,462		53,904		687		44,484	
	₩	2,770,946	₩	2,605,928	₩	165,018	₩	729	₩	44,484	

¹ In the consolidated statements of financial position, the retention is recorded as long-term deposits provided.

(in millions of Korean won)					20	16				
	COI	cumulated nstruction revenue		cumulated nstruction cost		umulated fit or loss		Ivance ceived	Ret	ention ¹
Construction	₩	1,388,368	₩	1,313,698	₩	74,670	₩	1,388	₩	-
Heavy industrial		1,275,072		1,232,764		42,308		6,398		48,919
	₩	2,663,440	₩	2,546,462	₩	116,978	₩	7,786	₩	48,919

¹ In the consolidated statements of financial position, the retention is recorded as long-term deposits provided.

Amount due from and due to customers for contract work as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		20	17	2016						
		ue from stomers ¹	Due to customers ²		Due from customers ¹		Due to customers			
Construction	₩	68,228	₩	50,342	₩	56,950	₩	52,543		
Heavy industrial		72,127		28,067		60,032		45,735		
	₩	140,355	₩	78,409	₩	116,982	₩	98,278		

Provisions of loss on construction amounting to 12,502 million (2016: 16,768 million) as at December 31, 2017 are included in amounts due from and due to customers for contract work

¹ Recognized as due from customers for contract work in the consolidated statement of financial position.

 $^{^{2}}$ Recognized as due to customers for contract work in the consolidated statement of financial position.

Details of provision of loss on construction as at December 31	, 2016	and 2017,	are a	as follows:	
(in millions of Korean won)		2017	2016		
Taejeon-dong APT, Gwangju	₩	3,475	₩	8,055	
Telecom center construction		25		114	
Welfare facilities construction in downtown		79		120	
Qatar MESAIEED Sewage disposal plant construction		4,091		1,727	
India Mokokchung & Melriat project		1,058		1,816	
India JHARKHAND project		419		775	
Parkistan Gujarat project		454		1,285	
Qatar ph10 turn-key construction project and etc.		2,901		2,876	
	₩	12,502	₩	16,768	

Provisions of loss on construction are included in amounts due from and due to customers for contract work in the consolidated statement of financial position.

Contractual information that contract revenue for the year ended December 31, 2017 is more than 5% of previous revenues, are as follows:

(in millions of Korean won)				Due	from	custor	ners	Trade receivables (receivables from construction contracts)				
	Contract date	Contractual completion date	Percentage -of- completion	Gro		impa	nulated irment oss	Gross amount	Provision for impairment	-		
Urban Redevelopme nt Projects on the 4th Yongsan Region, Seoul	Dec, 2015	Nov, 2020	9.90%	₩	1,245	₩	-	₩	- ₩	-		

Details of contract that uses percentage-of-completion measured by reference to the contract costs incurred up to date as a percentage of total estimated costs for each operating segments are as follows:

(in millions of Korean won)		profit or loss total co					•	n estimated ract costs		Due from customers			
	for e	ovisions expected osses	Changes in accounting estimate		Error correction	Changes in accounting estimate		Error correction	;	Gross amount		cumulated pairment loss	
Construction	₩	8,416	₩	2,575	₩ -	₩	(383)	₩ .	. ₩	68,228	₩	-	
Heavy industry		4,086		15,059			(7,681)			72,127			
	₩	12,502	₩	17,634	₩ -	₩	(8,064)	₩ -	₩	140,355	₩	-	

Details of changes in estimated total contract costs, profits or loss for the year and the succeeding year, and the impact on due from customers for contract work are as follows:

	estir C	anges in nated total ontract evenue	est total	Changes in estimated total contract cost		oact on t or loss the year	profi fo suc	pact on t or loss or the ceeding year	Changes in due from customers for contract work ^{1,2}		
Construction	₩	1,904	₩	(383)	₩	2,575	₩	(288)	₩	2,575	
Heavy industry		(10,752)		(7,681)		15,059		(18,130)		15,059	
Total	₩	(8,848)	₩	(8,064)	₩	17,634	₩	(18,418)	₩	17,634	

¹ The impact on recognition of housing revenue are included.

The impact on profit or loss for the year and the succeeding year is determined based on total contract costs, which are estimated based on the circumstances present from the start of the contract to the end of current year, and the estimated contract revenue as at December 31, 2017. The total contract costs and contract revenue may change in the future.

When the estimated total contract costs increase by 5%, profit before income tax and net assets before income tax effects decrease by \forall 126,924 million.

² The impact on sites of due to customers for contract work are included.

30. Expenses by Nature

Cost of sales, selling and administrative expenses and research and development expenses by nature for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)	2017	2016
Changes in inventories of finished goods and work-in- process and others	₩ (1,270,225)	₩ (1,191,217)
Changes in merchandise	2,741,861	2,742,334
Raw materials and supplies used	5,488,693	4,502,986
Employee benefit expense (Note 31)	1,231,394	1,173,024
Depreciation and amortization	664,548	623,363
Electricity expense	374,267	354,495
Export expense	136,264	158,688
Fuel expense	138,758	120,679
Service expense	251,864	223,994
Outsourcing expense	981,531	1,048,781
Others	1,036,648	1,155,639
Total ¹	₩ 11,775,603	₩ 10,912,766

¹ Included in the cost of sales, selling and administrative expense, and research and development expenses in the consolidated statements of profit or loss.

31. Employee Benefit Expense

(in millions of Korean won)		2017		2016
Salaries	₩	1,023,952	₩	972,653
Employee welfare benefits		142,367		135,670
Pension costs - defined contribution plans		5,870		5,471
Pension costs - defined benefit plans (Note 22)		59,205		59,230
	₩	1,231,394	₩	1,173,024

32. Selling and Administrative Expenses

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

(in millions of Korean won)	2017		2016	
Salaries	₩	278,117	₩	280,022
Severance pension benefits		25,314		23,097
Employee welfare benefits		35,495		34,229
Training		2,878		2,912
Transportation		32,126		30,785
Communications		7,322		7,578
Taxes and dues		22,253		24,591
Rent		40,560		37,302
Bad debt expenses		38,551		38,696
Depreciation		24,133		25,306
Amortization		20,572		26,863
Operating expenses for overseas branches		21,784		22,214
Advertising		48,323		40,425
Freight and storage expenses		68,418		69,164
Service fees		89,913		77,956
Export expenses		136,264		158,688
Entertainment		14,921		15,946
Others		96,668		109,395
	₩	1,003,612	₩	1,025,169

33. Other Income and Other Expenses

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

(in millions of Korean won)	2017	2016
Other income		
Rental income	₩ 2,017	₩ 2,387
Gain on disposal of property, plant and equipment	1,746	5,396
Gain on disposal of intangible assets	-	28
Gain on disposal of investment property	1,660	-
Miscellaneous gains	47,447	46,581
Gain on derivative transactions	123	545
Gain on valuation of derivatives	-	143
Reversal of provision for impairment loss on other assets	941	129
Government grants	12,468	10,879
Dividends	422	188
Others	17	
	66,841	66,276
Other expenses		
Loss on disposal of property, plant and equipment	3,377	7,353
Impairment loss on property, plant and equipment	106,582	39,188
Loss on disposal of intangible assets	36	756
Impairment loss on intangible assets	54,469	15,173
Loss on disposal of investment property	10,909	1,200
Miscellaneous losses	61,927	79,616
Donations	4,138	6,712
Other bad debt expenses	82,360	14,745
Nego fee	19,061	14,725
Loss on disposal of trade receivables	1,758	2,025
Commissions	89	21
Additional provisions for guarantees	50,505	3,476
Others	(8)	310
	395,203	185,300
	₩ (328,362)	₩ (119,024)

34. Finance Income and Expenses

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

(in millions of Korean won)		2017	2016		
Finance income					
Interest income	₩	4,557	₩ 7,3	310	
Gain on foreign currency transactions		151,985	192,6	84	
Gain on foreign currency translation		202,376	196,2	259	
Gain on disposal of financial assets					
Available-for-sale financial assets		-	14,0)36	
Gain on derivative transactions		53,263	35,9	923	
Gain on valuation of derivatives		29,848	4,7	750	
Others		794		_	
		442,823	450,	962	
Finance costs					
Interest expenses		175,381	170,2	286	
Loss on foreign currency transactions		154,811	248,1	124	
Loss on foreign currency translation		135,282	218,8	304	
Loss on disposal of financial assets					
Available-for-sale financial assets		-	2	222	
Impairment loss on available-for-sale financial assets		17,053	1,4	492	
Loss on derivative transactions		21,360	16,9	942	
Loss on valuation of derivatives		5,491	24,2	217	
		509,378	680,0	087	
	₩	(66,555)	₩ (229,1	25)	

The Group recognizes income and expense relating to exchange difference as finance income and expenses.

35. Earnings per Share

Basic earnings per ordinary share for the years ended December 31, 2017 and 2016, is as follows:

(in millions of Korean won, except per share amount)		2017		2016
Profit attributable to equity holders of the Controlling Company	₩	325,574	₩	455,526
Weighted average number of ordinary shares in issue ¹		33,268,604		33,268,604
Basic earnings per share Basic earnings per share from continuing operations(in Korean won)	₩	9,786	₩	13,692

¹ The number of weighted average number of ordinary shares for the years ended December 31, 2017 and 2016, is 33,268,604 shares and there has been no change for the year ended December 31, 2017.

36. Dividends

The dividends paid in 2017 and 2016 were $\mbox{$\mbox{$$\psi}$ 166,343 million ($\mbox{$\mbox{$$\mbox{$$\mbox{$}\mbox{$$\mbox{$}\mbo$

37. Cash Generated from Operations

Details of cash generated from operations for the years ended December 31, 2017 and 2016, are as follows:

(in millions of Korean won)	2017	2016
Profit before income tax	₩ 382,829	₩ 696,514
Adjustments for:		
Interest income and expenses, net	80,787	75,728
Loss (Gain) on foreign currency translation	(67,093)	22,337
Loss (Gain) on valuation of derivatives	(24,711)	20,036
Depreciation and amortization	664,548	623,363
Loss on disposal of property, plant, equipment, intangible assets and investment property	11,712	4,990
Impairment loss on property, plant, equipment, intangible assets, and investment property	161,043	54,361
Bad debts expense	172,036	99,527
Reversal of allowance for bad debts	(1,045)	(129)
Gain on disposal of financial assets	(18,363)	(15,091)
Impairment loss on financial assets	17,053	1,492
Dividend income	(16,761)	(13,950)
Post-employment benefits	59,204	59,230
Additional provisions adjustment	87,354	40,075
Loss on disposal of trade receivables	1,758	2,025
Gain on investments in subsidiaries and associates	(6,938)	(28,315)
Long-term employee benefits	923	1,660
Others	67,880	13,976
Changes in assets and liabilities from operations:		
Decrease (Increase) in trade receivables	(380,001)	201,719
Increase in inventories	(243,832)	(23,350)
Decrease (Increase) in other receivables	(24,773)	15,073
Increase in unbilled amount	(28,045)	(23,541)
Decrease in other financial assets	5,602	960
Increase in other assets	(27,120)	(6,888)
Increase in other financial business assets	(2,886)	(89,340)
Decrease (Increase) in cumulative effect of foreign currency translation	(210,973)	560
Increase in trade payables	411,625	102,447
Increase (Decrease) in other payables	(102,816)	257,362
Decrease in other financial liabilities	(30,225)	(19,063)
Payment of warranty expenses	(17,423)	(21,308)
Payment of post-employment benefits	(3,562)	(5,122)
Distribution to plan assets	(60,778)	(51,491)
Others	408	(1,924)
Cash generated from operations	₩ 857,417	₩ 1,993,923

Changes in liabilities arising from financial activities for the year ended December 31, 2017 are as follows:

(in millions of Korean won)		hort-term orrowings	of	rent portion long-term orrowings	D	ebentures		ong-term orrowings		Total
Beginning balance	₩	2,738,096	₩	1,642,329	₩	1,227,863	₩	1,434,308	₩	7,042,596
Cash flows		489,452		(1,409,441)		1,187,689		271,737		539,437
Discount on bonds payable		-		-		977		-		977
Reclassification of the current portion		289,436		1,707,518		(1,253,304)		(743,650)		-
Maturity extension		(13,500)		(223,762)		-		237,262		-
Others ¹		(180,143)		(122,989)		2,847		(20,640)		(320,925)
Ending balance	₩	3,323,341	₩	1,593,655	₩	1,166,072	₩	1,179,017	₩	7,262,085

¹ Others include exchange differences or changes in scope of consolidation to liabilities.

Significant transactions not affecting cash flows are as follows:

(in millions of Korean won)		2017		2016
Change in advance payments related to the acquisition of property, plant and equipment	₩	(3,981)	₩	(2,227)
Change in other payables related to the acquisition of property, plant and equipment		(29,313)		(25,327)
Chang in other receivables related to disposal of property, plant and equipment		877		4,144
Construction-in-progress transferred to property, plant and equipment		638,298		687,665
Reclassification of the current portion of unearned revenue		987		3,176
Reclassification of the current portion of long-term deposits received		36,748		21,843
Reclassification of the current portion of debentures		1,253,304		816,800
Reclassification of the current portion of long-term borrowings		743,650		825,529

38. Contingencies and Commitments

(a) Notes and others provided as collaterals

As at December 31, 2017, the Group has provided ten notes and seven checks to the customers and other as collaterals for borrowings and transaction agreements.

(b) Loan agreements and others

The Group has commitments contracted with financial institution with a limit of \forall 6,143,839 million, including bank overdrafts, trade bill discounts, open local L/C and general loans. Also, the Group has trade receivable discount agreements with a limit of \forall 2,169,835 million as at December 31, 2017.

(c) Guarantees provided to others

The Group has provided payment guarantees for others, amounting to $\mbox{$\%$}$ 363,389 million (2016: $\mbox{$\%$}$ 232,261 million) as at December 31, 2017, and the limits of the related guarantees are $\mbox{$\%$}$ 572,710 million (2016: $\mbox{$\%$}$ 458,512 million) as at December 31, 2017. Further, as at December 31, 2017, the Group provides joint and several guarantees of performing construction contracts amounting $\mbox{$\%$}$ 3,062,719 million (2016: $\mbox{$\%$}$ 3,195,726 million) in relation to the guarantees of housing distribution which developers obtained from Korea Housing & Urban Guarantee Co., Ltd.

In addition, the Group has provided a fund supplemental commitment amounting to $\mbox{$\mathbb{W}$}$ 247,400 million (2016: $\mbox{$\mathbb{W}$}$ 364,400 million) to Grand Sixth Ltd. and others in relation to renewable energy business such as the solar power plant project in Romania as at December 31, 2017, and recognized $\mbox{$\mathbb{W}$}$ 98,903 million as an expense, regarding this agreement. Meanwhile, the Group has loaned $\mbox{$\mathbb{W}$}$ 125,853 million for the execution of the fund supplement agreements related to the project, and an additional loan amounting to $\mbox{$\mathbb{W}$}$ 209,570 million has been provided after the reporting period(Note 10). In addition, the Group has been asked to take over debt amounting to $\mbox{$\mathbb{W}$}$ 8,804 million due to the failure of completion guarantee regarding the UK biomass business, and a lawsuit is involved regarding this matter.

Also, the Group has provided collaterals and payment guarantees for its associates, the related parties (Note 19).

(d) Guarantees provided in relation to project financing

Details of guarantees provided by the Group to developers as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)		2017		2016
Liabilities take-over/fund supplemental commitments	₩	180,391	₩	180,391
Conditional liabilities take-over		665,000		569,000
Completion guarantee		3,973,300		3,128,000
	₩	4,818,691	₩	3,877,391

Details of guarantees provided in relation to project financing as at December 31, 2017, are as follows:

(in millions of Korean won)

			Carrying		
		Guarantee	amount of	Details of	
Construction	Creditor	limit	borrowings	guarantees	Guarantee period
Gwangju Taejeondong APT	IB	₩ 132,000	₩ 132,00	0 Debt take-over	2017.04~2018.04
Sunchun-si Resource	Bank and				
Recycling Center BTO		48,391	39,39	1 Joint guarantees	2015.06~2028.12
Project	insurance				
		₩ 180,391	₩ 171,39	1	

The Group provides conditional liabilities take-over guarantee amounting to $\mbox{$\mbox{$$\mu$}$}$ 454,200 million in for Urban Redevelopment Projects on the 4th Yongsan Region, Seoul and other 5 construction projects with a limit of $\mbox{$\mbox{$\mbox{$$\psi$}}$}$ 665,000 million. In addition, the Group has committed to fulfill the obligations to complete the responsibilities for the construction of other 28 sites including the construction of Hoehyeon station complex. The related loan balance is $\mbox{$\mbox{$$\psi$}$}$ 2,228,602 million and the guarantee limits is $\mbox{$\mbox{$$\psi$}$}$ 3,973,300 million.

(e) Guarantees provided by others

Details of guarantees provided by others as at December 31, 2017, are as follows:

(in millions of Korean won)

Guarantor	Collaterals and guarantees provided		Amount
The Export-Import Bank of Korea,			
Woori Bank and others	Performance guarantee and others	₩	769,718
Kookmin Bank,	Payment guarantee in foreign currencies		
Shinhan Bank and others	and others		81,562
Machinery Financial Cooperative	Performance guarantee,		
	Warranty guarantee and others		68,118
Seoul Guarantee Insurance Company	Performance guarantee and others		24,359
Seoul Housing and Communities			
Corporation, Daewoo Engineering &			
Construction Co.,Ltd and others ¹	Payment guarantee in borrowing		28,677
Korea Construction Financial			
Cooperative and others	Construction performance and others		1,895,968

¹ The Group has provided certain amount of the shares in Somesevit Coporation of the subsidiaries held by the remaining shareholders (SHC Corporation, Daewoo Engineering & Construction Co.,Ltd and others) as collateral for borrowings.

(f) Assets pledged as collaterals

Details of assets pledged as collaterals for the Group's borrowings as at December 31, 2017, are as follows: (in millions of Korean Won, in USD)

Assets pledged as collaterals	Related	borrowings	Maximum credit amount		Lender
Cash, and cash equivalents PP&E, Intangible assets and others ³	KRW	98,400	KRW	127,920	NEW STAR HAECHI INC. and others
Available-for-sale financial assets ¹	KRW	-	KRW	135,141	Committee of Creditor Banks of Chin Hung International Inc.
Trade receivables and others	USD	43,000,000	USD	43,000,000	Wells Fargo Bank
Property, plant, equipment and others	KRW	565,535	KRW	1,794,937	Korea Development Bank, Shinhan Bank and Others
Trade receivables	KRW	279,445	KRW	298,445	Woori Bank and Others
Available-for-sale financial assets	KRW	-	KRW	3,504	Machinery Financial Cooperative
Available-for-sale financial assets	KRW	-	KRW	4,373	Construction Financial cooperative
Property, plant, equipment ²	KRW	-	KRW	10,000	JeonJu City
Cash, and cash equivalents Intangible assets and others	KRW	165,000	KRW	221,000	Korea Federation Of Community Credit Cooperatives, National Credit Union Federation of Korea and Others

¹ The equity shares of Chin Hung International Inc. amounting to W 135,141 million have been provided as collateral to the Committee of Creditor Banks of Chin Hung International Inc. in accordance with the special agreement for plans for normalization of the business of Chin Hung International Inc. (Notes 11 and 19).

As at December 31, 2017, the Group has pledged its shares in Somesevit Corporation as collateral (with a maximum credit amount of \forall 56,000 million) in relation to borrowings of Somesevit Corporation. Also, the Group has pledged its shares in Gongdeok Gyeongwoo Development as collateral (with a maximum credit amount of \forall 165,000 million) in relation to borrowings of Gongdeok Gyeongwoo Development Corporation. Also, the Group has pledged its shares in Pyeongchang Wind Power Co., Ltd.(investments in associates, book value of \forall 6,949 million) as collateral, relating to borrowings of Pyeongchang Wind Power Co., Ltd. (amount: \forall 59,407 million). In addition, property, plant and equipment of the Group have been collateralized in relation to inventory finance of Hyosung Toyota Corp. (Notes 18, 19), Also, the Group has pledged its shares in Soonchon Eco Green Corporation (investments in associates, book value of \forall -) as collateral (with maximum credit amount of \forall 39,391 million) in relation to borrowing of Soonchon Eco Green Corporation (Note 19).

² The certain amount of the property, plant and equipment are provided as collateral to JeonJu City for receiving government grants.

³ The claim of business Interruption Insurance for Somesevit business have been provided as collateral.

(g) Pending lawsuits

Details of pending lawsuits as at December 31, 2017, are as follows:

(in millions of Korean won)

	Number		Amount	Details of lawsuit
As a plaintiff	28	₩	74,197	Claims for cancellation of acquisition tax levy and others
As a defendant	50		138,136	Claims for damages and others

The final outcome of the above cases cannot yet be estimated at the end of the reporting period. Accordingly, no provision for potential losses arising from the claims is reflected in the accompanying financial statements.

The Group has entered into a subordinated loan agreement with borrowers including NEW STAR HAECHI INC. and New Star Luna 2nd Co.,Ltd. to borrow the amount corresponding to the withholding tax imposed on the interest income to be paid by each borrower during the term of the arrangement under the loan agreement.

39. Information on Non-controlling Interests

39.1 Changes in Accumulated Non-controlling Interests

The profit or loss allocated to non-controlling interests and accumulated non-controlling interests of subsidiaries that are material to the Group for the years ended December 31, 2017 and 2016, is as follows:

(in millions of Korean won)						2017					
	Non- controlling interest rate (%)	non-c intere	umulated controlling ests at the inning of ne year	allo	it or loss cated to non- itrolling terests	paid	vidends d to non- ntrolling terests	(Others	non- inte	cumulated controlling rests at the of the year
Hyosung Investment & Development Corporation	41.25	₩	6,274	₩	(3,982)	₩	(20,130)	₩	41,199	₩	23,361
HanaLandchip Private Real Estate Investment Trust No.39	22.99		334		447		-		(893)		(112)
Hyosung Capital Co., Ltd.	2.85		11,440		756		-		(332)		11,864
Nautilus Hyosung Inc.	45.98		131,751		60		-		2,978		134,789
Hyosung Vietnam Co., Ltd.	11.79		52,972		13,095		-		(38,251)		27,816
Other	-		19,236		4,889				(12,078)		12,047
		₩	222,007	₩	15,265	₩	(20,130)	₩	(7,377)	₩	209,765
(in millions of Korean won)						2	016				
(in millions of Korean won)	Non- controlling interest rate (%)	non-c intere beg	umulated controlling ests at the inning of ne year	allo	it or loss cated to non- atrolling terests	Div paid	vidends d to non- ntrolling terests	(Others	non-	cumulated controlling rests at the of the year
(in millions of Korean won) Hyosung Investment & Development Corporation HanaLandchip Private Real Estate Investment Trust	controlling interest rate	non-c intere beg	controlling ests at the inning of	allo	cated to non- ntrolling	Div paid	vidends d to non- ntrolling		Others (753)	non-	controlling rests at the
Hyosung Investment & Development Corporation HanaLandchip Private Real	controlling interest rate (%)	non-c intere beg	controlling ests at the inning of ne year	allo cor int	cated to non- atrolling terests	Div paid cor in	vidends d to non- ntrolling terests			non- inter end	controlling rests at the of the year
Hyosung Investment & Development Corporation HanaLandchip Private Real Estate Investment Trust	controlling interest rate (%) 41.25	non-c intere beg	controlling ests at the inning of ne year 30,328	allo cor int	cated to non- atrolling terests (4,821)	Div paid cor in	vidends d to non- ntrolling terests			non- inter end	controlling rests at the of the year 6,274
Hyosung Investment & Development Corporation HanaLandchip Private Real Estate Investment Trust No.39	controlling interest rate (%) 41.25	non-c intere beg	controlling ests at the inning of ne year 30,328 (113)	allo cor int	cated to non- ntrolling terests (4,821)	Div paid cor in	vidends d to non- ntrolling terests		(753)	non- inter end	controlling rests at the of the year 6,274
Hyosung Investment & Development Corporation HanaLandchip Private Real Estate Investment Trust No.39 Hyosung Capital Co., Ltd.	controlling interest rate (%) 41.25	non-c intere beg	controlling ests at the inning of ne year 30,328 (113) 10,958	allo cor int	cated to non- itrolling terests (4,821) 447 232	Div paid cor in	vidends d to non- ntrolling terests		(753) - 250	non- inter end	rests at the of the year 6,274
Hyosung Investment & Development Corporation HanaLandchip Private Real Estate Investment Trust No.39 Hyosung Capital Co., Ltd. Nautilus Hyosung Inc.	controlling interest rate (%) 41.25 22.99 2.85 45.98	non-c intere beg	controlling ests at the inning of ne year 30,328 (113) 10,958 128,703	allo cor int	cated to non- itrolling terests (4,821) 447 232 5,928	Div paid cor in	vidends d to non- ntrolling terests		(753) - 250 (2,880)	non- inter end	controlling rests at the of the year 6,274 334 11,440 131,751

39.2 Summarized Financial Information on Subsidiaries

The summarized financial information for each subsidiary with non-controlling interests that are material to the Group before inter-company eliminations is as follows.

Summarized statements of financial position as at December 31, 2017 and 2016, are as follows:

						2017					
(in millions of Korean won)	Hv	osuna		Landchip ate Real						_	
Norean won,	Inves	Hyosung Investment & Development Corporation ¹		Estate estment st No.39		Hyosung apital Co., Ltd.		lautilus osung Inc.	Hyosung Vietnam Co., Ltd.		
Current assets	₩	2,171	₩	1,050	₩	222,574	₩	355,561	₩	335,297	
Non-current assets		58,241		190,890		2,482,796		257,077		445,573	
Current liabilities		3,987		159,950		1,404,209		328,793		465,626	
Non-current liabilities		2,790		-		899,188		159		750	
Equity		53,635		31,990		401,973		283,686		314,494	
						2016					
(in millions of			Hana	Landchip							
Korean won)	•	osung	Priv	ate Real							
		stment &		Estate		lyosung				lyosung	
		lopment oration ¹		estment st No.39	Ca	apital Co., Ltd.		lautilus sung Inc.	Vie	tnam Co., Ltd.	
Current assets	₩	12,231	₩	1,054	₩	161,710	₩	330,611	₩	380,133	
Non-current assets		58,683		190,890		2,315,813		228,475		586,311	
Current liabilities		6,082		9,950		740,020		281,515		528,176	
Non-current liabilities		2,804		150,000		1,350,440		957		55,511	
Equity		62,027		31,994		387,064		276,614		382,757	

¹Non-consolidated financial statements

Summarized statements of comprehensive income for the years ended December 31, 2017 and 2016, are as follows:

						2017				
(in millions of Korean won)	Inve	osung stment & elopment poration ¹	Priv E Inve	Landchip ate Real state estment st No.39		lyosung pital Co., Ltd.		lautilus sung Inc.		lyosung etnam Co., Ltd.
Revenue	₩	1,050	₩	8,087	₩	222,286	₩	605,005	₩	1,224,618
Profit for the year		40,563		1,943		26,532		7,069		108,650
Other comprehensive income (expenses)		(154)		-		(11,623)		16		(39,934)
Total comprehensive income	₩	40,409	₩	1,943	₩	14,909	₩	7,085	₩	68,716
						2016				
(in millions of Korean won)	Inve	osung stment & elopment poration ¹	Priv E Inve	Landchip ate Real state estment st No.39		lyosung pital Co., Ltd.		lautilus sung Inc.		lyosung etnam Co., Ltd.
Revenue	₩	544	₩	8,065	₩	189,467	₩	693,424	₩	1,131,331
Profit for the year		38,127		1,945		8,157		25,998		148,795
Other comprehensive income (expenses)		(1,823)		-		8,753		(1,681)		21,132

¹Non-consolidated financial statements

Summarized statements of cash flows for the years ended December 31, 2017 and 2016, are as follows:

	2017									
(in millions of Korean won)	Hyosung Investment & Development Corporation ¹		HanaLandchip Private Real Estate Investment Trust No.39		Hyosung Capital Co., Ltd.		Nautilus Hyosung Inc.		Hyosung Vietnam Co., Ltd.	
Cash flows from operating activities	₩	38,827	₩	1,944	₩	(134,150)	₩	54,305	₩	195,676
Cash flows from investing activities		9,912		-		(53,622)		(46,197)		34,008
Cash flows from financing activities		(48,752)		(1,946)		232,108		46,634		(221,921)
Net increase (decrease) in cash and cash equivalents		(13)		(2)		44,336		54,742		7,763
Cash and cash equivalents at the beginning of year		141		670		121,256		45,810		8,444
Cash and cash equivalents at the end of year	₩	128	₩	668	₩	165,592	₩	100,552	₩	16,207
					2	016				
(in millions of Korean won)	Inve Dev	osung stment & elopment poration ¹	Priv E Investi	Landchip ate Real state ment Trust Io.39		yosung pital Co., Ltd.		autilus sung Inc.		yosung tnam Co., Ltd.
Cash flows from operating activities	₩	41,641	₩	1,971	₩	(36,831)	₩	108,849	₩	268,503
Cash flows from investing activities		3,080		-		(57,298)		(15,588)		(36,980)
Cash flows from financing activities		(44,800)		(1,934)		47,423		(108,509)		(230,712)
Net increase (decrease) in cash and cash equivalents		(79)		37		(46,706)		(15,248)		811
Cash and cash equivalents at the beginning of year		221		633		167,962		61,057		7,633
Cash and cash equivalents at the end of year	₩	142	₩	670	₩	121,256	₩	45,809	₩	8,444

¹Non-consolidated financial statements

end of year

40. Unconsolidated Structured Entities

The nature of business unconsolidated structured entities as at December 31, 2017 and 2016, are as follows:

	Purpose of establishment				
(in millions of Korean wor) and activities	Method of financing		2017	2016
Investment fund and investment trust	Enforcement of investment and profit sharing	Issuance of equity shares	₩	3,182,494 ₩	2,672,663
Mortgage loan	Investment and in real property and collection through sales	Issuance of equity shares and borrowings		1,816,552	1,316,904
Securitization of assets	Securitization and collection of assets	Issuance of ABL and ABCP		349,610	90,829
Investment in vessels	Investment in vessels and profit sharing	Issuance of equity shares and borrowings		19,830	29,080

The risk of interest in unconsolidated structured entities as at December 31, 2017 and 2016, are as follows:

(in millions of Korean won)

	Book va	lue of		
2017	available-	for-sale	Book value of	
	financial	assets	receivables	Total
Investment fund and investment trust	₩	200,703	₩ -	₩ 200,703
Mortgage loan		-	101,856	101,856
Securitization of assets		-	45,462	45,462
Investment in vessels		-	9,742	9,742
(in millions of Korean won)				
	Book va	lue of		
2016	available-	for-sale	Book value of	
	financial	assets	receivables	Total
Investment fund and investment trust	₩	145,280	₩ -	₩ 145,280
Mortgage loan		-	117,986	117,986
Securitization of assets		-	5,000	5,000
Investment in vessels		-	9,158	9,158

Maximum exposure to loss on interest in unconsolidated structured entities as at December 31, 2017 and 2016, is equal to the book amount.

41. Restatement of Prior Year Financial Statements

The Group restated its prior year consolidated financial statements to correct the understatement of impairment losses on available-for-sale financial assets as at December 31, 2013. As a result, the retained earnings and other comprehensive income as at December 31, 2016, decreased and increased respectively by $\mbox{$\mathbb{H}$}$ 24,403 million and there is no impact on the prior year's consolidated statement of profit or loss.

42. Events After the Reporting Period

42.1 Spin-off

In order to secure competitiveness of each business division and to strengthen its expertise, the Group will be divided into the Fabric and Trading business, the Heavy industrial and Construction business, the Industrial materials business and the Chemical business. The date of spin-off will be June 1, 2018. After the spin-off, the existing spin-off company, Hyosung Corporation, will remain as a listed corporation on the securities market and the new spin-off company will also be established as a listed corporation.

42.2 Establishment of new corporation

The Group decided to establish the new corporation in Vietnam (amount to be invested \widetilde{196,164} million) to grow as the Global PP Maker by establishing a PP batch production system in accordance with the resolution by the Board of Directors held on February 6, 2018.