Hyundai Engineering & Construction Co., Ltd. and Subsidiaries

Consolidated Financial Statements
December 31, 2018

(With Independent Auditors' Report Thereon)

Hyundai Engineering & Construction Co., Ltd. and Subsidiaries

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December 31, 2018 and 2017

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Independent Auditors' Report

(English Translation of a Report Originally Issued in Korean)

To the Shareholders and Board of Directors of
Hyundai Engineering & Construction Co., Ltd.

Opinion
We have audited the accompanying consolidated financial statements of Hyundai Engineering & Construction Co., Ltd. and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statement of financial position as at December 31, 2018, and the consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2018, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the Republic of Korea ("K-IFRS").

Basis for Opinion
We conducted our audit in accordance with Korean Standards on Auditing. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the ethical requirements of the Republic of Korea that are relevant to our audit of the consolidated financial statements and we have fulfilled our other ethical responsibilities in accordance with the ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Key Audit Matters
Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements as at and for the year ended December 31, 2018. These matters were addressed in the context of our 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.

(a) Revenue recognition based on input method

As the Group recognizes 94% of its revenue based on the input method, there are the risks of misstatement in contract revenue if the stage of contract completion by the input method does not measure reliably the construction work performed. As described in Note 28 to the consolidated financial statements, the estimated total contract revenue and the estimated contract costs increased by ₩2,432,094 million ($ 2,175,202 thousand) and ₩2,377,121 million ($ 2,126,036 thousand), respectively, for the year ended December 31, 2018. According to the changes in estimated total contract revenue and costs, the profit or loss for the year ended December 31, 2018 has decreased by ₩152,139 million ($ 136,069 thousand), and the profit or loss for the succeeding period is estimated to increase by ₩207,112 million ($ 185,235 thousand). It is probable that the changes in estimated total contract revenue and costs may have negative impacts on the profit or loss for the current period; therefore, we identified the revenue recognition based on the input method as a significant risk.

The major audit procedures performed regarding the revenue recognition based on the input method are as follows:

① Review of accounting policies on revenue recognition and any changes to the policies

② Inquiry and analytical review on the current status of major construction projects and its significant changes
③ Analytical review of major financial indicators including contract amounts, estimated contract costs, contract cost ratios, and ratios of amount due from customer
④ Assessment and review of the internal controls relating to the review and approval processes of new contracts, and any significant changes to the existing contracts

(b) Uncertainty of estimated total contract costs

As described in the Note 3 to the consolidated financial statements (Critical Accounting Estimates and Assumptions), the estimated total contract costs are projected based on the expected future figures of material costs, labor costs, construction period and others. Most of the Group's construction contracts are long-term in nature, and the estimations are affected by a variety of factors including changes in engineering and construction environments, fluctuation of material costs and others. Therefore, we identified the uncertainty of the total estimated contract costs as a significant risk.

The major audit procedures performed regarding the impact of the uncertainty of the total estimated contract costs are as follows:

① Inquiry and analytical review of construction projects with significant changes in the estimated total contract costs
② Comparison of the accumulated contract costs incurred for those projects completed to the estimated total contract costs to identify the projects with significant differences and inspection of supporting documents if necessary
③ Review of the internal controls in regards to approval processes of the estimated total construction costs by authorized personnel based upon review of changes in the relevant construction budget
④ Inquiry and assessment of existence of project delays, analysis of its financial impacts on the total estimated costs, and inspection of supporting documents if necessary
⑤ Evaluation of the appropriateness of the estimated total contract costs by utilizing experts in the construction industry to review details of contractual scope of work, analysis of input costs accrued for the year incurred, and such information as monthly process report and minutes submitted to its customers
⑥ Verification of the executed budget approved by authorized personnel
⑦ Review of costs incurred subsequent to December 31, 2018 to evaluate significant impacts on the estimated total contract costs for the year then ended

(c) Calculation of Percentage-of-Completion

As described in Note 28 to the consolidated financial statements, the changes in the estimated total contract costs amount to ₩2,377,121 million ($ 2,126,036 thousand) while the cumulative contract costs amount to ₩74,962,309 million ($ 67,044,369 thousand). Due to the increase in the costs incurred compared to the estimated total contract costs as well as the uncertainty of estimated total contract costs as a result of the uncertain market situation, we identified the measurement of percentage of completion as a significant risk.

The major audit procedures performed to review the impact of the estimated total contract costs and cumulative contract costs on the measurement of percentage-of-completion are as follows:

① Recalculation of the stage of contract completion provided by the Group

② Substantive tests to review occurrence and cutoff of those costs incurred in the current year as well as the proper allocation of the construction costs into the corresponding contracts

(d) Collectability of amount due from customers for contract work

The amount due from customers for contract work is 15% of total assets. If the Group is unable to recover the recognized amount due from customers for contract work, there are the risks of misstatement in the Group's assets amount. Therefore, we identified the collectability of amount due from customers for contract work as a significant risk.

The major audit procedures performed to review the collectability of amount due from customers for contract work are as follows:

① Inquiry and analytical review of changes in due from customers for contract work and review of the appropriateness of each due from customers for contract work
② Review and inquiry of the major construction contracts as well as related payment terms
③ Review and inquiry of the expected billing period and recoverability of long-term due from customers for contract work and expected billing date

(e) Accounting treatment for variations in contract work

As described in Note 3 to the consolidated financial statements, the Group measures total contract revenue at the initial amount of revenue agreed in the contract. However, the measurement of total 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 in 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 it is probable that the customer will approve the variation and the amount of revenue arising from the variation or the contract is sufficiently advanced that it is probable that the specified performance standards will be met or exceeded and the amount of revenue can be reliably measured. For the year ended December 31, 2018, variations in contract have occurred while performing the contract activities, so we identified the accounting treatment for variations in construction as a significant risk.

The major audit procedures performed to review the Group's accounting treatment and disclosures for variations in contract work are as follows:

① Review of the internal controls in regards to review and approval processes of amendments to the construction contracts by authorized personnel
② Identification of projects with significant modifications to the contracts and inspection of supporting documents to review whether an appropriate approval from the customers is obtained
③ Confirmation of variations in contracts directly with the customers for those contracts with modifications for the year ended December 31, 2018
④ Identification of existence of probable projects with financial penalties arising from delays and inspection of supporting documents if necessary
⑤ Review of the adequacy of the estimated total contract costs and the stage of completion with a consideration of additional contract costs due to variations in contract work

Other Matters
The consolidated financial statements of the Group for the year ended December 31, 2017 were audited by Samil PricewaterhouseCoopers, whose report dated March 21, 2018, expressed an unqualified opinion on those statements.

The accompanying consolidated financial statements as at and for the years ended December 31, 2018 and 2017, have been translated into US dollars solely for the convenience of the reader and have been translated on the basis set forth in Note 2 to the consolidated financial statements.

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

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with K-IFRS, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Korean Standards on Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements. As part of an audit in accordance with Korean Standards on Auditing, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit 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.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditors' report is Cho, Seungwoo.

Shinhan Accounting Corp.
Seoul, Korea
March 7, 2019

This report is effective as of March 7, 2019, the auditor's report date. Certain subsequent events or circumstances may have occurred between the audit report date and the time of the auditor's report is read. Such events or circumstances could significantly affect the accompanying financial statements and may result in modifications to the auditor's report.

Hyundai Engineering & Construction Co., Ltd. and Subsidiaries
Consolidated Statements of Financial Position
December 31, 2018 and 2017

(in millions of Korean won and in thousands of USD (Note 2))	Notes	Korean won 2018	Korean won 2017	Translation into U.S. dollars 2018 (Unaudited)	Translation into U.S. dollars 2017 (Unaudited)
Assets					
Current assets					
Cash and cash equivalents	4,21,36,38,39	₩ 2,241,188	₩ 2,107,242	$ 2,004,461	$ 1,884,663
Short-term financial instruments	21,36,39	1,824,955	1,356,651	1,632,193	1,213,354
Trade receivables	5,21,35,39	2,176,726	1,966,367	1,946,808	1,758,668
Other receivables	5,21,28,35,36,39	1,322,349	1,499,381	1,182,675	1,341,008
Due from customers for contract work	5,28,35	2,679,723	2,896,446	2,396,676	2,590,507
Held-to-maturity financial assets	9,21,39	-	16,668	-	14,908
Financial assets at amortized cost	9,21,39	14,692	-	13,140	-
Derivative assets	21, 23	9	-	8	-
Inventories	6,13	1,947,052	2,105,517	1,741,393	1,883,120
Current tax assets	33	4,898	3,749	4,380	3,353
Other current assets	7,13,35	1,125,176	1,297,819	1,006,329	1,160,736
		13,336,768	13,249,840	11,928,063	11,850,317
Non-current assets					
Long-term financial instruments	20,21,36,39	7,531	611,111	6,736	546,562
Long-term accounts receivable	5,21,39	379,385	364,030	339,312	325,579
Long-term other receivables	5,21,28,35,39	975,213	906,373	872,206	810,637
Available-for-sale financial assets	8,21,36,39	-	266,255	-	238,132
Held-to-maturity financial assets	9,21,39	-	25,759	-	23,038
Financial assets at fair value through other comprehensive income	8,21,36	83,468	-	74,652	-
Financial assets at fair value through profit or loss	8,21,36	298,346	-	266,833	-
Financial assets at amortized cost	9,21,39	37,306	-	33,366	-
Investments in joint ventures and associates	10,35	45,891	79,319	41,044	70,941
Derivative assets	21,23	-	25	-	22
Investment property	11	371,598	394,196	332,347	352,560
Property, plant and equipment	12	1,436,574	1,398,791	1,284,836	1,251,041
Intangible assets	14	711,198	760,228	636,077	679,928
Deferred income tax assets	33	252,549	251,650	225,873	225,069
Other non-current assets	7	118,782	124,325	106,235	111,193
		4,717,841	5,182,062	4,219,517	4,634,702
Total assets		₩ 18,054,609	₩ 18,431,902	$ 16,147,580	$ 16,485,019

Hyundai Engineering & Construction Co., Ltd. and Subsidiaries
Consolidated Statements of Financial Position
December 31, 2018 and 2017

(in millions of Korean won and in thousands of USD (Note 2))	Notes	Korean won 2018	Korean won 2017	Translation into U.S. dollars 2018 (Unaudited)	Translation into U.S. dollars 2017 (Unaudited)
Liabilities					
Current liabilities					
Trade payables	15,21,35,39	₩ 2,256,754	₩ 2,347,746	$ 2,018,383	$ 2,099,764
Other payables	15,21,35,39	1,182,054	879,357	1,057,199	786,474
Advances from customers	28,35	1,193,947	1,388,429	1,067,835	1,241,775
Due to customers for contract work	28,35	1,461,712	1,781,887	1,307,317	1,593,674
Short-term borrowings	16,21,37,39	272,242	362,580	243,485	324,281
Current portion of long-term borrowings and debentures	16,21,37,39	328,612	223,621	293,902	200,001
Derivative liabilities	21,23	-	122	-	109
Current tax liabilities	33	40,094	155,381	35,859	138,968
Provisions	17	34,066	546	30,468	488
Other financial liabilities	18,21,35,36,37,39	14,493	10,990	12,962	9,829
Other current liabilities	19	76,901	68,379	68,778	61,156
		6,860,875	7,219,038	6,136,188	6,456,519
Non-current liabilities					
Long-term other payables	15,21,39	425,499	450,026	380,555	402,492
Debentures	16,21,37,39	1,347,438	1,347,463	1,205,113	1,205,135
Long-term borrowings	16,21,37,39	458,363	348,102	409,948	311,333
Derivative liabilities	21,23	-	55	-	49
Post-employment benefit obligations	20	17,034	2,349	15,235	2,101
Provision for long-term employee benefits		21,291	19,206	19,047	17,180
Provisions	17	451,076	404,869	403,431	362,105
Deferred income tax liabilities	33	8,357	10,380	7,474	9,284
Other financial liabilities	18,21,36,37,39	113,404	100,039	101,426	89,472
Other non-current liabilities	19	59,416	57,437	53,140	51,370
		2,901,878	2,739,926	2,595,369	2,450,521
Total liabilities		9,762,753	9,958,964	8,731,557	8,907,040
Equity					
Equity attributable to owners of the Parent Company					
Share capital	1,24,39	557,273	557,273	498,411	498,411
Other paid-in capital	24,39	997,930	1,028,151	892,523	919,552
Other components of equity	25,39	(267,546)	68,973	(239,287)	61,688
Retained earnings	26,39	4,986,437	4,813,249	4,459,742	4,304,847
		6,274,094	6,467,646	5,611,389	5,784,498
Non-controlling interest		2,017,762	2,005,292	1,804,634	1,793,481
Total equity		8,291,856	8,472,938	7,416,023	7,577,979
Total liabilities and equity		₩ 18,054,609	₩ 18,431,902	$ 16,147,580	$ 16,485,019

The U.S. dollars figures are provided for information purpose only and do not form part of the consolidated financial statements. Refer to Note 2.
The above consolidated statements of financial position should be read in conjunction with the accompanying notes.

Hyundai Engineering & Construction Co., Ltd. and Subsidiaries
Consolidated Statements of Comprehensive Income
Years Ended December 31, 2018 and 2017

(in millions of Korean won and in thousands of USD (Note 2))	Notes	Korean won		Translation into U.S. dollars	
		2018	2017	2018 (Unaudited)	2017 (Unaudited)
Sales	27,28,35	₩ 16,730,894	₩ 16,887,090	$ 14,963,683	$ 15,103,380
Cost of sales	28,32,35	15,069,747	15,108,126	13,477,995	13,512,320
Gross profit		1,661,147	1,778,964	1,485,688	1,591,060
Selling and administrative expenses	29,32,35	821,158	792,859	734,421	709,112
Operating profit		839,989	986,105	751,267	881,948
Share of profit of joint ventures and associates		1,856	1,249	1,657	1,115
Share of loss of joint ventures and associates		18,299	16,159	16,368	14,454
Finance income	22,30,35	283,085	154,925	253,184	138,561
Finance costs	22,30,32,35	172,583	300,027	154,353	268,336
Other income	31,35	257,050	360,978	229,899	322,850
Other expenses	31,32,35	293,236	632,242	262,263	565,461
Profit before income tax		897,862	554,829	803,023	496,223
Income tax expense	33	362,559	183,265	324,263	163,907
Profit for the year	26	₩ 535,303	₩ 371,564	$ 478,760	$ 332,316
Other comprehensive income, net of tax					
Items that will not be reclassified to profit or loss					
Share of other comprehensive income of joint		₩ 1	₩ 971	$ 1	$ 868
Remeasurements of defined benefit liabilities	20,26	(18,799)	54,271	(16,813)	48,538
Gain (loss) on valuation of financial assets at fair value through other comprehensive income		2,790	-	2,495	-
Items that may be subsequently reclassified to profit or loss					
Changes in valuation of available-for-sale financial assets	22,25	-	1,029	-	920
Gain (loss) on foreign operation translation	25	(191,129)	16,310	(170,940)	14,587
		(207,137)	72,581	(185,257)	64,913
Total comprehensive income for the year		₩ 328,166	₩ 444,145	$ 293,503	$ 397,229
Profit is attributable to:					
Owners of the Parent Company		₩ 381,606	₩ 201,697	$ 341,298	$ 180,392
Non-controlling interest		153,697	169,867	137,462	151,924
Total comprehensive income for the year is attributable to:					
Owners of the Parent Company		225,077	201,626	201,303	180,329
Non-controlling interests		103,089	242,519	92,200	216,902
Earnings per share (*in Korean won and in U.S. dollars*)					
Basic earnings per share of ordinary share	34	3,424	1,810	3,062	1,618
Basic earnings per share of preferred share	34	3,474	1,860	3,107	1,663

The U.S. dollars figures are provided for information purpose only and do not form part of the consolidated financial statements. Refer to Note 2.
The above consolidated statements of comprehensive income should be read in conjunction with the accompanying notes.

Hyundai Engineering & Construction Co., Ltd. and Subsidiaries

Consolidated Statements of Changes in Equity

Years Ended December 31, 2018 and 2017

(in millions of Korean won)	Korean won					
	Attributable to owners of the Parent Company					
	Share capital	Other paid-in capital	Other components of equity	Retained earnings	Non-controlling interests	Total
Balance at January 1, 2017	₩ 557,273	₩ 1,035,424	₩ 114,516	₩ 4,621,812	₩ 1,795,620	₩ 8,124,645
Dividends	-	-	-	(55,732)	(52,873)	(108,605)
Profit for the year	-	-	-	201,697	169,867	371,564
Change in value of available-for-sale financial assets	-	-	879	-	150	1,029
Share of other comprehensive income of joint ventures and associates	-	-	971	-	-	971
Gain (loss) on foreign operations translation	-	-	(47,393)	-	63,703	16,310
Acquisition of subsidiaries	-	(7,273)	-	-	(3,017)	(10,290)
Changes in scope of consolidation	-	-	-	-	23,043	23,043
Remeasurements of defined benefit liabilities	-	-	-	45,472	8,799	54,271
Balance at December 31, 2017	₩ 557,273	₩ 1,028,151	₩ 68,973	₩ 4,813,249	₩ 2,005,292	₩ 8,472,938
Balance at January 1, 2018	₩ 557,273	₩ 1,028,151	₩ 68,973	₩ 4,813,249	₩ 2,005,292	₩ 8,472,938
Transition impact of accounting changes (Note 2)	-	-	(189,409)	(143,268)	(40,179)	(372,856)
Dividends	-	-	-	(55,732)	(52,112)	(107,844)
Capital increase	-	-	-	-	3,610	3,610
Profit for the year	-	-	-	381,606	153,697	535,303
Gain (loss) on valuation of financial assets at fair value through other comprehensive income	-	-	(1,013)	175	3,628	2,790
Share of other comprehensive income of joint ventures and associates	-	-	1	-	-	1
Gain (loss) on foreign operation translation	-	-	(146,098)	-	(45,031)	(191,129)
Acquisition/disposal of subsidiaries	-	(30,221)	-	-	(1,937)	(32,158)
Remeasurements of defined benefit liabilities	-	-	-	(9,593)	(9,206)	(18,799)
Balance at December 31, 2018	₩ 557,273	₩ 997,930	₩ (267,546)	₩ 4,986,437	₩ 2,017,762	₩ 8,291,856

Hyundai Engineering & Construction Co., Ltd. and Subsidiaries

Consolidated Statements of Changes in Equity

Years Ended December 31, 2018 and 2017

(in thousands of USD (Note 2)	Translation into U.S. dollars					
	Attributable to owners of the Parent Company					
	Share capital	Other paid-in capital	Other components of equity	Retained earnings	Non-controlling interests	Total
Balance at January 1, 2017	$ 498,411	$ 926,056	$ 102,420	$ 4,133,630	$ 1,605,956	$ 7,266,473
Dividends	-	-	-	(49,844)	(47,288)	(97,132)
Profit for the year	-	-	-	180,392	151,924	332,316
Change in value of available-for-sale financial assets	-	-	787	-	135	922
Share of other comprehensive income of joint ventures and associates	-	-	868	-	-	868
Gain (loss) on foreign operation translation	-	-	(42,387)	-	56,974	14,587
Acquisition of subsidiaries	-	(6,504)	-	-	(2,698)	(9,202)
Changes in scope of consolidation	-	-	-	-	20,609	20,609
Remeasurements of defined benefit liabilities	-	-	-	40,669	7,869	48,538
Balance at December 31, 2017 (Unaudited)	$ 498,411	$ 919,552	$ 61,688	$ 4,304,847	$ 1,793,481	$ 7,577,979
Balance at January 1, 2018	$ 498,411	$ 919,552	$ 61,688	$ 4,304,847	$ 1,793,481	$ 7,577,979
Transition impact of accounting changes (Note 2)	-	-	(169,403)	(128,135)	(35,935)	(333,473)
Dividends	-	-	-	(49,845)	(46,607)	(96,452)
Capital increases	-	-	-	-	3,228	3,228
Profit for the year	-	-	-	341,298	137,462	478,760
Gain (loss) on valuation of financial assets at fair value through other comprehensive income	-	-	(906)	156	- 3,244	- 2,494
Share of other comprehensive income of joint ventures and associates	-	-	1	-	-	1
Gain (loss) on foreign operations translation	-	-	(130,667)	-	(40,274)	(170,941)
Acquisition/disposal of subsidiaries	-	(27,029)	-	-	(1,732)	(28,761)
Remeasurements of defined benefit liabilities	-	-	-	(8,579)	(8,233)	(16,812)
Balance at December 31, 2018 (Unaudited)	$ 498,411	$ 892,523	$ (239,287)	$ 4,459,742	$ 1,804,634	$ 7,416,023

The U.S. dollars figures are provided for information purpose only and do not form part of the consolidated financial statements. Refer to Note 2.

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

Hyundai Engineering & Construction Co., Ltd. and Subsidiaries
Consolidated Statements of Cash Flows
Years Ended December 31, 2018 and 2017

(in millions of Korean won and in thousands of USD (Note 2))	Notes	Korean won 2018	Korean won 2017	Translation into U.S. dollars 2018 (Unaudited)	Translation into U.S. dollars 2017 (Unaudited)
Cash flows from operating activities					
Cash generated from operating activities	38	₩ 678,985	₩ 790,887	$ 607,267	$ 707,350
Interests received		104,925	90,198	93,842	80,670
Dividends received		2,593	12,757	2,319	11,409
Interests paid		(86,690)	(96,092)	(77,533)	(85,943)
Income taxes paid		(450,289)	(283,346)	(402,726)	(253,418)
Net cash provided by operating activities		249,524	514,404	223,169	460,068
Cash flows from investing activities					
Cash inflows from investing activities:					
Decrease in short-term financial instruments		1,406,502	1,888,202	1,257,939	1,688,759
Decrease in other receivables		245,227	131,116	219,324	117,266
Decrease in long-term financial instruments		219,562	105,276	196,370	94,156
Decrease in long-term other receivables		44,938	21,038	40,191	18,815
Proceeds from sale of financial assets at fair value through profit or loss		38,267	-	34,225	-
Proceeds from sale of available-for-sale financial assets		-	8,749	-	7,824
Proceeds from sale of financial assets at amortised cost		18,474	-	16,522	-
Proceeds from sale of held-to-maturity financial assets		-	334,280	-	298,971
Proceeds from sale of investments in subsidiaries		-	47,052	-	42,082
Proceeds from sale of investments in associates		142	3,507	127	3,136
Proceeds from sale of investment property		34,197	23,035	30,584	20,601
Proceeds from sale of property, plant and equipment		13,307	11,325	11,901	10,128
Proceeds from sale of intangible assets		3,889	1,030	3,478	921
Cash outflows for investing activities:				-	-
Increase in short-term financial instruments		(745,171)	(1,453,069)	(666,461)	(1,299,587)
Increase in other receivables		(189,052)	(82,295)	(169,083)	(73,602)
Increase in long-term financial instruments		(746,365)	(795,337)	(667,529)	(711,329)
Increase in long-term other receivables		(126,909)	(105,351)	(113,504)	(94,223)
Acquisition of financial assets at fair value through profit or loss		(69,654)	-	(62,296)	-
Acquisition of available-for-sale financial assets		-	(23,919)	-	(21,392)
Acquisition of financial assets at amortized costs		(28,019)	-	(25,059)	-
Acquisition of held-to-maturity financial assets		-	(77,170)	-	(69,018)
Acquisition of investments in joint ventures and associates		(6,228)	(221)	(5,570)	(197)
Acquisition of investment property		(10,495)	(42)	(9,386)	(37)
Acquisition of property, plant and equipment		(191,903)	(49,766)	(171,633)	(44,509)
Acquisition of intangible assets		(2,752)	(3,692)	(2,461)	(3,302)
Net cash used in investing activities		(92,043)	(16,252)	(82,321)	(14,537)
Cash flows from financing activities					
Cash inflows from financing activities:					
Capital increase		3,610	-	3,228	-
Proceeds from short-term borrowings		250,129	1,088,637	223,708	973,649
Issuance of debentures		300,000	-	268,312	-
Proceeds from long-term borrowings		138,700	-	124,049	-
Proceeds from government grants		59	-	52	-
Cash outflows for financing activities:					
Repayment of short-term borrowings		(340,313)	(885,531)	(304,367)	(791,996)
Repayment of current portion of long-term borrowings		(223,261)	(475,397)	(199,678)	(425,182)
Repayment of long-term borrowings		(451)	-	(403)	-
Repayment of debentures		(1,270)	-	(1,135)	-
Payment of dividends		(106,910)	(108,605)	(95,617)	(97,133)
Issuance of new shares		(101)	-	(90)	-
Acquisition of non-controlling interest		(57,482)	(40)	(51,410)	(35)
Net cash used in financing activities		(37,290)	(380,936)	(33,351)	(340,697)
Net increase in cash and cash equivalents		120,191	117,216	107,497	104,834
Cash and cash equivalents at the beginning of the year		2,107,242	2,149,984	1,884,663	1,922,891
Effects of exchange rate changes on cash and cash equivalents		13,608	(165,095)	12,170	(147,656)
Changes in scope of consolidation		147	5,137	131	4,594
Cash and cash equivalents at the end of the year		₩ 2,241,188	₩ 2,107,242	$ 2,004,461	$ 1,884,663

The U.S. dollars figures are provided for information purpose only and do not form part of the consolidated financial statements. Refer to Note 2.
The above consolidated statements of cash flows should be read in conjunction with the accompanying notes.

1. General Information

Hyundai Engineering & Construction Co., Ltd. (the "Company" or the "Parent Company"), the parent company in accordance with K-IFRS 1110 *Consolidated Financial Statements*, was incorporated on January 10, 1950, under the laws of the Republic of Korea to engage in civil engineering and construction business. On December 22, 1984, the Company listed its shares on the Korea Stock Exchange. Total ordinary shares and preferred shares as at December 31, 2018, are ₩556,779 million ($497,969 thousand) and ₩494 million ($442 thousand), respectively. The details of the Company's shareholders as at December 31, 2018, are as follows:

	Number of shares		Percentage of ownership (%)	
	Ordinary share	Preferred share	Ordinary share	Preferred share
Hyundai Motor Company	23,327,400	-	20.95	-
Hyundai Mobis Co., Ltd.	9,719,750	-	8.73	-
Kia Motors Corporation	5,831,850	-	5.24	-
Other shareholders	72,476,765	98,856	65.08	100.00
	111,355,765	98,856	100.00	100.00

1.1 Consolidated Subsidiaries

A summary of the Parent Company's 34 subsidiaries, including Hyundai Engineering Co., Ltd., as at December 31, 2018 and 2017, is as follows:

Name of subsidiary	Main business	Location	Closing date	Ownership interest held by the Group (%)	
				2018	2017
Hyundai Engineering Co., Ltd.[1,2]	Construction	Korea	Dec. 31	38.62	38.62
Hyundai Architects & Engineers Assoc.	Architectural design and facility maintenance	Korea	Dec. 31	84.79	84.79
Hyundai Engineering & Steel Industries Co., Ltd.	Steel structure manufacturing and installation	Korea	Dec. 31	100.00	100.00
Hyundai Farm Land & Development Co., Ltd.	Agricultural management and livestock industry	Korea	Dec. 31	84.67	84.67
Hyundai City Corporation	Real estate suppliers	Korea	Dec. 31	100.00	100.00
Hyundai Engineering & Construction (Wuxi) Co., Ltd.	Construction	China	Dec. 31	100.00	100.00
Hyundai Asian Technics (Pte) Ltd.	Construction	Singapore	Dec. 31	100.00	100.00
Hatay RNC Co., Ltd. [3]	Real estate developer	Korea	Dec. 31	-	100.00
Hyundai Rnc HATAY Co., Ltd.	Real estate developer	Vietnam	Dec. 31	100.00	100.00
Middle East Engineering & Development Co., Ltd.	Construction	Saudi Arabia	Dec. 31	100.00	95.00
Hyundai E&C Vina Song Gia Co., Ltd.	Management of resort condominium	Vietnam	Dec. 31	100.00	100.00
Hyundai Energy Inc. [4]	Production of steam, cold and hot water and air-conditioning	Korea	Dec. 31	49.00	49.00

Name of subsidiary	Main business	Location	Closing date	Ownership interest held by the Group (%)	
				2018	2017
Songdo Landmark City, LLC	Real estate development and supply	Korea	Dec. 31	94.20	50.26
PT. Hyundai Citra	Equipment maintenance	Indonesia	Dec. 31	95.00	95.00
CONSORCIO PUENTE CHACAO S.A.	Construction	Chile	Dec. 31	51.00	51.00
Hyundai Eco Energy Co, Ltd.	Electricity production	Korea	Dec. 31	81.00	-
Global Engineering & Construction	Construction	Myanmar	Dec. 31	100.00	-
Hyundai Engineering Pakistan Private Limited	Construction	Pakistan	Dec. 31	99.99	99.99
Hyundai Engineering India Private Limited	Construction and engineering services	India	Mar. 31	100.00	100.00
HYUNDAI ENG AMERICA, INC.	Construction of commercial building	USA	Dec. 31	100.00	100.00
HYUNDAI AMCO MEXICO S. DE R.L. [5]	Construction	Mexico	Dec. 31	100.00	100.00
HYUNDAI ENGINEERING RUS. L.L.C.	Construction of commercial building	Russia	Dec. 31	100.00	100.00
HYUNDAI ENGINEERING INSAAT TURIZM SANAYI VE TICARET LIMITED SIRKETI	Construction of commercial building	Turkey	Dec. 31	100.00	100.00
HYUNDAI ENGINEERING CHINA (BEIJING) CO., LTD.)	Construction of commercial building	China	Dec. 31	90.00	90.00
HYUNDAI AMCO CHINA (RIZHAO) CO.,LTD[6]	Business facility management service	China	Dec. 31	100.00	100.00
HYUNDAI ENGINEERING DEUTSCHLAND GmbH	Construction of commercial building	Germany	Dec. 31	100.00	100.00
HYUNDAI ENGINEERING BRASIL CONSTRUTORAE GESTAO DE PROJETOS LTDA.	Construction of commercial building	Brazil	Dec. 31	100.00	100.00
HYUNDAI ENGINEERING CZECH s.r.o.	Construction of commercial building	Czech	Dec. 31	100.00	100.00
HYUNDAI ENGINEERING SLOVAKIA s.r.o.	Construction of commercial building	Slovakia	Dec. 31	100.00	100.00
GALING POWER & ENERGY CONSTRUCTION CO. INC.	Construction	Philippines	Dec. 31	100.00	100.00
HYUNDAI ENGINEERING MEXICO, S. DE R.L. DE C.V.	Construction	Mexico	Dec. 31	100.00	100.00
PT.HEIN GLOBAL UTAMA	Construction	Indonesia	Dec. 31	67.00	67.00
HYUNDAI ENGINEERING MALAYSIA SDN BHD	Construction	Malaysia	Dec. 31	100.00	100.00
HEC INDIA LLP	Construction	India	Mar. 31	100.00	100.00

[1] Although the Group holds 38.62% of equity shares of Hyundai Engineering Co., Ltd., the percentage of voting rights of the Group is 40.47% in consideration of treasury shares held by its subsidiaries.

[2] Hyundai Engineering Co., Ltd. is substantially controlled by the Group in accordance with the agreement with other investors.

[3] Upon the merger with the Company, the entity was dissolved in 2018.

[4] The Group owns 49.00% of ordinary shares, but its percentage of ownership interest is 51.81% in consideration of convertible preferred shares.

[5] It is a subsidiary of HYUNDAI ENG AMERICA INC.

[6] It is a subsidiary of HYUNDAI ENGINEERING CHINA (BEIJING) Co., Ltd.

1.2 Changes in Scope of Consolidation

Subsidiaries newly included in consolidation for the year ended December 31, 2018, are as follows:

Subsidiary	Reason
Hyundai Eco Energy Co, Ltd.	Reclassified to a subsidiary from an associate
Global Engineering & Construction	Newly established

1.3 Information for Non-controlling Interests

As at December 31, 2018 and 2017, summarized financial positions of subsidiaries, of which non-controlling interests are material to the Group's consolidated financial statements, are as follows:

(in millions of Korean won)	Hyundai Engineering Co., Ltd.			
	2018		2017	
Current assets	₩	4,772,936	₩	4,362,615
Non-current assets		1,473,957		1,963,338
Total assets	₩	6,246,893	₩	6,325,953
Current liabilities	₩	2,368,925	₩	2,457,761
Non-current liabilities		494,686		533,768
Total liabilities		2,863,611		2,991,529
Equity attributable to the owners of the Parent Company		3,389,085		3,332,814
Non-controlling interests		(5,803)		1,610
Total equity	₩	3,383,282	₩	3,334,424

(in thousands of USD (Note2))	Hyundai Engineering Co., Ltd.			
	2018		2017	
Current assets	$	4,268,792	$	3,901,811
Non-current assets		1,318,269		1,755,959
Total assets	$	5,587,061	$	5,657,770
Current liabilities	$	2,118,706	$	2,198,158
Non-current liabilities		442,434		477,389
Total liabilities	$	2,561,140	$	2,675,547

Equity attributable to the owners of the Parent Company	$	3,031,111	$	2,980,783
Non-controlling interests		(5,190)		1,440
Total equity	$	3,025,921	$	2,982,223

The above summarized financial position is based on the consolidated financial position of subsidiaries before the elimination of the intercompany transactions.

Condensed business performance of subsidiaries, of which non-controlling interests are material to the Group's consolidated financial statements, for the years ended December 31, 2018 and 2017, is summarized as follows:

(in millions of Korea won)	**Hyundai Engineering Co., Ltd.**			
	2018		**2017**	
Sales	₩	6,286,224	₩	6,268,216
Operating profit		453,692		514,422
Profit for the year		279,092		319,340
Other comprehensive income		(83,026)		124,782
Total comprehensive income	₩	196,066	₩	444,122

(in thousands of USD (Note2))	**Hyundai Engineering Co., Ltd.**			
	2018		**2017**	
Sales	$	5,622,238	$	5,606,132
Operating profit		405,771		460,086
Profit for the year		249,613		285,610
Other comprehensive income		(74,257)		111,601
Total comprehensive income	$	175,356	$	397,211

The above summarized business performance is based on the consolidated business performance of subsidiaries before the elimination of the intercompany transactions.

Condensed cash flows of subsidiaries, of which non-controlling interests are material to the Group's consolidated financial statements, for the years ended December 31, 2018 and 2017, are summarized as follows:

(in millions of Korea won)	**Hyundai Engineering Co., Ltd.**			
	2018		**2017**	
Cash flows from operating activities	₩	(137,209)	₩	707,705
Cash flows from investing activities		(6,307)		(366,798)
Cash flows from financing activities		(81,466)		(234,658)

Net increase (decrease) in cash and cash equivalents		(224,982)		106,249
Cash and cash equivalents at the beginning of the year		745,387		677,990
Effects of exchange rate changes on cash and cash equivalents		3,587		(38,852)
Cash and cash equivalents at the end of the year	₩	523,992	₩	745,387

(in thousands of USD (Note2))	**Hyundai Engineering Co., Ltd.**			
	2018		**2017**	
Cash flows from operating activities	$	(122,716)	$	632,953
Cash flows from investing activities		(5,641)		(328,055)
Cash flows from financing activities		(72,861)		(209,872)
Net increase (decrease) in cash and cash equivalents		(201,218)		95,026
Cash and cash equivalents at the beginning of the year		666,655		606,377
Effects of exchange rate changes on cash and cash equivalents		3,208		(34,748)
Cash and cash equivalents at the end of the year	$	468,645	$	666,655

The above summarized cash flows is based on the consolidated cash flows of subsidiaries before the elimination of the intercompany transactions.

Condensed financial position and business performance of major subsidiaries as at and for the year-ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	**2018**							
	Total assets		**Total liabilities**		**Sales**		**Profit for the year**	
Hyundai Engineering & Steel Industries Co., Ltd.	₩	497,267	₩	101,442	₩	276,655	₩	(10,149)
Middle East Engineering & Development Co., Ltd.		256,768		235,253		78,352		6,861

(in thousands of USD (Note2))	**2018**							
	Total assets		**Total liabilities**		**Sales**		**Profit for the year**	
Hyundai Engineering & Steel Industries Co., Ltd.	$	444,743	$	90,727	$	247,433	$	(9,077)
Middle East Engineering & Development Co., Ltd.		229,647		210,404		70,076		6,136

(in millions of Korean won)	2017			
	Total assets	Total liabilities	Sales	Profit for the year
Hyundai Engineering & Steel Industries Co., Ltd.	₩ 527,743	₩ 120,126	₩ 308,104	₩ (28,790)
Middle East Engineering & Development Co., Ltd.	324,321	285,337	153,709	22,733

(in thousands of USD (Note2))	2017			
	Total assets	Total liabilities	Sales	Profit for the year
Hyundai Engineering & Steel Industries Co., Ltd.	$ 472,000	$ 107,438	$ 275,560	$ (25,749)
Middle East Engineering & Development Co., Ltd.	290,064	255,198	137,473	20,332

2. Significant Accounting Policies

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 (K-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 Group operates primarily in Korean won and its accounting records are maintained in Korean won. The U.S. dollars amounts, provided herein, represent supplementary information, solely for the convenience of the reader. All Korean won amounts are expressed in U.S. dollars at US$1: ₩1,118.10, the exchange rate in effect on December 31, 2018. Such presentation is not in accordance with accounting principles generally accepted in either the Republic of Korea or the United States, and should not be construed as a representation that the Korean won amounts shown could be readily converted, realized or settled in U.S. dollars at this or any other rate.

The December 31, 2017 U.S. dollar amounts, which were previously expressed at US$ 1: ₩1,071.40, the rate in effect on December 31, 2017, have been restated to reflect the exchange rate in effect on December 31, 2018.

2.1 Basis of Preparation

The Group has prepared the consolidated financial statements in accordance with K-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 significant accounting policies used for the preparation of the consolidated financial statements are summarized below. These accounting policies are consistent with those applied to the consolidated financial statements for the year ended December 31, 2017, except for the adoption effect of the new accounting standards and interpretations described below.

The accompanying consolidated financial statements have been prepared on the historical cost basis, except for certain non-current assets and financial instruments that are measured at revalued amounts or fair values, at the end of each reporting period. Historical cost is generally based on the fair value of the consideration given.

(a) New and amended standards adopted by the Group

The Group has initially adopted K-IFRS 1115 "Revenue from Contracts with Customers" and K-IFRS 1109 "Financial Instruments" from January 1, 2018. The other accounting standards adopted from January 1, 2018 had no significant effect on the Group's consolidated financial statements.

- K-IFRS 1109: “Financial Instruments”

Amendments to K-IFRS 1109 contain the requirements for the classification and measurement of financial assets and financial liabilities based on a business model whose objective is achieved both by collecting contractual cash flows and selling financial assets and based on the contractual terms that give rise on specified dates to cash flows, impairment methodology based on the expected credit losses, and broadened types of instruments that qualify as hedging instruments and the types of risk components of non-financial items that are eligible for hedge accounting and the change of the hedge effectiveness test. The Group elected not to restate comparative information for the prior period when applying this enactment for the first time.

The following table summarizes the impact of transition to K-IFRS 1109 on the Group’s financial statements as at January 1, 2018.

(in millions of Korean won)

	Other components of equity	Retained earnings	Non-controlling interest	Total
Classification and measurement of financial assets (after tax)	₩ (189,408)	₩ 190,070	₩ 124	₩ 786
Impairment of financial assets	-	(29,303)	(13,405)	(42,708)
Income tax impact on impairment of financial assets	-	5,720	2,610	8,330
Transition impact	₩ (189,408)	₩ 166,487	₩ (10,671)	₩ (33,592)

(in thousands of USD (Note 2))

	Other components of equity	Retained earnings	Non-controlling interest	Total
Classification and measurement of financial assets (after tax)	$ (169,402)	$ 169,994	$ 111	$ 703
Impairment of financial assets	-	(26,208)	(11,989)	(38,197)
Income tax impact on impairment of financial assets	-	5,116	2,334	7,450
Transition impact	$ (169,402)	$ 148,902	$ (9,544)	$ (30,044)

- Reclassification of financial assets

  The Group reclassified available-for-sale ("AFS") financial assets as financial assets measured at fair value through other comprehensive income ("FVOCI") or financial assets measured at fair value through profit or loss ("FVPL"). In addition, the Group elected to record as other comprehensive income for changes in fair value of the investments in equity instruments that are not held for trading, reclassified as financial assets at FVOCI Further, held-to-maturity financial assets are reclassified as financial assets measured at amortized cost.

- Impairment of financial assets including trade receivables and due from customers for contract work

  The Group established an allowance for impairment that represents its estimate of future expected credit losses in respect of trade receivables and other receivables (including due from customers for contract work).

The following table summarizes adjusted amounts recognized in the statement of financial position at the date of initial application.

(in millions of Korean won)	Before Adjustments	Adjustments	After adjustments
Assets	₩ 18,431,902	₩ (33,592)	₩ 18,398,310
Liabilities	9,958,964	-	9,958,964
Equity	8,472,938	(33,592)	8,439,346

(in thousands of USD (Note 2))	Before adjustments	Adjustments	After adjustments
Assets	$ 16,485,021	$ (30,044)	$ 16,454,977
Liabilities	8,907,042	-	8,907,042
Equity	7,577,979	(30,044)	7,547,935

Financial statement line items affected by the adoption of K-IFRS 1109 in the current period

are summarized as follows:

The effects of adoption of K-IFRS 1109 to the Group's consolidated statements of financial position and consolidated statements of comprehensive income as at and for the year ended December 31, 2018 are as follows. There were no material impact on the Group's consolidated statements of cash flows for the year ended December 31, 2018.

(in millions of Korean won)	Amount after application of K-IFRS 1109	Adjustments	Amount before application of K-IFRS 1109
Assets	₩ 18,054,609	₩ 76,433	₩ 18,131,042
Liabilities	9,762,753	-	9,762,753
Equity	8,291,856	76,433	8,368,289
Sales	16,730,894	-	16,730,894
Cost of sales	15,069,747	-	15,069,747
Net profit	535,303	(60,391)	474,912

(in thousands of USD (Note 2))	Amount after application of K-IFRS 1109	Adjustments	Amount before application of K-IFRS 1109
Assets	$ 16,147,580	$ 68,360	$ 16,215,940
Liabilities	8,731,556	-	8,731,556
Equity	7,416,024	68,360	7,484,384
Sales	14,963,683	-	14,963,683
Cost of sales	13,477,996	-	13,477,996
Net profit	478,761	(54,012)	424,749

- K-IFRS 1115 *'Revenue from Contract with Customers'*

The Group has initially adopted K-IFRS 1115 "Revenue from Contracts with Customers" for its annual reporting period commencing January 1, 2018. In accordance with the transitional provisions in K-IFRS 1115, the Group applied the modified retrospective approach by recognizing the cumulative impact of initially applying the new revenue standard as of January 1, 2018, the date of initial application. In addition, the Group elected to apply the practical expedients as allowed by K-IFRS 1115 by applying the new standard only to those contracts that are not considered as completed contracts at the date of initial application.

The following table summarizes the impact of transition to K-IFRS 1115 on the Group's financial statements as at January 1, 2018.

(in millions of Korean won)	**Retained earnings**	**Non-controlling interest**	**Total**
Incremental costs of obtaining a contract	₩ (291,376)	₩ (36,551)	₩ (327,927)
Performance obligation over time	(18,553)	(35)	(18,588)
Significant financing component	(5,727)	(135)	(5,862)

(in millions of Korean won)

	Retained earnings	Non-controlling interest	Total
Subsidiary combinations under contract	(1,373)	(1,372)	(2,745)
Income tax impact	7,274	8,584	15,858
Transition impact	₩ (309,755)	₩ (29,509)	₩ (339,264)

(in thousands of USD (Note 2))

	Retained earnings	Non-controlling interest	Total
Incremental costs of obtaining a contract	$ (260,599)	$ (32,690)	$ (293,289)
Performance obligation over time	(16,593)	(31)	(16,624)
Significant financing component	(5,122)	(121)	(5,243)
Subsidiary combinations under contract	(1,228)	(1,227)	(2,455)
Income tax impact	6,506	7,677	14,183
Transition impact	$ (277,036)	$ (26,392)	$ (303,428)

- Incremental costs of obtaining a contract

  In accordance with K-IFRS 1115, the costs to obtain a contract is generally recognized as an expense when incurred unless those costs are explicitly chargeable to the customer regardless of whether the contract is obtained. In addition, the Group recognizes as an asset the incremental costs of obtaining a contract with a customer to the extent that the Group expects to recover those costs that it would not have incurred if the contract had not been obtained.

- Performance obligation over time

  The contract revenue is recognized over time by measuring progress when the Group has an enforceable right to payment for performance completed to date at contract inception. (At all times throughout the duration of the contract, the Group must be entitled to an amount that at least compensates the entity for performance completed to date if the contract is terminated by the customer or another party for reasons other than the entity's failure to perform as promised.) Otherwise, the revenue is recognized at a point in time when the Group satisfies the performance obligation.

- Significant financing component

  In determining the transaction price, a promised amount of consideration is adjusted for the effects of the time value of money if the timing of payments agreed to by the parties to the contract provides the customer or the Group with a significant benefit of financing the transfer of goods or services to the customer.

- Offsetting of contractual assets and liabilities

  A contract asset is an entity’s right to consideration in exchange for goods or services that the Group has transferred to a customer, and a contract liability is an entity’s obligation to transfer goods or services to a customer for which the entity has received consideration

from the customer. In accordance with K-IFRS 1115, the Group presents contract assets and liabilities at net amount by offsetting each other, reflecting on the beginning balances of the statement of financial position.

- Indication of allowance for construction
  In accordance with K-IFRS 1115, the Group presents provision for impairment on contract assets and liabilities at gross amount, not at net amount, reflecting on the beginning balances of the statement of financial position.

The following table summarizes adjusted amounts recognized in the statement of financial position at the date of initial application.

(in millions of Korean won)	Before adjustments	Adjustments	After adjustments
Assets	₩ 18,431,902	₩ (516,362)	₩ 17,915,540
Liabilities	9,958,964	(177,098)	9,781,866
Equity	8,472,938	(339,264)	8,133,674

(in thousands of USD (Note 2))	Before adjustments	Adjustments	After adjustments
Assets	$ 16,485,021	$ (461,821)	$ 16,023,200
Liabilities	8,907,042	(158,392)	8,748,650
Equity	7,577,979	(303,429)	7,274,550

Financial statement line items affected by the adoption of K-IFRS 1115 in the current period are summarized as follows:

The effects of adoption of K-IFRS 1115 to the Group's consolidated statements of financial position and consolidated statements of comprehensive income as at and for the year ended December 31, 2018 are as follows. There were no material impact on the Group's consolidated statements of cash flows for the year ended December 31, 2018.

(in millions of Korean won)	**Amount after application of K-IFRS 1115**	**Adjustments**	**Amount before application of K-IFRS 1115**
Assets	₩ 18,054,609	₩ 661,543	₩ 18,716,152
Liabilities	9,762,753	323,508	10,086,261
Equity	8,291,856	338,035	8,629,891
Sales	16,730,894	78,565	16,809,459
Cost of sales	15,069,747	102,626	15,172,373
Net profit	535,303	45,260	580,563

(in thousands of USD (Note 2))	**Amount after application of K-IFRS 1115**	**Adjustments**	**Amount before application of K-IFRS 1115**
Assets	$ 16,147,580	$ 591,667	$ 16,739,247
Liabilities	8,731,556	289,337	9,020,893
Equity	7,416,024	302,330	7,718,354

(in thousands of USD (Note 2))	**Amount after application of K-IFRS 1115**	**Adjustments**	**Amount before application of K-IFRS 1115**
Sales	14,963,683	70,267	15,033,950
Cost of sales	13,477,996	91,786	13,569,782
Net profit	478,761	40,479	519,240

The overall impact on the statement of financial position as a result of the adoption of the newly introduced K-IFRS 1109 and 1105 is as follows:

(in millions of Korean won)	Before adjustments	Adjustments	After adjustments
Assets			
Current assets	₩ 13,249,840	₩ (533,691)	₩ 12,716,149
Non-current assets	5,182,062	(16,263)	5,165,799
Total assets	₩ 18,431,902	₩ (549,954)	₩ 17,881,948
Liabilities			
Current liabilities	₩ 7,219,038	₩ (177,098)	₩ 7,041,940
Non-current liabilities	2,739,926	-	2,739,926
Total liabilities	9,958,964	(177,098)	9,781,866
Equity			
Capital	557,273	-	557,273
Other paid-in capital	1,028,151	-	1,028,151
Other components of equity	68,973	(189,409)	(120,436)
Retained earnings	4,813,249	(143,268)	4,669,981
Non-controlling interest	2,005,292	(40,179)	1,965,113
Total equity	8,472,938	(372,856)	8,100,082
Total liabilities and equity	₩ 18,431,902	₩ (549,954)	₩ 17,881,948

(in thousands of USD (Note 2))	Before adjustments	Adjustments	After adjustments
Assets			
Current assets	$ 11,850,318	$ (477,320)	$ 11,372,998
Non-current assets	4,634,704	(14,545)	4,620,159
Total assets	$ 16,485,022	$ (491,865)	$ 15,993,157
Liabilities			
Current liabilities	$ 6,456,523	$ (158,392)	$ 6,298,131
Non-current liabilities	2,450,520	-	2,450,520
Total liabilities	8,907,043	(158,392)	8,748,651
Equity			
Capital	498,411	-	498,411
Other paid-in capital	919,552	-	919,552
Other components of equity	61,688	(169,403)	(107,715)

(in thousands of USD (Note 2))	Before adjustments	Adjustments	After adjustments
Retained earnings	4,304,847	(128,135)	4,176,712
Non-controlling interest	1,793,481	(35,935)	1,757,546
Total equity	7,577,979	(333,473)	7,244,506
Total liabilities and equity	$ 16,485,022	$ (491,865)	$ 15,993,157

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

The following new standards, interpretations and amendments to existing standards have been published but are not mandatory for the Group for annual reporting period beginning on or after January 1, 2018, and the Group has not early adopted them.

- Amendments to K-IFRS 1116 *'Leases'*

K-IFRS 1116 suggests a single accounting model that requires a lessee to recognize lease related asset and liability in the financial statements. K-IFRS 1116 "Leases" will replace K-IFRS 1017 "Leases" and it is effective for annual periods beginning on or after January 1, 2019.

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 of which has a term of 12 months or less at the commencement date and low value assets. Accounting treatment for lessor is similar to the existing standard which classifies lease into finance and operating lease.

The Group is currently evaluating the impact of the above-mentioned enactment on the financial statements.

2.2 Cash and Cash Equivalents

Cash and cash equivalents include cash, checks issued by others, checking accounts, ordinary deposits, and financial instruments with maturities (or date of redemption) of three months or less from acquisition, which can be easily converted into cash and whose value changes are not material due to changes in interest rates.

2.3 Financial Assets

1) Classification

From January 1, 2018, the Group classifies its financial assets in the following measurement categories:

- Those to be measured subsequently at fair value (either through other comprehensive income, or through profit or loss)
- Those to be measured at amortized cost

The classification depends on the Group's business model for managing the financial assets and the contractual terms of the cash flows.

For financial assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. For investments in debt instruments, this will depend on the business model in which the investment is held. The Group reclassifies debt investments only when its business model for managing those assets changes.

For investments in equity instruments that are not held for trading, classification will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income. Changes in fair value of the investments in equity instruments that are not accounted for as other comprehensive income are recognized in profit or loss.

2) Measurement

At initial recognition, the Group measures a financial asset, in the case of a financial asset not at fair value through profit or loss, at its fair value plus transaction costs that are directly attributable to the acquisition of the financial asset or the issuance of the financial liabilities. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss.

Hybrid (combined) contracts with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

a) Debt Instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. The Group classifies its debt instruments into one of the following three measurement categories:

① Financial assets measured at amortized cost

Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. A gain or loss on a debt investment that is subsequently measured at amortized cost and is not part of a hedging relationship is recognized in profit or loss when the asset is derecognized or impaired. Interest income from these financial assets is included in 'Financial income' using the effective interest rate method.

② Financial assets measured at fair value through other comprehensive income

Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at fair value through other comprehensive income. Movements in the carrying

amount are taken through other comprehensive income, except for the recognition of impairment loss (reversal of impairment loss), interest income and foreign exchange gains and losses which are recognized in profit or loss. When the financial asset is derecognized, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss. Interest income from these financial assets is included in 'Financial income' using the effective interest rate method. Foreign exchange gains and losses are presented in 'Financial income and expenses' and impairment losses are presented in 'Other non-operating expenses'.

③ Financial assets measured at fair value through profit or loss

Assets that do not meet the criteria for amortized cost or fair value through other comprehensive income are measured at fair value through profit or loss. A gain or loss on debt investment that is subsequently measured at fair value through profit or loss and is not part of a hedging relationship is recognized in profit or loss and presented in the statement of profit or loss within 'Other non-operating income and expenses' in the year in which it arises.

3) Impairment

The Group assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortized cost and fair value through other comprehensive income. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables and lease receivables, the Group applies the simplified approach, which requires expected lifetime losses to be recognized from initial recognition of the receivables.

4) Recognition and Derecognition

Purchases and sales of financial assets in the ordinary course of business are recognized or derecognized on trade-date, the date on which the Group commits to purchase or sell the asset. Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership. If a transfer does not result in derecognition because the Group has retained substantially all the risks and rewards of ownership of the transferred asset, the Group continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received. The Group classified the financial liability as "borrowings" in the statement of financial position.

5) Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount reported in the 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.

2.4 Derivative Financial Instruments

Derivatives are initially recognized at fair value at the date the derivative contract is entered into and transaction cost is immediately recognized as profit or loss.

The Group designates certain derivatives either as hedges of recognized assets or liabilities or firm commitments (fair value hedges), hedges of highly probable forecast transactions, hedges of foreign currency risk of firm commitments (cash flow hedges) or hedges of net investments in foreign operations (net investment hedges).

Derivatives are measured at their fair values subsequently and profit or loss on changes of fair values is recognized as follows:

1) Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognized in profit or loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The change in the fair value of the hedging instrument and the change in the hedged item attributable to the hedged risk are recognized in the line of the separate statement of comprehensive income relating to the hedged item.

2) Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss, and is included in the ‘other gains and losses’ line item. Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to profit or loss in the periods when the hedged item is recognized in profit or loss in the same line of the separate statement of comprehensive income as the recognized hedged item. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously accumulated in equity are transferred from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

Hedge accounting is discontinued when the Group revokes the hedging relationship; the hedging instrument expires or is sold, terminated or exercised; or it no longer qualifies for hedge accounting. Any gain or loss accumulated in equity at that time remains in equity and is recognized when the forecast transaction is ultimately recognized in profit or loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognized immediately in profit or loss.

Changes in fair values of derivatives that do not qualify the requirements of hedge accounting or designate as hedge are recognized as profit or loss.

2.5 Inventories

Inventories are stated at the lower of cost or net realizable value. The cost of inventories is determined using the first-in, first-out method for merchandise, supplies and raw materials; specific identification method for land for construction and materials in transit; and weighted-average method for finished and unfinished housing units. The cost of construction support materials is determined at cost, less accumulated expenses incurred. The amount of any write-down of inventories to net realizable value due to obsolescence or excess inventory and other losses of inventories occurring in the normal course of business is recognized as cost of revenues, and such valuation losses are deducted from the inventories as allowance for valuation losses. The amount of any reversal of any write-down of inventories, arising from an increase in net realizable value, is recognized as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs.

2.6 Investments in Subsidiaries, Associates and Joint Ventures

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

A joint venture is a joint arrangement, whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The results and assets and liabilities of associates or joint ventures are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment is classified as held for sale, in which case it is accounted for in accordance with K-IFRS 1105. Under the equity method, an investment in an associate or a joint venture is initially recognized in the consolidated statements of financial position at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of the associate or joint venture. When the Group's share in losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an associate or a joint venture recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Group’s share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition, after reassessment, is recognized immediately in profit or loss.

Upon disposal of an associate or a joint venture that results in the Group losing significant influence over that associate or joint venture, any retained investment is measured at fair value at that date and the fair value is regarded as its fair value on initial recognition as a financial asset in accordance with K-IFRS 1039. The difference between the previous carrying amount of the associate or joint venture attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate or joint venture. In addition, the Group accounts for all amounts previously recognized in other comprehensive income in relation to that associate or joint venture on the same basis as would be required if that associate or joint venture had directly disposed of the related assets or liabilities.

Therefore, if a gain or loss previously recognized in other comprehensive income by that associate or joint venture would be reclassified to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as reclassification adjustment) when it loses significant influence over that associate or joint venture.

When the Group reduces its ownership interest in an associate or a joint venture, but continues to use the equity method, the Group reclassifies to profit or loss the proportion of the gain or loss that had previously been recognized in other comprehensive income related to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities. In addition, the Group applies K-IFRS 1105 to a portion of investment in an associate or a joint venture that meets the criteria to be classified as held for sale.

The requirements of K-IFRS 1039 are applied to determine whether it is necessary to recognize any impairment loss with respect to the Group's investment in an associate or a joint venture. When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with K-IFRS 1036, 'Impairment of Assets,' by comparing its recoverable amount (higher of value in use and fair value, less costs to sell) with its carrying amount, and any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with K-IFRS 1036 to the extent that the recoverable amount of the investment subsequently increases.

2.7 Interests in Joint Operations

A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets, and obligations for the liabilities, related to the arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

When the Group undertakes its activities under joint operations, the Group as a joint operator recognizes in relation to its interest in a joint operation:

- its assets, including its share of any assets held jointly;
- its liabilities, including its share of any liabilities incurred jointly;

- its revenue from the sale of its share of the output arising from the joint operation;
- its share of the revenue from the sale of the output by the joint operation; and
- its expenses, including its share of any expenses incurred jointly.

The Group accounts for the assets, liabilities, revenues and expenses related to its interest in a joint operation in accordance with the K-IFRS applicable to the particular assets, liabilities, revenues and expenses.

When the Group transacts with a joint operation in which the Group is a joint operator (such as a sale or contribution of assets), the Group is considered to be conducting the transaction with the other parties to the joint operation, and gains and losses resulting from the transactions are recognized in the Group's consolidated financial statements only to the extent of other parties' interests in the joint operation.

When the Group transacts with a joint operation in which the Group is a joint operator (such as a purchase of assets), the Group does not recognize its share of the gains and losses until it resells those assets to a third party.

2.8 Investment Property

Investment property is a property held to earn rentals or for capital appreciation, or both. Investment property is measured initially at cost, including transaction costs. Subsequent to initial recognition, investment property is reported at cost, less accumulated depreciation and accumulated impairment losses.

Subsequent costs are recognized in the carrying amount of an asset or as a separate asset if it is probable that future economic benefits associated with the assets will flow into the Group and the cost of an asset can be measured reliably. Routine maintenance and repairs are expensed as incurred.

While land is not depreciated, all other investment property is depreciated based on the respective assets’ estimated useful lives ranging from 11 to 60 years using the straight-line method.

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

An investment property is derecognized upon disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from the disposal. Any gain or loss arising on derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss in the period in which the property is derecognized.

2.9 Property, Plant and Equipment

Property, plant and equipment are stated at cost, less subsequent accumulated depreciation and accumulated impairment losses. The cost of an item of property, plant and equipment is directly attributable to its purchase or construction, which includes any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent costs are recognized at the carrying amount of an asset or as a separate asset if it is probable that future economic benefits associated with the assets will flow into the Group and the cost of an asset can be measured reliably. Routine maintenance and repairs are expensed as incurred.

The Group does not depreciate land and construction in progress. Depreciation is computed using the straight-line method based on the estimated useful lives of the assets as follows:

	Estimated useful lives (years)
Buildings	5 - 60
Structures	2 - 48
Machinery	1 - 30
Vehicles	2 - 7
Tools and fixtures	2 - 20
Ship	3 - 15
Other	4 - 50

The Group reviews the depreciation method, the estimated useful lives and residual values of property, plant and equipment at the end of each annual reporting period. If expectations differ from previous estimates, the changes are accounted for as a change in an accounting estimate.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss in the period in which the property is derecognized.

2.10 Intangible Assets

Intangible assets are initially recognized at acquisition cost (purchase cost, plus expenditure directly related to preparing the assets ready for its use) and subsequently presented at amortized cost. In relation to intangible assets with indefinite useful lives, the estimated useful life and amortization method are reviewed at the end of each annual reporting period, with the effect of any changes in estimate being accounted for as a change in accounting estimates.

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, and are recognized in profit or loss when the asset is derecognized.

2.11 Impairment of Tangible and Intangible Assets Other than Goodwill

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise, they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and irrespective of whether there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value, less costs to sell, and value in use. If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or the cash-generating unit) is reduced to its recoverable amount and the reduced amount is recognized in profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or the cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

2.12 Financial Liabilities and Equity Instruments

Debt and equity instruments are classified as either financial liabilities or equity in accordance with the substance of the contractual arrangement and the definitions of financial liability and an equity instrument.

1) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Group are recognized as the proceeds are received, net of direct issue costs.

Repurchase of the Group’s own equity instruments is recognized and deducted directly in equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancellation of the Group’s own equity instruments.

2) Financial liabilities

The Group’s financial liabilities at fair value through profit or loss are financial instruments held for trading. A financial liability is held for trading if it is incurred principally for the purpose of

repurchasing in the near term. A derivative that is not designated as hedging instruments and an embedded derivative that is separated are also classified 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 present as 'trade payables', 'borrowings', or 'other payables' in the consolidated statement of financial position.

3) Financial guarantee contract liabilities

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of debt instruments.

Financial guarantee contract liabilities are initially measured at their fair values and, if not designated as at FVPL, are subsequently measured at the higher of:

- The amount of the obligation under the contract, as determined in accordance with K-IFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets*; and
- The amount initially recognized, less cumulative amortization recognized in accordance with K-IFRS 1115 *Revenue from Contracts with Customers*.

4) Derecognition of financial liabilities

The Group derecognizes financial liabilities when the Group's obligations are discharged, canceled or they expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

2.13 Post-employment Benefit Obligations

For defined post-employment benefit plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each reporting period. Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is reflected immediately in the consolidated statements of financial position, with a charge or credit recognized in other comprehensive income in the period in which it occurs. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss. Past service cost is recognized in profit or loss in the period of a plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset. Defined benefit costs are composed of service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements), net interest expense (income) and remeasurement.

The Group presents the service cost and net interest expense (income) components in profit or loss and the remeasurement component in other comprehensive income. Curtailment gains

and losses are accounted for as past service costs.

A liability for termination benefit is recognized at the earlier of when the entity can no longer withdraw the offer of the termination benefit or when the entity recognizes any related restructuring costs.

2.14 Provisions

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

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation.

Where a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows. When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

At the end of each reporting period, the remaining provision balance is reviewed and assessed to determine if the current best estimate is being recognized. If the existence of an obligation to transfer economic benefit is no longer probable, the related provision is reversed during that period.

2.15 Revenue Recognition

1) Identification of performance obligations

The Group identifies the performance obligation in the contract with customers. Different performance obligation shall be identified if customer benefits from goods or service or customer benefits from goods or service with other resources that are readily available and promise to customer to transfer goods or service is separately identified from another promise within a contract.

2) A performance obligation satisfied over time

Revenue is recognized over time by measuring progress only if 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.

For certain construction service contracts such as apartments, the contract revenue is recognized over time by measuring progress as the Group has an enforceable right to payment,

at all times throughout the duration of the contract, the entity must be entitled to an amount that at least compensates the entity for performance completed to date if the contract is terminated by the customer. Otherwise, the revenue is recognized upon completion of construction.

3) Progress measurement using input method

The Group recognizes performance obligations satisfied over time based on percentage of completion by input method after excluding the effects of any inputs that do not depict the performance. In addition, if the Group may not be able to reasonably measure the outcome of a performance obligation, but the Group expects to recover the cost incurred in satisfying the performance obligation, the Group will recognize revenue only to the extent of the costs incurred until such time that it can reasonably measure the outcome of the performance obligation.

Meanwhile, a faithful depiction of the Group's performance might be to recognize revenue at an amount equal to the cost of goods used to satisfy a performance obligation if the Group expects at contract inception that all of the following conditions would be met: i) the goods are not distinct; ii) the customer is expected to obtain control of the goods significantly before receiving services related to the goods; iii) the cost of the transferred goods is significant relative to the total expected costs to completely satisfy the performance obligation; and iv) the Group procures the goods from a third party and is not significantly involved in designing and manufacturing the goods.

When contract costs incurred to date plus recognized profits less recognized losses exceed progress billing, the surplus is shown as amounts due from customers for contract work. For contracts where progress billings exceed contract costs incurred to date plus recognized profits less recognized losses, the surplus is shown as the amounts due to customers for contract work. Amounts received before the related work is performed are included in the statements of financial position, as a liability, as advances received. Amounts billed for work performed but not yet paid by the customer are included in the statements of financial position under trade and other receivables.

The Group recognizes other income when the amount of revenue can be reasonably measured and it is probable that any future economic benefit associated with the item of revenue will flow to the entity.

4) Variable consideration

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 recognizes 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.

5) Incremental costs of obtaining a contract

The incremental costs of obtaining a contract are those contracts that the Group incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained. The costs to obtain a contract will be recognized as an expense when incurred, unless those costs are explicitly chargeable to the customer regardless of whether the contract is obtained. The Group reviews the incremental costs of obtaining a contract based on each incurred items and recognizes the capitalized costs as contract cost based on percentage of completion

6) Costs to fulfill a contract

The Group shall recognize an asset for contract fulfillment costs if they meet all of the following conditions:

- Relate directly to a contract or to an anticipated contract
- Generate or enhance resources of the entity that will be used in satisfying performance obligations in the future
- Are expected to be recovered

2.16 Borrowing Costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings, pending their expenditure on qualifying assets, is deducted from the borrowing costs eligible for capitalization. All other borrowing costs are recognized in profit or loss in the period in which they are incurred.

2.17 Foreign Currency Translation

The consolidated financial statements of the Group are presented in the currency of the primary economic environment in which the entity operates (its functional currency). The Parent Company's functional currency, as well as the reporting currency for the consolidated financial statements, is Korean won.

In preparation of the Group's consolidated financial statements, any transaction occurred in currency other than its functional currency will be recorded in translated amount using the exchange rate of the transaction. At the end of the reporting period, all monetary assets and liabilities will be translated using the exchange rate. Meanwhile, non-monetary assets and liabilities measured at fair value will be retranslated using the exchange rate at the date of fair value evaluation, whereas non-monetary assets and liabilities measured at historical cost will not be translated.

Exchange differences are recognized in profit or loss in the period in which they arise, except

for:

- Exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings; and

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

In case of foreign assets and liabilities of overseas branches and offices for which the operating and financial activities operate independently with the headquarters, the Group translates assets and liabilities using the exchange rate at the end of the reporting period, equity using historical exchange rate and income and expenses using the average exchange rate in the current period.

Gains and losses arising from the translation are offset and recognized in other component equity as gain (loss) on translation of foreign operations. The amount will be offset with gains (losses) on translation of foreign operations arising in future periods and recognized in profit or loss in the period when the branches and offices are disposed, closed or liquidated.

2.18 Non-current Assets Held for Sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continued use. This condition is regarded as met only when the sale is highly probable and the non-current asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification. Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their previous carrying amount and fair value, less costs to sell.

2.19 Income Tax Expense and Deferred Income Tax

Income tax expense represents the sum of the taxes currently payable and deferred.

1) Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the separate statements of comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

2) Deferred income tax

Deferred income tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred income tax liabilities are generally recognized for all taxable temporary differences. Deferred income tax assets are generally recognized for all deductible temporary differences to the extent it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred income tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred income tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred income tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent it is probable that there will be sufficient taxable profits against which the benefits of the temporary differences can be utilized and they are expected to reverse in the foreseeable future.

The carrying amount of deferred income tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred income tax assets and liabilities are measured at the tax rates that are expected to be applied in the period in which the liability is settled or the asset is realized, based on tax rates and tax laws that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred income tax assets and liabilities reflects the tax consequences that would follow the manner in which the Group expects to recover or settle the carrying amount of its assets and liabilities at the end of the reporting period.

Deferred income tax assets and liabilities are offset if, and only if the Group has a legally enforceable right to set off current tax assets against current tax liabilities, and the deferred income tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax liabilities and assets on a net basis, or to realize the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred income tax liabilities or assets are expected to be settled or recovered.

3) Current tax and deferred income tax for the year

Current tax and deferred income tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity or items arising from initial accounting treatments of a business combination. The tax effect arising from

a business combination is included in the accounting for the business combination.

2.20 Fair Value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date.

Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of K-IFRS 1102 leasing transactions that are within the scope of K-IFRS 1017 *Leases* and measurements that have some similarities to fair value, but are not fair value, such as net realizable value in K-IFRS 1002 *Inventories* or value in use in K-IFRS 1036 *Impairment of Assets*.

In addition, for financial reporting purposes, fair value measurements are categorized into Levels 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

Level 1: Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
Level 2: Inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly.
Level 3: Inputs are unobservable inputs for the asset or liability.

2.21 Approval of Issuance of the Financial Statements

The 2018 consolidated financial statements were approved for issue by the Board of Directors on January 25, 2019 and are subject to change with the approval of shareholders at their Annual General Meeting.

3. Critical Accounting Estimates and Assumptions

The preparation of consolidated financial statements requires the Group to make estimates and assumptions concerning the future. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. 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 discussed below.

(a) 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.

(b) Uncertainty of the estimated total contract revenue due to delay

Measurement of construction revenue is affected by the uncertainty of the occurrence of future events. Since the contract revenue can be decreased by the penalty when the completion of contract is delayed due to the Group's fault, the Group estimates the delay compensation from past experiences for contracts expected to delay.

(c) Estimated total contract costs

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

(d) Income taxes

The Group's taxable income generated from these operations are 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.

If certain portion of the taxable income is not used for investments or increase in wages, the Group is liable to pay additional income tax calculated based on the tax laws. 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 other, there is an uncertainty measuring the final tax effects.

(e) 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.

(f) Net defined benefit liability

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

(g) Provisions

The Group recognizes provision for warranty reserve related to construction contracts at the end of the reporting period. The amounts are estimated based on historical data.

4. Cash and Cash Equivalents

Cash and cash equivalents as at December 31, 2018 and 2017, consist of the following:

(in millions of Korean won)		2018		2017
Cash on hand	₩	1,395	₩	2,378
Checking deposits		287,767		391,893
Ordinary deposits		1,952,026		1,712,971
	₩	2,241,188	₩	2,107,242

(in thousands of USD (Note 2))		2018		2017
Cash on hand	$	1,248	$	2,127
Checking deposits		257,371		350,499
Ordinary deposits		1,745,842		1,532,037
	$	2,004,461	$	1,884,663

5. Trade, Other Receivables, Due from Customers for Contract Work, Long-term Accounts Receivables and Long-term Other Receivables

Details of trade, other receivables, due from customers for contract work, long-term accounts receivable and long-term other receivables as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		2018		2017
Trade receivables	Trade receivables	₩ 29,767	₩	25,357
	Provision for impairment	(408)		(368)
	Receivables from real estate sales	396,672		259,418
	Construction work trade receivables	1,917,100		1,834,018
	Provision for impairment	(166,405)		(152,058)
		₩ 2,176,726	₩	1,966,367
Other receivables	Short-term guarantee deposits	₩ 563,860	₩	761,535
	Provision for impairment	(15,896)		(13,079)
	Short-term loans	57,675		7,223
	Provision for impairment	(753)		(25)

(in millions of Korean won)			**2018**		**2017**
	Non-trade receivables		625,640		651,897
	Provision for impairment		(108,964)		(116,928)
	Present value discount		-		(3)
	Accrued income		46,570		40,310
	Provision for impairment		(8,994)		(8,009)
	Current portion of long-term loans		164,578		176,460
	Provision for impairment		(1,367)		-
		₩	1,322,349	₩	1,499,381
Due from customers for contract work	Due from customers for contract work	₩	2,747,139	₩	2,923,550
	Provision for impairment		(67,416)		(27,104)
		₩	2,679,723	₩	2,896,446
Long-term accounts receivable	Long-term accounts receivable	₩	384,648	₩	364,017
	Provision for impairment		(4,272)		-
	Present value discount		(1,011)		-
	Long-term construction work trade receivables		20		13
		₩	379,385	₩	364,030
Long-term other receivables	Long-term non-trade receivables	₩	4,707	₩	15,165
	Provision for impairment		(352)		(14,936)
	Long-term loans		215,383		269,020
	Provision for impairment		(124,886)		(124,777)
	Present value discount		(3,838)		(3,246)
	Guarantee deposits		933,859		796,545
	Provision for impairment		(13,562)		(4,295)
	Present value discount		(36,098)		(27,103)
		₩	975,213	₩	906,373

(in thousands of USD(Note 2))			**2018**		**2017**
Trade receivables	Trade receivables	$	26,623	$	22,679
	Provision for impairment		(365)		(329)
	Receivables from real estate sales		354,773		232,017
	Construction work trade receivables		1,714,604		1,640,299
	Provision for impairment		(148,827)		(135,998)
		$	1,946,808	$	1,758,668
Other receivables	Short-term guarantee deposits	$	504,302	$	681,097
	Provision for impairment		(14,217)		(11,698)

(in thousands of USD(Note 2))		2018	2017
	Short-term loans	51,583	6,460
	Provision for impairment	(673)	(22)
	Non-trade receivables	559,556	583,040
	Provision for impairment	(97,455)	(104,577)
	Present value discount	-	(3)
	Accrued income	41,651	36,052
	Provision for impairment	(8,044)	(7,163)
	Current portion of long-term loans	147,195	157,822
	Provision for impairment	(1,223)	-
		$ 1,182,675	$ 1,341,008
Due from customers for contract work	Due from customers for contract work	$ 2,456,971	$ 2,614,748
	Provision for impairment	(60,295)	(24,241)
		$ 2,396,676	$ 2,590,507
Long-term accounts receivable	Long-term accounts receivable	344,019	325,567
	Provision for impairment	(3,821)	-
	Present value discount	(904)	-
	Long-term construction work trade receivables	18	12
		$ 339,312	$ 325,579
Long-term other receivables	Long-term non-trade receivables	$ 4,210	$ 13,563
	Provision for impairment	(315)	(13,358)
	Long-term loans	192,633	240,605
	Provision for impairment	(111,695)	(111,597)
	Present value discount	(3,433)	(2,903)
	Guarantee deposits	835,220	712,409
	Provision for impairment	(12,130)	(3,841)
	Present value discount	$ (32,285)	$ (24,241)
		$ 872,205	$ 810,637

Changes in provision for impairment on trade, other receivables, due from customers for contract work and long-term other receivables for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018							
	Beginning balance	Impairment loss	Written off	Reversal	Transfer	Transition Impact	Exchange differences	Ending balance
Trade receivables	₩ (368)	₩ (40)	₩ -	₩ -	₩ -	₩ -	₩ -	₩ (408)
Construction work trade receivables	(152,058)	(1,212)	5,047	380	-	(18,562)	-	(166,405)
Short-term guarantee	(13,079)	(1,162)	-	1,833	-	(3,159)	(329)	(15,896)

deposits								
Short-term loans	(25)	(657)	-	-	-	(71)	-	(753)
Non-trade receivables	(116,928)	(5,743)	4,625	13,843	-	(5,427)	666	(108,964)
Accrued income	(8,009)	(685)	-	79	-	(379)	-	(8,994)
Current portion of long-term loans	-	24	-	621	-	(2,012)	-	(1,367)
Long-term trade receivables	-	(229)	-	-	-	(4,043)	-	(4,272)
Due from customers for contract work	(27,104)	(15,783)	(817)	-	7,625	(31,337)	-	(67,416)
Long-term non-trade receivables	(14,936)	-	14,561	26	-	(3)	-	(352)
Long-term loans	(124,777)	(27,996)	23,390	6,421	-	(1,924)	-	(124,886)
Guarantee deposits	(4,295)	(1,237)	-	1,175	-	(9,205)	-	(13,562)
	₩ (461,579)	₩ (54,720)	₩ 46,806	₩ 24,379	₩ 7,625	(76,122)	₩ 337	\ (513,275)

(in thousands of USD (Note 2))

	2018							
	Beginning balance	**Impairment loss**	**Written off**	**Reversal**	**Transfer**	**Transition Impact**	**Exchange differences**	**Ending balance**
Trade receivables	$ (329)	$ (36)	$ -	$ -	$ -	$ -	$ -	$ (365)
Construction work trade receivables	(135,997)	(1,084)	4,514	340	-	(16,601)	-	(148,828)
Short-term guarantee deposits	(11,698)	(1,039)	-	1,639	-	(2,825)	(294)	(14,217)
Short-term loans	(22)	(588)	-	-	-	(64)	-	(674)
Non-trade receivables	(104,577)	(5,136)	4,136	12,381	-	(4,854)	596	(97,454)
Accrued income	(7,163)	(613)	-	71	-	(339)	-	(8,044)
Current portion of long-term loans	-	21	-	555	-	(1,799)	-	(1,223)
Long-term trade receivables	-	(205)	-	-	-	(3,616)	-	(3,821)
Due from customers for contract work	(24,241)	(14,116)	(731)	-	6,820	(28,027)	-	(60,295)
Long-term non-trade receivables	(13,358)	-	13,023	23	-	(3)	-	(315)
Long-term loans	(111,597)	(25,039)	20,919	5,743	-	(1,721)	-	(111,695)
Guarantee deposits	(3,841)	(1,106)	-	1,051	-	(8,233)	-	(12,129)
	$ (412,823)	$ (48,941)	$ 41,861	$ 21,803	$ 6,820	$ (68,082)	$ 302	$ (459,060)

(in millions of Korean won)

	2017						
	Beginning balance	**Impairment loss**	**Written off**	**Reversal**	**Transfer**	**Exchange differences**	**Ending balance**
Trade receivables	₩ (351)	₩ (17)	₩ -	₩ -	₩ -	₩ -	₩ (368)
Construction work trade receivables	(175,489)	(37,336)	62,308	-	(1,541)	-	(152,058)
Short-term guarantee	(9,781)	(4,402)	148	-	-	956	(13,079)

(in millions of Korean won)	2017						
	Beginning balance	**Impairment loss**	**Written off**	**Reversal**	**Transfer**	**Exchange differences**	**Ending balance**
deposits							
Short-term loans	-	(25)	-	-	-	-	(25)
Non-trade receivables	(44,616)	(110,635)	32,144	5,684	19	476	(116,928)
Accrued income	(19,633)	-	11,624	-	-	-	(8,009)
Due from customers for contract work	(4,512)	(26,937)	4,345	-	-	-	(27,104)
Long-term non-trade receivables	(14,391)	(526)	-	-	(19)	-	(14,936)
Long-term loans	(153,586)	(6,786)	26,980	8,614	-	1	(124,777)
Guarantee deposits	(1,810)	(2,485)	-	-	-	-	(4,295)
	₩ (424,169)	₩ (189,149)	₩ 137,549	₩ 14,298	₩ (1,541)	₩ 1,433	₩ (461,579)

(in thousands of USD (Note 2))	2017						
	Beginning balance	**Impairment loss**	**Written off**	**Reversal**	**Transfer**	**Exchange differences**	**Ending balance**
Trade receivables	$ (314)	$ (15)	$ -	$ -	$ -	$ -	$ (329)
Construction work trade receivables	(156,954)	(33,392)	55,727	-	(1,378)	-	(135,997)
Short-term guarantee deposits	(8,748)	(3,937)	132	-	-	855	(11,698)
Short-term loans	-	(22)	-	-	-	-	(22)
Non-trade receivables	(39,903)	(98,950)	28,749	5,084	17	426	(104,577)
Accrued income	(17,559)	-	10,396	-	-	-	(7,163)
Due from customers for contract work	(4,035)	(24,092)	3,886	-	-	-	(24,241)
Long-term non-trade receivables	(12,871)	(470)	-	-	(17)	-	(13,358)
Long-term loans	(137,363)	(6,069)	24,130	7,704	-	1	(111,597)
Guarantee deposits	(1,619)	(2,222)	-	-	-	-	(3,841)
	$ (379,366)	$ (169,169)	$ 123,020	$ 12,788	$ (1,378)	$ 1,282	$ (412,823)

The aging analysis of trade receivables as at December 31, 2018 and 2017, is as follows:

(in millions of Korean won)	**2018**	**2017**
Receivables not past due	₩ 1,432,584	₩ 1,243,770
Past due but not impaired		
Up to 1 year	437,947	505,735
1 to 3 years	239,070	129,818

(in millions of Korean won)	2018	2017
Over 3 years	75,223	81,091
	752,240	716,644
Impaired[1]		
Up to 1 year	6,338	-
1 to 3 years	10,487	68,500
Over 3 years	141,122	89,878
	157,948	158,378
	₩ 2,342,772	₩ 2,118,792

(in millions of Korean won)	2018	2017
Receivables not past due	$ 1,281,266	$ 1,112,396
Past due but not impaired		
Up to 1 year	391,689	452,316
1 to 3 years	213,818	116,106
Over 3 years	67,278	72,526
	672,785	640,948
Impaired[1]		
Up to 1 year	-	-
1 to 3 years	9,379	61,265
Over 3 years	126,216	80,385
	135,595	141,650
	$ 2,089,646	$ 1,894,994

[1] The Group has recognized the provision for impairment of ₩ 166,813 million ($149,193 thousand) as at December 31, 2018 (2017: ₩ 152,426 million ($136,326 thousand)).

6. Inventories

Inventories as at December 31, 2018 and 2017, consist of the following:

(in millions of Korean won)	2018			2017		
	Acquisition cost	Valuation allowance	Book amount	Acquisition cost	Valuation allowance	Book amount
Land for construction	₩1,623,110	₩ (1,035)	₩1,622,075	₩1,777,231	₩ (2,447)	₩1,774,784
Finished housing	6,513	(2,838)	3,675	41,231	(4,994)	36,237
Unfinished housing	71,249	-	71,249	37,503	-	37,503

Merchandise	8,279	-	8,279	4,830	-	4,830
Supplies	503	-	503	44	-	44
Work in process	170,953	-	170,953	188,715	-	188,715
Raw materials	35,052	-	35,052	26,970	-	26,970
Materials in transit	21,745	-	21,745	21,058	-	21,058
Construction support materials	3,468	-	3,468	5,755	-	5,755
Korean native cattle	9,405	-	9,405	8,924	-	8,924
Others	648	-	648	697	-	697
	₩1,950,925	₩ (3,873)	₩1,947,052	₩2,112,958	₩ (7,441)	₩2,105,517

(in thousands of USD (Note 2))	2018			2017		
	Acquisition cost	**Valuation allowance**	**Book amount**	**Acquisition cost**	**Valuation allowance**	**Book amount**
Land for construction	$ 1,451,668	$ (926)	$ 1,450,742	$ 1,589,510	$ (2,189)	$ 1,587,321
Finished housing	5,825	(2,538)	3,287	36,876	(4,467)	32,409
Unfinished housing	63,723	-	63,723	33,542	-	33,542
Merchandise	7,405	-	7,405	4,320	-	4,320
Supplies	450	-	450	39	-	39
Work in process	152,896	-	152,896	168,782	-	168,782
Raw materials	31,350	-	31,350	24,121	-	24,121
Materials in transit	19,448	-	19,448	18,834	-	18,834
Construction support materials	3,102	-	3,102	5,147	-	5,147
Korean native cattle	8,412	-	8,412	7,981	-	7,981
Others	578	-	578	624	-	624
	$ 1,744,857	$ (3,464)	$ 1,741,393	$ 1,889,776	$ (6,656)	$ 1,883,120

Changes in allowance for valuation of inventory for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018			
	Beginning balance	**Written off**	**Disposal**	**Ending balance**
Land for construction	₩ (2,447)	₩ -	₩ 1,412	₩ (1,035)
Finished housing	(4,994)	(549)	2,705	(2,838)
	₩ (7,441)	₩ (549)	₩ 4,117	₩ (3,873)

(in thousands of USD (Note 2))	2018			
	Beginning balance	**Written off**	**Disposal**	**Ending balance**
Land for construction	$ (2,189)	$ -	$ 1,263	$ (926)
Finished housing	(4,467)	(490)	2,419	(2,538)

	$ (6,656)	$ (490)	$ 3,682	$ (3,464)

(in millions of Korean won)

	2017			
	Beginning balance	**Written off**	**Disposal**	**Ending balance**
Land for construction	₩ (1,087)	₩ (1,360)	₩ -	₩ (2,447)
Finished housing	(4,151)	(2,953)	2,110	(4,994)
	₩ (5,238)	₩ (4,313)	₩ 2,110	₩ (7,441)

(in thousands of USD (Note 2))

	2017			
	Beginning balance	**Written off**	**Disposal**	**Ending balance**
Land for construction	$ (972)	$ (1,217)	$ -	$ (2,189)
Finished housing	(3,713)	(2,641)	1,887	(4,467)
	$ (4,685)	$ (3,858)	$ 1,887	$ (6,656)

7. Other Current Assets and Other Non-current Assets

Details of other current assets and other non-current assets as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)

		2018	2017
Other current assets	Advance payments	₩ 672,203	₩ 603,914
	Provision for impairment	(22,343)	(9,216)
	Prepaid construction cost	188,011	350,903
	Provision for impairment	-	(33,410)
	Prepaid expenses	248,021	356,410
	Provision for impairment	(1,619)	(1,557)
	Prepaid value-added tax	40,903	30,775
		₩ 1,125,176	₩ 1,297,819
Other non-current assets	Long-term advance payments	₩ 974	₩ 25,714
	Provision for impairment	(80)	(115)
	Long-term prepaid expenses	405	98,726
	Other non-current assets	117,483	-
		₩ 118,782	₩ 124,325

(in thousands of USD (Note 2))		2018	2017
Other current assets	Advance payments	$ 601,201	$ 540,125
	Provision for impairment	(19,983)	(8,243)
	Prepaid construction cost	168,152	313,839
	Provision for impairment	-	(29,881)
	Prepaid expenses	221,824	318,764
	Provision for impairment	(1,448)	(1,393)
	Prepaid value-added tax	36,583	27,525
		$ 1,006,329	$ 1,160,736
Other non-current assets	Long-term advance payments	$ 871	$ 22,998
	Provision for impairment	(72)	(103)
	Long-term prepaid expenses	362	88,298
	Other non-current assets	105,074	-
		$ 106,235	$ 111,193

Changes in provision for impairment for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018					
	Beginning balance	Impairment loss	Written off	Transition Impact	Exchange differences	Ending balance
Advance payments	₩ (9,216)	₩ (12,940)	₩ -	₩ -	₩ (187)	₩ (22,343)
Prepaid construction cost	(33,410)	-	-	33,410	-	-
Prepaid expenses	(1,557)	-	-	-	(62)	(1,619)
Long-term advance payments	(115)	-	35	-	-	(80)
	₩ (44,298)	₩ (12,940)	₩ 35	₩ 33,410	₩ (249)	₩ (24,042)

(in thousands of USD(Note 2))	2018					
	Beginning balance	Impairment loss	Written off	Transition Impact	Exchange differences	Ending balance
Advance payments	$ (8,243)	$ (11,573)	$ -	$ -	$ (167)	$ (19,983)
Prepaid construction cost	(29,881)	-	-	29,881	-	-
Prepaid expenses	(1,393)	-	-	-	(55)	(1,448)
Long-term advance payments	(103)	-	31	-	-	(72)
	$ (39,620)	$ (11,573)	$ 31	$ 29,881	$ (222)	$ (21,503)

(in millions of Korean won)	2017					
	Beginning balance	Impairment loss	Written off	Reversal	Exchange differences	Ending balance

Advance payments	₩ (9,514)	₩ (559)	₩ 377	₩ 94	₩ 386	₩ (9,216)
Prepaid construction cost	(29,733)	(13,753)	-	10,076	-	(33,410)
Prepaid expenses	(1,746)	-	-	-	189	(1,557)
Long-term advance payments	(55)	(60)	-	-	-	(115)
	₩ (41,048)	₩ (14,372)	₩ 377	₩ 10,170	₩ 575	₩ (44,298)

(in thousands of USD(Note 2))	2017					
	Beginning balance	**Impairment loss**	**Written off**	**Reversal**	**Exchange differences**	**Ending balance**
Advance payments	$ (8,509)	$ (500)	$ 337	$ 84	$ 345	$ (8,243)
Prepaid construction cost	(26,592)	(12,300)	-	9,012	-	(29,880)
Prepaid expenses	(1,562)	-	-	-	169	(1,393)
Long-term advance payments	(49)	(54)	-	-	-	(103)
	$ (36,712)	$ (12,854)	$ 337	$ 9,096	$ 514	$ (39,619)

8. Financial Assets measured at Fair Value and Available-for-sale Financial Assets

Financial assets measured at fair value and AFS financial assets as at December 31, 2018 and 2017, are as follows

(in millions of Korean won)	**2018**	**2017**
Financial assets at fair value through other comprehensive income	₩ 83,468	₩ -
Financial assets at fair value through profit or loss	298,346	-
AFS financial assets (Non-current) - Marketable equity securities	-	12,282
AFS financial assets (Non-current) - Non-marketable equity securities	-	253,973
	₩ 381,814	₩ 266,255

(in thousands of USD (note2))	**2018**	**2017**
Financial assets at fair value through other comprehensive income	$ 74,652	$ -
Financial assets at fair value through profit or loss	266,833	-
AFS financial assets (Non-current) - Marketable equity securities	-	10,985
AFS financial assets (Non-current) - Non-marketable equity securities	-	227,147
	$ 341,485	$ 238,132

Changes in financial assets at fair value and AFS financial assets for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		**2018**		**2017**
Beginning balance	₩	266,255	₩	267,404
Acquisitions		69,655		28,420
Disposals		(38,010)		(9,375)
Transfer		11,138		8
Net gains reclassified from equity		-		24
Net gains reclassified to equity		-		1,974
Gain/loss on valuation of financial assets at fair value through profit or loss		79,676		-
Gain/loss on valuation of financial assets at fair value through other comprehensive income		2,923		-
Impairment		(9,823)		(22,200)
Ending balance	₩	381,814	₩	266,255

(in thousands of USD (Notes 2))		**2018**		**2017**
Beginning balance	$	238,132	$	239,159
Acquisitions		62,298		25,418
Disposals		(33,995)		(8,384)
Transfer		9,962		7
Net gains reclassified from equity		-		21
Net gains reclassified to equity		-		1,765
Gain/loss on valuation of financial assets at fair value through profit or loss		71,260		-
Gain/loss on valuation of financial assets at fair value through other comprehensive income		2,614		-
Impairment		(8,786)		(19,854)
Ending balance	$	341,485	$	238,132

9. Financial Assets at Amortized Cost and Held-to-maturity Financial Assets

Financial assets at amortized cost and held-to-maturity financial assets as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		**2018**		**2017**
Current:				
Government & public bonds and others	₩	14,692	₩	-

(in millions of Korean won)	2018	2017
Held-to-maturity financial assets	-	16,668
Non-current:		
Government & public bonds and others	37,306	-
Held-to-maturity financial assets	-	25,759
	₩ 51,998	₩ 42,427

(in thousands of UDS (Note 2))	2018	2017
Current:		
Government and public bonds and others	$ 13,140	$ -
Held-to-maturity financial assets	-	14,908
Non-current:		
Government & public bonds and others	33,366	-
Held-to-maturity financial assets	-	23,038
	$ 46,506	$ 37,946

10. Investments in Joint Ventures and Associates

Details of investments in joint ventures and associates as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)				2018		2017	
	Main operations	Location	Date of financial statements	Owner-ship (%)	Book amount	Owner-ship (%)	Book amount
Busan Jungkwan Energy Co., Ltd. [1]	Electricity production	Korea	Dec. 31	-	₩ -	56.76	₩ -
Busan Exhibition & Convention Center LTD.	Business facility management service	Korea	Dec. 31	21.70	17,230	21.70	16,457
The Gyeongnam Highway Co., Ltd.	Construction of road	Korea	Dec. 31	29.50	18	29.50	4,528
The Ulsan Harbour Bridge Co., Ltd.	Business facility management service	Korea	Dec. 31	24.50	1,864	24.50	3,992
Busan Finance Center PFV. Co., Ltd. [2]	Real estate business	Korea	Dec. 31	24.63	2,754	24.63	11,777
Hillstate Homaesil Newstay REIT Co., Ltd.	Construction	Korea	Dec. 31	27.02	1,679	27.02	9,240
Suwon Convention City Co., Ltd.	Real estate development	Korea	Dec. 31	29.00	-	29.00	1,450
Ganghwa Tidal Power Corporation Co., Ltd.	Other electricity production	Korea	Dec. 31	22.00	11	22.00	11
Daejeon Clean Water Co., Ltd. [1]	Service for treatment of sewage	Korea	Dec. 31	-	-	28.01	-
Busan Finance Center AMC Co., Ltd. [2]	Real estate management	Korea	Dec. 31	24.63	109	24.63	109
Yulchon 2 Industrial Complex Development Inc.	Other real estate construction	Korea	Dec. 31	48.00	-	48.00	1,920
Seoul Tunnel Co., Ltd. [3]	Construction of bridge, tunnel and rail	Korea	Dec. 31	13.08	-	17.19	11,137
Hyundai Eco Energy Co., Ltd. [4]	Electricity production	Korea	Dec. 31		-	100.00	193
Subic Clean Energy & Infra,	Electricity production	Philippine	Dec. 31	40.00	48	40.00	48

(in millions of Korean won)

	Main operations	Location	Date of financial statements	2018 Owner-ship (%)	2018 Book amount	2017 Owner-ship (%)	2017 Book amount
Inc.							
Arian International Contractors Company	Construction	Iran	Dec. 31	49.00	-	49.00	-
Concast HDEC Haldia Port Pvt., Ltd.	Construction	India	Mar. 31	26.00	-	26.00	-
Hyunson Engineering & Construction spa.	Construction	Algeria	Dec. 31	44.10	2,546	44.10	876
Arboretum Construction, Inc. [5]	Construction	Philippine	Dec. 31	100.00	1,286	-	-
Oriental Hyundai Quarry Development Corporation	Mine development	Philippine	Dec. 31	40.00	-	40.00	-
Hyundai Engineering (Thailand) Co., Ltd.	Engineering service	Thailand	Dec. 31	49.00	-	49.00	-
LHT International Engineering Joint Stock Company	Engineering service	Vietnam	Dec. 31	30.00	479	30.00	496
Haevichi Country Club., Ltd.	Golf course services	Korea	Dec. 31	40.00	6,502	40.00	5,419
Visionride Inc.	Construction	Korea	Dec. 31	32.92	-	32.92	-
Damyang Green Development Co., Ltd.	Construction	Korea	Dec. 31	24.90	-	24.90	25
Cheongju Ochang Technopolis Co., Ltd.	Construction	Korea	Dec. 31	29.00	290	29.00	290
Incheon Ganghwa Industrial Complex Co., Ltd.	Construction	Korea	Dec. 31	20.00	2,400	20.00	2,400
KM Energy	Construction	Korea	Dec. 31	29.90	-	29.90	-
Sejong Mirae Industrial Complex Co., LTD.	Construction	Korea	Dec. 31	20.00	389	20.00	400
Hwaseong City Expressway Co.,Ltd.	Construction	Korea	Dec. 31	27.66	5,235	27.66	8,504
Hyundai Engineering (Cambodia) Co., Ltd.	Construction	Cambodia	Dec. 31	100.00	-	100.00	20
UZLITI ENGINEERING LLC	Construction	Uzbekistan	Dec. 31	25.00	-	25.00	25
CHONGJU OKSAN2 INDUSTRIAL COMPLEX DEVELOPMENT CO., LTD.	Construction	Korea	Dec. 31	20.00	2	20.00	2
Dongbuk LRT	Transport	Korea	Dec. 31	32.00	2,464	-	-
Smart Valley Co., Ltd.	Construction	Korea	Dec. 31	20.00	200	-	-
Tina Hydropower Limited	Construction	Solomon	Dec. 31	20.00	385	-	-
					₩ 45,891		₩ 79,319

(in thousands of USD (Note 2))

	Main operations	Location	Date of financial statements	2018 Owner-ship (%)	2018 Book amount	2017 Owner-ship (%)	2017 Book amount
Busan Jungkwan Energy Co., Ltd. [1]	Electricity production	Korea	Dec. 31	-	$ -	56.76	$ -
Busan Exhibition & Convention Center LTD.	Business facility management service	Korea	Dec. 31	21.70	15,410	21.70	14,719
The Gyeongnam Highway Co., Ltd.	Construction of road	Korea	Dec. 31	29.50	16	29.50	4,050
The Ulsan Harbour Bridge Co., Ltd.	Business facility management service	Korea	Dec. 31	24.50	1,667	24.50	3,570
Busan Finance Center PFV. Co., Ltd. [2]	Real estate business	Korea	Dec. 31	24.63	2,463	24.63	10,533
Hillstate Homaesil Newstay REIT Co., Ltd.	Construction	Korea	Dec. 31	27.02	1,502	27.02	8,264
Suwon Convention City Co., Ltd.	Real estate development	Korea	Dec. 31	29.00	-	29.00	1,297
Ganghwa Tidal Power Corporation Co., Ltd.	Other electricity production	Korea	Dec. 31	22.00	10	22.00	10
Daejeon Clean Water Co., Ltd. [1]	Service for treatment of sewage	Korea	Dec. 31	28.01	-	28.01	-
Busan Finance Center AMC Co., Ltd. [2]	Real estate management	Korea	Dec. 31	24.63	98	24.63	98
Yulchon 2 Industrial Complex	Other real estate	Korea	Dec. 31	48.00	-	48.00	1,717

(in thousands of USD (Note 2))

	Main operations	Location	Date of financial statements	2018 Owner-ship (%)	2018 Book amount	2017 Owner-ship (%)	2017 Book amount
Development Inc.	construction						
Seoul Tunnel Co., Ltd. [3]	Construction of bridge, tunnel and rail	Korea	Dec. 31	17.19	-	17.19	9,961
Hyundai Eco Energy Co., Ltd. [4]	Electricity production	Korea	Dec. 31	-	-	100.00	172
Subic Clean Energy & Infra, Inc.	Electricity production	Philippine	Dec. 31	40.00	43	40.00	43
Arian International Contractors Company	Construction	Iran	Dec. 31	49.00	-	49.00	-
Concast HDEC Haldia Port Pvt., Ltd.	Construction	India	Mar. 31	26.00	-	26.00	-
Hyunson Engineering & Construction spa.	Construction	Algeria	Dec. 31	44.10	2,277	44.10	783
Arboretum Construction, Inc. [5]	Construction	Philippine	Dec. 31	100.00	1,150	-	-
Oriental Hyundai Quarry Development Corporation	Mine development	Philippine	Dec. 31	40.00	-	40.00	-
Hyundai Engineering (Thailand) Co., Ltd.	Engineering service	Thailand	Dec. 31	49.00	-	49.00	-
LHT International Engineering Joint Stock Company	Engineering service	Vietnam	Dec. 31	30.00	429	30.00	444
Haevichi Country Club., Ltd.	Golf course services	Korea	Dec. 31	40.00	5,815	40.00	4,847
Visionride Inc.	Construction	Korea	Dec. 31	32.92	-	32.92	-
Damyang Green Development Co., Ltd.	Construction	Korea	Dec. 31	24.90	-	24.90	22
Cheongju Ochang Technopolis Co., Ltd.	Construction	Korea	Dec. 31	29.00	259	29.00	259
Incheon Ganghwa Industrial Complex Co., Ltd.	Construction	Korea	Dec. 31	20.00	2,146	20.00	2,146
KM Energy	Construction	Korea	Dec. 31	29.90	-	29.90	-
Sejong Mirae Industrial Complex Co., LTD.	Construction	Korea	Dec. 31	20.00	348	20.00	358
Hwaseong City Expressway Co.,Ltd.	Construction	Korea	Dec. 31	27.66	4,682	27.66	7,606
Hyundai Engineering (Cambodia) Co., Ltd.	Construction	Cambodia	Dec. 31	100.00	-	100.00	18
UZLITI ENGINEERING LLC	Construction	Uzbekistan	Dec. 31	25.00	-	25.00	22
CHONGJU OKSAN2 INDUSTRIAL COMPLEX DEVELOPMENT CO., LTD.	Construction	Korea	Dec. 31	20.00	2	20.00	2
Dongbuk LRT	Transport	Korea	Dec. 31	32.00	2,204	-	-
Smart Valley Co., Ltd.	Construction	Korea	Dec. 31	20.00	179	-	-
Tina Hydropower Limited	Construction	Solomon	Dec. 31	20.00	344	-	-
					$ 41,044		$ 70,941

[1] The Group disposed of the entity for the year-ended December 31, 2018.

[2] The Group has significant influence over the entities as it holds more than 20% of voting rights directly or indirectly through subsidiaries.

[3] The Group classified Seoul Tunnel Co., Ltd. as financial assets at fair value through profit or loss in that it does not exercise significant influence over the entity as a result of financial investor's capital increase in 2018.

[4] At the end of the previous year, Hyundai Eco Energy Co., Ltd., which is a small company, was classified as an associate as the Group does not have significant influence over this entity. However, as at December 31, 2018, the Group reclassified the entity as a subsidiary.

[5] Arboretum Construction, Inc., a small company, is considered to be an associate since it does not have significant influence on the Group's consolidated financial statements.

Changes in investments in joint ventures and associates for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018				
	Beginning balance	**Acquisitions**	**Dividends**	**Share of profit (loss)**	**Impairment loss**
Busan Exhibition & Convention Center LTD.	₩ 16,457	₩ -	₩ -	₩ 772	₩ -
The Gyeongnam Highway Co., Ltd.	4,528	-	-	(4,510)	-
The Ulsan Harbour Bridge Co., Ltd.	3,992	-	-	(2,128)	-
Busan Finance Center PFV. Co., Ltd.	11,777	-	-	(831)	(8,192)
Hillstate Homaesil Newstay REIT Co., Ltd.	9,240	-	-	(7,561)	-
Others	33,325	6,228	-	(2,185)	(3,469)
	₩ 79,319	₩ 6,228	₩ -	₩ (16,443)	₩ (11,661)

(in millions of Korean won) *(Continued)*	2018			
	Disposals	**Transfer**	**Changes in equity**	**Ending balance**
Busan Exhibition & Convention Center LTD.	₩ -	₩ -	₩ 1	₩ 17,230
The Gyeongnam Highway Co., Ltd.	-	-	-	18
The Ulsan Harbour Bridge Co., Ltd.	-	-	-	1,864
Busan Finance Center PFV. Co., Ltd.	-	-	-	2,754
Hillstate Homaesil Newstay REIT Co., Ltd.	-	-	-	1,679
Others	-	(11,553)	-	22,346
	₩ -	₩ (11,553)	₩ 1	₩ 45,891

(in thousands of USD (Note 2))	2018				
	Beginning balance	**Acquisitions**	**Dividends**	**Share of profit (loss)**	**Impairment loss**
Busan Exhibition & Convention Center LTD.	$ 14,719	$ -	$ -	$ 690	$ -
The Gyeongnam Highway Co., Ltd.	4,050	-	-	(4,034)	-
The Ulsan Harbour Bridge Co., Ltd.	3,570	-	-	(1,903)	-
Busan Finance Center PFV. Co., Ltd.	10,533	-	-	(743)	(7,327)
Hillstate Homaesil Newstay REIT Co., Ltd.	8,264	-	-	(6,762)	-
Others	29,805	5,570	-	(1,954)	(3,102)

	$ 70,941	$ 5,570	$ -	$ (14,706)	$ (10,429)

(in thousands of USD (Note 2)) *(Continued)*	2018			
	Disposals	**Transfer**	**Changes in equity**	**Ending balance**
Busan Exhibition & Convention Center LTD.	$ -	$ -	$ 1	$ 15,410
The Gyeongnam Highway Co., Ltd.	-	-	-	16
The Ulsan Harbour Bridge Co., Ltd.	-	-	-	1,667
Busan Finance Center PFV. Co., Ltd.	-	-	-	2,463
Hillstate Homaesil Newstay REIT Co., Ltd.	-	-	-	1,502
Others	-	(10,333)	-	19,986
	$ -	$ (10,333)	$ 1	$ 41,044

(in millions of Korean won)	2017				
	Beginning balance	**Acquisitions**	**Dividends**	**Share of profit (loss)**	**Impairment loss**
Busan Jungkwan Energy Co., Ltd.	₩ -	₩ -	₩ -	₩ -	₩ -
Busan Exhibition & Convention Center LTD.	16,284	-	-	186	-
The Gyeongnam Highway Co., Ltd.	8,086	-	-	(3,558)	-
The Ulsan Harbour Bridge Co., Ltd.	6,808	-	-	(2,816)	-
Busan Finance Center PFV. Co., Ltd.	11,871	-	-	(94)	-
CONSORCIO PUENTE CHACAO S.A.	23,115	-	-	700	-
Hillstate Homaesil Newstay REIT Co., Ltd.	17,727	-	-	(8,487)	-
Others	44,254	221	(19)	(841)	(1,645)
	₩ 128,145	₩ 221	₩ (19)	₩ (14,910)	₩ (1,645)

(in millions of Korean won) *(Continued)*	2017			
	Disposals	**Transfer**	**Changes in equity**	**Ending balance**
Busan Jungkwan Energy Co., Ltd.	₩ -	₩ -	₩ -	₩ -
Busan Exhibition & Convention Center LTD.	-	-	(13)	16,457
The Gyeongnam Highway Co., Ltd.	-	-	-	4,528
The Ulsan Harbour Bridge Co., Ltd.	-	-	-	3,992

Busan Finance Center PFV. Co., Ltd.	-	-	-	11,777
CONSORCIO PUENTE CHACAO S.A.	-	(23,711)	(104)	-
Hillstate Homaesil Newstay REIT Co., Ltd.	-	-	-	9,240
Others	(3,668)	(4,978)	-	33,325
	₩ (3,668)	₩ (28,689)	₩ (117)	₩ 79,319

(in thousands of USD (Note 2))	2017				
	Beginning balance	**Acquisitions**	**Dividends**	**Share of profit (loss)**	**Impairment loss**
Busan Jungkwan Energy Co., Ltd.	$ -	$ -	$ -	$ -	$ -
Busan Exhibition & Convention Center LTD.	14,564	-	-	166	-
The Gyeongnam Highway Co., Ltd.	7,232	-	-	(3,182)	-
The Ulsan Harbour Bridge Co., Ltd.	6,089	-	-	(2,519)	-
Busan Finance Center PFV. Co., Ltd.	10,617	-	-	(84)	-
CONSORCIO PUENTE CHACAO S.A.	20,673	-	-	626	-
Hillstate Homaesil Newstay REIT Co., Ltd.	15,855	-	-	(7,591)	-
Others	39,580	198	(17)	(751)	(1,471)
	$ 114,610	$ 198	$ (17)	$ (13,335)	$ (1,471)

(in thousands of USD (Note 2))	2017			
(Continued)	**Disposals**	**Transfer**	**Changes in equity**	**Ending balance**
Busan Jungkwan Energy Co., Ltd.	$ -	$ -	$ -	$ -
Busan Exhibition & Convention Center LTD.	-	-	(12)	14,719
The Gyeongnam Highway Co., Ltd.	-	-	-	4,050
The Ulsan Harbour Bridge Co., Ltd.	-	-	-	3,570
Busan Finance Center PFV. Co., Ltd.	-	-	-	10,533
CONSORCIO PUENTE CHACAO S.A.	-	(21,207)	(93)	-
Hillstate Homaesil Newstay REIT Co., Ltd.	-	-	-	8,264
Others	(3,281)	(4,452)	-	29,805
	$ (3,281)	$ (25,659)	$ (105)	$ 70,941

The Group used unaudited financial statements of joint ventures and associates in the equity method valuation. The Group does not anticipate that the difference between unaudited and audited financial statements will have a significant effect on the Group's consolidated financial statements and disclosures.

The tables below provide unrecognized share of losses of joint ventures and associates, both for the reporting period and cumulatively, as the Group has stopped recognizing its share of losses of the joint ventures and associates when applying the equity method.

(in millions of Korean won)	2018	
	Unrecognized loss	Accumulated unrecognized losses
Hyundai Engineering (Thailand) Co., Ltd.	₩ 389	₩ 12,338

(in thousands of USD (Note 2))	2018	
	Unrecognized loss	Accumulated unrecognized losses
Hyundai Engineering (Thailand) Co., Ltd.	$ 348	$ 11,035

(in millions of Korean won)	2017	
	Unrecognized loss	Accumulated unrecognized losses
Busan Jungkwan Energy Co., Ltd.	₩ 6,037	₩ 58,789
Hyundai Engineering (Thailand) Co., Ltd.	(92)	11,949

(in thousands of USD (Note 2))	2017	
	Unrecognized loss	Accumulated unrecognized losses
Busan Jungkwan Energy Co., Ltd.	$ 5,399	$ 52,579
Hyundai Engineering (Thailand) Co., Ltd.	(82)	10,687

Condensed financial information of the joint ventures and associates that is material to the Group as at and for the years ended December 31, 2018 and 2017, is as follows:

(in millions of Korean won)	2018				
	Busan Exhibition & Convention Center LTD.	The Gyeongnam Highway Co., Ltd.	The Ulsan Harbour Bridge Co., Ltd.	Busan Finance Center PFV. Co., Ltd.	Hillstate Homaesil Newstay REIT Co., Ltd.

Current assets	₩ 40,961	₩ 14,797	₩ 4,011	₩ 59,370	₩ 2,488
Non-current assets	54,710	299,245	275,704	34	274,736
	95,671	314,042	279,715	59,404	277,224
Current liabilities	3,780	4,947	3,352	14,913	5,853
Non-current liabilities	3,331	307,500	261,873	50	207,689
	7,111	312,447	265,225	14,963	213,542
Sales	32,527	16,612	15,073	13,650	-
Operating profit (loss)	(2,010)	(3,879)	357	(3,827)	(801)
Profit (loss) for the year	2,652	(15,355)	(8,962)	(3,230)	(793)
Total comprehensive income	2,652	(15,355)	(8,962)	(3,230)	(793)

(in thousands of USD (Note 2))	2018				
	Busan Exhibition & Convention Center LTD.	**The Gyeongnam Highway Co., Ltd.**	**The Ulsan Harbour Bridge Co., Ltd.**	**Busan Finance Center PFV. Co., Ltd.**	**Hillstate Homaesil Newstay REIT Co., Ltd.**
Current assets	$ 36,634	$ 13,234	$ 3,587	$ 53,099	$ 2,225
Non-current assets	48,931	267,637	246,583	30	245,717
	85,565	280,871	250,170	53,129	247,942
Current liabilities	3,381	4,424	2,998	13,338	5,235
Non-current liabilities	2,979	275,020	234,213	45	185,752
	6,360	279,444	237,211	13,383	190,987
Sales	29,091	14,857	13,481	12,208	-
Operating profit (loss)	(1,798)	(3,469)	319	(3,423)	(716)
Profit (loss) for the year	2,372	(13,733)	(8,015)	(2,889)	(709)
Total comprehensive income	2,372	(13,733)	(8,015)	(2,889)	(709)

(in millions of Korean won)	2017					
	Busan Jungkwan Energy Co., Ltd.	**Busan Exhibition & Convention Center LTD.**	**The Gyeongnam Highway Co., Ltd.**	**The Ulsan Harbour Bridge Co., Ltd.**	**Busan Finance Center PFV. Co., Ltd.**	**Hillstate Homaesil Newstay REIT Co., Ltd.**
Current assets	₩ 16,087	₩ 40,249	₩ 5,408	₩ 10,039	₩ 70,454	₩ 2,913
Non-current assets	127,506	57,313	309,958	286,192	125	182,334
	143,593	97,562	315,366	296,231	70,579	185,247
Current liabilities	105,218	8,592	19,872	2,786	22,714	200
Non-current liabilities	165,560	3,140	278,560	270,000	49	120,570
	270,778	11,732	298,432	272,786	22,763	120,770

Sales	35,531	27,806	18,666	18,262	8,520	-
Operating profit (loss)	79	(3,883)	1,391	3,589	(266)	(1,824)
Profit (loss) for the year	(10,608)	27	(12,115)	(11,758)	(14)	(1,891)
Total comprehensive income	(10,636)	27	(12,115)	(11,758)	(14)	(1,891)

(in thousands of USD (Note 2))	2017					
	Busan Jungkwan Energy Co., Ltd.	**Busan Exhibition & Convention Center LTD.**	**The Gyeongnam Highway Co., Ltd.**	**The Ulsan Harbour Bridge Co., Ltd.**	**Busan Finance Center PFV. Co., Ltd.**	**Hillstate Homaesil Newstay REIT Co., Ltd.**
Current assets	$ 14,388	$ 35,998	$ 4,837	$ 8,979	$ 63,012	$ 2,605
Non-current assets	114,038	51,259	277,218	255,963	112	163,075
	128,426	87,257	282,055	264,942	63,124	165,680
Current liabilities	94,104	7,684	17,773	2,492	20,315	179
Non-current liabilities	148,073	2,808	249,137	241,481	44	107,835
	242,177	10,492	266,910	243,973	20,359	108,014
Sales	31,778	24,869	16,694	16,333	7,620	-
Operating profit (loss)	71	(3,473)	1,244	3,210	(238)	(1,631)
Profit (loss) for the year	(9,488)	24	(10,835)	(10,516)	(13)	(1,691)
Total comprehensive income	(9,513)	24	(10,835)	(10,516)	(13)	(1,691)

Adjustments to the carrying amount of investments in joint ventures and associates that are material to the Group as at December 31, 2018, are as follows:

(in millions of Korean won)	2018				
	Busan Exhibition & Convention Center LTD.	**The Gyeongnam Highway Co., Ltd.**	**The Ulsan Harbour Bridge Co., Ltd.**	**Busan Finance Center PFV. Co., Ltd.**	**Hillstate Homaesil Newstay REIT Co., Ltd.**
Associates net asset (A)	₩ 88,560	₩ 1,595	₩ 14,490	₩ 44,441	₩ 63,681
Ownership percentage (B) (%)	21.70	29.50	24.50	24.63	27.02
Net share amount (A*B)	19,218	470	3,550	10,946	17,207
(-)Elimination of intercompany transactions	1,987	452	1,687	8,192	15,528
Book amount	17,230	18	1,864	2,754	1,679

(in thousands of USD (Note 2))	2018				
	Busan Exhibition & Convention Center LTD.	**The Gyeongnam Highway Co., Ltd.**	**The Ulsan Harbour Bridge Co., Ltd.**	**Busan Finance Center PFV. Co., Ltd.**	**Hillstate Homaesil Newstay REIT Co., Ltd.**
Associates net asset (A)	$ 79,206	$ 1,427	$ 12,959	$ 39,747	$ 56,955
Ownership percentage (B) (%)	21.70	29.50	24.50	24.63	27.02
Net share amount (A*B)	17,188	420	3,175	9,790	15,390
(-) Elimination of intercompany transactions	1,778	404	1,508	7,327	13,888
Book amount	15,410	16	1,667	2,463	1,502

11. Investment Property

Changes in investment property for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018			
	Land	**Buildings**	**Structures**	**Total**
Acquisition cost:				
Beginning balance	₩ 358,222	₩ 36,124	₩ 15,304	₩ 409,650
Acquisitions	4,977	5,518	-	10,495
Disposals	(31,797)	(2,385)	-	(34,182)
Changes in scope of consolidation	-	-	-	-
Transfer[1]	(2,380)	3,972	-	1,592
Exchange differences	-	533	-	533
Ending balance	329,022	43,762	15,304	388,088
Accumulated depreciation:				
Beginning balance	-	(5,554)	(447)	(6,001)
Depreciation	-	(861)	(765)	(1,626)
Disposals	-	1,335	-	1,335
Transfer[1]	-	(662)	-	(662)
Exchange differences	-	(83)	-	(83)
Ending balance	-	(5,825)	(1,212)	(7,037)
Accumulated impairment loss:				
Beginning balance	(9,453)	-	-	(9,453)
Impairment loss	-	-	-	-
Disposals	-	-	-	-
Ending balance	(9,453)	-	-	(9,453)
Book amount:				

Beginning balance	₩ 348,769	₩ 30,570	₩ 14,857	₩ 394,196
Ending balance	₩ 319,569	₩ 37,937	₩ 14,092	₩ 371,598

(in thousands of USD (Note 2))	2018			
	Land	**Buildings**	**Structures**	**Total**
Acquisition cost:				
Beginning balance	$ 320,385	$ 32,308	$ 13,688	$ 366,380
Acquisitions	4,451	4,935	-	9,386
Disposals	(28,438)	(2,133)	-	(30,572)
Changes in scope of consolidation	-	-	-	-
Transfer[1]	(2,129)	3,552	-	1,424
Exchange differences	-	477	-	477
Ending balance	294,269	39,139	13,688	347,095
Accumulated depreciation:				
Beginning balance	-	(4,967)	(400)	(5,367)
Depreciation	-	(770)	(684)	(1,454)
Disposals	-	1,194	-	1,194
Transfer[1]	-	(592)	-	(592)
Exchange differences	-	(74)	-	(74)
Ending balance	-	(5,209)	(1,084)	(6,293)
Accumulated impairment loss:				
Beginning balance	(8,455)	-	-	(8,455)
Impairment loss	-	-	-	-
Disposals	-	-	-	-
Ending balance	(8,455)	-	-	(8,455)
Book amount:				
Beginning balance	$ 311,930	$ 27,341	$ 13,288	$ 352,559
Ending balance	$ 285,814	$ 33,930	$ 12,604	$ 332,347

[1] The book amount of ₩892 million ($798 thousand) is transferred from investment property to property, plant and equipment. The book amount of ₩1,822 million ($1,630 thousand) is transferred from other assets to investment property.

(in millions of Korean won)	2017			
	Land	**Buildings**	**Structures**	**Total**
Acquisition cost:				
Beginning balance	₩ 332,337	₩ 73,636	₩ -	₩ 405,973
Acquisitions	43,117	7,050	15,304	65,471
Disposals	(18,582)	(6,457)	-	(25,039)

Changes in scope of consolidation	(6,660)	(34,963)	-	(41,623)
Transfer[1]	8,010	-	-	8,010
Exchange differences	-	(3,142)	-	(3,142)
Ending balance	358,222	36,124	15,304	409,650
Accumulated depreciation:				
Beginning balance	-	(13,411)	-	(13,411)
Depreciation	-	(1,502)	(447)	(1,949)
Disposals	-	939	-	939
Changes in scope of consolidation	-	7,992	-	7,992
Exchange differences	-	428	-	428
Ending balance	-	(5,554)	(447)	(6,001)
Accumulated impairment loss:				
Beginning balance	-	(1,623)	-	(1,623)
Impairment loss	(9,453)	-	-	(9,453)
Disposals	-	1,623	-	1,623
Ending balance	(9,453)	-	-	(9,453)
Book amount:				
Beginning balance	₩ 332,337	₩ 58,602	₩ -	₩ 390,939
Ending balance	₩ 348,769	₩ 30,570	₩ 14,857	₩ 394,196

(in thousands of USD (Note2))	2017			
	Land	**Buildings**	**Structures**	**Total**
Acquisition cost:				
Beginning balance	$ 297,234	$ 65,858	$ -	$ 363,092
Acquisitions	38,563	6,305	13,688	58,556
Disposals	(16,619)	(5,775)	-	(22,394)
Changes in scope of consolidation	(5,957)	(31,270)	-	(37,227)
Transfer[1]	7,164	-	-	7,164
Exchange differences	-	(2,810)	-	(2,810)
Ending balance	320,385	32,308	13,688	366,381
Accumulated depreciation:				
Beginning balance	-	(11,994)	-	(11,994)
Depreciation	-	(1,343)	(400)	(1,743)
Disposals	-	840	-	840
Changes in scope of consolidation	-	7,148	-	7,148
Exchange differences	-	383	-	383
Ending balance	-	(4,966)	(400)	(5,366)
Accumulated impairment loss:				
Beginning balance	-	(1,452)	-	(1,452)

Impairment loss	(8,455)	-	-	(8,455)
Disposals	-	1,452	-	1,452
Ending balance	(8,455)	-	-	(8,455)
Book amount:				
Beginning balance	$ 297,234	$ 52,412	$ -	$ 349,646
Ending balance	$ 311,930	$ 27,342	$ 13,288	$ 352,560

[1] The book amount of ₩6,176 million ($5,524 thousand) is transferred from property, plant and equipment to investment property. The book amount of ₩1,834 million ($1,640 thousand) is transferred from other assets to investment property.

Recognized profit or loss on investment property for the years ended December 31, 2018 and 2017, is as follows:

(in millions of Korean won)	**2018**	**2017**
Rental income	₩ 12,034	₩ 16,374
Direct operating expenses arising from investment property	6,979	9,953

(in thousands of USD (Note 2))	**2018**	**2017**
Rental income	$ 10,763	$ 14,644
Direct operating expenses arising from investment property	6,242	8,902

The book amount and fair value of investment property as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	**2018**		**2017**	
	Book amount	**Fair value[1]**	**Book amount**	**Fair value[1]**
Land	₩ 319,569	₩ 391,810	₩ 348,769	₩ 448,367
Buildings	37,937	36,665	30,570	35,365
Structures	14,092	14,858	14,857	14,858
	₩ 371,598	₩ 443,333	₩ 394,196	₩ 498,590

(in thousands of USD (Note2))	**2018**		**2017**	
	Book amount	**Fair value[1]**	**Book amount**	**Fair value[1]**
Land	$ 285,814	$ 350,425	$ 311,930	$ 401,008
Buildings	33,930	32,792	27,341	31,630
Structures	12,604	13,289	13,288	13,289
	$ 332,348	$ 396,506	$ 352,559	$ 445,927

[1] The fair value of investment property is classified as Level 3 (unobservable inputs for the asset or liability) based on inputs that were used in valuation technique.

12. Property, Plant and Equipment

Changes in property, plant and equipment for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018									
	Land	**Buildings**	**Structures**	**Machinery and equipment**	**Vehicles**	**Tools, furniture and fixtures**	**Ships**	**Others**	**Construction in progress**	**Total**
Acquisition cost:										
Beginning balance	₩ 330,733	₩ 240,806	₩ 88,921	₩ 1,051,228	₩ 49,408	₩ 167,653	₩ 286,458	₩ 51,422	₩ 65,922	₩ 2,332,551
Acquisition	397	738	754	10,875	6,958	19,934	612	118	136,993	177,379
Changes in consolidation scope	-	-	-	16	182	52	-	-	40	290
Disposal	(1,151)	(150)	(490)	(32,454)	(6,465)	(15,297)	(7,976)	(51)	-	(64,034)
Transfer[1]	3,727	798	-	(4,971)	(3)	(95)	(17,196)	(613)	(14,996)	(33,349)
Exchange differences	-	137	-	1,536	1,281	1,991	-	859	-	5,804
Ending balance	333,706	242,329	89,185	1,026,230	51,361	174,238	261,898	51,735	187,959	2,418,641
Accumulated depreciation:										
Beginning balance	-	(62,211)	(20,544)	(459,564)	(33,818)	(120,035)	(191,636)	(35,622)	-	(923,430)
Depreciation	-	(5,886)	(3,199)	(66,194)	(6,554)	(19,054)	(15,864)	(1,428)	-	(118,179)
Changes in consolidation scope	-	-	-	-	-	-	-	-	-	-
Disposal	-	-	423	27,401	5,687	12,241	7,977	51	-	53,780
Transfer[1]	-	667	-	6,362	(43)	(81)	16,665	1,134	-	24,704
Exchange differences	-	(108)	-	(6,139)	(659)	(1,118)	-	(588)	-	(8,612)
Ending balance	-	(67,538)	(23,320)	(498,134)	(35,387)	(128,047)	(182,858)	(36,453)	-	(971,737)
Accumulated impairment loss:										
Beginning balance	-	(4,656)	(5,674)	-	-	-	-	-	-	(10,330)
Ending balance	-	(4,656)	(5,674)	-	-	-	-	-	-	(10,330)
Book amount:										
Beginning balance	₩ 330,733	₩ 173,939	₩ 62,703	₩ 591,664	₩ 15,590	₩ 47,618	₩ 94,822	₩ 15,800	₩ 65,922	₩ 1,398,791
Ending balance	₩ 333,706	₩ 170,135	₩ 60,191	₩ 528,096	₩ 15,974	₩ 46,191	₩ 79,040	₩ 15,282	₩ 187,959	₩ 1,436,574

(in thousands of USD (Note 2))	2018									
	Land	**Buildings**	**Structures**	**Machinery and equipment**	**Vehicles**	**Tools, furniture and fixtures**	**Ships**	**Others**	**Construction in progress**	**Total**
Acquisition cost:										

(in thousands of USD (Note 2))	2018									
	Land	**Buildings**	**Structures**	**Machinery and equipment**	**Vehicles**	**Tools, furniture and fixtures**	**Ships**	**Others**	**Construction in progress**	**Total**
Beginning balance	$ 295,799	$ 215,371	$ 79,529	$ 940,191	$ 44,189	$ 149,945	$ 256,201	$ 45,991	$ 58,958	$ 2,086,174
Acquisition	355	660	674	9,726	6,223	17,828	547	106	122,524	158,643
Changes in consolidation scope	-	-	-	14	163	47	-	-	36	260
Disposal	(1,029)	(134)	(438)	(29,026)	(5,782)	(13,681)	(7,134)	(46)	-	(57,270)
Transfer[1]	3,333	714	-	(4,446)	(3)	(85)	(15,380)	(548)	(13,412)	(29,827)
Exchange differences	-	123	-	1,374	1,146	1,781	-	768	-	5,192
Ending balance	298,458	216,734	79,765	917,833	45,936	155,835	234,234	46,271	168,106	2,163,172
Accumulated depreciation:										
Beginning balance	-	(55,640)	(18,374)	(411,022)	(30,246)	(107,357)	(171,395)	(31,860)	-	(825,894)
Depreciation	-	(5,264)	(2,861)	(59,202)	(5,862)	(17,041)	(14,188)	(1,277)	-	(105,695)
Changes in consolidation scope	-	-	-	-	-	-	-	-	-	-
Disposal	-	-	378	24,507	5,086	10,948	7,134	46	-	48,099
Transfer[1]	-	597	-	5,690	(38)	(72)	14,905	1,014	-	22,096
Exchange differences	-	(97)	-	(5,491)	(589)	(1,000)	-	(526)	-	(7,703)
Ending balance	-	(60,404)	(20,857)	(445,518)	(31,649)	(114,522)	(163,544)	(32,603)	-	(869,097)
Accumulated impairment loss:										-
Beginning balance	-	(4,164)	(5,075)	-	-	-	-	-	-	(9,239)
Ending balance	-	(4,164)	(5,075)	-	-	-	-	-	-	(9,239)
Book amount:										
Beginning balance	$ 295,799	$ 155,567	$ 56,080	$ 529,169	$ 13,943	$ 42,588	$ 84,806	$ 14,131	$ 58,958	$ 1,251,041
Ending balance	$ 298,458	$ 152,166	$ 53,833	$ 472,315	$ 14,287	$ 41,313	$ 70,690	$ 13,668	$ 168,106	$ 1,284,836

[1] The book amount of ₩ 892 million ($ 798 thousand) is transferred from investment property to property, plant and equipment and ₩ 6,623 million ($ 5,923 thousand) is transferred from property, plant and equipment to intangible assets. The book amount of ₩ 2,914 million ($ 2,606 thousand) is transferred from property, plant and equipment to other assets.

(in millions of Korean won)	2017									
	Land	**Buildings**	**Structures**	**Machinery and equipment**	**Vehicles**	**Tools, furniture and fixtures**	**Ships**	**Others**	**Construction in progress**	**Total**
Acquisition cost:										
Beginning balance	₩ 320,006	₩ 240,692	₩ 89,388	₩ 1,082,004	₩ 62,468	₩ 174,356	₩ 356,202	₩ 56,733	₩ 41,176	₩ 2,423,025
Acquisition	190	330	86	11,216	4,948	15,752	528	112	16,802	49,964
Changes in consolidation scope	-	1,026	-	256	342	(357)	-	(25)	-	1,242
Disposal	(1,109)	(422)	(746)	(25,081)	(9,412)	(11,131)	(46,589)	(1,955)	-	(96,445)

(in millions of Korean won)	2017									
	Land	**Buildings**	**Structures**	**Machinery and equipment**	**Vehicles**	**Tools, furniture and fixtures**	**Ships**	**Others**	**Construction in progress**	**Total**
Transfer[1]	11,646	381	193	859	(664)	(889)	(23,683)	372	7,946	(3,839)
Exchange differences	-	(1,201)	-	(18,026)	(8,274)	(10,078)	-	(3,815)	(2)	(41,396)
Ending balance	330,733	240,806	88,921	1,051,228	49,408	167,653	286,458	51,422	65,922	2,332,551
Accumulated depreciation:										
Beginning balance	-	(56,247)	(18,034)	(409,529)	(38,580)	(117,363)	(236,744)	(38,109)	-	(914,606)
Depreciation	-	(5,941)	(3,197)	(77,637)	(7,638)	(19,803)	(17,645)	(1,878)	-	(133,739)
Changes in consolidation scope	-	(763)	-	(257)	(133)	406	-	19	-	(728)
Disposal	-	288	687	21,796	7,919	10,183	46,589	1,390	-	88,852
Transfer[1]	-	10	-	180	82	205	16,164	604	-	17,245
Exchange differences	-	442	-	5,883	4,532	6,337	-	2,352	-	19,546
Ending balance	-	(62,211)	(20,544)	(459,564)	(33,818)	(120,035)	(191,636)	(35,622)	-	(923,430)
Accumulated impairment loss:										
Beginning balance	-	(4,656)	(5,674)	-	-	-	-	-	-	(10,330)
Ending balance	-	(4,656)	(5,674)	-	-	-	-	-	-	(10,330)
Book amount:										
Beginning balance	₩ 320,006	₩ 179,789	₩ 65,680	₩ 672,475	₩ 23,888	₩ 56,993	₩ 119,458	₩ 18,624	₩ 41,176	₩1,498,089
Ending balance	₩ 330,733	₩ 173,939	₩ 62,703	₩ 591,664	₩ 15,590	₩ 47,618	₩ 94,822	₩ 15,800	₩ 65,922	₩1,398,791

(in thousands of USD (Note 2))	2017									
	Land	**Buildings**	**Structures**	**Machinery and equipment**	**Vehicles**	**Tools, furniture and fixtures**	**Ships**	**Others**	**Construction in progress**	**Total**
Acquisition cost:										
Beginning balance	$ 286,205	$ 215,269	$ 79,946	$ 967,717	$ 55,870	$ 155,940	$ 318,578	$ 50,741	$ 36,826	$ 2,167,092
Acquisition	170	295	77	10,031	4,425	14,088	472	100	15,026	44,684
Changes in consolidation scope	-	918	-	229	306	(319)	-	(22)	-	1,112
Disposal	(992)	(377)	(667)	(22,432)	(8,418)	(9,955)	(41,668)	(1,749)	-	(86,258)
Transfer[1]	10,416	341	173	768	(594)	(795)	(21,181)	333	7,106	(3,433)
Exchange differences	-	(1,074)	-	(16,122)	(7,400)	(9,014)	-	(3,412)	-4	(37,026)
Ending balance	295,799	215,372	79,529	940,191	44,189	149,945	256,201	45,991	58,954	2,086,171
Accumulated depreciation:										
Beginning balance	-	(50,306)	(16,129)	(366,272)	(34,505)	(104,966)	(211,738)	(34,084)	-	(818,000)
Depreciation	-	(5,313)	(2,859)	(69,437)	(6,831)	(17,711)	(15,781)	(1,680)	-	(119,612)
Changes in consolidation scope	-	(682)	-	(230)	(119)	363	-	17	-	(651)
Disposal	-	258	614	19,494	7,083	9,107	41,668	1,243	-	79,467
Transfer[1]	-	9	-	161	73	183	14,457	540	-	15,423

(in thousands of USD (Note 2))	2017									
	Land	**Buildings**	**Structures**	**Machinery and equipment**	**Vehicles**	**Tools, furniture and fixtures**	**Ships**	**Others**	**Construction in progress**	**Total**
Exchange differences	-	395	-	5,262	4,053	5,668	-	2,104	-	17,482
Ending balance	-	(55,639)	(18,374)	(411,022)	(30,246)	(107,356)	(171,394)	(31,860)	-	(825,891)
Accumulated impairment loss:										
Beginning balance	-	(4,164)	(5,075)	-	-	-	-	-	-	(9,239)
Ending balance	-	(4,164)	(5,075)	-	-	-	-	-	-	(9,239)
Book amount:										
Beginning balance	$ 286,205	$ 160,799	$ 58,742	$ 601,445	$ 21,365	$ 50,974	$ 106,840	$ 16,657	$ 36,826	$ 1,339,853
Ending balance	$ 295,799	$ 155,569	$ 56,080	$ 529,169	$ 13,943	$ 42,589	$ 84,807	$ 14,131	$ 58,954	$ 1,251,041

[1] The book amount of ₩ 6,176 million ($ 5,524 thousand) is transferred from property, plant and equipment to investment property and ₩ 8,397 million ($ 7,510 thousand) is transferred from property, plant and equipment to intangible assets. The book amount of ₩ 28,311 million ($ 25,321 thousand) is transferred from inventories to property, plant and equipment, and ₩ 332 million ($ 297 thousand) is transferred from property, plant and equipment to other assets.

Allocation of depreciation on property, plant and equipment for the years ended December 31, 2018 and 2017, is as follows:

(in millions of Korean won)	**2018**	**2017**
Cost of sales	₩ 103,030	₩ 120,687
Selling and administrative expenses	11,694	11,852
Other expenses	3,455	1,200
	₩ 118,179	₩ 133,739

(in thousands of USD (Note 2))	**2018**	**2017**
Cost of sales	$ 92,147	$ 107,939
Selling and administrative expenses	10,459	10,600
Other expenses	3,090	1,073
	$ 105,696	$ 119,612

13. Borrowing Costs

Capitalization of borrowing costs for the years ended December 31, 2018 and 2017, is as follows:

(in millions of Korean won)	2018	2017
Qualifying assets	Inventories and others	Inventories and others
Capitalized interest expenses	₩ 3,420	₩ 10,476
Capitalization rate	2.05%~3.36%	1.91%~3.35%

(in thousands of USD (Note 2))	2018	2017
Qualifying assets	Inventories and others	Inventories and others
Capitalized interest expenses	$ 3,059	$ 9,369
Capitalization rate	2.05%~3.36%	1.91%~3.35%

14. Intangible Assets

Changes in intangible assets for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018				
	Goodwill	Membership	Backlog of orders	Other intangible assets	Total
Acquisition cost:					
Beginning balance	₩ 627,697	₩ 55,436	₩ 213,330	₩ 121,056	₩ 1,017,519
Acquisition	-	9	-	2,434	2,443
Disposal	-	(123)	-	(5,809)	(5,932)
Transfer[1]	-	(2,010)	-	6,753	4,743
Exchange differences	-	-	-	209	209
Ending balance	627,697	53,312	213,330	124,643	1,018,982
Accumulated amortization:					
Beginning balance	-	-	(170,896)	(76,567)	(247,463)
Amortization	-	-	(34,553)	(21,215)	(55,768)
Disposal	-	-	-	5,806	5806
Transfer[1]	-	-	-	(326)	(326)
Exchange differences	-	-	-	(45)	(45)
Ending balance	-	-	(205,449)	(92,347)	(297,796)
Accumulated impairment loss:					
Beginning balance	(9,103)	(725)	-	-	(9,828)
Impairment loss	-	(160)	-	-	(160)
Ending balance	(9,103)	(885)	-	-	(9,988)
Book amount:					
Beginning balance	₩ 618,594	₩ 54,711	₩ 42,434	₩ 44,489	₩ 760,228
Ending balance	₩ 618,594	₩ 52,427	₩ 7,881	₩ 32,296	₩ 711,198

(in thousands of USD (Note 2))	2018				
	Goodwill	Membership	Backlog of orders	Other intangible assets	Total
Acquisition cost:					

(in thousands of USD (Note 2))	2018				
	Goodwill	**Membership**	**Backlog of orders**	**Other intangible assets**	**Total**
Beginning balance	$ 561,396	$ 49,581	$ 190,797	$ 108,269	$ 910,043
Acquisition	-	8	-	2,176	2,184
Disposal	-	(110)	-	(5,195)	(5,305)
Transfer[1]	-	(1,798)	-	6,040	4,242
Exchange differences	-	-	-	187	187
Ending balance	561,396	47,681	190,797	111,477	911,351
Accumulated amortization:					
Beginning balance	-	-	(152,845)	(68,480)	(221,325)
Amortization	-	-	(30,903)	(18,974)	(49,877)
Disposal	-	-	-	5,193	5,193
Transfer[1]	-	-	-	(292)	(292)
Exchange differences	-	-	-	(40)	(40)
Ending balance	-	-	(183,748)	(82,593)	(266,341)
Accumulated impairment loss:					
Beginning balance	(8,141)	(649)	-	-	(8,790)
Impairment loss	-	(143)	-	-	(143)
Ending balance	(8,141)	(792)	-	-	(8,933)
Book amount:					
Beginning balance	$ 553,255	$ 48,932	$ 37,952	$ 39,789	$ 679,928
Ending balance	$ 553,255	$ 46,889	$ 7,049	$ 28,884	$ 636,077

[1] The book amount of ₩ 6,623 million ($ 5,923 thousand) is transferred from property, plant and equipment to intangible assets. The book amount of ₩ 2,206 million ($ 1,973 thousand) is transferred from intangible assets to other assets.

(in millions of Korean won)	2017				
	Goodwill	**Membership**	**Backlog of orders**	**Other intangible assets**	**Total**
Acquisition cost:					
Beginning balance	₩ 627,697	₩ 56,201	₩ 213,330	₩ 111,609	₩ 1,008,837
Acquisition	-	1,227	-	2,465	3,692
Disposal	-	(1,030)	-	(55)	(1,085)
Transfer[1]	-	(962)	-	8,374	7,412
Exchange differences	-	-	-	(1,337)	(1,337)
Ending balance	627,697	55,436	213,330	121,056	1,017,519
Accumulated amortization:					
Beginning balance	-	-	(127,251)	(61,605)	(188,856)
Amortization	-	-	(43,645)	(15,228)	(58,873)
Disposal	-	-	-	55	55
Transfer[1]	-	-	-	(10)	(10)
Exchange differences	-	-	-	221	221
Ending balance	-	-	(170,896)	(76,567)	(247,463)
Accumulated impairment loss:					
Beginning balance	(9,103)	(542)	-	-	(9,645)
Impairment loss	-	(183)	-	-	(183)
Ending balance	(9,103)	(725)	-	-	(9,828)
Book amount:					

(in millions of Korean won)	2017				
	Goodwill	**Membership**	**Backlog of orders**	**Other intangible assets**	**Total**
Beginning balance	₩ 618,594	₩ 55,659	₩ 86,079	₩ 50,004	₩ 810,336
Ending balance	₩ 618,594	₩ 54,711	₩ 42,434	₩ 44,489	₩ 760,228

(in thousands of USD (Note 2))	2017				
	Goodwill	**Membership**	**Backlog of orders**	**Other intangible assets**	**Total**
Acquisition cost:					
Beginning balance	$ 561,396	$ 50,265	$ 190,797	$ 99,820	$ 902,278
Acquisition	-	1,097	-	2,205	3,302
Disposal	-	(921)	-	(49)	(970)
Transfer[1]	-	(860)	-	7,489	6,629
Exchange differences	-	-	-	(1,196)	(1,196)
Ending balance	561,396	49,581	190,797	108,269	910,043
Accumulated amortization:					
Beginning balance	-	-	(113,810)	(55,098)	(168,908)
Amortization	-	-	(39,035)	(13,620)	(52,655)
Disposal	-	-	-	49	49
Transfer[1]	-	-	-	(9)	(9)
Exchange differences	-	-	-	198	198
Ending balance	-	-	(152,845)	(68,480)	(221,325)
Accumulated impairment loss:					
Beginning balance	(8,141)	(485)	-	-	(8,626)
Impairment loss	-	(164)	-	-	(164)
Ending balance	(8,141)	(649)	-	-	(8,790)
Book amount:					
Beginning balance	$ 553,255	$ 49,780	$ 76,987	$ 44,722	$ 724,744
Ending balance	$ 553,255	$ 48,932	$ 37,952	$ 39,789	$ 679,928

[1] The book amount of ₩ 1,995 million ($ 1,784 thousand) is transferred from property, plant and equipment to intangible assets. The book amount of ₩ 24 million ($ 21 thousand) is transferred from other assets to intangible assets.

Allocation of amortization of intangible assets for the years ended December 31, 2018 and 2017, is as follows:

(in millions of Korean won)	**2018**	**2017**
Cost of sales	₩ 3,323	₩ 2,759
Selling and administrative expenses	52,445	56,114
	₩ 55,768	₩ 58,873

(in thousands of USD (Note 2))	**2018**	**2017**
Cost of sales	$ 2,972	$ 2,468

Selling and administrative expenses		46,905		50,187
	$	49,877	$	52,655

Recognized research and development expenses for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		**2018**		**2017**
Selling and administrative expenses	₩	109,949	₩	85,934

(in thousands of USD (Note 2))		**2018**		**2017**
Selling and administrative expenses	$	98,336	$	76,857

15. Trade, Other and Long-term Other Payables

Details of trade, other and long-term other payables as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		**2018**		**2017**
Trade payables				
Accounts payable-trade	₩	2,256,754	₩	2,347,746
Other payables				
Non-trade payables		673,238		431,320
Accrued expenses		38,025		41,954
Withholdings		470,791		406,083
		1,182,054		879,357
Long-term other payables				
Long-term non-trade payables		65,817		138,521
Deposits received		373,856		322,940
Present value discounts		(14,174)		(11,435)
	₩	425,499	₩	450,026

(in thousands of USD (Note 2))		**2018**		**2017**
Trade payables				
Accounts payable-trade	$	2,018,383	$	2,099,764
Other payables				
Non-trade payables		602,127		385,762
Accrued expenses		34,009		37,523
Withholdings		421,063		363,189

	1,057,199	786,474
Long-term other payables		
Long-term non-trade payables	58,865	123,890
Deposits received	334,367	288,829
Present value discounts	(12,677)	(10,227)
	$ 380,555	$ 402,492

16. Borrowings

Details of short-term borrowings as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		Interest rate (%) as at December 31, 2018	2018	2017
Short-term borrowings				
Manufacturing financing	BANCO CHILE	3.97	₩ -	₩ 2,990
Trade financing	Shinhan Bank and others	0.15~0.2	5,756	69,424
General loans[1]	KEB Hana Bank, Philippines	LIBOR 3M	5,799	64,279
Commercial paper	Victoria 3rd Limited (SPC)	2.15 ~ 2.22	137,000	169,000
Operating loans[1]	Construction Guarantee	1.4, TAB180+0.45%	123,687	56,887
			₩ 272,242	₩ 362,580

(in thousands of USD (Note 2))		Interest rate (%) as at December 31, 2018	2018	2017
Short-term borrowings				
Manufacturing financing	BANCO CHILE	3.97	$ -	$ 2,674
Trade financing	Shinhan Bank and others	0.15~0.2	5,148	62,091
General loans[1]	KEB Hana Bank, Philippines	LIBOR 3M	5,186	57,489
Commercial paper	Victoria 3rd Limited (SPC)	2.15 ~ 2.22	122,529	151,149
Operating loans[1]	Construction Guarantee	1.4, TAB180+0.45%	110,622	50,878
			$ 243,485	$ 324,281

[1] Financial assets at fair value through profit or loss are provided as collateral related to the above borrowings (Note 36).

Details of long-term borrowings as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	Interest rate (%) as at December	2018	2017

		31, 2018		
Long-term borrowings				
General loans	Korea Development Bank and others	3.7	₩ 138,700	₩ -
Credit loans	Korea Housing & Urban Guarantee Corporation	-	11,731	12,182
Facility loans[1]	Korea Development Bank and others	2.92% - 8.10%, Return of non-guaranteed bond (due in three years) of AA-grade+1.60%	340,786	374,047
	Less: present value discounts		(4,156)	(4,430)
			487,061	381,799
	Less: current portion		(28,698)	(33,697)
			₩ 458,363	₩ 348,102

(in thousands of USD (Note 2))		Interest rate (%) as at December 31, 2018	2018	2017
Long-term borrowings				
General loans	Korea Development Bank and others	3.7	$ 124,050	$ -
Credit loans	Korea Housing & Urban Guarantee Corporation	-	10,492	10,895
Facility loans[1]	Korea Development Bank and others	2.92% - 8.10%, Return of non-guaranteed bond (due in three years) of AA-grade+1.60%	304,790	334,538
	Less: present value discounts		(3,717)	(3,962)
			435,615	341,471
	Less: current portion		(25,667)	(30,138)
			$ 409,948	$ 311,333

[1] Property, plant and equipment are provided as collateral related to above borrowings (Note 36).

Details of debentures as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)

Description	Issued date	Maturity	Interest rate (%) as at December 31, 2018	2018	2017
Unsecured public offered bonds	04/11/2013	04/11/2018	3.07	₩ -	₩ 100,000
Unsecured public offered bonds	04/11/2013	04/11/2020	3.40	100,000	100,000

(in millions of Korean won)

Description	Issued date	Maturity	Interest rate (%) as at December 31, 2018	2018	2017
Unsecured public offered bonds	10/11/2013	10/11/2018	3.80	-	90,000
Unsecured public offered bonds	02/18/2014	02/18/2019	3.77	200,000	200,000
Unsecured public offered bonds	08/29/2014	08/29/2021	3.64	150,000	150,000
Unsecured public offered bonds	02/16/2015	02/16/2020	2.57	150,000	150,000
Unsecured public offered bonds	02/16/2015	02/16/2022	2.98	200,000	200,000
Unsecured public offered bonds	07/12/2016	07/12/2021	2.03	150,000	150,000
Unsecured public offered bonds	11/08/2016	11/08/2023	3.00	50,000	50,000
Unsecured public offered bonds	02/08/2018	02/08/2021	2.73	120,000	-
Unsecured public offered bonds	02/08/2018	02/08/2023	3.19	180,000	-
Unsecured public offered bonds	09/25/2014	09/25/2019	2.92	100,000	100,000
Unsecured public offered bonds	04/13/2015	04/13/2020	2.12	100,000	100,000
Unsecured public offered bonds	04/13/2015	04/13/2022	2.54	100,000	100,000
Unsecured public offered bonds	06/17/2015	06/17/2020	3.41	50,000	50,000
				1,650,000	1,540,000
	Less: discount on bonds			(2,648)	(2,613)
	Less: current portion			(299,914)	(189,924)
				₩ 1,347,438	₩ 1,347,463

(in thousands of USD (Note 2))

Description	Issued date	Maturity	Interest rate (%) as at December 31, 2018	2018	2017
Unsecured public offered bonds	04/11/2013	04/11/2018	3.07	$ -	$ 89,437
Unsecured public offered bonds	04/11/2013	04/11/2020	3.40	89,437	89,437
Unsecured public offered bonds	10/11/2013	10/11/2018	3.80	-	80,494
Unsecured public offered bonds	02/18/2014	02/18/2019	3.77	178,875	178,875
Unsecured public offered bonds	08/29/2014	08/29/2021	3.64	134,156	134,156
Unsecured public offered bonds	02/16/2015	02/16/2020	2.57	134,156	134,156
Unsecured public offered bonds	02/16/2015	02/16/2022	2.98	178,875	178,875
Unsecured public offered bonds	07/12/2016	07/12/2021	2.03	134,156	134,156
Unsecured public offered bonds	11/08/2016	11/08/2023	3.00	44,719	44,719
Unsecured public offered bonds	02/08/2018	02/08/2021	2.73	107,325	-
Unsecured public offered bonds	02/08/2018	02/08/2023	3.19	160,987	-
Unsecured public offered bonds	09/25/2014	09/25/2019	2.92	89,437	89,437
Unsecured public offered bonds	04/13/2015	04/13/2020	2.12	89,437	89,437
Unsecured public offered bonds	04/13/2015	04/13/2022	2.54	89,437	89,437
Unsecured public offered bonds	06/17/2015	06/17/2020	3.41	44,719	44,719
				1,475,716	1,377,335
	Less: discount on bonds			(2,368)	(2,337)
	Less: current portion			(268,235)	(169,863)

(in thousands of USD (Note 2))

Description	Issued date	Maturity	Interest rate (%) as at December 31, 2018	2018	2017
				$ 1,205,113	$ 1,205,135

17. Provisions

Changes in provisions for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018				
	Provision for construction warranties	Provision for litigation	Provision for construction loss	Other provisions	Total
Beginning balance	₩ 398,871	₩ 6,544	₩ -	₩ -	₩ 405,415
Transition impact	-	-	60,922	-	60,922
Additional provisions	87,435	40,760	78	2,650	130,923
Reversal of provisions	(12,173)	(3,548)	(27,892)	-	(43,613)
Utilization	(62,866)	(5,710)	(2,603)	-	(71,179)
Transfer	(27)	(154)	1,304	-	1,123
Exchange differences	1,713	9	(171)	-	1,551
Ending balance	₩ 412,953	₩ 37,901	₩ 31,638	₩ 2,650	₩ 485,142
Current	₩ -	₩ 315	₩ 31,101	₩ 2,650	₩ 34,066
Non-current	412,953	37,586	537	-	451,076

(in thousands of USD (Note 2))	2018				
	Provision for construction warranties	Provision for litigation	Provision for construction loss	Other provisions	Total
Beginning balance	$ 356,740	$ 5,853	$ -	$ -	$ 362,593
Transition impact			54,487	-	54,487
Additional provisions	78,200	36,455	70	2,370	117,095
Reversal of provisions	(10,887)	(3,173)	(24,946)	-	(39,006)
Utilization	(56,226)	(5,107)	(2,328)	-	(63,661)
Transfer	(24)	(138)	1,166	-	1,004
Exchange differences	1,532	8	(153)	-	1,387
Ending balance	$ 369,335	$ 33,898	$ 28,296	$ 2,370	$ 433,899
Current	$ -	$ 282	$ 27,816	$ 2,370	$ 30,468
Non-current	369,335	33,616	480	-	403,431

(in millions of Korean won)	2017			
	Provision for construction warranties	Provision for litigation	Other provisions	Total
Beginning balance	₩ 422,150	₩ 7,843	₩ 30	₩ 430,023

Additional provisions	110,004	6,675	21,691	138,370
Reversal of provisions	(6,530)	(4,657)	-	(11,187)
Utilization	(101,236)	(3,249)	(30)	(104,515)
Transfer	43	-	(21,691)	(21,648)
Exchange differences	(25,560)	(68)	-	(25,628)
Ending balance	₩ 398,871	₩ 6,544	₩ -	₩ 405,415
Current	₩ -	₩ 546	₩ -	₩ 546
Non-current	398,871	5,998	-	404,869

(in thousands of USD (Note 2))	2017			
	Provision for construction warranties	**Provision for litigation**	**Other provisions**	**Total**
Beginning balance	$ 377,560	$ 7,015	$ 27	$ 384,602
Additional provisions	98,385	5,970	19,400	123,755
Reversal of provisions	(5,840)	(4,165)	-	(10,005)
Utilization	(90,543)	(2,906)	(27)	(93,476)
Transfer	38	-	(19,400)	(19,362)
Exchange differences	(22,860)	(61)	-	(22,921)
Ending balance	$ 356,740	$ 5,853	$ -	$ 362,593
Current	$ -	$ 488	$ -	$ 488
Non-current	356,740	5,365	-	362,105

18. Other Current and Non-current Financial Liabilities

Other current and non-current financial liabilities as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		2018	2017
Other current financial liabilities	Financial guarantee liabilities (Current)	₩ 14,493	₩ 10,990
Other non-current financial liabilities	Financial guarantee liabilities (Non-current)	113,404	100,039
		₩ 127,897	₩ 111,029

(in thousands of USD (Note 2))		2018	2017
Other current financial liabilities	Financial guarantee liabilities (Current)	$ 12,962	$ 9,829
Other non-current financial liabilities	Financial guarantee liabilities (Non-current)	101,426	89,472
		$ 114,388	$ 99,301

19. Other Current and Non-current Liabilities

Other current and non-current liabilities as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		2018	2017
Other current liabilities	Value-added tax withheld	₩ 30,361	₩ 30,151
	Other advance receipts	33,997	33,450
	Unearned income	12,299	4,582
	Others	244	196
		₩ 76,901	₩ 68,379
Other non-current liabilities	Long-term unearned income	₩ 46,030	₩ 57,437
	Others	13,386	-
		₩ 59,416	₩ 57,437

(in thousands of USD (Note 2))		2018	2017
Other current liabilities	Value-added tax withheld	$ 27,154	$ 26,966
	Other advance receipts	30,406	29,917
	Unearned income	11,000	4,098
	Others	218	175
		$ 68,778	$ 61,156
Other non-current liabilities	Long-term unearned income	$ 41,168	$ 51,370
	Others	11,972	-
		$ 53,140	$ 51,370

20. Post-employment Benefits

The Group maintains defined benefit plan for its employees, and according to the plan, the employees will be paid their average salary amount of the final three months multiplied by the number of years of service, adjusted for payment rate and other. The actuarial valuation of plan assets and defined benefit obligations is performed by an independent qualified actuary using the pension actuarial method.

Details of post-employment benefit obligation recognized in the consolidated statements of financial position as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018	2017
Present value of defined benefit obligations	₩ 671,347	₩ 638,422
Fair value of plan assets	(654,313)	(660,683)
Surplus in plan assets [1]	-	24,610
Post-employment benefit obligation	₩ 17,034	₩ 2,349

(in thousands of USD (Note 2))	2018	2017
Present value of defined benefit obligations	$ 600,436	$ 570,988
Fair value of plan assets	(585,201)	(590,898)

Surplus in plan assets [1]		-		22,011
Post-employment benefit obligation	$	15,235	$	2,101

[1] As at December 31, 2017, the plan assets in excess of defined benefit obligations amounting to ₩ 24,610 million ($ 22,011 thousand) were transferred to long-term financial instruments.

Changes in present value of defined benefit obligation for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		**2018**		**2017**
Beginning balance	₩	638,421	₩	688,528
Current service cost		72,077		82,401
Interest cost		23,842		22,007
Remeasurements:				
Changes in demographic assumptions		(677)		385
Changes in financial assumptions		25,607		(75,463)
Experience adjustments		(14,241)		(5,018)
Transfer in (out) affiliates		211		53
Benefits paid		(73,893)		(74,470)
Exchange differences		-		(1)
Ending balance	₩	671,347	₩	638,422

(in thousands of USD (Note 2))		**2018**		**2017**
Beginning balance	$	570,987	$	615,802
Current service cost		64,464		73,697
Interest cost		21,324		19,682
Remeasurements:				
Changes in demographic assumptions		(605)		344
Changes in financial assumptions		22,902		(67,492)
Experience adjustments		(12,737)		(4,488)
Transfer in (out) affiliates		189		47
Benefits paid		(66,088)		(66,603)
Exchange differences		-		(1)
Ending balance	$	600,436	$	570,988

Changes in fair value of plan assets for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		**2018**		**2017**
Beginning balance	₩	636,121	₩	672,687
Interest income		25,101		21,687
Remeasurements:				
Changes in financial assumptions		(12,332)		(9,918)
Transfer in (out) affiliates		(97)		53
Contributions from the employer		40,392		35,583
Benefits paid		(59,434)		(59,453)
Replacement		24,562		-
Exchange differences		-		44
Ending balance	₩	654,313	₩	660,683

(in thousands of USD (Note 2))		**2018**		**2017**
Beginning balance	$	568,930	$	601,634
Interest income		22,450		19,396
Remeasurements:				
Changes in financial assumptions		(11,029)		(8,870)
Transfer in (out) affiliates		(87)		47
Contributions from the employer		36,126		31,825
Benefits paid		(53,156)		(53,173)
Replacement		21,967		-
Exchange differences		-		39
Ending balance	$	585,201	$	590,898

Profit or loss recognized for defined benefit plan for the years ended December 31, 2018 and 2017, is as follows:

(in millions of Korean won)		**2018**		**2017**
Current service cost	₩	72,077	₩	82,401
Interest cost		23,842		22,007
Interest income		(25,101)		(21,687)
	₩	70,818	₩	82,721
Selling and administrative expenses	₩	27,520	₩	30,175
Cost of sales		43,298		52,546

(in thousands of USD (Note 2))		**2018**		**2017**
Current service cost	$	64,464	$	73,697

(in thousands of USD (Note 2))		**2018**		**2017**
Interest cost		21,324		19,682
Interest income		(22,450)		(19,395)
	$	63,338	$	73,984
Selling and administrative expenses	$	24,613	$	26,988
Cost of sales		38,725		46,996

Changes in remeasurements of defined benefit plan recognized as other comprehensive income for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		**2018**		**2017**
Beginning balance	₩	(66,257)	₩	(120,528)
Changes		(21,961)		70,178
Less: tax effect		3,208		(15,907)
Ending balance	₩	(85,010)	₩	(66,257)

(in thousands of USD (Note 2))		**2018**		**2017**
Beginning balance	$	(59,259)	$	(107,797)
Changes		(19,641)		62,765
Less: tax effect		2,869		(14,227)
Ending balance	$	(76,031)	$	(59,259)

Fair value of plan assets as at December 31, 2018 and 2017, consists of

(in millions of Korean won)		**2018**		**2017**
Cash and cash equivalents	₩	174	₩	12,498
Financial instruments		13,928		158,229
Insurance contracts		638,924		487,814
Others		1,288		2,142
	₩	654,313	₩	660,683

(in thousands of USD (Note 2))		**2018**		**2017**
Cash and cash equivalents	$	156	$	11,178
Financial instruments		12,457		141,516
Insurance contracts		571,437		436,288
Others		1,151		1,916

(in thousands of USD (Note 2))	2018	2017
	$ 585,201	$ 590,898

Investment strategies and policies for plan assets seek a balanced approach of minimizing risks and return of the highest profit. Moreover, actual profit from plan assets for the years ended December 31, 2018 and 2017, is ₩ 12,768 million ($ 11,419 thousand) and ₩ 11,769 million ($ 10,526 thousand), respectively.

Actuarial assumptions used as at December 31, 2018 and 2017, are as follows:

	2018	2017
Discount rate	2.40% ~ 3.61%	2.41% ~ 4.17%
Future salary growth rate	2.75% ~ 4.00%	2.00% ~ 4.04%

The sensitivity analysis below has been determined based on reasonably possible changes in actuarial assumptions while holding all other assumptions constant as at December 31, 2018 and 2017.

(in millions of Korean won)	2018		2017	
	Increase	Decrease	Increase	Decrease
1% change of discount rate	₩ (68,065)	₩ 78,092	₩ (50,693)	₩ 58,772
1% change in future salary growth rate	78,967	(69,521)	59,801	(52,275)

(in thousands of USD (Note 2))	2018		2017	
	Increase	Decrease	Increase	Decrease
1% change of discount rate	$ (60,876)	$ 69,843	$ (45,339)	$ 52,564
1% change in future salary growth rate	70,626	(62,178)	53,484	(46,753)

The above sensitivity analysis does not demonstrate actual fluctuations in defined benefit obligation since the actuarial assumptions are correlated and adjustment to a single set of assumption would not occur independently of others. Moreover, the present value of defined benefit obligation in the above sensitivity analysis was calculated using the projected unit credit method that was used to calculate post-employment benefit obligation in the consolidated statement of financial position.

21. Fair Value of Financial Assets and Liabilities

Carrying amount and fair value of financial assets by category as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018		2017	
	Carrying amount	**Fair value**	**Carrying amount**	**Fair value**
Financial assets at amortized cost:				
Cash and cash equivalents	₩ 2,241,188	₩ 2,241,188	₩ 2,107,242	₩ 2,107,242
Short-term financial instruments	1,824,955	1,824,955	1,356,651	1,356,651
Trade receivables	2,176,726	2,176,726	1,966,367	1,966,367
Other receivables	1,322,349	1,322,349	1,499,381	1,499,381
Long-term non-trade receivables	379,385	379,385	364,030	364,030
Long-term other receivables	975,213	975,213	906,373	906,373
Long-term financial instruments	7,531	7,531	611,111	611,111
Financial assets at amortized cost(Current)	14,692	14,692	-	-
Financial assets at amortized cost(Non-current)	37,306	37,306	-	-
Derivative financial assets:				
Derivative financial assets(current)	9	9	-	-
Financial assets at fair value through other comprehensive income (2017: Available-for-sale financial assets):				
Financial assets at fair value through other comprehensive income	83,468	83,468	-	-
Available-for-sale financial assets (non-current)	-	-	215,476	215,476
Financial assets at fair value through profit or loss (2017: Held-to-maturity financial assets):				
Financial assets at fair value through profit or loss	298,346	298,346	-	-
Held-to-maturity financial assets (current)	-	-	16,668	16,668
Held-to-maturity financial assets (non-current)	-	-	25,759	25,759
	₩ 9,361,168	₩ 9,361,168	₩ 9,069,058	₩ 9,069,058

(in thousands of USD (Note 2))	2018		2017	
	Carrying amount	**Fair value**	**Carrying amount**	**Fair value**
Financial assets at amortized cost:				
Cash and cash equivalents	$ 2,004,461	$ 2,004,461	$ 1,884,663	$ 1,884,663
Short-term financial	1,632,193	1,632,193	1,213,354	1,213,354

(in thousands of USD (Note 2))	2018		2017	
	Carrying amount	**Fair value**	**Carrying amount**	**Fair value**
instruments				
Trade receivables	1,946,808	1,946,808	1,758,668	1,758,668
Other receivables	1,182,675	1,182,675	1,341,008	1,341,008
Long-term non-trade receivables	339,312	339,312	325,579	325,579
Long-term other receivables	872,206	872,206	810,637	810,637
Long-term financial instruments	6,736	6,736	546,562	546,562
Financial assets at amortized cost(Current)	13,140	13,140	-	-
Financial assets at amortized cost(Non-current)	33,366	33,366	-	-
Derivative financial assets:				
Derivative financial assets(current)	8	8	-	-
Financial assets at fair value through other comprehensive income (2017: Available-for-sale financial assets):	-	-	-	-
Financial assets at fair value through other comprehensive income	74,652	74,652	-	-
Available-for-sale financial assets (non-current)	-	-	192,716	192,716
Financial assets at fair value through profit or loss (2017: Held-to-maturity financial assets):				
Financial assets - Fair value through profit or loss(FVPL)	266,833	266,833	-	-
Held-to-maturity financial assets (current)	-	-	14,908	14,908
Held-to-maturity financial assets (non-current)	-	-	23,038	23,038
	$ 8,372,390	$ 8,372,390	$ 8,111,133	$ 8,111,133

[1] Equity instruments that do not have a quoted price in an active market are measured at cost because their fair values cannot be measured reliably and, accordingly, excluded from the fair value disclosures.

Carrying amount and fair value of financial liabilities by category as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018		2017	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial liabilities at amortized cost:				
Trade payables	₩ 2,256,754	2,256,754	₩ 2,347,746	₩ 2,347,746
Other payables	1,182,054	1,182,054	879,357	879,357
Short-term borrowings	272,242	272,242	362,580	362,580
Current portion of long-term borrowings and debentures	328,612	329,933	223,621	226,456
Long-term other payables	425,499	425,500	450,026	450,026
Debentures	1,347,438	1,372,375	1,347,463	1,358,980
Long-term borrowings	458,363	458,363	348,102	348,102
Other financial liabilities (current)	14,493	14,493	10,990	10,990
Other financial liabilities (non-current)	113,404	113,404	100,039	100,039
Derivative financial liabilities:				
Derivative liabilities (current)	-	-	122	122
Derivative liabilities (non-current)	-	-	55	55
	₩ 6,398,859	6,425,118	₩ 6,070,101	₩ 6,084,453

(in thousands of USD (Note 2))	2018		2017	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial liabilities at amortized cost:				
Trade payables	$ 2,018,383	$ 2,018,383	$ 2,099,764	$ 2,099,764
Other payables	1,057,199	1,057,199	786,474	786,474
Short-term borrowings	243,485	243,485	324,281	324,281
Current portion of long-term borrowings and debentures	293,902	295,084	200,001	200,001
Long-term other payables	380,555	380,556	402,492	402,492
Debentures	1,205,114	1,227,417	1,205,135	1,215,437
Long-term borrowings	409,948	409,948	311,333	311,333
Other financial liabilities (current)	12,962	12,962	9,829	9,829
Other financial liabilities (non-current)	101,426	101,426	89,472	89,472
Derivative financial liabilities:				
Derivative liabilities (current)	-	-	109	109
Derivative liabilities (non-current)	-	-	49	49
	$ 5,722,974	$ 5,746,460	$ 5,428,939	$ 5,439,241

Financial instruments that are measured at fair value subsequent to initial recognition are grouped into Level 1, 2 or 3, based on the degree to which the fair value is observable, as described below:

(a) Fair Value Hierarchy Levels

Level 1	Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
Level 2	Inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly.
Level 3	Inputs are unobservable inputs for the asset or liability.

Financial instruments that are measured subsequent to initial recognition at fair value according to fair value hierarchy levels as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018			
	Level 1	**Level 2**	**Level 3**	**Total**
Recurring fair value measurements:				
Financial assets - Fair value through other comprehensive income (non-current)	₩ 9,263	₩ -	₩ 74,205	₩ 83,468
Financial assets - Fair value through profit or loss	2,071	-	296,275	298,346
Derivative liabilities (current)	-	9	-	9

(in thousands of USD (Note 2))	2018			
	Level 1	**Level 2**	**Level 3**	**Total**
Recurring fair value measurements:				
Financial assets - Fair value through other comprehensive income (non-current)	$ 8,285	$ -	$ 66,367	$ 74,652
Financial assets - Fair value through profit or loss	1,852	-	264,981	266,833
Derivative liabilities (current)	-	8	-	8

(in millions of Korean won)	2017			
	Level 1	**Level 2**	**Level 3**	**Total**
Recurring fair value measurements:				
Available-for-sale financial assets (non-current)	₩ 12,282	₩ -	₩ 203,194	₩ 215,476
Derivative liabilities (current)	-	122	-	122
Derivative liabilities (non-current)	-	55	-	55

(in thousands of USD (Note 2))	2017			
	Level 1	**Level 2**	**Level 3**	**Total**
Recurring fair value measurements:				
Available-for-sale financial assets (non-current)	$ 10,985	$ -	$ 181,732	$ 192,717
Derivative liabilities (current)	-	109	-	109

(in thousands of USD (Note 2))	2017			
	Level 1	**Level 2**	**Level 3**	**Total**
Recurring fair value measurements:				
Derivative liabilities (non-current)	-	49	-	49

The Group recognizes transfers between levels of the fair value hierarchy at the date of the event or change in circumstances that caused the transfer.

Financial liabilities that are not measured subsequent to initial recognition at fair value, but are disclosed according to fair value hierarchy levels as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	**2018**	**2017**
Current portion of long-term borrowings and debentures	₩ 301,235	₩ 192,758
Debentures	1,372,375	1,358,980

(in thousands of USD (Note 2))	**2018**	**2017**
Current portion of long-term borrowings and debentures	$ 269,417	$ 172,398
Debentures	1,227,417	1,215,437

Details of valuation techniques and inputs for measuring fair values of the financial instrument classified as Level 2 are as follows:

- Derivative financial instruments

The Group's derivative financial instruments consist of currency forwards and interest rate swap.

The fair value of currency forwards is measured based on forward exchange rate, disclosed on the market that remaining period is the same until maturity of the forward contract. If the forward exchange rate is not disclosed on the market, it is calculated by using interpolation method. Discount rate, which is used to measure a fair value of currency forwards, is determined based on yield curve derived market rates at the end of the reporting period.

Discount rate and forward rate, which are used to measure a fair value of interest rate swap, are determined based on applicable yield curve derived market rates at the end of the reporting period. Fair value of the interest rate swap is measured by discounted cash flow estimated on basis of the forward rate above.

As described above, fair value measurement for the currency forwards and interest rate swap is categorized within Level 2 as inputs used for valuation are derived from observable market

forward rate, interest rate and the yield curve.

The valuation methods used to evaluate fair values of each non-marketable securities of financial assets and financial assets at fair value through other comprehensive income and profit or loss in Level 3 as at December 31, 2018, are as follows:

(in millions of Korean won)	2018		
	Fair value	**Valuation techniques**	**Inputs**
Fair value through other comprehensive income(FVOCI):		Discounted free cash flow model, Net asset value method, Comparable company approach, Historical transaction approach	Discount rate and others
Equity security	₩ 74,205		
Fair value through profit or loss(FVPL):			
Equity security/Debt security	209,975		
Other equity investments	86,300		
	370,480		

(in thousands of USD (Note 2))	2018		
	Fair value	**Valuation techniques**	**Inputs**
Fair value through other comprehensive income(FVOCI):		Discounted free cash flow model, Net asset value method, Comparable company approach, Historical transaction approach	Discount rate and others
Equity security	$ 66,367		
Fair value through profit or loss(FVPL):			
Equity security/Debt security	187,796		
Other equity investments	77,185		
	331,348		

(in millions of Korean won)	2017		
	Fair value	**Valuation techniques**	**Inputs**
Available-for-sale financial assets (non-current):		Discounted free cash flow model, Net asset value method, Comparable company approach, Historical transaction approach	Discount rate and others
Equity security	₩ 116,359		
Other equity investments	86,835		

(in thousands of USD (Note 2))	2017		
	Fair value	**Valuation techniques**	**Inputs**
Available-for-sale financial assets (non-current):			
Equity security	$ 104,069	Discounted free cash flow model, Net asset value method, Comparable company approach, Historical transaction approach	Discount rate and others
Other equity investments	77,663		

There are no changes in the valuation techniques for measuring fair value of financial instruments that are classified as Level 2 and Level 3 during the year ended December 31, 2018.

22. Finance Income (Costs) and Other Comprehensive Income by Categories of Financial Instruments

Financial income (costs) and other comprehensive income by categories of financial instruments for the years ended December 31, 2018 and 2017, are as follows:

	2018						
(in millions of Korean won)	**Financial assets at amortized cost**	**Financial assets at fair value through other comprehen-sive income**	**Financial assets at fair value through profit or loss**	**Financial liabilities at amortized cost**	**Derivative instruments**	**Investments in subsidiaries and associates**	**Total**
Profit or loss:							
Interest income (expenses)	₩ 45,063	₩ -	₩ -	₩ (25,879)	₩ -	₩ -	₩ 19,184
Dividend income	-	-	2,362	-	-	-	2,362
Gain (loss) on foreign currency transaction	3,442	-	-	-	-	-	3,442
Gain (loss) on foreign currency translation	25,394	-	-	-	-	-	25,394
Gain (loss) on disposal	-	-	(28)	-	760	656	1,388
Gain (loss) on valuation	-	-	80,225	-	39	-	80,264
Impairment loss	-	-	(9,823)	-	-	(11,618)	(21,441)
	₩ 73,899	₩ -	₩ 72,736	₩ (25,879)	₩ 799	₩ (10,962)	₩ 110,539
Other comprehensive income:							
Gain on valuation	₩ -	₩ 2,790	₩ -	₩ -	₩ -	₩ -	₩ 2,790

(in millions of	2018

Korean won)	Financial assets at amortized cost	Financial assets at fair value through other comprehen-sive income	Financial assets at fair value through profit or loss	Financial liabilities at amortized cost	Derivative instruments	Investments in subsidiaries and associates	Total
Profit or loss:							
Interest income (expenses)	$ 40,303	$ -	$ -	$ (23,146)	$ -	$ -	$ 17,158
Dividend income	-	-	2,113	-	-	-	2,113
Gain (loss) on foreign currency transaction	3,078	-	-	-	-	-	3,078
Gain (loss) on foreign currency translation	22,712	-	-	-	-	-	22,712
Gain (loss) on disposal	-	-	(25)	-	680	587	1,241
Gain (loss) on valuation	-	-	71,751	-	35	-	71,786
Impairment loss	-	-	(8,785)	-	-	(10,391)	(19,176)
	$ 66,093	$ -	$ 65,053	$ (23,146)	$ 715	$ (9,804)	$ 98,912
Other comprehensive income:							
Gain on valuation	$ -	$ 2,495	$ -	$ -	$ -	$ -	$ 2,495

(in millions of Korean won)	2017					
	Loans and receivables	Available-for-sale financial assets	Held-to-maturity financial assets	Financial liabilities at fair value through profit or loss	Financial liabilities at amortized cost	Total
Profit or loss:						
Interest income (expenses)	₩ 79,827	₩ -	₩ 2,365	₩ -	₩ (66,108)	₩ 16,084
Dividend income	-	8,027	-	-	-	8,027
Gain (loss) on foreign currency transaction	22,465	-	-	-	(38,153)	(15,688)
Gain (loss) on foreign currency translation	(143,296)	-	-	-	832	(142,464)
Gain (loss) on disposal	-	(1,471)	-	-	-	(1,471)
Gain (loss) on valuation	-	-	-	24	-	24
Impairment loss	-	(22,200)	-	-	-	(22,200)
	₩ (41,004)	₩ (15,644)	₩ 2,365	₩ 24	₩ (103,429)	₩ (157,688)
Other comprehensive income:						
Gain on valuation	₩ -	₩ 1,029	₩ -	₩ -	₩ -	₩ 1,029

(in thousands of USD (Note 2))	2017					
	Loans and receivables	**Available-for-sale financial assets**	**Held-to-maturity financial assets**	**Financial liabilities at fair value through profit or loss**	**Financial liabilities at amortized cost**	**Total**
Profit or loss:						
Interest income (expenses)	$ 71,395	$ -	$ 2,115	$ -	$ (59,125)	$ 14,385
Dividend income	-	7,179	-	-	-	7,179
Gain (loss) on foreign currency transaction	20,092	-	-	-	(34,123)	(14,031)
Gain (loss) on foreign currency translation	(128,160)	-	-	-	744	(127,416)
Gain (loss) on disposal	-	(1,316)	-	-	-	(1,316)
Gain (loss) on valuation	-	-	-	21	-	21
Impairment loss	-	(19,855)	-	-	-	(19,855)
	$ (36,673)	$ (13,992)	$ 2,115	$ 21	$ (92,504)	$ (141,033)
Other comprehensive income:						
Gain on valuation	$ -	$ 920	$ -	$ -	$ -	$ 920

23. Derivative Instruments

Fair values of derivatives as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018			2017		
	Assets (current)	**Liabilities (current)**	**Liabilities (non-current)**	**Assets (non-current)**	**Liabilities (current)**	**Liabilities (non-current)**
Currency swap	₩ -	₩ -	₩ -	₩ -	₩ 122	₩ -
Interest rate swap	9	-	-	25	-	55
	₩ 9	₩ -	₩ -	₩ 25	₩ 122	₩ 55

(in thousands of USD (Note 2))	2018			2017		
	Assets (current)	**Liabilities (current)**	**Liabilities (non-current)**	**Assets (non-current)**	**Liabilities (current)**	**Liabilities (non-current)**
Currency swap	$ -	$ -	$ -	$ -	$ 109	$ -
Interest rate swap	8	-	-	22	-	49
	$ 8	$ -	$ -	$ 22	$ 109	$ 49

Gain (loss) included in profit or loss related to the derivative instruments for the years ended December 31, 2018 and 2017, is as follows:

(in millions of Korean won)	Gain (loss) on valuation of derivatives	
	2018	**2017**
Currency swap	₩ 760	₩ (122)
Interest rate swap	(39)	146
	₩ 721	₩ 24

(in thousands of USD (Note 2))	Gain (loss) on valuation of derivatives	
	2018	**2017**
Currency swap	$ 680	$ (109)
Interest rate swap	(35)	131
	$ 645	$ 22

24. Share Capital and Other Paid-in Capital

Share capital as at December 31, 2018, and 2017, are as follows:

(in millions of Korean won)	No. of shares authorized	No. of shares issued	Par value (In Korea won)	2018	2017
Ordinary shares	6,925,000,000	111,355,765	₩ 5,000	₩ 556,779	₩ 556,779
Preferred shares[1]	75,000,000	98,856	5,000	494	494
				₩ 557,273	₩ 557,273

(in thousands of USD (Note 2))	No. of shares authorized	No. of shares issued	Par value (In USD)	2018	2017
Ordinary shares	6,925,000,000	111,355,765	$ 4.472	$ 497,969	$ 497,969
Preferred shares[1]	75,000,000	98,856	4.472	442	442
				$ 498,411	$ 498,411

[1] Preferred shares are entitled to receive 1% above the cash dividend rate on ordinary shares. If ordinary shares are not entitled to receive cash dividend, the preferred shares have no rights in relation to receipt of cash dividends, non-cumulative. Residual income will be distributed equally between ordinary shares and preferred shares.

Details of other paid-in capital as at December 31, 2018, and 2017, are as follows:

(in millions of Korean won)	2018	2017
Share premium	₩ 287,481	₩ 287,481
Gain from reduction of capital	532,974	532,974
Gain on disposal of treasury shares	217	217

Other capital surplus		182,969		211,740
Other capital adjustments		(5,711)		(4,261)
	₩	997,930	₩	1,028,151

(in thousands of USD (Note 2))		**2018**		**2017**
Share premium	$	257,116	$	257,116
Gain from reduction of capital		476,678		476,678
Gain on disposal of treasury shares		194		194
Other capital surplus		163,643		189,375
Other capital adjustments		(5,108)		(3,811)
	$	892,523	$	919,552

25. Other Components of Equity

Details of other components of equity as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		**2018**		**2017**
Changes in value of available-for-sale financial assets	₩	-	₩	26,463
Changes in value of financial assets at fair value through other comprehensive income		(163,959)		-
Share of other comprehensive income of joint ventures and associates		(494)		(495)
Gain (loss) on foreign operations translation		(103,093)		43,005
	₩	(267,546)	₩	68,973

(in thousands of USD (Note 2))		**2018**		**2017**
Changes in value of available-for-sale financial assets	$	-	$	23,668
Changes in value of financial assets at fair value through other comprehensive income		(146,641)		-
Share of other comprehensive income of joint ventures and associates		(442)		(443)
Gain (loss) on foreign operations translation		(92,204)		38,463
	$	(239,287)	$	61,688

Changes in other components of equity for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	**2018**		
	Beginning balance	**Changes**	**Ending balance**

Changes in value of available-for-sale financial assets	₩ 35,829	₩ (35,829)	₩ -
Less: tax effect	(9,366)	9,366	-
	₩ 26,463	₩ (26,463)	₩ -
Changes in value of financial assets at fair value through other comprehensive income	₩ -	₩ (187,001)	₩ (187,001)
Less: tax effect	-	23,042	23,042
	₩ -	₩ (163,959)	₩ (163,959)
Share of other comprehensive income of joint ventures and associates	₩ (495)	₩ 1	₩ (494)
Gain (loss) on foreign operations translation	43,005	(150,987)	(107,982)
Less: tax effect	-	4,889	4,889
	₩ 43,005	₩ (146,098)	₩ (103,093)

(in thousands of USD (Note 2))	**2018**		
	Beginning balance	**Changes**	**Ending balance**
Changes in value of available-for-sale financial assets	$ 32,045	$ (32,045)	$ -
Less: tax effect	(8,377)	8,377	-
	$ 23,668	$ (23,668)	$ -
Changes in value of financial assets at fair value through other comprehensive income	$ -	$ (167,249)	$ (167,249)
Less: tax effect	-	20,608	20,608
	$ -	$ (146,641)	$ (146,641)
Share of other comprehensive income of joint ventures and associates	$ (443)	$ 1	$ (442)
Gain (loss) on foreign operations translation	38,462	(135,038)	(96,576)
Less: tax effect	-	4,373	4,373
	$ 38,462	$ (130,665)	$ (92,203)

(in millions of Korean won)	**2017**		
	Beginning balance	**Changes**	**Ending balance**
Changes in value of available-for-sale financial assets	₩ 33,981	₩ 1,848	₩ 35,829
Less: tax effect	(8,397)	(969)	(9,366)
	₩ 25,584	₩ 879	₩ 26,463
Share of other comprehensive income of joint ventures and associates	₩ (1,466)	₩ 971	₩ (495)
Gain (loss) on foreign operations	111,778	(68,773)	43,005

translation			
Less: tax effect	(21,380)	21,380	-
	₩ 90,398	₩ (47,393)	₩ 43,005

(in thousands of USD (Note 2))	2017		
	Beginning balance	**Changes**	**Ending balance**
Changes in value of available-for-sale financial assets	$ 30,392	$ 1,653	$ 32,045
Less: tax effect	(7,510)	(867)	(8,377)
	$ 22,882	$ 786	$ 23,668
Share of other comprehensive income of joint ventures and associates	$ (1,311)	$ 868	$ (443)
Gain (loss) on foreign operations translation	99,971	(61,509)	38,462
Less: tax effect	(19,122)	19,122	-
	$ 80,849	$ (42,387)	$ 38,462

26. Retained Earnings

Retained earnings as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		2018	2017
Statutory reserve	Legal reserve	₩ 61,832	₩ 56,259
Voluntary reserve	Reserve for financial structure improvements	61,810	61,810
	Reserve for overseas business losses	1,220,000	1,180,000
	Reserve for technology development	1,110,000	1,070,000
	Reserve for business expansion	1,135,000	1,100,000
	Reserve for research development	13,000	28,333
	Other voluntary reserves	463,700	453,700
		4,003,510	3,893,843
Retained earnings before appropriations	Retained earnings before appropriations	921,095	863,147
		₩ 4,986,437	₩ 4,813,249

(in thousands of USD (Note 2))		2018	2017
Statutory reserve	Legal reserve	$ 55,301	$ 50,317
Voluntary reserve	Reserve for financial structure improvements	55,281	55,281
	Reserve for overseas business losses	1,091,137	1,055,362
	Reserve for technology development	992,756	956,981
	Reserve for business expansion	1,015,115	983,812

	Reserve for research development	11,627	25,340
	Other voluntary reserves	414,721	405,777
		3,580,637	3,482,554
Retained earnings before appropriations	Retained earnings before appropriations	823,804	771,977
		$ 4,459,742	$ 4,304,847

The computation of the proposed dividends of the Parent Company for the years ended December 31, 2018 and 2017, is as follows:

(a) The computation of the proposed dividends

(in millions of Korean won)	2018		2017	
	Preferred share	**Ordinary share**	**Preferred share**	**Ordinary share**
Dividends per share (in Korean won)	₩ 550	₩ 500	₩ 550	₩ 500
Dividend ratio	11%	10%	11%	10%
Number of shares issued (in shares)	98,856	111,355,765	98,856	111,355,765
Total dividends declared	₩ 54	₩ 55,678	₩ 54	₩ 55,678

(in thousands of USD (Note 2))	2018		2017	
	Preferred share	**Ordinary share**	**Preferred share**	**Ordinary share**
Dividends per share (in USD)	$ 0.492	$ 0.447	$ 0.492	$ 0.447
Dividend ratio	11%	10%	11%	10%
Number of shares issued (in shares)	98,856	111,355,765	98,856	111,355,765
Total dividends declared	$ 48	$ 49,797	$ 48	$ 49,797

(b) Ratios of dividends to profit for the year

(in millions of Korean won)	2018	2017
Total dividends declared	₩ 55,732	₩ 55,732
Profit attributable to owners of the Parent Company	381,606	201,697
Ratios of dividends to profit for the year	14.60%	27.63%

(in thousands of USD (Note 2))	2018	2017
Total dividends declared	$ 49,845	$ 49,845
Profit attributable to owners of the Parent Company	341,299	180,393
Ratios of dividends to profit for the year	14.60%	27.63%

(c) Dividend yield ratio

(in Korean won)	2018		2017	
	Preferred share	Ordinary share	Preferred share	Ordinary share
Dividends per share	₩ 550	₩ 500	₩ 550	₩ 500
Market price per share	158,000	54,600	47,450	36,300
Dividend yield ratio	0.35%	0.92%	1.16%	1.38%

(in USD (Note 2))	2018		2017	
	Preferred share	Ordinary share	Preferred share	Ordinary share
Dividends per share	$ 0.492	$ 0.447	$ 0.492	$ 0.447
Market price per share	141	49	42	32
Dividend yield ratio	0.35%	0.92%	1.16%	1.38%

27. Revenue

Revenue arising from contracts with customers other than financial and other income (Notes 30 and 31), for the year ended December 31, 2018 is as follows:

(in millions of Korean won)	2018
Performance obligation at point in time	₩ 1,051,188
Performance obligation over time	15,679,706
	₩ 16,730,894

(in thousands of USD (Note 2))	2018
Performance obligation at point in time	$ 940,156
Performance obligation over time	14,023,527
	$ 14,963,683

28. Construction Contracts

Recognized contract income related to construction contracts for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018	2017
[Construction contract as a constructor]		
Infra/Environment	₩ 2,360,295	₩ 2,419,680
Building/House	6,474,411	6,820,664

(in millions of Korean won)	2018	2017
Plant/Power	5,349,220	5,519,961
	14,183,926	14,760,305
[Construction contract as a developer & constructor]		
Infra/Environment	82,591	37,476
Building/House	1,346,983	1,136,045
	1,429,574	1,173,521
[Other construction]		
Others	68,301	70,380
	₩ 15,681,801	₩ 16,004,206

(in thousands of USD (Note 2))	2018	2017
[Construction contract as a constructor]		
Infra/Environment	$ 2,110,988	$ 2,164,100
Building/House	5,790,547	6,100,227
Plant/Power	4,784,205	4,936,912
	12,685,740	13,201,239
[Construction contract as a developer & constructor]		
Infra/Environment	73,867	33,517
Building/House	1,204,707	1,016,050
	1,278,574	1,049,567
[Other construction]		
Others	61,087	62,946
	$ 14,025,401	$ 14,313,752

Details of accumulated contract costs for ongoing or completed construction contracts as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018							
	Accumulated contract costs	**Accumulated contract revenue**	**Accumulated profit or loss**	**Progress billing**	**Advance received**	**Due from customers for contract work**	**Due to customers for contract work**	**Retentions[1]**
[Construction contract as a constructor]								
Infra/Environment	₩ 12,786,813	₩ 784,302	₩ 13,571,115	₩ 12,299,607	₩ 70,247	₩ 999,963	₩ 49,270	₩ 244,474
Building/House	16,442,512	2,322,032	18,764,544	18,789,762	84,829	642,217	707,118	64,360
Plant/Power	42,948,232	2,724,683	45,672,915	45,156,112	461,367	1,026,321	696,205	882,190
	72,177,557	5,831,017	78,008,574	76,245,481	616,443	2,668,501	1,452,593	1,191,024

(in millions of Korean won)	2018							
	Accumulated contract costs	Accumulated contract revenue	Accumulated profit or loss	Progress billing	Advance received	Due from customers for contract work	Due to customers for contract work	Retentions[1]
[Construction contract as a developer & constructor]								
Infra/Environment	124,741	15,385	140,127	140,127	91,854	-	-	-
Building/House	2,433,285	642,502	3,075,786	3,075,786	482,339	-	-	-
	2,558,026	657,887	3,215,913	3,215,913	574,193	-	-	-
[Other construction]								
Others	226,726	22,935	249,661	250,056	2,259	11,222	9,119	-
	₩ 74,962,309	₩ 6,511,839	₩ 81,474,148	₩ 79,711,450	₩1,192,895	₩ 2,679,723	₩ 1,461,712	₩ 1,191,024

(in thousands of USD (Note 2))	2018							
	Accumulated contract costs	Accumulated contract revenue	Accumulated profit or loss	Progress billing	Advance received	Due from customers for contract work	Due to customers for contract work	Retentions[1]
[Construction contract as a constructor]								
Infra/Environment	$ 11,436,198	$ 701,460	$ 12,137,658	$ 11,000,453	$ 62,827	$ 894,341	$ 44,066	$ 218,651
Building/House	14,705,761	2,076,766	16,782,528	16,805,082	75,869	574,383	632,428	57,562
Plant/Power	38,411,799	2,436,887	40,848,685	40,386,470	412,635	917,915	622,668	789,008
	64,553,758	5,215,113	69,768,871	68,192,005	551,331	2,386,639	1,299,162	1,065,221
[Construction contract as a developer & constructor]								
Infra/Environment	111,565	13,760	125,326	125,326	82,152	-	-	-
Building/House	2,176,268	574,637	2,750,904	2,750,904	431,392	-	-	-
	2,287,833	588,397	2,876,230	2,876,230	513,544	-	-	-
[Other construction]								
Others	202,778	20,512	223,290	223,644	2,020	10,037	8,156	-
	$ 67,044,369	$ 5,824,022	$ 72,868,391	$ 71,291,879	$ 1,066,895	$ 2,396,676	$ 1,307,318	$ 1,065,221

[1] In the consolidated statement of financial position, the amount of retention is recorded as other receivables and long-term other receivables.

(in millions of Korean won)	2017							
	Accumulated contract costs	Accumulated contract revenue	Accumulated profit or loss	Progress billing	Advance received	Due from customers for contract work	Due to customers for contract work	Retentions[1]
[Construction								

(in millions of Korean won)	2017							
	Accumulated contract costs	**Accumulated contract revenue**	**Accumulated profit or loss**	**Progress billing**	**Advance received**	**Due from customers for contract work**	**Due to customers for contract work**	**Retentions[1]**
contract as a constructor]								
Infra/Environment	₩ 13,342,099	₩ 1,222,786	₩ 14,564,885	₩ 13,481,341	₩ 366,956	₩ 1,083,696	₩ 52,724	₩ 201,430
Building/House	15,599,338	2,198,280	17,797,618	17,921,225	143,740	717,946	797,721	110,719
Plant/Power	44,859,745	2,738,355	47,598,100	47,173,631	714,857	1,082,437	926,258	724,054
	73,801,182	6,159,421	79,960,603	78,576,197	1,225,553	2,884,079	1,776,703	1,036,203
[Construction contract as a developer & constructor]								
Infra/Environment	49,228	8,309	57,537	57,537	82,414	-	-	-
Building/House	2,348,370	554,396	2,902,766	2,943,442	46,644	-	-	-
	2,397,598	562,705	2,960,303	3,000,979	129,058	-	-	-
[Other construction]								
Others	191,586	20,405	211,991	206,725	1,578	12,367	5,184	-
	₩ 76,390,366	₩ 6,742,531	₩ 83,132,897	₩ 81,783,901	₩1,356,189	₩ 2,896,446	₩ 1,781,887	₩ 1,036,203

(in thousands of USD (Note 2))	2017							
	Accumulated contract costs	**Accumulated contract revenue**	**Accumulated profit or loss**	**Progress billing**	**Advance received**	**Due from customers for contract work**	**Due to customers for contract work**	**Retentions[1]**
[Construction contract as a constructor]								
Infra/Environment	$ 11,932,832	$ 1,093,628	$ 13,026,460	$ 12,057,366	$ 328,196	$ 969,230	$ 47,155	$ 180,154
Building/House	13,951,648	1,966,085	15,917,734	16,028,285	128,557	642,112	713,461	99,024
Plant/Power	40,121,407	2,449,115	42,570,521	42,190,887	639,350	968,104	828,421	647,575
	66,005,887	5,508,828	71,514,715	70,276,538	1,096,103	2,579,446	1,589,037	926,753
[Construction contract as a developer & constructor]								
Infra/Environment	44,028	7,431	51,460	51,460	73,709	-	-	-
Building/House	2,100,322	495,838	2,596,159	2,632,539	41,717	-	-	-
	2,144,350	503,269	2,647,619	2,683,999	115,426	-	-	-
[Other construction]								
Others	171,350	18,250	189,599	184,890	1411.32278	11,061	4,636	-
	$ 68,321,587	$ 6,030,347	$ 74,351,933	$ 73,145,427	$ 1,212,940	$ 2,590,507	$ 1,593,673	$ 926,753

[1] In the consolidated statement of financial position, the amount of retention is recorded as other receivables and long-term other receivables.

Due to the projects changed in accounting estimates during the current period (contracts in

progress at the end of prior period applying input method that the proportion that the contract costs incurred for the work performed to date bear to the estimated total contract costs), effects of changes in profit for the year and succeeding period (before net of tax) and due from/to customers for contract work are as follows:

(in millions of Korean won)	2018						
	Changes in estimated total contract revenue	**Changes in estimated total contract costs**	**Effects on profit (loss) for the year**	**Effects on profit (loss) for the subsequent period**	**Changes in due from customers for contract work**	**Changes in due to customers for contract work**	**Provision for construction loss**
Infra/Environment	₩ 397,002	₩ 643,220	₩ (275,424)	₩ 29,206	₩ (64,184)	₩ 211,240	₩ 4,222
Building/House	872,392	690,606	105,753	76,033	99,700	(6,053)	94
Plant/Power	1,132,467	1,016,850	15,409	100,208	325,901	310,492	31,042
Others	30,233	26,445	2,123	1,665	1,586	(537)	156
	₩ 2,432,094	₩ 2,377,121	₩ (152,139)	₩ 207,112	₩ 363,003	₩ 515,142	₩ 35,514

(in thousands of USD (Note 2))	2018						
	Changes in estimated total contract revenue	**Changes in estimated total contract costs**	**Effects on profit (loss) for the year**	**Effects on profit (loss) for the subsequent period**	**Changes in due from customers for contract work**	**Changes in due to customers for contract work**	**Provision for construction loss**
Infra/Environment	$ 355,068	$ 575,279	$ (246,332)	$ 26,121	$ (57,405)	$ 188,928	$ 3,776
Building/House	780,245	617,660	94,583	68,002	89,169	(5,414)	84
Plant/Power	1,012,849	909,445	13,781	89,623	291,478	277,696	27,763
Others	27,040	23,652	1,899	1,489	1,418	(480)	140
	$ 2,175,202	$ 2,126,036	$ (136,069)	$ 185,235	$ 324,660	$ 460,730	$ 31,763

(in millions of Korean won)	2017						
	Changes in estimated total contract revenue	**Changes in estimated total contract costs**	**Effects on profit (loss) for the year**	**Effects on profit (loss) for the subsequent period**	**Changes in due from customers for contract work**	**Changes in due to customers for contract work**	**Provision for construction loss**
Infra/Environment	₩ 279,334	₩ 386,755	₩ (237,543)	₩ 130,122	₩ (137,998)	₩ 99,545	₩ 16,692
Building/House	546,644	71,127	305,299	170,218	303,072	(2,227)	6,267
Plant/Power	(520,166)	91,546	(477,611)	(134,101)	(129,594)	348,017	45,364
Others	3,797	3,517	263	17	(43)	(306)	-
	₩ 309,609	₩ 552,945	₩ (409,592)	₩ 166,256	₩ 35,437	₩ 445,029	₩ 68,323

(in thousands of USD (Note 2))	2017						
	Changes in estimated total contract revenue	**Changes in estimated total contract costs**	**Effects on profit (loss) for the year**	**Effects on profit (loss) for the subsequent period**	**Changes in due from customers for contract work**	**Changes in due to customers for contract work**	**Provision for construction loss**

Infra/Environment	$ 249,829	$ 345,904	$ (212,452)	$ 116,378	$ (123,422)	$ 89,030	$ 14,929
Building/House	488,904	63,614	273,052	152,239	271,060	(1,992)	5,605
Plant/Power	(465,223)	81,876	(427,163)	(119,937)	(115,906)	311,257	40,572
Others	3,396	3,146	235	15	(38)	(273)	-
	$ 276,906	$ 494,540	$ (366,328)	$ 148,695	$ 31,694	$ 398,022	$ 61,106

Details of major contracts which contract price more than 5% of sales in the prior period and recognized revenue in the current period by the stage of completion method for basis of the percentage of total costs incurred to date as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)

	2018						
				Due from customers		Receivables from construction contracts	
	Contract date	Contractual completion date[1]	Percentage-of-completion (%)	Gross amount	Provision for impairment	Gross amount	Provision for impairment
Kuwait Sheik Jaber Causeway construction	11/14/2012	04/30/2019	99	₩ 50,116	₩ -	₩ 1,668	₩ -
Kuwait Aljur LNG port of entry construction	03/30/2016	02/12/2021	49	-	-	58	-
Katar Lusail expressway construction	05/21/2012	12/15/2019	99	149,359	-	-	-
Jurong Rock Cavern Phase 1 - Stage 2 Project	06/15/2009	02/28/2019	99	42,152	-	384	-
Hillstate River city	04/01/2018	07/31/2020	14	-	-	212	-
Gaepo 8 complex development project	06/01/2018	07/21/2021	8	-	-	5,408	-
U.A.E nuclear power plant construction	03/26/2010	12/31/2020	93	110,945	-	-	-
Venezuela Puerto La Cruz oil refinery construction	06/27/2012	09/30/2020	91	-	-	23,793	-
Iraq Karbala oil refinery construction	04/15/2014	04/02/2022	61	-	-	21,738	-
U.A.E Saab offshore oil and gas processing facility construction	03/18/2013	02/28/2019	99	31,078	-	-	-
Uzbekistan natural gas liquefaction refinement facility construction	01/07/2014	04/30/2020	53	270,918	-	170,507	-
Libya Tripoli West thermal power plant construction	07/19/2010	12/31/2019	49	-	-	-	-
UAE Mirfa IWPP Project	07/02/2014	03/31/2019	99	107,010	-	118,805	-
Uzbekistan UKAN Project	02/13/2015	01/31/2019	100	69,034	-	-	-
Turkmenistan Ethane Cracker and PE PP Pl	01/29/2014	02/28/2019	98	-	-	2,947	-
Melaka 1,800MW-2,400MW CCGT Power Plant	05/30/2017	05/01/2021	21	-	-	4,437	-
Ain Arnat 1200MW CCPP Project	11/25/2012	04/20/2019	94	-	-	5,207	-

(in thousands of USD (Note 2))	2018						
				Due from customers		Receivables from construction contracts	
	Contract date	Contractual completion date[1]	Percentage-of-completion (%)	Gross amount	Provision for impairment	Gross amount	Provision for impairment
Kuwait Sheik Jaber Causeway construction	11/14/2012	04/30/2019	99	$ 44,822	$ -	$ 1,492	$ -
Kuwait Aljur LNG port of entry construction	03/30/2016	02/12/2021	49	-	-	52	-
Katar Lusail expressway construction	05/21/2012	12/15/2019	99	133,583	-	-	-
Jurong Rock Cavern Phase 1 - Stage 2 Project	06/15/2009	02/28/2019	99	37,700	-	343	-
Hillstate River city	04/01/2018	07/31/2020	14	-	-	190	-
Gaepo 8 complex development project	06/01/2018	07/21/2021	8	-	-	4,837	-
U.A.E nuclear power plant construction	03/26/2010	12/31/2020	93	99,226	-	-	-
Venezuela Puerto La Cruz oil refinery construction	06/27/2012	09/30/2020	91	-	-	21,280	-
Iraq Karbala oil refinery construction	04/15/2014	04/02/2022	61	-	-	19,442	-
U.A.E Saab offshore oil and gas processing facility construction	03/18/2013	02/28/2019	99	27,795	-	-	-
Uzbekistan natural gas liquefaction refinement facility construction	01/07/2014	04/30/2020	53	242,302	-	152,497	-
Libya Tripoli West thermal power plant construction	07/19/2010	12/31/2019	49	-	-	-	-
UAE Mirfa IWPP Project	07/02/2014	03/31/2019	99	95,707	-	106,256	-
Uzbekistan UKAN Project	02/13/2015	01/31/2019	100	61,742	-	-	-
Turkmenistan Ethane Cracker and PE PP Pl	01/29/2014	02/28/2019	98	-	-	2,636	-
Melaka 1,800MW-2,400MW CCGT Power Plant	05/30/2017	05/01/2021	21	-	-	3,968	-
Ain Arnat 1200MW CCPP Project	11/25/2012	04/20/2019	94	-	-	4,657	-

[1] Contractual deadlines or expected deadlines by project

(in millions of Korean won)	2017						
				Due from customers		Receivables from construction contracts	
	Contract date	Contractual completion date[1]	Percentage-of-completion (%)	Gross amount	Provision for impairment	Gross amount	Provision for impairment
U.A.E nuclear power plant construction	03/26/2010	05/01/2020	90	₩ 112,947	₩ -	₩ -	₩ -
Kuwait Sheik Jaber	11/14/2012	11/03/2018	95	179,677	-	-	-

(in millions of Korean won)

	2017						
				Due from customers		Receivables from construction contracts	
	Contract date	Contractual completion date[1]	Percentage-of-completion (%)	Gross amount	Provision for impairment	Gross amount	Provision for impairment
Causeway construction							
U.A.E Saab offshore oil and gas processing facility construction	03/18/2013	06/30/2018	96	86,226	-	-	-
Venezuela Puerto La Cruz oil refinery construction	06/27/2012	12/31/2018	90	14,038	-	23,397	-
Iraq Karbala oil refinery construction	04/15/2014	11/27/2018	44	-	-	201,388	-
Kuwait Aljur LNG port of entry construction	03/30/2016	02/12/2021	21	17,921	-	-	-
Katar Lusail expressway construction	05/21/2012	06/30/2018	92	150,274	-	-	-
Libya Tripoli West thermal power plant construction	07/19/2010	12/31/2018	49	-	-	-	-
United Arab Emirate MIRFA IWPP Project	07/02/2014	02/20/2018	99	95,385	-	105,696	-
Uzbekistan natural gas liquefaction refinement facility construction	01/07/2014	04/30/2020	30	-	-	-	-
Uzbekistan UKAN Project	02/13/2015	01/31/2019	76	-	-	-	-
Turkmenistan Ethane Cracker and PE PP PI	01/29/2014	09/30/2018	92	32,497	-	77,007	-
Kuwait Al-Zour LNG Import Project	03/30/2016	02/12/2021	17	-	-	-	-
Uzbekistan GTL Project	01/07/2014	04/30/2020	20	-	-	32,501	-

(in thousands of USD (Note 2))

	2017						
				Due from customers		Receivables from construction contracts	
	Contract date	Contractual completion date[1]	Percentage-of-completion (%)	Gross amount	Provision for impairment	Gross amount	Provision for impairment
U.A.E nuclear power plant construction	03/26/2010	05/01/2020	90	$ 101,017	$ -	$ -	$ -
Kuwait Sheik Jaber Causeway construction	11/14/2012	11/03/2018	95	160,699	-	-	-
U.A.E Saab offshore oil and gas processing facility construction	03/18/2013	06/30/2018	96	77,118	-	-	-
Venezuela Puerto La Cruz oil refinery construction	06/27/2012	12/31/2018	90	12,555	-	20,926	-
Iraq Karbala oil refinery construction	04/15/2014	11/27/2018	44	-	-	180,116	-
Kuwait Aljur LNG port of entry construction	03/30/2016	02/12/2021	21	16,028	-	-	-
Katar Lusail expressway construction	05/21/2012	06/30/2018	92	134,401	-	-	-

(in thousands of USD (Note 2))	2017						
				Due from customers		Receivables from construction contracts	
	Contract date	Contractual completion date[1]	Percentage-of-completion (%)	Gross amount	Provision for impairment	Gross amount	Provision for impairment
Libya Tripoli West thermal power plant construction	07/19/2010	12/31/2018	49	-	-	-	-
United Arab Emirate MIRFA IWPP Project	07/02/2014	02/20/2018	99	85,310	-	94,532	-
Uzbekistan natural gas liquefaction refinement facility construction	01/07/2014	04/30/2020	30	-	-	-	-
Uzbekistan UKAN Project	02/13/2015	01/31/2019	76	-	-	-	-
Turkmenistan Ethane Cracker and PE PP Pl	01/29/2014	09/30/2018	92	29,064	-	68,873	-
Kuwait Al-Zour LNG Import Project	03/30/2016	02/12/2021	17	-	-	-	-
Uzbekistan GTL Project	01/07/2014	04/30/2020	20	-	-	29,068	-

[1] Contractual deadlines or expected deadlines by project

Details of joint contract of construction as at December 31, 2018 are as follows:

	Country	Participation ratio	Lead company
U.A.E nuclear power plant construction	U.A.E	55%	Hyundai Engineering & Construction Co., Ltd.
Venezuela Puerto La Cruz oil refinery construction	Venezuela	92%	Hyundai Engineering & Construction Co., Ltd.
Iraq Karbala oil refinery construction	Iraq	38%	Hyundai Engineering & Construction Co., Ltd.

29. Selling and Administrative Expenses

Details of selling and administrative expenses for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018	2017
Salaries	₩ 389,894	₩ 346,194
Post-employment benefits	27,521	30,175
Employee welfare benefits	58,069	55,477
Travel	4,540	5,529
Utility expenses	7,141	5,938
Taxes and dues	11,388	9,796
Depreciation	11,694	11,852
Amortization	52,445	56,114
Advertising	5,895	10,592
Ordinary development expense	109,949	85,934

Commissions and fees		49,135		40,353
Rental		23,422		20,535
Impairment loss		18,402		64,290
Others		51,663		50,080
	₩	821,158	₩	792,859

(in thousands of USD (Note 2))		**2018**		**2017**
Salaries	$	348,711	$	309,627
Post-employment benefits		24,614		26,988
Employee welfare benefits		51,935		49,617
Travel		4,060		4,945
Utility expenses		6,387		5,311
Taxes and dues		10,185		8,761
Depreciation		10,459		10,600
Amortization		46,905		50,187
Advertising		5,272		9,473
Ordinary development expense		98,336		76,857
Commissions and fees		43,945		36,091
Rental		20,948		18,366
Impairment loss		16,458		57,499
Others		46,206		44,790
	$	734,421	$	709,112

30. Finance Income and Costs

Finance income for the years ended December 31, 2018 and 2017, is as follows:

(in millions of Korean won)		**2018**		**2017**
Interest income	₩	110,298	₩	92,900
Dividend income		2,362		8,027
Gain on foreign currency transactions		37,917		27,759
Gain on foreign currency translation		32,130		9,755
Gain on disposal of available-for-sale financial asset		-		861
Gain on valuation of financial assets at fair value through profit or loss		98,824		-
Gain on disposal of investments in associates		656		-
Gain on disposal of investments in subsidiaries		23		15,477
Gain on derivative transactions		819		-
Gain on valuation of derivatives		56		146
	₩	283,085	₩	154,925

(in thousands of USD (Note 2))		**2018**		**2017**
Interest income	$	98,648	$	83,087

Dividend income	2,113	7,179
Gain on foreign currency transactions	33,912	24,827
Gain on foreign currency translation	28,736	8,725
Gain on disposal of available-for-sale financial assets	-	770
Gain on valuation of financial assets at fair value through profit or loss	88,386	-
Gain on disposal of investments in associates	587	-
Gain on disposal of investments in subsidiaries	21	13,842
Gain on derivative transactions	732	-
Gain on valuation of derivatives	50	131
	$ 253,184	$ 138,561

Finance costs for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	**2018**	**2017**
Interest expenses	₩ 91,114	₩ 76,816
Loss on foreign currency transactions	34,475	43,446
Loss on foreign currency translation	6,737	152,219
Loss on disposal of available-for-sale financial assets	-	2,332
Impairment loss on available-for-sale financial assets	-	22,200
Loss on disposal of financial assets at fair value through profit or loss	28	-
Loss on valuation of financial assets at fair value through profit or loss	18,599	-
Impairment loss on financial assets at fair value through profit or loss	9,823	-
Loss on disposal of investments in associates	114	1,247
Impairment loss on investments in associates	11,618	1,645
Loss on derivative transactions	59	-
Loss on valuation of derivatives	16	122
	₩ 172,583	₩ 300,027

(in thousands of USD (Note 2))	**2018**	**2017**
Interest expenses	$ 81,490	$ 68,702
Loss on foreign currency transactions	30,834	38,857
Loss on foreign currency translation	6,025	136,141
Loss on disposal of available-for-sale financial assets	-	2,086
Impairment loss on available-for-sale financial assets	-	19,855
Loss on disposal of financial assets at fair value through profit or loss	25	-
Loss on valuation of financial assets at fair value through profit or loss	16,634	-

Impairment loss on financial assets at fair value through profit or loss		8,785		-
Loss on disposal of investments in associates		102		1,115
Impairment loss on investments in associates		10,391		1,471
Loss on derivative transactions		53		-
Loss on valuation of derivatives		14		109
	$	154,353	$	268,336

31. Other Income and Expenses

Other income for the years ended December 31, 2018 and 2017, is as follows:

(in millions of Korean won)		**2018**		**2017**
Gain on foreign currency transactions	₩	74,508	₩	181,186
Gain on foreign currency translation		77,553		77,766
Reversal of provision for impairment		22,857		24,468
Gain on disposal of property, plant and equipment		7,190		5,359
Gain on disposal of intangible assets		66		-
Gain on disposal of investment property		2,603		1,171
Reversal of income from translation of foreign operations		6,980		-
Miscellaneous income		65,293		71,028
	₩	257,050	₩	360,978

(in thousands of USD (Note 2))		**2018**		**2017**
Gain on foreign currency transactions	$	66,638	$	162,048
Gain on foreign currency translation		69,361		69,552
Reversal of provision for impairment		20,443		21,884
Gain on disposal of property, plant and equipment		6,431		4,793
Gain on disposal of intangible assets		59		-
Gain on disposal of investment property		2,328		1,047
Reversal of income from translation of foreign operations		6,243		-
Miscellaneous income		58,396		63,526
	$	229,899	$	322,850

Other expenses for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		**2018**		**2017**
Loss on foreign currency transactions	₩	65,892	₩	158,026
Loss on foreign currency translation		30,228		143,464
Commission expenses		2,639		2,527
Other impairment loss		47,703		139,231
Donations and contributions		17,624		5,640

Loss on disposal of property, plant and equipment		6,385		1,468
Loss on disposal of intangible assets		1		-
Loss on impairment of intangible assets		2,170		183
Loss on disposal of investment property		1,254		612
Loss on impairment of investment property		-		9,453
Depreciation on assets not in use		3,455		1,200
Loss on foreign operations translation		-		50,979
Miscellaneous expenses		115,885		119,459
	₩	293,236	₩	632,242

(in thousands of USD (Note 2))		**2018**		**2017**
Loss on foreign currency transactions	$	58,932	$	141,334
Loss on foreign currency translation		27,035		128,311
Commission expenses		2,360		2,260
Other impairment loss		42,664		124,525
Donations and contributions		15,762		5,044
Loss on disposal of property, plant and equipment		5,711		1,313
Loss on disposal of intangible assets		1		-
Loss on impairment of intangible assets		1,941		164
Loss on disposal of investment property		1,122		547
Loss on impairment of investment property		-		8,455
Depreciation on assets not in use		3,090		1,073
Loss on foreign operations translation		-		45,594
Miscellaneous expenses		103,645		106,841
	$	262,263	$	565,461

32. Breakdown of Expenses by Nature

Breakdown of expenses by nature for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		**2018**		**2017**
Use of inventories (land for construction, unfinished housing, and raw materials)	₩	5,188,246	₩	4,706,873
Changes in other inventories		(22,218)		(27,410)
Employee benefit expenses		1,562,333		1,534,181
Outside processing expenses		7,283,506		7,642,574
Depreciation, amortization and others		172,335		194,828
Impairment loss		18,278		64,290
Financial costs		14,384		15,269
Others		1,674,042		1,770,381
	₩	15,890,906	₩	15,900,986

(in thousands of USD (Note 2))	**2018**	**2017**

Use of inventories (land for construction, unfinished housing, and raw materials)	$	4,640,234	$	4,209,707
Changes in other inventories		(19,871)		(24,515)
Employee benefit expenses		1,397,311		1,372,132
Outside processing expenses		6,514,181		6,835,323
Depreciation, amortization and others		154,132		174,249
Impairment loss		16,347		57,499
Financial costs		12,865		13,656
Others		1,497,220		1,583,383
	$	14,212,419	$	14,221,434

33. Income Tax Expense

Income tax expense for the years ended December 31, 2018 and 2017, consists of:

(in millions of Korean won)		**2018**		**2017**
Current tax on profits for the year	₩	324,975	₩	299,584
Change in deferred income tax due to temporary differences		(2,922)		(120,823)
Income tax expense directly charged to equity		40,506		4,504
Income tax expense	₩	362,559	₩	183,265

(in thousands of USD (Note 2))		**2018**		**2017**
Current tax on profits for the year	$	290,650	$	267,940
Change in deferred income tax due to temporary differences		(2,614)		(108,062)
Income tax expense directly charged to equity		36,227		4,029
Income tax expense	$	324,263	$	163,907

The differences between income before income tax expense in financial accounting and income tax expense pursuant to Corporate Income Tax Law of Korea for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		**2018**		**2017**
Profit before income tax expense	₩	897,862	₩	554,829
Tax at domestic tax rates applicable to profits		241,546		138,395
Adjustments:				
Income not subject to tax		(88,881)		(3,087)
Expenses not deductible for tax purposes		9,753		15,640
Tax credit and tax exempt for the year		(8,466)		(57,857)
The changes in unrecognized deferred income tax assets (liabilities)		12,626		25,543
Others		195,981		64,631
Income tax expense	₩	362,559	₩	183,265
Effective tax rate		40.38%		33.03%

(in thousands of USD (Note 2))	2018	2017
Profit before income tax expense	$ 803,024	$ 496,225
Tax at domestic tax rates applicable to profits	216,032	123,777
Adjustments:		
Income not subject to tax	(79,493)	(2,761)
Expenses not deductible for tax purposes	8,723	13,988
Tax credit and tax exempt for the year	(7,572)	(51,746)
The changes in unrecognized deferred income tax assets (liabilities)	11,292	22,844
Others	175,281	57,805
Income tax expense	$ 324,263	$ 163,907
Effective tax rate	40.38%	33.03%

The changes in deferred income tax due to temporary differences for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018		
	Beginning balance	Changes	Ending balance
Asset revaluation	₩ (2,113)	₩ 137	₩ (1,976)
Trade and other receivables	127,721	(278)	127,443
Inventories	450	(1,097)	(647)
Financial assets at FVPL[1]	55,446	(47,683)	7,763
Investment property	1,706	653	2,359
Property, plant and equipment	2,911	(488)	2,423
Unrealized gain (loss) on the merger and others[2]	(2,251)	(226)	(2,477)
Long-term borrowings	(1,130)	137	(993)
Post-employment benefits	143,982	(325)	143,657
Provision for long-term employee benefits	(11,071)	837	(10,234)
Retirement insurance fee	(159,099)	8,971	(150,128)
Provisions and others	33,347	37,642	70,989
Other non-current liabilities	89,020	(12,420)	76,600
Reserves	(2,861)	3,269	408
Foreign operations translation	(4,843)	307	(4,536)
Interest income	(13,365)	(735)	(14,100)
Valuation of derivatives	43	(43)	-
Gain (loss) on foreign currency translation	(23,123)	1,469	(21,654)
Borrowing costs	(3,604)	(125)	(3,729)
Revaluation profit (loss)	(51,429)	(2,802)	(54,231)
Accrued expenses	15,188	320	15,508
Interest expense (Advances from customers)	-	386	386
Repair cost	-	307	307
Contract related cost	-	4,351	4,351
Carried forward tax credit	11,601	(11,601)	-

(in millions of Korean won)	2018		
	Beginning balance	**Changes**	**Ending balance**
Deficit carried forward	21,484	(18,546)	2,938
Gain (loss) on valuation of financial asset at FVOCI[3]	(9,392)	32,408	23,016
Retained earnings	-	4,890	4,890
Remeasurements of defined benefit plan	22,651	3,208	25,859
Deferred income tax assets	₩ 241,269	₩ 2,923	₩ 244,192

(in thousands of USD (Note 2))	2018		
	Beginning balance	**Changes**	**Ending balance**
Asset revaluation	$ (1,890)	$ 123	$ (1,767)
Trade and other receivables	114,231	(249)	113,982
Inventories	403	(982)	(579)
Financial assets at FVPL[1]	49,590	(42,647)	6,943
Investment property	1,526	584	2,110
Property, plant and equipment	2,603	(436)	2,167
Unrealized gain (loss) on the merger and others[2]	(2,013)	(202)	(2,215)
Long-term borrowings	(1,011)	123	(888)
Post-employment benefits	128,774	(291)	128,483
Provision for long-term employee benefits	(9,901)	748	(9,153)
Retirement insurance fee	(142,294)	8,023	(134,271)
Provisions and others	29,826	33,665	63,491
Other non-current liabilities	79,616	(11,109)	68,507
Reserves	(2,559)	2,924	365
Foreign operations translation	(4,332)	275	(4,057)
Interest income	(11,954)	(656)	(12,610)
Valuation of derivatives	38	(38)	-
Gain (loss) on foreign currency translation	(20,680)	1,313	(19,367)
Borrowing costs	(3,223)	(112)	(3,335)
Revaluation profit	(45,997)	(2,505)	(48,502)
Accrued expenses	13,584	286	13,870
Interest expense (Advances from customers)	-	345	345
Repair cost	-	275	275
Contract related cost	-	3,891	3,891
Carried forward tax credit	10,375	(10,375)	-
Deficit carried forward	19,214	(16,586)	2,628
Gain (loss) on valuation of financial asset at FVOCI[3]	(8,400)	28,985	20,585
Retained earnings	-	4,373	4,373
Remeasurements of defined benefit plan	20,259	2,869	23,128
Deferred income tax assets	$ 215,785	$ 2,614	$ 218,399

[1] Reclassified from AFS financial assets as at December 31, 2017
[2] Reclassified from impairment loss on long-term investment securities and others as at December 31, 2017
[3] Reclassified from gain/loss on valuation of long-term investment securities as at December 31, 2017

(in millions of Korean won)	2017		
	Beginning balance	**Changes**	**Ending balance**
Asset revaluation	₩ (2,005)	₩ (108)	₩ (2,113)
Trade and other receivables	85,783	41,938	127,721
Inventories	351	99	450
AFS financial assets	35,802	19,644	55,446
Investment property	3,381	(1,675)	1,706
Property, plant and equipment	14,641	(11,730)	2,911
Impairment loss on long-term investment securities and others	7,357	(9,608)	(2,251)
Long-term borrowings	(1,138)	8	(1,130)
Post-employment benefits	140,805	3,177	143,982
Provision for long-term employee benefits	(23,305)	12,234	(11,071)
Retirement insurance fee	(158,800)	(299)	(159,099)
Provisions and others	15,565	17,782	33,347
Other non-current liabilities	79,793	9,227	89,020
Reserves	(6,492)	3,631	(2,861)
Foreign operations translation	(4,595)	(248)	(4,843)
Interest income	(12,485)	(880)	(13,365)
Valuation of derivatives	43	-	43
Gain/loss on foreign currency translation	(28,158)	5,035	(23,123)
Borrowing costs	(3,979)	375	(3,604)
Revaluation profit	(73,815)	22,386	(51,429)
Accrued expenses	3,557	11,631	15,188
Carried forward tax credit	9,550	2,051	11,601
Deficit carried forward	29,835	(8,351)	21,484
Gain/loss on valuation of long-term investment securities	(8,423)	(969)	(9,392)
Gain/loss on foreign operations translation	(21,380)	21,380	-
Remeasurements of defined benefit plan	38,558	(15,907)	22,651
Deferred income tax assets	₩ 120,446	₩ 120,823	₩ 241,269

(in thousands of USD (Note 2))	2017		
	Beginning balance	**Changes**	**Ending balance**
Asset revaluation	$ (1,793)	$ (97)	$ (1,890)
Trade and other receivables	76,722	37,509	114,231
Inventories	314	89	403
AFS financial assets	32,021	17,569	49,590
Investment property	3,024	(1,498)	1,526
Property, plant and equipment	13,094	(10,491)	2,603
Impairment loss on long-term investment securities and others	6,580	(8,593)	(2,013)
Long-term borrowings	(1,018)	7	(1,011)
Post-employment benefits	125,933	2,841	128,774
Provision for long-term employee benefits	(20,843)	10,942	(9,901)
Retirement insurance fee	(142,027)	(267)	(142,294)
Provisions and others	13,922	15,904	29,826
Other non-current liabilities	71,364	8,252	79,616
Reserves	(5,807)	3,248	(2,559)
Foreign operations translation	(4,109)	(223)	(4,332)
Interest income	(11,167)	(787)	(11,954)
Valuation of derivatives	38	-	38
Gain/loss on foreign currency translation	(25,184)	4,504	(20,680)
Borrowing costs	(3,558)	335	(3,223)
Revaluation profit	(66,018)	20,021	(45,997)
Accrued expenses	3,181	10,403	13,584
Carried forward tax credit	8,541	1,834	10,375
Deficit carried forward	26,684	(7,470)	19,214
Gain/loss on valuation of long-term investment securities	(7,533)	(867)	(8,400)
Gain/loss on foreign operations translation	(19,122)	19,122	-
Remeasurements of defined benefit plan	34,485	(14,226)	20,259
Deferred income tax assets	$ 107,724	$ 108,061	$ 215,785

Unrecognized deferred income tax assets (liabilities) as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018		2017	
	Temporary differences	**Deferred income tax assets (liabilities)**	**Temporary differences**	**Deferred income tax assets (liabilities)**
Deferred income tax assets:				
Investments in subsidiaries	₩ 166,120	₩ 39,979	₩ 132,043	₩ 32,274
Investments in associates	56,719	13,550	112,073	28,590
Loss on foreign operations translation	474,389	113,332	474,389	121,017

Tax losses carried forward	190,054	41,812	133,124	29,287
Reflux taxes on corporate undistributed profits	6,133	1,465	-	-
Provision for impairment	54,865	13,411	52,246	13,524
Others	2,773	610	-	-
	₩ 951,053	₩ 224,159	₩ 903,875	₩ 224,692
Deferred income tax liabilities:				
Investments in subsidiaries	₩ (902,739)	₩ (205,361)	₩ (882,665)	₩ (209,435)
Reflux taxes on corporate undistributed profits	-	-	(82,595)	(9,085)
	₩ (902,739)	₩ (205,361)	₩ (965,260)	₩ (218,520)

(in thousands of USD (Note 2))	2018		2017	
	Temporary differences	**Deferred income tax assets (liabilities)**	**Temporary differences**	**Deferred income tax assets (liabilities)**
Deferred income tax assets:				
Investments in subsidiaries	$ 148,573	$ 35,756	$ 118,096	$ 28,865
Investments in associates	50,728	12,119	100,235	25,570
Loss on foreign operations translation	424,281	101,361	424,281	108,234
Tax losses carried forward	169,979	37,395	119,063	26,194
Reflux taxes on corporate undistributed profits	5,485	1,310	-	-
Provision for impairment	49,070	11,994	46,728	12,096
Others	2,481	546	-	-
	$ 850,597	$ 200,481	$ 808,403	$ 200,959
Deferred income tax liabilities:				
Investments in subsidiaries	$ (807,386)	$ (183,670)	$ (789,433)	$ (187,313)
Reflux taxes on corporate undistributed profits	-	-	(73,870)	(8,126)
	$ (807,386)	$ (183,670)	$ (863,303)	$ (195,439)

Income tax expense directly charged to equity for the years ended December 31, 2018 and 2017, is as follows:

(in millions of Korean won)	2018	2017
Deferred income tax assets (liabilities) directly charged to equity:		
Gain (loss) on valuation of AFS financial assets	₩ 32,408	₩ (969)
Gain (loss) on foreign operations translation	4,890	21,380
Remeasurements of defined benefit plan	3,208	(15,907)
	₩ 40,506	₩ 4,504

(in thousands of USD (Note 2))		**2018**		**2017**
Deferred income tax assets (liabilities) directly charged to equity:				
Gain (loss) on valuation of AFS financial assets	$	28,984	$	(867)
Gain (loss) on foreign operations translation		4,374		19,122
Remeasurements of defined benefit plan		2,869		(14,226)
	$	36,227	$	4,029

34. Earnings per Share

Basic earnings per share of ordinary share for the years ended December 31, 2018 and 2017, are computed as follows. The Group does not compute diluted earnings per share of ordinary share for the years ended December 31, 2018 and 2017, because there is no dilution effect.

(in millions of Korean won)		**2018**		**2017**
Profit attributable to the ordinary equity holders of the Parent Company	₩	381,606	₩	201,697
Expected dividends on preferred shares		(54)		(54)
Expected residual income attributable to preferred shares		(289)		(129)
Profit available to ordinary share		381,263		201,514
Weighted-average number of ordinary shares outstanding (shares)		111,355,765		111,355,765
Basic earnings per share of ordinary share *(in Korean won)*	₩	3,424	₩	1,810

(in thousands of USD (Note 2))		**2018**		**2017**
Profit attributable to the ordinary equity holders of the Parent Company	$	341,299	$	180,393
Expected dividends on preferred shares		(49)		(48)
Expected residual income attributable to preferred shares		(259)		(115)
Profit available to ordinary share		340,991		180,229
Weighted-average number of ordinary shares outstanding (shares)		111,355,765		111,355,765
Basic earnings per share of ordinary share *(in USD)*	$	3	$	2

Basic earnings per share of preferred share for the years ended December 31, 2018 and 2017, are computed as follows. The Parent Company does not compute diluted earnings per share of preferred share for the years ended December 31, 2018 and 2017, because there is no dilution effect.

(in millions of Korean won)		**2018**		**2017**
Expected dividends on and residual income	₩	343	₩	184

attributable to preferred share				
Weighted-average number of preferred shares outstanding (shares)		98,856		98,856
Basic earnings per share of preferred share *(in Korean won)*	₩	3,474	₩	1,860

(in thousands of USD (Note 2))		**2018**		**2017**
Expected dividends on and residual income attributable to preferred share	$	307	$	165
Weighted-average number of preferred shares outstanding (shares)		98,856		98,856
Basic earnings per share of preferred share *(in USD)*	$	3	$	2

35. Related Party Transactions

Sales and purchases with related parties for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	**2018**			
	Sales and other income	**Disposal of property, plant and equipment, etc.**	**Purchases and other expenses**	**Acquisition of property, plant and equipment, etc.**
Entities with significant influence over the Group:				
Hyundai Motor Company	₩ 620,923	₩ -	₩ 22,535	₩ 415
Kia Motors Corporation	195,213	-	9,024	111
Hyundai Mobis Co., Ltd.	45,088	-	13,915	-
	₩ 861,224	₩ -	₩ 45,474	₩ 526
Associates:				
Sejong Mirae Industrial Complex Co., Ltd.	₩ 136	₩ -	₩ -	₩ -
Incheon Ganghwa Industrial Complex Co., Ltd.	-	-	19	-
Haevichi Country Club., Ltd	-	-	656	-
Hillstate Homaesil Newstay REIT	79,964	-	-	-
	₩ 80,100	₩ -	₩ 675	₩ -
Other related parties:				
Hyundai Kefico Corporation	₩ 13,692	₩ -	₩ -	₩ -
Hyundai Rotem Company	9,367	-	29,115	-
Hyundai Capital Services, Inc.	8,814	-	3,428	-
KIA MOTORS INDIA, Pvt. Ltd.	6,866	-	-	-
Kia Motors India Private Limited	311,898	-	-	-
Hyundai PowerTech automatic transmission	25,102	-	-	-

(in millions of Korean won)	2018			
	Sales and other income	**Disposal of property, plant and equipment, etc.**	**Purchases and other expenses**	**Acquisition of property, plant and equipment, etc.**
HYUNDAI MOTOR INDIA LIMITED	28,131	-	13,937	-
HYUNDAI MOTOR EUROPE GmbH	21,271	-	-	-
MOBIS INDIA LIMITED	21,886	-	296	-
Automotive Steel Pipe India Private, Ltd.	18,850	-	1,667	-
Kia Motors Slovakia s.r.o.	15,553	-	5	-
HYUNDAI MOTOR MANUFACTURING RUS	14,652	-	1,425	-
HYUNDAI AUTOEVER AMERICA	11,898	-	-	-
Hyundai Motor Manufacturing Czech, s.r.o.	10,429	-	-	-
HYUNDAI MOTOR BRASIL MONTADORA DE AUTOMOVEIS LTDA	11,214	-	-	-
KIA MOTORS MEXICO SA DE CV	8,892	-	-	-
Hyundai Motor Technology & Engineering Center (China) Ltd.	8,095	-	-	-
MOBIS MANUFACTURING MEXICO S DE RL	8,089	-	-	-
HYUNDAI MOTOR AMERICA	7,570	-	26	-
WIA AUTOMOTIVE ENGINE(SHANDONG) COMPANY	5,210	-	-	-
HYUNDAI MOTOR EUROPE TECHNICAL CENTER GmbH	5,849	-	-	-
Others	174,760	-	6,812	-
	₩ 748,088	₩ -	₩ 56,711	₩ -
Affiliates by the Act [1]:				
Hyundai Steel Company	₩ 117,414	₩ -	₩ 359,713	₩ -
Hyundai Wia	24,838	-	86	-
HL green power Inc.	17,110	-	-	-
Hyundai Dymos Inc.	21,271	-	-	-
Hyundai-Autron Inc.	10,982	-	-	-
Hyundai Glovis Co., Ltd.	10,990	88	106,675	-
Hyundai PowerTech Co., Ltd.	12,964	-	14	-
Hyundai Autoever Corp.	3,849	-	131,385	5,892
INNOCEAN WORLDWIDE	3,049	-	323	-
Others	3,074	-	531	-
	₩ 225,541	₩ 88	₩ 598,727	₩ 5,892

(in thousands of USD (Note 2))	2018			
	Sales and other income	**Disposal of property, plant and equipment, etc.**	**Purchases and other expenses**	**Acquisition of property, plant and equipment, etc.**
Entities with significant influence over the Group:				
Hyundai Motor Company	$ 555,338	$ -	$ 20,155	$ 371
Kia Motors Corporation	174,594	-	8,071	99
Hyundai Mobis Co., Ltd.	40,326	-	12,445	-
	$ 770,258	$ -	$ 40,671	$ 470
Associates:				
Sejong Mirae Industrial Complex Co., Ltd.	$ 122	$ -	$ -	$ -
Incheon Ganghwa Industrial Complex Co., Ltd.	-	-	17	-
Haevichi Country Club., Ltd	-	-	587	-
Hillstate Homaesil Newstay REIT	71,518	-	-	-
	$ 71,640	$ -	$ 604	$ -
Other related parties:				
Hyundai Kefico Corporation	$ 12,246	$ -	$ -	$ -
Hyundai Rotem Company	8,378	-	26,040	-
Hyundai Capital Services, Inc.	7,883	-	3,066	-
KIA MOTORS INDIA, Pvt. Ltd.	6,141	-	-	-
Kia Motors India Private Limited	278,954	-	-	-
Hyundai PowerTech automatic transmission	22,451	-	-	-
HYUNDAI MOTOR INDIA LIMITED	25,160	-	12,465	-
HYUNDAI MOTOR EUROPE GmbH	19,024	-	-	-
MOBIS INDIA LIMITED	19,574	-	265	-
Automotive Steel Pipe India Private, Ltd.	16,859	-	1,491	-
Kia Motors Slovakia s.r.o.	13,910	-	4	-
HYUNDAI MOTOR MANUFACTURING RUS	13,104	-	1,274	-
HYUNDAI AUTOEVER AMERICA	10,641	-	-	-
Hyundai Motor Manufacturing Czech, s.r.o.	9,327	-	-	-
HYUNDAI MOTOR BRASIL MONTADORA DE AUTOMOVEIS LTDA	10,030	-	-	-
KIA MOTORS MEXICO SA DE CV	7,953	-	-	-
Hyundai Motor Technology & Engineering Center (China)	7,240	-	-	-

(in thousands of USD (Note 2))	2018			
	Sales and other income	**Disposal of property, plant and equipment, etc.**	**Purchases and other expenses**	**Acquisition of property, plant and equipment, etc.**
Ltd.				
MOBIS MANUFACTURING MEXICO S DE RL	7,235	-	-	-
HYUNDAI MOTOR AMERICA	6,770	-	23	-
WIA AUTOMOTIVE ENGINE(SHANDONG) COMPANY	4,660	-	-	-
HYUNDAI MOTOR EUROPE TECHNICAL CENTER GmbH	5,231	-	-	-
Others	156,301	-	6,092	-
	$ 669,072	$ -	$ 50,720	$ -
Affiliates by the Act [1]:				
Hyundai Steel Company	$ 105,012	$ -	$ 321,718	$ -
Hyundai Wia	22,214	-	77	-
HL green power Inc.	15,303	-	-	-
Hyundai Dymos Inc.	19,024	-	-	-
Hyundai-Autron Inc.	9,822	-	-	-
Hyundai Glovis Co., Ltd.	9,829	79	95,407	-
Hyundai PowerTech Co., Ltd.	11,595	-	13	-
Hyundai Autoever Corp.	3,442	-	117,507	5,270
INNOCEAN WORLDWIDE	2,727	-	289	-
Others	2,749	-	475	-
	$ 201,717	$ 79	$ 535,486	$ 5,270

[1] Included in the Group of Hyundai Motor Company under the Monopoly Regulation and Fair Trade Act.

(in millions of Korean won)	2017			
	Sales and other income	**Disposal of property, plant and equipment, etc.**	**Purchases and other expenses**	**Acquisition of property, plant and equipment, etc.**
Entities with significant influence over the Group:				
Hyundai Motor Company	₩ 758,264	₩ -	₩ 21,690	₩ 499
Kia Motors Corporation	213,915	-	8,995	77
Hyundai Mobis Co., Ltd.	107,777	-	13,918	-
	₩ 1,079,956	₩ -	₩ 44,603	₩ 576
Associates:				
Hwaseong City Expressway	₩ 17,943	₩ -	₩ -	₩ -

(in millions of Korean won)	2017			
	Sales and other income	**Disposal of property, plant and equipment, etc.**	**Purchases and other expenses**	**Acquisition of property, plant and equipment, etc.**
Co., Ltd.				
Damyang Green Development Co., Ltd.	2,268	-	-	-
Sejong Mirae Industrial Complex Co., Ltd.	6,697	-	-	-
Busan Jungkwan Energy Co., Ltd. and others	8,042	-	-	-
Seoul Tunnel Co., Ltd.	8,626	-	-	-
Hillstate Homaesil Newstay REIT	65,153	-	-	-
Others	262	-	867	-
	₩ 108,991	₩ -	₩ 867	₩ -
Other related parties:				
Hyundai Card Co., Ltd.	₩ 13,323	₩ -	₩ 5,868	₩ -
Hyundai Capital Services, Inc.	11,477	-	3,689	-
Hyundai Rotem Company	8,646	-	63,440	-
Hyundai Partecs Inc.	926	-	-	-
Hyundai Kefico Corporation	516	-	-	-
KIA MOTORS MEXICO SA DE CV	13,585	-	-	-
MOBIS AUTOMOTIVE SYSTEM CZECH	4,985	-	-	-
ChongQing Hyundai Mobis Automotive Parts Co., Ltd.	31,314	-	-	-
Cangzhou Hyundai Mobis Automotive Parts Co., Ltd.	4,155	-	-	-
Hyundai Motor Technology & Engineering Center (China) Ltd.	8,765	-	-	-
BEIJING HYUNDAI MOTOR COMPANY	2,032	-	-	-
HYUNDAI MOTOR MANUFACTURING RUS	10,327	-	1,005	-
HYUNDAI MOTOR BRASIL MONTADORA DE AUTOMOVEIS LTDA	5,028	-	-	-
MOBIS PARTS EUROPE N.V.	762	-	-	-
Kia Motors Slovakia s.r.o.	17,178	-	1	-
Jiangsu Mobis Automotive Parts Co., Ltd.	1,340	-	-	-
Hyundai Motor Manufacturing Alabama, LLC	10,449	-	-	-
Kia Motors Manufacturing Georgia, Inc	12,238	-	-	-
HYUNDAI MOTOR EUROPE TECHNICAL CENTER GmbH	6,988	-	-	-

(in millions of Korean won)	2017			
	Sales and other income	**Disposal of property, plant and equipment, etc.**	**Purchases and other expenses**	**Acquisition of property, plant and equipment, etc.**
Hyundai Motor Manufacturing Czech, s.r.o.	12,482	-	1	-
HYUNDAI MOTOR INDIA LIMITED	14,469	-	-	-
Beijing Hyundai Auto Finance Co., Ltd,	560	-	-	-
HYUNDAI MOTOR EUROPE GmbH	3,723	-	-	-
KIA MOTORS AMERICA, Inc.	236	-	-	-
KIA MOTORS EUROPE GmbH	3,061	-	-	-
Others	159,804	-	3,891	-
	₩ 358,369	₩ -	₩ 77,895	₩ -
Affiliates by the Act [1]:				
Hyundai Glovis Co., Ltd.	₩ 21,218	₩ 58	₩ 72,919	₩ -
Hyundai Wia	46,323	-	895	-
Hyundai Dymos Inc.	17,292	-	2	-
Hyundai PowerTech Co., Ltd.	15,338	-	7	-
Hyundai Autoever Corp.	3,469	-	127,623	9,950
Hyundai Steel Company	159,555	-	391,279	-
Others	4,119	-	968	-
	₩ 267,314	₩ 58	₩ 593,693	₩ 9,950

(in thousands of USD (Note 2))	2017			
	Sales and other income	**Disposal of property, plant and equipment, etc.**	**Purchases and other expenses**	**Acquisition of property, plant and equipment, etc.**
Entities with significant influence over the Group:				
Hyundai Motor Company	$ 678,172	$ -	$ 19,399	$ 446
Kia Motors Corporation	191,320	-	8,045	69
Hyundai Mobis Co., Ltd.	96,393	-	12,448	-
	$ 965,885	$ -	$ 39,892	$ 515
Associates:				
Hwaseong City Expressway Co., Ltd.	$ 16,048	$ -	$ -	$ -
Damyang Green Development Co., Ltd.	2,028	-	-	-
Sejong Mirae Industrial Complex Co., Ltd.	5,990	-	-	-
Busan Jungkwan Energy Co.,	7,193	-	-	-

(in thousands of USD (Note 2))	2017			
	Sales and other income	**Disposal of property, plant and equipment, etc.**	**Purchases and other expenses**	**Acquisition of property, plant and equipment, etc.**
Ltd. and others				
Seoul Tunnel Co., Ltd.	7,715	-	-	-
Hillstate Homaesil Newstay REIT	58,271	-	-	-
Others	234	-	775	-
	$ 97,479	$ -	$ 775	$ -
Other related parties:				
Hyundai Card Co., Ltd.	$ 11,916	$ -	$ 5,248	$ -
Hyundai Capital Services, Inc.	10,265	-	3,299	-
Hyundai Rotem Company	7,733	-	56,739	-
Hyundai Partecs Inc.	828	-	-	-
Hyundai Kefico Corporation	461	-	-	-
KIA MOTORS MEXICO SA DE CV	12,150	-	-	-
MOBIS AUTOMOTIVE SYSTEM CZECH	4,458	-	-	-
ChongQing Hyundai Mobis Automotive Parts Co., Ltd.	28,006	-	-	-
Cangzhou Hyundai Mobis Automotive Parts Co., Ltd.	3,716	-	-	-
Hyundai Motor Technology & Engineering Center (China) Ltd.	7,839	-	-	-
BEIJING HYUNDAI MOTOR COMPANY	1,817	-	-	-
HYUNDAI MOTOR MANUFACTURING RUS	9,236	-	899	-
HYUNDAI MOTOR BRASIL MONTADORA DE AUTOMOVEIS LTDA	4,497	-	-	-
MOBIS PARTS EUROPE N.V.	682	-	-	-
Kia Motors Slovakia s.r.o.	15,364	-	1	-
Jiangsu Mobis Automotive Parts Co., Ltd.	1,198	-	-	-
Hyundai Motor Manufacturing Alabama, LLC	9,345	-	-	-
Kia Motors Manufacturing Georgia, Inc	10,945	-	-	-
HYUNDAI MOTOR EUROPE TECHNICAL CENTER GmbH	6,250	-	-	-
Hyundai Motor Manufacturing Czech, s.r.o.	11,164	-	1	-
HYUNDAI MOTOR INDIA LIMITED	12,941	-	-	-
Beijing Hyundai Auto Finance Co., Ltd,	501	-	-	-
HYUNDAI MOTOR EUROPE GmbH	3,330	-	-	-

(in thousands of USD (Note 2))	2017			
	Sales and other income	**Disposal of property, plant and equipment, etc.**	**Purchases and other expenses**	**Acquisition of property, plant and equipment, etc.**
KIA MOTORS AMERICA, Inc.	211	-	-	-
KIA MOTORS EUROPE GmbH	2,738	-	-	-
Others	142,925	-	3,480	-
	$ 320,516	$ -	$ 69,667	$ -
Affiliates by the Act [1]:				
Hyundai Glovis Co., Ltd.	$ 18,977	$ 52	$ 65,217	$ -
Hyundai Wia	41,430	-	800	-
Hyundai Dymos Inc.	15,466	-	2	-
Hyundai PowerTech Co., Ltd.	13,718	-	6	-
Hyundai Autoever Corp.	3,103	-	114,143	8,899
Hyundai Steel Company	142,702	-	349,950	-
Others	3,684	-	866	-
	$ 239,080	$ 52	$ 530,984	$ 8,899

[1] Included in the Group of Hyundai Motor Company under the Monopoly Regulation and Fair Trade Act.

Significant financing and equity transactions for the years ended December 31, 2018 and 2017, between the Group and related parties or affiliates by the Monopoly Regulation and Fair Trade Act are as follows:

(in millions of Korean won)	2018						
	Loan transactions		**Borrowing transactions**		**Financial instruments**		
	Loans	**Collections**	**Borrowings**	**Repayments**	**Investments**	**Collection**	**Contributions in cash**
Associates:							
Hyunson Engineering & Construction spa.	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 1,672
Arboretum Construction, Inc	-	-	-	-	-	-	1,286
	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 2,958
Affiliates by the Act [1]:							
Hyundai Motor Investment & Securities (formerly, HMC Investment Securities Co., Ltd.)	₩ -	₩ -	₩ -	₩ -	₩ 974	₩ 1,455	₩ -

(in thousands of USD (Note 2))	2018						
	Loan transactions		Borrowing transactions		Financial instruments		
	Loans	Collections	Borrowings	Repayments	Investments	Collection	Contributions in cash
Associates:							
Hyunson Engineering & Construction spa.	$ -	$ -	$ -	$ -	$	$ -	$ 1,495
Arboretum Construction, Inc	-	-	-	-	-	-	1,150
	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,645
Affiliates by the Act [1]:							
Hyundai Motor Investment & Securities (formerly, HMC Investment Securities Co., Ltd.)	$ -	$ -	$ -	$ -	$ 871	$ 1,301	$ -

[1] Included in the Group of Hyundai Motor Company under the Monopoly Regulation and Fair Trade Act.

With debentures issued by the Group, Hyundai Motor Securities (formerly, HMC Investment Securities Co., Ltd.), an affiliate by the above Act, acquired an amount of ₩90,000 million ($80,494 thousand) for the year ended December 31, 2018. The amount of contributions paid from Fubonhyundai Life Insurance Co., Ltd. and Hyundai Motor Securities for plan assets, including the amount transferred in (out) affiliates, is ₩41,054 million ($36,718 thousand) and the amount of benefit paid is ₩23,832 million ($21,315 thousand) for the year ended December 31, 2018.

Hyundai Life Insurance Co., Ltd. changed its corporate name to Fubonhyundai Life Insurance Co., Ltd. in 2017.

(in millions of Korean won)	2017						
	Loan transactions		Borrowing transactions		Financial instruments		
	Loans	Collections	Borrowings	Repayments	Investments	Collection	Contributions in cash
Associates:							
Busan Jungkwan Energy Co., Ltd. and others	₩ 137	₩ -	₩ -	₩ -	₩ -	₩ -	₩ -
HYUNDAI ECOENERGY	-	-	-	-	-	-	193
	₩ 137	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 193
Affiliates by the Act [1]:							
Hyundai Motor Investment & Securities (formerly, HMC Investment Securities Co., Ltd.)	₩ -	₩ -	₩ -	₩ -	₩ 13,403	₩ 13,440	₩ -

(in thousands of USD (Note 2))	2017						
	Loan transactions		Borrowing transactions		Financial instruments		
	Loans	Collections	Borrowings	Repayments	Investments	Collection	Contributions in cash
Associates:							
Busan Jungkwan Energy Co., Ltd. and others	$ 123	$ -	$ -	$ -	$ -	$ -	$ -
HYUNDAI ECOENERGY	-	-	-	-	-	-	173
	$ 123	$ -	$ -	$ -	$ -	$ -	$ 173
Affiliates by the Act [1]:							
Hyundai Motor Investment & Securities (formerly, HMC Investment Securities Co., Ltd.)	$ -	$ -	$ -	$ -	$ 11,987	$ 12,020	$ -

[1] Included in the Group of Hyundai Motor Company under the Monopoly Regulation and Fair Trade Act.

The amount of plan assets contributed to Fubonhyundai Life Insurance Co., Ltd. and Hyundai Motor Investment & Securities (formerly, HMC Investment Securities Co., Ltd.) is ₩ 31,506 million ($28,178 thousand) and the amount of benefit paid is ₩ 33,071 million ($29,578 thousand) for the year ended December 31, 2017.

Outstanding balances arising from sales/purchases of goods and services as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018					
	Receivables			Payables		
	Trade receivables and due from customers for contract work	Loans	Others	Trade payables	Borrowings	Others
Entities with significant influence over the Group:						
Hyundai Motor Company	₩ 193,358	₩ -	₩ 10,538	₩ 5	₩ -	₩ 29,147
Kia Motors Corporation	86,365	-	997	-	-	4,316
Hyundai Mobis Co., Ltd.	7,140	-	1,878	-	-	541
	₩ 286,863	₩ -	₩ 13,413	₩ 5	₩ -	₩ 34,004
Associates:						
Sejong Mirae Industrial Complex Co., Ltd.	₩ 6,220	₩ -	₩ -	₩ -	₩ -	₩ -
Hillstate Homaesil Newstay REIT	4,709	-	-	-	-	-
KM Energy	26	-	-	-	-	-
Hyundai Engineering (Thailand) Co., Ltd.	-	19,049	5,194	-	-	-
LHT INTERNATIONAL	-	-	5	-	-	-

(in millions of Korean won)	2018					
	Receivables			Payables		
	Trade receivables and due from customers for contract work	Loans	Others	Trade payables	Borrowings	Others
ENGINEERING JOINT STOCK COMPANY						
Busan Finance Center PFV. Co., Ltd.	-	-	5,159	-	-	251
Haevichi Country Club., Ltd.	-	-	-	33	-	45
HYUNDAI ENGINEERING(CAMBODIA) CO., LTD.	-	27	-	-	-	-
	₩ 10,955	₩ 19,076	₩ 10,358	₩ 33	₩ -	₩ 296
Other related parties:						
Hyundai Card Co., Ltd.	₩ -	₩ -	₩ -	₩ -	₩ -	₩ 34
Hyundai Rotem Company	890	-	634	-	-	61
Hyundai Capital Services, Inc.	799	-	-	153	-	34
Hyundai Partecs Corporation	130	-	-	-	-	-
Hyundai Kefico Corporation	4,082	-	-	-	-	4,645
Dymos Lear Automotive India Private Limited	12,496	-	-	-	-	19
Hyundai PowerTech automatic transmission	7,751	-	-	-	-	12
Hyundai Motor Manufacturing Alabama, LLC	7,560	-	2,151	-	-	3,097
Automotive Steel Pipe India Private, Ltd.	2,962	-	-	-	-	-
ChongQing Hyundai Mobis Automotive Parts Co., Ltd.	5,463	-	-	-	-	-
Glovis India, Pvt. Ltd.	5,401	-	-	-	-	-
BEIJING HYUNDAI MOTOR COMPANY	3,138	-	-	-	-	-
Kia Motors Slovakia s.r.o.	2,850	-	-	-	-	1,085
Cangzhou Hyundai Mobis Automotive Parts Co., Ltd.	2,798	-	-	-	-	-
HYUNDAI MOTOR INDIA LIMITED	2,452	-	75	-	-	1,332
MOBIS INDIA LIMITED	1,899	-	-	-	-	28
Hyundai Motor Manufacturing Czech, s.r.o.	1,880	-	-	-	-	532
KIA MOTORS MEXICO SA DE CV	1,858	-	-	-	-	-
HYUNDAI MOTOR AMERICA	1,667	-	-	-	-	-
HYUNDAI MOTORMANUFACTURING RUS	1,612	-	-	-	-	697
Hyundai Steel Chongqing Co., Ltd.	1,553	-	-	-	-	11

(in millions of Korean won)	2018					
	Receivables			Payables		
	Trade receivables and due from customers for contract work	Loans	Others	Trade payables	Borrowings	Others
Others	8,674	-	6,737	-	-	9,240
	₩ 77,915	₩ -	₩ 9,597	₩ 153	₩ -	₩ 20,827
Affiliates by the Act [1]:						
Hyundai Steel Company	₩ 45,712	₩ -	₩ 2,166	₩ 128,148	₩ -	₩ 2,345
Hyundai Wia	16,711	-	638	-	-	3,026
HL Green power	3,971	-	-	-	-	-
Hyundai Dymos Inc.	11,827	-	-	-	-	1,154
Hyundai PowerTech Co., Ltd.	9,690	-	1	-	-	1,906
Hyundai Glovis Co., Ltd.	535	-	342	10,526	-	4,997
Hyundai Autoever Corp.	1,042	-	776	22,013	-	6,975
INNOCEAN WORLDWIDE	36	-	-	4,232	-	1,213
Hyundai Special Steel	1,394	-	-	-	-	-
Others	250	-	38	-	-	67
	₩ 91,168	₩ -	₩ 3,961	₩ 164,919	₩ -	₩ 21,683

(in thousands of USD (Note 2))	2018					
	Receivables			Payables		
	Trade receivables and due from customers for contract work	Loans	Others	Trade payables	Borrowings	Others
Entities with significant influence over the Group:						
Hyundai Motor Company	$ 172,934	$ -	$ 9,425	$ 4	$ -	$ 26,068
Kia Motors Corporation	77,243	-	892	-	-	3,860
Hyundai Mobis Co., Ltd.	6,386	-	1,680	-	-	484
	$ 256,563	$ -	$ 11,997	$ 4	$ -	$ 30,412
Associates:						
Sejong Mirae Industrial Complex Co., Ltd.	$ 5,563	$ -	$ -	$ -	$ -	$ -
Hillstate Homaesil Newstay REIT	4,212	-	-	-	-	-
KM Energy	23	-	-	-	-	-
Hyundai Engineering (Thailand) Co., Ltd.	-	17,037	4,645	-	-	-
LHT INTERNATIONAL ENGINEERING JOINT STOCK COMPANY	-	-	4	-	-	-
Busan Finance Center PFV. Co., Ltd.	-	-	4,614	-	-	224
Haevichi Country Club., Ltd.	-	-	-	30	-	40
HYUNDAI	-	24	-	-	-	-

(in thousands of USD (Note 2))	2018					
	Receivables			Payables		
	Trade receivables and due from customers for contract work	Loans	Others	Trade payables	Borrowings	Others
ENGINEERING(CAMBODIA) CO., LTD.	$ 9,798	$ 17,061	$ 9,263	$ 30	$ -	$ 265
Other related parties:						
Hyundai Card Co., Ltd.	$ -	$ -	$ -	$ -	$ -	$ 30
Hyundai Rotem Company	796	-	567	-	-	55
Hyundai Capital Services, Inc.	715	-	-	137	-	30
Hyundai Partecs Corporation	116	-	-	-	-	-
Hyundai Kefico Corporation	3,651	-	-	-	-	4,154
Dymos Lear Automotive India Private Limited	11,176	-	-	-	-	17
Hyundai PowerTech automatic transmission	6,932	-	-	-	-	11
Hyundai Motor Manufacturing Alabama, LLC	6,761	-	1,924	-	-	2,770
Automotive Steel Pipe India Private, Ltd.	2,649	-	-	-	-	-
ChongQing Hyundai Mobis Automotive Parts Co., Ltd.	4,886	-	-	-	-	-
Glovis India, Pvt. Ltd.	4,831	-	-	-	-	-
BEIJING HYUNDAI MOTOR COMPANY	2,807	-	-	-	-	-
Kia Motors Slovakia s.r.o.	2,549	-	-	-	-	970
Cangzhou Hyundai Mobis Automotive Parts Co., Ltd.	2,502	-	-	-	-	-
HYUNDAI MOTOR INDIA LIMITED	2,193	-	67	-	-	1,191
MOBIS INDIA LIMITED	1,698	-	-	-	-	25
Hyundai Motor Manufacturing Czech, s.r.o.	1,681	-	-	-	-	476
KIA MOTORS MEXICO SA DE CV	1,662	-	-	-	-	-
HYUNDAI MOTOR AMERICA	1,491	-	-	-	-	-
HYUNDAI MOTOR MANUFACTURING RUS	1,442	-	-	-	-	623
Hyundai Steel Chongqing Co., Ltd.	1,389	-	-	-	-	10
Others	7,758	-	6,025	-	-	8,264
	$ 69,685	$ -	$ 8,583	$ 137	$ -	$ 18,626
Affiliates by the Act [1]:						
Hyundai Steel Company	$ 40,884	$ -	$ 1,937	$ 114,612	$ -	$ 2,097
Hyundai Wia	14,946	-	571	-	-	2,706
HL Green power	3,552	-	-	-	-	-

(in thousands of USD (Note 2))	2018					
	Receivables			Payables		
	Trade receivables and due from customers for contract work	Loans	Others	Trade payables	Borrowings	Others
Hyundai Dymos Inc.	10,578	-	-	-	-	1,032
Hyundai PowerTech Co., Ltd.	8,666	-	1	-	-	1,705
Hyundai Glovis Co., Ltd.	478	-	306	9,414	-	4,469
Hyundai Autoever Corp.	932	-	694	19,688	-	6,238
INNOCEAN WORLDWIDE	32	-	-	3,785	-	1,085
Hyundai Special Steel	1,247	-	-	-	-	-
Others	224	-	34	-	-	60
	$ 81,539	$ -	$ 3,543	$ 147,499	$ -	$ 19,392

[1] Included in the Group of Hyundai Motor Company under the Monopoly Regulation and Fair Trade Act.

(in millions of Korean won)	2017					
	Receivables			Payables		
	Trade receivables and due from customers for contract work	Loans	Others	Trade payables	Borrowings	Others
Entities with significant influence over the Group:						
Hyundai Motor Company	₩ 187,183	₩ -	₩ 10,959	₩ 110	₩ -	₩ 35,591
Kia Motors Corporation	72,879	-	245	-	-	6,423
Hyundai Mobis Co., Ltd.	33,388	-	1,949	-	-	4,425
	₩ 293,450	₩ -	₩ 13,153	₩ 110	₩ -	₩ 46,439
Associates:						
Busan Finance Center PFV. Co., Ltd.	₩ -	₩ -	₩ 3,871	₩ -	₩ -	₩ -
Damyang Green Development Co., Ltd.	2,842	-	-	-	-	-
Sejong Mirae Industrial Complex Co., Ltd.	9,861	-	-	-	-	119
Hyundai Engineering (Thailand) Co., Ltd.	-	19,049	5,274	-	-	-
Busan Jungkwan Energy Co., Ltd. and others	4,966	2,742	-	-	-	-
Seoul Tunnel Co., Ltd.	8,298	-	-	-	-	-
Hillstate Homaesil Newstay REIT	3,261	-	-	-	-	-
Others	26	-	5	33	-	651
	₩ 29,254	₩ 21,791	₩ 9,150	₩ 33	₩ -	₩ 770
Other related parties:						
Hyundai Card Co., Ltd.	₩ 912	₩ -	₩ -	₩ -	₩ -	₩ 4,842

(in millions of Korean won)	2017					
	Receivables			Payables		
	Trade receivables and due from customers for contract work	Loans	Others	Trade payables	Borrowings	Others
Hyundai Rotem Company	653	-	1,738	7,576	-	1,812
KIA MOTORS MEXICO SA DE CV	6,855	-	1,014	-	-	-
ChongQing Hyundai Mobis Automotive Parts Co., Ltd.	5,307	-	-	-	-	-
Hyundai Steel Chongqing Co., Ltd.	4,559	-	138	-	-	87
BEIJING HYUNDAI MOTOR COMPANY	2,846	-	-	-	-	-
Cangzhou Hyundai Mobis Automotive Parts Co., Ltd.	2,823	-	85	-	-	772
WIA AUTOMOTIVE ENGINE(SHANDONG) COMPANY	2,739	-	219	-	-	46
HYUNDAI MOTOR MANUFACTURING RUS	2,469	-	281	1	-	2,809
Hyundai Motor Manufacturing Czech, s.r.o.	2,177	-	-	-	-	381
Hyundai Steel Tianjin Co., Ltd	2,024	-	334	-	-	-
HYUNDAI MOTOR INDIA LIMITED	2,013	-	-	-	-	-
Beijing Dymos Transmission Co., Ltd.	1,978	-	-	-	-	238
Kia Motors Slovakia s.r.o.	1,603	-	1	-	-	411
Hyundai Motor Technology & Engineering Center (China) Ltd.	1,560	-	45	-	-	1,135
HYUNDAI MOTOR BRASIL MONTADORA DE AUTOMOVEIS LTDA	1,012	-	220	-	-	-
HYUNDAI MOTOR AMERICA	881	-	-	4	-	-
Beijing Hyundai Mobis Automotive Parts Co., Ltd.	865	-	96	-	-	1,511
Hyundai Motor Manufacturing Alabama, LLC	786	-	558	-	-	-
Others	7,733	-	5,655	1,817	-	49,813
	₩ 51,795	₩ -	₩ 10,384	₩ 9,398	₩ -	₩ 63,857
Affiliates by the Act [1]:						
Hyundai Steel Company	₩ 65,188	₩ -	₩ 2,284	₩ 42,707	₩ -	₩ 4,223
Hyundai Wia	18,783	-	232	-	-	2,277
Hyundai Glovis Co., Ltd.	5,333	-	1,159	2,451	-	4,105
Hyundai Autoever Corp.	1,350	-	2,420	28,091	-	5,228
Hyundai PowerTech Co., Ltd.	1,471	-	38	-	-	1
Others	7,192	-	38	4,831	-	3,186
	₩ 99,317	₩ -	₩ 6,171	₩ 78,080	₩ -	₩ 19,020

(in thousands of USD (Note 2))	2017					
	Receivables			Payables		
	Trade receivables and due from customers for contract work	Loans	Others	Trade payables	Borrowings	Others
Entities with significant influence over the Group:						
Hyundai Motor Company	$ 167,412	$ -	$ 9,801	$ 98	$ -	$ 31,832
Kia Motors Corporation	65,181	-	219	-	-	5,745
Hyundai Mobis Co., Ltd.	29,861	-	1,743	-	-	3,958
	$ 262,454	$ -	$ 11,763	$ 98	$ -	$ 41,535
Associates:						
Busan Finance Center PFV. Co., Ltd.	$ -	$ -	$ 3,462	$ -	$ -	$ -
Damyang Green Development Co., Ltd.	2,542	-	-	-	-	-
Sejong Mirae Industrial Complex Co., Ltd.	8,819	-	-	-	-	106
Hyundai Engineering (Thailand) Co., Ltd.	-	17,037	4,717	-	-	-
Busan Jungkwan Energy Co., Ltd. and others	4,441	2,452	-	-	-	-
Seoul Tunnel Co., Ltd.	7,422	-	-	-	-	-
Hillstate Homaesil Newstay REIT	2,917	-	-	-	-	-
Others	23	-	4	30	-	582
	$ 26,164	$ 19,489	$ 8,183	$ 30	$ -	$ 688
Other related parties:						
Hyundai Card Co., Ltd.	$ 816	$ -	$ -	$ -	$ -	$ 4,331
Hyundai Rotem Company	584	-	1,554	6,776	-	1,621
KIA MOTORS MEXICO SA DE CV	6,131	-	907	-	-	-
ChongQing Hyundai Mobis Automotive Parts Co., Ltd.	4,746	-	-	-	-	-
Hyundai Steel Chongqing Co., Ltd.	4,077	-	123	-	-	78
BEIJING HYUNDAI MOTOR COMPANY	2,545	-	-	-	-	-
Cangzhou Hyundai Mobis Automotive Parts Co., Ltd.	2,525	-	76	-	-	690
WIA AUTOMOTIVE ENGINE(SHANDONG) COMPANY	2,450	-	196	-	-	41
HYUNDAI MOTOR MANUFACTURING RUS	2,208	-	251	1	-	2,512
Hyundai Motor Manufacturing Czech, s.r.o.	1,947	-	-	-	-	341
Hyundai Steel Tianjin Co., Ltd	1,810	-	299	-	-	-
HYUNDAI MOTOR INDIA LIMITED	1,800	-	-	-	-	-
Beijing Dymos Transmission	1,769	-	-	-	-	213

(in thousands of USD (Note 2))	2017					
	Receivables			Payables		
	Trade receivables and due from customers for contract work	Loans	Others	Trade payables	Borrowings	Others
Co., Ltd.						
Kia Motors Slovakia s.r.o.	1,434	-	1	-	-	368
Hyundai Motor Technology & Engineering Center (China) Ltd.	1,395	-	40	-	-	1,015
HYUNDAI MOTOR BRASIL MONTADORA DE AUTOMOVEIS LTDA	905	-	197	-	-	-
HYUNDAI MOTOR AMERICA	788	-	-	4	-	-
Beijing Hyundai Mobis Automotive Parts Co., Ltd.	774	-	86	-	-	1,351
Hyundai Motor Manufacturing Alabama, LLC	703	-	499	-	-	-
Others	6,916	-	5,058	1,625	-	44,551
	$ 46,323	$ -	$ 9,287	$ 8,406	$ -	$ 57,112
Affiliates by the Act [1]:						
Hyundai Steel Company	$ 58,302	$ -	$ 2,043	$ 38,196	$ -	$ 3,777
Hyundai Wia	16,799	-	207	-	-	2,036
Hyundai Glovis Co., Ltd.	4,770	-	1,037	2,192	-	3,671
Hyundai Autoever Corp.	1,207	-	2,164	25,124	-	4,676
Hyundai PowerTech Co., Ltd.	1,316	-	34	-	-	1
Others	6,432	-	34	4,321	-	2,849
	$ 88,826	$ -	$ 5,519	$ 69,833	$ -	$ 17,010

[1] Included in the Group of Hyundai Motor Company under the Monopoly Regulation and Fair Trade Act.

Details of impairment loss and provision for impairment related to receivables with related parties as at and for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018		2017	
	Provision for impairment	Impairment loss	Provision for impairment	Impairment loss
Associates	₩ 24,291	₩ -	₩ 42,534	₩ 3,852

(in thousands of USD (Note 2))	2018		2017	
	Provision for impairment	Impairment loss	Provision for impairment	Impairment loss
Associates	$ 21,725	$ -	$ 38,041	$ 3,445

Pledged assets provided as collateral for related parties as at December 31, 2018, are as follows:

(in millions of Korean won and in thousands of USD (Note 2))	Description of pledged assets	Book amount				Security holder	Remarks
		Korean won		US dollars			
Associates:							
The Gyeongnam Highway Co., Ltd.	Investment in associate	₩	18	$	16	Kookmin Bank and others	Loan guarantee
The Ulsan Harbour Bridge Co., Ltd.	Investment in associate		1,864		1,667	Kookmin Bank and others	Loan guarantee
Hwaseong City Expressway Co., Ltd.	Investment in associate		5,235		4,682	NongHyup Bank and others	Loan guarantee
Sejong Mirae Industrial Complex Co., LTD. and others	Investment in associate		589		527	Woori Bank and others	Loan guarantee
		₩	7,706	$	6,892		

Supplemental funding arrangements and others provided to related parties as at December 31, 2018, are as follows:

(in millions of Korean won and in thousands of USD (Note 2))	Amount used [1]				Remarks
	Korean won		US dollars		
Associates:					
Hwaseong City Expressway Co., Ltd.	₩	3,513	$	3,142	Supplemental funding arrangements of borrowings

[1] Limits on payment guarantee is equal to amount used.

The compensation paid or payable to key management for employee services for the years ended December 31, 2018 and 2017, consists of the following:

(in millions of Korean won)	2018		2017	
Short-term employee benefits	₩	58,360	₩	51,809
Post-employment benefits		7,968		9,343
Long-term employee benefits		21		19
	₩	66,349	₩	61,171

(in thousands of USD (Note 2))	2018		2017	
Short-term employee benefits	$	52,196	$	46,337
Post-employment benefits		7,126		8,356
Long-term employee benefits		19		17
	$	59,341	$	54,710

36. Pledged Assets

Pledged assets provided as collateral for the Group's borrowings and guarantees as at December 31, 2018, are as follows:

(in millions of Korean won and in thousands of USD (Note 2))

Description	Detailed title	Book amount		Security holder	Remarks
		Korean won	US dollars		
Cash and cash equivalents	Financial deposits	₩ 11,455	$ 10,245	Korea Development Bank and others	For borrowings
Short-term financial instruments	Financial deposits	94	84	KEB Hana Bank and others	For seizure related to lawsuit
Short-term financial instruments	Financial deposits	737	659	KEB Hana Bank	For lease deposit
Short-term financial instruments	Financial deposits	1,100	984	KEB Hana Bank	Warranty for N-Tower
Other receivables	Court deposits	5,706	5,103	-	Court deposit
Long-term financial instruments	Financial deposits	41	37	KEB Hana Bank and others	Deposit for bank account
Long-term financial instruments	Financial deposits	3,344	2,991	Shinhan bank and others	Gaepo 8 deposit guarantee
Long-term financial instruments	Financial deposits	1,165	1,042	First Gulf Bank	For construction payment guarantee
Long-term financial instruments	Financial deposits	65	58	Kookmin Bank	Deposit for license
Long-term financial instruments	Financial deposits	20	18	Kookmin Bank	Deposit for license
Long-term financial instruments	Financial deposits	721	645	ING Bank(Turkey)	Deposit of lawsuit
Long-term financial instruments	Financial deposits	258	231	KEB Hana Bank	Deposit for issuance of certificate for the supervision service contract
Financial assets at FVPL(Non-current)	Construction Guarantee Cooperative	77,102	68,958	Construction Guarantee Cooperative	For construction payment guarantee and others
Financial assets at FVPL (Non-current)	Engineering Financial Cooperative and others	7,731	6,557	Engineering Financial Cooperative	Guarantee for contract and guarantee for advance payment and others
Financial assets at FVPL (non-current)	Korea Specialty Contractor Financial Cooperative	1,281	1,146	Korea Specialty Contractor Financial Cooperative	For collateral for borrowings, construction payment guarantee and others
Investment property	Land	40,791	36,482	HYUNDAI THE LINKS CO.LTD	Guarantee for business performance[1]
		₩ 151,611	$ 135,240		

[1] Land in investment property has been pledged as collateral for up to a maximum of ₩ 82,030 million ($ 73,366 thousand) for guarantee for performance.

In relation to borrowings of Hyundai Energy Inc., one of the subsidiaries, the subsidiary provided its ordinary shares as collateral and its shareholders provided the security rights. In addition, the comprehensive insurance program for the plants (coverage: ₩ 1,242,973 million ($ 1,111,683 thousand)) is provided as collateral. Meanwhile, in accordance with the subsidiary's loan agreement with its creditors, the plant located in Yeosu is provided as collateral. Total carrying amount of property, plant and equipment that are provided as collateral as at December 31, 2018 amounts to ₩426,930 million ($381,835 thousand), and related loan arrangements' limit amount to ₩390,000 million ($ 348,806 thousand) with executed amount of ₩348,900 million ($ 312,047 thousand).

Pledged assets provided as collateral by the Group to other parties, excluding the Group's related parties as at December 31, 2018, are as follows:

(*in millions of Korean won and in thousands of USD (Note 2)*)

Company	Description of pledged assets	Detailed title	Book amount		Security holder	Remarks
			Korean won	US dollars		
Incheon-Gimpo Expressway Co., Ltd.	FVPL	Shares of Incheon-Gimpo Expressway Co.,Ltd.	₩ 5,898	$ 5,275	Kookmin Bank and others	For borrowings
West Seoul urban expressway	FVPL	Shares of West Seoul urban expressway	65,971	59,003	NongHyup Bank	For borrowings
The 2nd YoungdongHighway Co., Ltd.	FVPL	Shares of the 2nd Youngdong Highway Co., Ltd.	21,381	19,123	Shinhan Bank and others	For borrowings
Sangju-Yeongcheon Expressway Co., Ltd.	FVPL	Shares of Sangju-Yeongcheon Expressway Co., Ltd.	3,988	3,567	Korea Development Bank and others	For borrowings
The 2nd Seoul-Incheon Linking Highway Co., Ltd.	FVPL	Shares of the 2nd Seoul -Incheon Linking Highway Co., Ltd.	7,008	6,268	Kookmin Bank and others	For borrowings
Seoul tunnel Co., Ltd.	FVPL	Shares of Seoul tunnel Co., Ltd.	22,535	20,155	Korea Development Bank and others	For borrowings
Mileseum Co., Ltd.	FVPL	Shares of Mileseum Co., Ltd.	-	-	Korea Development Bank and others	For borrowings
Miraeseum 2nd Co., Ltd	FVPL	Shares of Miraeseum 2nd Co., Ltd	-	-	Korea Development Bank and others	For borrowings
Miraeseum 3rd Co., Ltd.	FVPL	Shares of Miraeseum 3rd Co., Ltd.	-	-	Korea Development Bank and others	For borrowings
Miraeseum 4th Co., Ltd.	FVPL	Shares of Miraeseum 4th Co., Ltd.	-	-	Korea Development Bank and others	For borrowings
Jinju Chongchun Co., Ltd	FVPL	Shares of Jinju Chongchun Co., Ltd	-	-	Industrial Bank of Korea and others	For borrowings
Ulsan Chongchun Co., Ltd	FVPL	Shares of Ulsan Chongchun Co., Ltd	-	-	Industrial Bank of Korea and others	For borrowings
Seosan Chongchun Co., Ltd	FVPL	Shares of Seosan Chongchun Co., Ltd	-	-	Korea Development Bank and others	For borrowings
Ulju Chongchun Co., Ltd	FVPL	Shares of Ulju Chongchun Co., Ltd	-	-	Kyobo Life Insurance Co., Ltd. and others	For borrowings

(in millions of Korean won and in thousands of USD (Note 2))

Company	Description of pledged assets	Detailed title	Book amount		Security holder	Remarks
			Korean won	US dollars		
Kaya Railroad Co., Ltd.	FVPL	Shares of Kaya Railroad Co., Ltd.	-	-	National Pension Service and others	For borrowings
Heemangsewoom Co., Ltd.	FVPL	Shares of hHeemangsewoom Co., Ltd.	-	-	Korea Finance Corporation and others	For borrowings
ERail Co., Ltd.	FVPL	Shares of ERail Co., Ltd.	-	-	Korea Development Bank and others	For borrowings
WESTERN Metro Co., Ltd	FVPL	Shares of WESTERN Metro Co., Ltd	-	-	Korea Development Bank and others	For borrowings
Deajeon Clean Water Co., Ltd	FVPL	Shares of Deajeon Clean Water Co., Ltd	-	-	Samsung life insurance and others	For borrowings
Pocheon Eco-Development Co., Ltd.	FVOCI	Shares of Pocheon Eco-Development Co., Ltd.	-	-	Trinity YongJung Co., Ltd.	For borrowings
Cham Daun Changjo Co., Ltd.	FVOCI	Shares of Cham Daun Changjo Co., Ltd.	-	-	Kyobo Life Insurance Co., Ltd. and others	For borrowings
Kwangkyo Baumteo Co., Ltd.	FVOCI	Shares of Kwangkyo Baumteo Co., Ltd.	-	-	Korea BTL Infra Investment Co., Ltd. and others	For borrowings
Yongin Heemang Co., Ltd.	FVOCI	Shares of Yongin Heemang Co., Ltd.	-	-	Heungkuk Life Insurance Co., Ltd. and others	For borrowings
Yeolin ChangJo Kyoyook Co., Ltd.	FVOCI	Shares of Yeolin ChangJo Kyoyook Co., Ltd.	-	-	NongHyup Bank	For borrowings
Kyeongbuk Bio Industrial Complex Development Co., Ltd	FVOCI	Shares of Kyeongbuk Bio Industrial Complex Development Co., Ltd.	100	89	Korea Development Bank and others	For borrowings
JINJU ROOT SANDAN DEVELOPMENT CO., LTD.	FVOCI	Shares of JINJU ROOT SANDAN DEVELOPMENT CO., LTD.	8	7	Kyongnam Bank and others	For borrowings
			₩ 126,889	$ 113,487		

37. Contingencies and Commitments

Guarantees provided by the Group to other parties, excluding the Group's related parties, as at December 31, 2018, are as follows:

(in millions of Korean won)

Beneficiary	Amount used[1]	Remarks
North A-hyeon 1-1 sector residential redevelopment association etc	₩ 1,790,724	Business drive expense
Hillstate Eco Misa Vendee and others	949,644	Interim payment
ERail Co., Ltd. and others	801,530	Fund supplement agreements

(in millions of Korean won)

Beneficiary	Amount used[1]	Remarks
Posco Engineering Co., Ltd. and others	163	Guarantee for contract performance and others
	₩ 3,542,061	

(in thousands of USD (Note 2))

Beneficiary	Amount used[1]	Remarks
North A-hyeon 1-1 sector residential redevelopment association etc	$ 1,601,578	Business drive expense
Hillstate Eco Misa Vendee and others	849,337	Interim payment
ERail Co., Ltd. and others	716,868	Fund supplement agreements
Posco Engineering Co., Ltd. and others	146	Guarantee for contract performance and others
	$ 3,167,929	

[1] Limits on payment guarantee are ₩ 7,260,920 million ($ 6,493,981 thousand).

In addition, the Group entered into an agreement for conditional takeover of debt for completion of the Teheran-ro 237 Development project and others. [Limit: ₩9,287,250 million ($ 8,306,279 thousand), executed: ₩6,440,255 million ($ 5,759,999 thousand)]. As at December 31, 2018, the Group as a construction investor has guaranteed minimum revenue to financial investors in connection with Busan Finance Center PFV Co., Ltd. and others.

As a common practice in the Korean construction industry, construction companies exchange mutual guarantees for the performance of construction. As at December 31, 2018, the performance guarantees that the Group has provided to the other construction companies' projects amount to ₩ 1,930,794 million ($ 1,726,853 thousand).

Other than guarantees provided by the Group above, in connection with the development company's project financing ("PF") borrowings, the major guarantees provided by the Group as at December 31, 2018, are as follows:

(in millions of Korean won and in thousands of USD)

Area	Financial institution	Loan amount		Beginning date	Maturity	Description	Type
		Korean won	US dollars				
Incheon	Nonmonetary institutions	₩ 255,000	$ 228,065	03/14/2018	03/13/2019	Joint guarantee	ABCP
Gyeonggi	Nonmonetary institutions	167,600	149,897	06/22/2018	03/22/2019	Joint guarantee	ABCP
Seoul	Nonmonetary institutions	149,000	133,262	05/16/2018	03/15/2019	Joint guarantee	ABL

(in millions of Korean won and in thousands of USD)

Area	Financial institution	Loan amount		Beginning date	Maturity	Description	Type
		Korean won	US dollars				
Seoul	Nonmonetary institutions	99,629	89,106	03/30/2018	03/28/2019	Joint guarantee	ABCP
Daegu	Nonmonetary institutions	80,000	71,550	12/17/2018	06/17/2022	Joint guarantee	ABS
Gangwon	Nonmonetary institutions	78,100	69,851	10/05/2018	04/05/2019	Joint guarantee	ABCP
Seoul	Nonmonetary institutions	75,649	67,659	03/30/2018	03/28/2019	Joint guarantee	ABCP
Seoul	Nonmonetary institutions	74,722	66,829	03/30/2018	03/28/2019	Joint guarantee	ABCP
Gyeonggi	Nonmonetary institutions	70,000	62,606	09/14/2018	09/14/2021	Joint guarantee	ABS
Gyeonggi	Nonmonetary institutions	70,000	62,606	04/07/2017	10/07/2020	Joint guarantee	ABSTB

In addition, the outstanding borrowings from the project-administering companies amount to ₩1,566,700 million ($1,401,216 thousand), consisting of Asset-Backed Commercial Paper (ABCP) type for ₩1,444,200 million ($ 1,291,655 thousand) as well as other PF Loan type for ₩122,500 million ($ 109,561 thousand). Moreover, in regards to the outstanding PF borrowings of ₩ 1,566,700 million ($ 1,401,216 thousand), the Group provides payment guarantees up to ₩1,747,530 million ($ 1,562,946 thousand). Further, the Group provides joint guarantees of ₩7,892,799 million ($ 7,059,117 thousand) for the housing guarantee issued by the developer's Housing and Urban Guarantee Corporation and others.

Guarantees provided to the Group by other parties, excluding the Group's related parties, as at December 31, 2018, are as follows:

(in millions of Korean won and thousands of USD)

Guarantee	Korean won		Translation into U.S. dollars		Remarks
Construction Guarantee Cooperative	KRW	4,242,438	USD	3,794,328	Guarantee for construction performance and others
Seoul Guarantee Insurance Co., Ltd.	KRW	794,150	USD	710,267	Guarantee for construction performance and others
Korea Housing & Urban Guarantee Co., Ltd.	KRW	8,500,238	USD	7,602,395	Guarantee for housing and others
KEB Hana Bank and others	USD	4,854,231	USD	4,854,231	Guarantee for overseas construction and others
Engineering Financial Cooperative and others	KRW	764,359	USD	683,623	Guarantee for construction performance and others
Posco Engineering Co., Ltd.	KRW	938	USD	839	Guarantee for construction performance and others
KEB Hana Bank	KRW	486,436	USD	435,056	Guarantee for

(in millions of Korean won and thousands of USD)

Guarantee	Korean won		Translation into U.S. dollars		Remarks
					construction performance and others
The Export-Import Bank of Korea and others	USD	2,250,243	USD	2,250,243	Guarantee for construction performance and others
KEB Hana Bank	USD	2,023,171	USD	2,023,171	Guarantee for other foreign currency payment
Korea South-East Power Co., Ltd.	KRW	47,067	USD	42,096	Pledging of shares
NH Power the 2nd Co., Ltd.	KRW	14,402	USD	12,881	Pledging of shares
NongHyup Bank	KRW	9,601	USD	8,587	Pledging of shares
Boim Energy Co., Ltd.	KRW	2,903	USD	2,596	Pledging of shares
	KRW	14,862,532	USD	13,292,668	
	USD	9,127,645	USD	9,127,645	

As at December 31, 2018, the Group has agreements with several financial institutions for the trade financing such as Letter of Credit (comprehensive credit limit: USD 3,007 million). In addition, the Group has entered into overdraft agreements with 11 financial institutions (limit: ₩316,000 million ($ 282,622 thousand) & $ 336 million). Also, the Group has credit sales loan agreements with 9 financial institutions (limit: ₩1,359,800 million ($ 1,216,170 thousand).

As at December 31, 2018, the Group has been named as a defendant in 214 lawsuits and claims pending for alleged damage in aggregation of approximately ₩936,945 million ($ 837,980 thousand). Beside such cases, 7 arbitrations are underway as at December 31, 2018. However, the Group believes that the final conclusion and the effects of such lawsuits cannot be reasonably estimated or the measurements or timing of outflows of resources are uncertain. The Group has recognized provisions for litigation amounting to ₩37,901 million ($ 33,898 thousand) as at December 31, 2018.

As at December 31, 2018, the Group has provided 1 blank note, 20 blank checks and 6 checks (₩45,996 million ($ 41,138 thousand)) as collateral to related institutions for borrowings, payment guarantees, and others.

The bond issuance contracts issued by Hyundai Engineering Co., Ltd. and Hyundai Engineering & Steel Industries Co., Ltd., the Group's subsidiaries, provide for such terms and conditions that the debt-to-equity ratio shall be kept at less than 800%, 500% and 300%; collateral shall not exceed 200%, 500% and 300% of equity; and disposal of assets shall not exceed ₩2,000,000 million ($ 1,788,749 thousand) or ₩500,000 million ($447,187 thousand) and 100% of total assets a year. The Group shall be required to comply with the said terms and conditions. In case of failure to comply with these obligations, the Group's rights of net profit in the applicable period may be forfeited. Such bonds applicable to these terms and conditions amount to ₩1,650,000 million ($1,475,718 thousand).

Long-term contracts of the Group's subsidiary, Hyundai Energy Inc., are as follows:

Counterparty	Description of contract	Contract period
Korea South-East Power Co., Ltd.	Real estate lease	27 years from 04/01/2010
Boim Energy Co., Ltd.	Coal purchases	4 years from 04/16/2015
Boim Energy Co., Ltd.	Coal unloading, storage and transit piping management of heat	25 years from starting of unloading, storage
Korea South-East Power Co., Ltd.	Operation and maintenance of integrated energy business and coal purchases	25 years from two months before completion of the integrated energy facilities in Yeosu
GS-Caltex Corporation	Steam supplies	4 years from starting of steam supply
LG CHEM LTD.	Steam supplies	10 years from starting of steam supply
KR Copolymer Co., Ltd.	Steam supplies	10 years from starting of steam supply
IC Chemical Co., Ltd.	Steam supplies	10 years from starting of steam supply
YLEM TECHNOLOGY Inc.	Steam supplies	10 years from starting of steam supply
Gudow Chemical Co., Ltd.	Steam supplies	10 years from starting of steam supply

Hyundai Energy Inc. changed the due date of completion of the integrated energy facilities upon consent of the unsubordinated lenders from June 30, 2012 to December 31, 2012. Event of default may occur in relation to borrowings amounting to ₩ 333,320 million ($ 298,113 thousand) if the requirement of comprehensive completion is not satisfied until the effective due date and it is not solved within 30 days from the date of receipt of corrective notice of Korea Development Bank.

As at December 31, 2018, the Group provides call options and put options to a financial investor with rights to exercise the purchase and sale of the shares in connection with the Southeast District Logistics Center of Seoul project and others.

38. Consolidated Statements of Cash Flows

Cash generated from operations for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018	2017
Profit for the year	₩ 535,303	₩ 371,564

(in millions of Korean won)	**2018**	**2017**
Adjustments:		
Transfer to provision for construction warranties	87,435	110,004
Transfer to provision for construction loss	18,049	47,202
Transfer to provision for litigation	40,760	6,675
Transfer to other provisions	2,650	21,691
Loss on valuation of inventories	549	2,203
Post-employment benefits	70,818	82,721
Depreciation	114,724	132,539
Depreciation of investment property	1,626	1,949
Depreciation on assets not in use	3,455	1,200
Amortization	55,768	58,873
Impairment loss	18,402	64,290
Other impairment loss	47,703	139,231
Other long-term employee benefits	4,151	3,739
Loss on foreign currency transactions (finance costs)	555	104
Loss on foreign currency translation (finance costs)	6,737	152,219
Loss on foreign currency translation (other expenses)	30,228	143,464
Loss on derivative transactions	59	-
Loss on valuation of derivatives	16	122
Loss on foreign operations translation	476	50,979
Loss on disposal of property, plant and equipment	6,385	1,468
Loss on disposal of investment property	1,254	612
Impairment loss on investment property	-	9,453
Loss on disposal of intangible assets	1	-
Impairment loss on intangible assets	2,170	183
Loss on valuation of financial assets at fair value	28	-
Impairment loss on financial assets at fair value	28,422	-
Loss on disposal of available-for-sale financial assets	-	2,332
Impairment loss on available-for-sale financial assets	-	22,200
Loss on disposal of investments in associates	114	1,247
Impairment loss on investments in associates	11,618	1,645
Share of loss of joint ventures and associates	18,299	16,159
Interest expenses	91,114	76,816

(in millions of Korean won)	**2018**	**2017**
Income tax expenses	362,559	183,265
Miscellaneous expenses	-	10,118
Reversal of provision for construction warranties	(12,173)	(6,530)
Reversal of provision for construction loss	(1,253)	(19,995)
Reversal of provision for litigation	(3,547)	(4,657)
Reversal of provision for impairment	(22,857)	(24,468)
Gain on foreign currency transactions (finance income)	(59)	(3,205)
Gain on foreign currency translation (finance income)	(32,130)	(9,755)
Gain on foreign currency translation (other income)	(77,553)	(77,766)
Gain on derivative transactions	(819)	-
Gain on valuation of derivatives	(55)	(146)
Reversal of income or loss from foreign operations translation	(6,980)	-
Gain on disposal of investment property	(2,604)	(1,171)
Gain on disposal of property, plant and equipment	(7,190)	(5,359)
Gain on disposal of intangible assets	(66)	-
Gain on valuation of financial assets at fair value	(98,824)	-
Gain on disposal of available-for-sale financial assets	-	(861)
Gain on disposal of investments in subsidiaries	(23)	(15,477)
Gain on disposal of investments in associates	(656)	-
Share of profit of joint ventures and associates	(1,856)	(1,249)
Interest income	(110,298)	(92,900)
Dividend income	(2,362)	(8,027)
Miscellaneous income	(11,338)	(23,158)
	633,482	1,049,979
Change in operating assets and liabilities:		
Trade receivables	(233,118)	540,224
Other receivables	208,253	462,408
Due from customers for contract work	(12,846)	778,444
Inventories	279,871	(186,074)
Other current assets	(111,598)	49,457
Long-term other receivables	(133,546)	(38,544)
Other non-current assets	(188)	(416)

(in millions of Korean won)	2018	2017
Trade payables	(88,884)	(446,707)
Other payables	222,865	(675,134)
Advances from contract work	(152,536)	(533,410)
Due to customers for contract work	(224,101)	(147,436)
Other current liabilities	(32,769)	(28,498)
Long-term other payables	50,654	(88,200)
Provisions	(97,622)	(104,515)
Post-employment benefits liabilities	(78,599)	(50,645)
Provision for long-term employee benefits	6,930	(2,258)
Other components of equity	(92,566)	(159,352)
	(489,800)	(630,656)
Cash generated from operations	₩ 678,985	₩ 790,887

(in thousands of USD (Note 2))	2018	2017
Profit for the year	$ 478,761	$ 332,317
Adjustments:		
Transfer to provision for construction warranties	78,200	98,385
Transfer to provision for construction loss	16,143	42,216
Transfer to provision for litigation	36,455	5,970
Transfer to other provisions	2,370	19,400
Loss on valuation of inventories	491	1,970
Post-employment benefits	63,338	73,984
Depreciation	102,606	118,539
Depreciation of investment property	1,454	1,743
Depreciation on assets not in use	3,090	1,073
Amortization	49,877	52,655
Impairment loss	16,458	57,499
Other impairment loss	42,664	124,525
Other long-term employee benefits	3,713	3,344
Loss on foreign currency transactions (finance costs)	496	93
Loss on foreign currency translation (finance costs)	6,025	136,141
Loss on foreign currency translation (other expenses)	27,035	128,311
Loss on derivative transactions	53	-
Loss on valuation of derivatives	14	109
Loss on foreign operations translation	426	45,594

(in thousands of USD (Note 2))	**2018**	**2017**
Loss on disposal of property, plant and equipment	5,711	1,313
Loss on disposal of investment property	1,122	547
Impairment loss on investment property	-	8,455
Loss on disposal of intangible assets	1	-
Impairment loss on intangible assets	1,941	164
Loss on valuation of financial assets at fair value	25	-
Impairment loss on financial assets at fair value	25,420	-
Loss on disposal of available-for-sale financial assets	-	2,086
Impairment loss on available-for-sale financial assets	-	19,855
Loss on disposal of investments in associates	102	1,115
Impairment loss on investments in associates	10,391	1,471
Share of loss of joint ventures and associates	16,366	14,452
Interest expenses	81,490	68,702
Income tax expenses	324,263	163,908
Miscellaneous expenses	-	9,049
Reversal of provision for construction warranties	(10,887)	(5,840)
Reversal of provision for construction loss	(1,121)	(17,883)
Reversal of provision for litigation	(3,172)	(4,165)
Reversal of provision for impairment	(20,443)	(21,884)
Gain on foreign currency transactions (finance income)	(53)	(2,866)
Gain on foreign currency translation (finance income)	(28,736)	(8,725)
Gain on foreign currency translation (other income)	(69,361)	(69,552)
Gain on derivative transactions	(732)	-
Gain on valuation of derivatives	(49)	(131)
Reversal of income or loss from foreign operations translation	(6,243)	-
Gain on disposal of investment property	(2,329)	(1,047)
Gain on disposal of property, plant and equipment	(6,431)	(4,793)
Gain on disposal of intangible assets	(59)	-
Gain on valuation of financial assets at fair value	(88,386)	-
Gain on disposal of available-for-sale financial assets	-	(770)

(in thousands of USD (Note 2))	2018	2017
Gain on disposal of investments in subsidiaries	(21)	(13,842)
Gain on disposal of investments in associates	(587)	-
Share of profit of joint ventures and associates	(1,660)	(1,117)
Interest income	(98,648)	(83,087)
Dividend income	(2,113)	(7,179)
Miscellaneous income	(10,138)	(20,712)
	566,571	939,075
Change in operating assets and liabilities:		
Trade receivables	(208,495)	483,163
Other receivables	186,256	413,566
Due from customers for contract work	(11,489)	696,220
Inventories	250,309	(166,420)
Other current assets	(99,810)	44,233
Long-term other receivables	(119,440)	(34,473)
Other non-current assets	(168)	(372)
Trade payables	(79,496)	(399,523)
Other payables	199,325	(603,823)
Advances from contract work	(136,424)	(477,068)
Due to customers for contract work	(200,430)	(131,863)
Other current liabilities	(29,308)	(25,488)
Long-term other payables	45,304	(78,884)
Provisions	(87,311)	(93,476)
Post-employment benefits liabilities	(70,297)	(45,296)
Provision for long-term employee benefits	6,198	(2,019)
Other components of equity	(82,789)	(142,520)
	(438,065)	(564,043)
Cash generated from operations	$ 607,267	$ 707,349

Changes in liabilities arising from financing activities for the year ended December 31, 2018 are as follows:

(in millions of Korean won)	2018			
	Short-term borrowings	Long-term borrowings	Debentures	Total
Beginning balance	₩ 362,580	₩ 381,800	₩ 1,537,387	₩ 2,281,767
Cash flows	(90,184)	104,987	108,730	123,533
Exchange differences	(154)	16	-	(138)

Amortization of present value discounts	-	273	1,236	1,509
Ending balance	₩ 272,242	₩ 487,076	₩ 1,647,353	₩ 2,406,671

(in thousands of USD (Note 2))	2018			
	Short-term borrowings	**Long-term borrowings**	**Debentures**	**Total**
Beginning balance	$ 324,282	$ 341,472	$ 1,375,000	$ 2,040,754
Cash flows	(80,658)	93,898	97,245	110,485
Exchange differences	(139)	14	-	(125)
Amortization of present value discounts	-	244	1,105	1,349
Ending balance	$ 243,485	$ 435,628	$ 1,473,350	$ 2,152,463

Investing and financing activities of non-cash transactions for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018	2017
Current portion of long-term loans	₩ 158,217	₩ 94,947
Current portion of long-term debentures issued	300,000	190,000
Current portion of long-term financial instruments	1,130,086	345,369
Transfer of current portion of long-term loans to land for construction	21,832	562,147
Changes in non-trade payables related to land for construction	36,511	181,186

(in thousands of USD (Note 2))	2018	2017
Current portion of long-term loans	$ 141,505	$ 84,918
Current portion of long-term debentures issued	268,312	169,931
Current portion of long-term financial instruments	1,010,720	308,889
Transfer of current portion of long-term loans to land for construction	19,526	502,770
Changes in non-trade payables related to land for construction	32,655	162,048

39. Risk Management

(1) Capital risk management

The purpose of capital risk management is to protect its ability to continuously provide profits to shareholders and parties in interest and to maintain optimum capital structure to reduce

capital expenses. To maintain or to adjust capital structure, the Group can adjust dividend, return capital to shareholders, issue new shares to reduce liabilities and dispose of assets.

The Group's capital structure consists of net liability, which is borrowings less cash and cash equivalents and equity; the overall capital risk management policy of the Group is unchanged from the prior period. Items managed as capital by the Group as at December 31, 2018 and 2017, are as follows:

(in millions of Korean won)		**2018**		**2017**
Total borrowings	₩	2,406,655	₩	2,281,766
Less: Cash and cash equivalents		(2,241,188)		(2,107,242)
Net borrowings		165,467		174,524
Total liabilities		9,762,753		9,958,964
Total equity		8,291,856		8,472,938
The ratio of net borrowings compared to equity		2.00%		2.06%
Debt ratio		117.74%		117.54%

(in thousands of USD (Note 2))		**2018**		**2017**
Total borrowings	$	2,152,451	$	2,040,753
Less: Cash and cash equivalents		(2,004,461)		(1,884,663)
Net borrowings		147,989		156,090
Total liabilities		8,731,556		8,907,042
Total equity		7,416,024		7,577,979
The ratio of net borrowings compared to equity		2.00%		2.06%
Debt ratio		117.74%		117.54%

(2) Financial risk management

The Group is exposed to various financial risks, such as market risk (foreign exchange risk, interest rate risk and price risk), credit risk and liquidity risk related to financial instruments. The purpose of risk management of the Group is to identify potential risks related to financial performance and reduce, eliminate and evade those risks to a degree acceptable to the Group. The overall financial risk management policy of the Group is the same as the prior period.

1) Credit risk

① Management policy of credit risk

The Group makes transactions with reputable financial institutions to manage credit risk and operate with policy and procedures for credit enhancement of financial assets. The Group decides credit transaction limits based on evaluation of client's credit, through information obtained from the credit bureau and disclosed financial position at committing contracts. Also,

the Group is provided collateral or payment guarantees. The Group continually reviews the credit and the limits of credit of clients to adjust necessary collateral. For delayed collection of financial assets, current state and collection measures are reported in each quarter and appropriate actions are taken in accordance with the reason for any delays.

The Group deposits cash and cash equivalents, long-term and short-term financial instruments in KEB Hana Bank and others. As these financial institutions the Group makes transactions with are reputable financial institutions, the credit risks from them are considered limited.

② The maximum exposed amounts of credit risk

As at December 31, 2018, the maximum exposed amounts of credit risk for financial assets maintained by the Group are as follows:

(in millions of Korean won)		**Book amount**	**Exposed amount**
Loans and receivables	Cash and cash equivalents	₩ 2,241,188	₩ 2,241,188
	Short-term financial instruments	1,824,955	1,824,955
	Trade receivables	2,176,726	2,176,726
	Other receivables	1,322,349	1,322,349
	Long-term accounts receivables	379,385	379,385
	Long-term other receivables	975,213	975,213
	Long-term financial instruments	7,531	7,531
Financial assets at amortized cost	Financial assets at amortized cost (current)	14,692	14,692
	Financial assets at amortized cost (non-current)	37,306	37,306
Financial guarantee	Other financial liabilities	127,897	9,323,819
		₩ 9,107,242	₩ 18,303,164

(in thousands of USD (Note 2))		**Book amount**	**Exposed amount**
Loans and receivables	Cash and cash equivalents	$ 2,004,461	$ 2,004,461
	Short-term financial instruments	1,632,193	1,632,193
	Trade receivables	1,946,808	1,946,808
	Other receivables	1,182,675	1,182,675
	Long-term accounts receivables	339,312	339,312

(in thousands of USD (Note 2))		Book amount	Exposed amount
	Long-term other receivables	872,206	872,206
	Long-term financial instruments	6,736	6,736
Financial assets at amortized cost	Financial assets at amortized cost (current)	13,140	13,140
	Financial assets at amortized cost (non-current)	33,366	33,366
Financial guarantee	Other financial liabilities	114,388	8,338,985
		$ 8,145,285	$ 16,369,882

2) Liquidity risk

The Group establishes short-term and long-term fund management plans. The Group analyzes and reviews actual cash outflow and its budget to correspond the maturity of financial liabilities to that of financial assets. Management believes that with proper financial liabilities, it will be able to easily access cash when necessary for its operating activities and financial assets. The Group has overdraft agreements with its main banks to manage liquidity risk, which may temporarily increase.

The maturity analysis of financial liabilities according to their remaining contract expiration as at December 31, 2018, is as follows:

(in millions of Korean won)	Remaining contractual undiscounted cash flows			
	Less than 1 year	**1–5 years**	**More than 5 years**	**Total**
Trade payables	₩ 2,413,306	₩ -	₩ -	₩ 2,413,306
Other payables	1,062,581	494,361	42,291	1,599,233
Borrowings and debentures	634,069	1,511,072	378,632	2,523,773
Financial guarantee contract	9,323,819	-	-	9,323,819

(in thousands of USD (Note 2))	Remaining contractual undiscounted cash flows			
	Less than 1 year	**1–5 years**	**More than 5 years**	**Total**
Trade payables	$ 2,158,399	$ -	$ -	$ 2,158,399
Other payables	950,345	442,144	37,824	1,430,313
Borrowings and debentures	567,095	1,351,464	338,639	2,257,198
Financial guarantee contract	8,338,985	-	-	8,338,985

The above maturity analysis is based on the book amount and the earliest maturity date by which the payments should be made.

3) Market risk

① Management policy of foreign currency risk

The Group is generally exposed to the risk of foreign currencies in USD, KWD, AED, QAR, SGD and others. The Group's sensitivity to a 10% increase and decrease in Korean won (functional currency of the Group) against the major foreign currencies as at December 31, 2018, is described in the below table. This 10% is a sensitivity of management's valuation on rational changes of foreign currency and it is applied when reporting internally the foreign currency risk to management.

The sensitivity analysis is conducted on monetary assets and liabilities denominated in foreign currencies other than functional currency as at December 31, 2018. It only includes unsettled monetary accounts denominated in foreign currencies and adjusts foreign currency translation expecting changes in foreign currency by 10% at the end of the fiscal year. Positive balance (+) represents increases of gains, losses and others in equity section due to appreciation of Korean won. When Korean won is depreciated by 10% to other currencies, gains, losses and other equity accounts are affected by the corresponding amount, which will lead to negative balance (-).

Changes in net assets (before income tax) that are sensitive to changes in Korean won against the foreign currencies by 10% as at December 31, 2018, are as follows:

(in millions of Korean won)	**10% increase against foreign currency**	**10% decrease against foreign currency**
USD	₩ 48,728	₩ (48,728)
KWD	23,571	(23,571)
AED	49,251	(49,251)
QAR	26,605	(26,605)
SGD	30,898	(30,898)
Others	92,099	(92,099)

(in thousands of USD (Note 2))	**10% increase against foreign currency**	**10% decrease against foreign currency**
USD	$ 43,581	$ (43,581)
KWD	21,081	(21,081)
AED	44,049	(44,049)

QAR	23,795	(23,795)
SGD	27,634	(27,634)
Others	82,371	(82,371)

② Interest rate risk

The Group borrows funds with fixed and variable interest rates, and the Group is exposed to interest rate risk arising from financial instruments with variable interest rates. To manage the interest rate risk and to avoid the future cash flow fluctuation risk, the Group mainly uses fixed interest rate; however, it uses variable interest rates on occasion.

The Group's sensitivity to a 1% change in interest rates on profit before income tax as at December 31, 2018, is as follows:

(in millions of Korean won)	**Increase by 1%**	**Decrease by 1%**
Short-term borrowings	₩ (668)	₩ 668
Current position of long-term borrowings	(117)	117
Long-term borrowings	(1,263)	1,263
	₩ (2,048)	₩ 2,048

(in thousands of USD (Note 2))	**Increase by 1%**	**Decrease by 1%**
Short-term borrowings	$ (597)	$ 597
Current position of long-term borrowings	(105)	105
Long-term borrowings	(1,130)	1,130
	$ (1,832)	$ 1,832

② Price risks

The Group is exposed to price fluctuation risk arising from available-for-sale equity investments. As at December 31, 2018 and 2017, the amount of marketable available-for-sale equity investments is as follows:

(in millions of Korean won)	**2018**	**2017**
Financial assets measured at fair value	₩ 9,240	₩ 12,281

(in thousands of USD (Note 2))	**2018**	**2017**
Financial assets measured at fair value	$ 8,264	$ 10,984

When the price of marketable equity investments fluctuates by 1%, equity investments would

increase/decrease by ₩ 70 million ($63 thousand) (after income tax).

40. Operating Segment Information

Details of the Group's reportable segments are as follows:

Description	Details	Clients
Building/House	Buildings, structures and others	Public Procurement Service, CDPL and others
Infra/Environment	Roads, bridges, housing site development and others	Korea Expressway Corporation, MPW, JTC and others
Plant/Power	Power stations, gas facilities, electric work and others	Korea Hydro & Nuclear Power Co., Ltd., Korea Electric Power Corporation and others
Others	Real estate leasing and others	Korea Electric Power Corporation and others

Profit or loss by each segment for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018			
	Total segment revenue	Operating profit (loss)	Property, plant and equipment	Depreciation
Building/House	₩ 8,073,550	₩ 1,198,617	₩ 4,848	₩ 2,164
Infra/Environment	2,570,689	24,449	220,014	29,268
Plant/Power	5,498,832	335,217	177,423	11,584
Others	1,166,583	108,836	903,784	71,358
Consolidation adjustments	(578,760)	(5,972)	130,505	797
	₩ 16,730,894	₩ 1,661,147	₩ 1,436,574	₩ 115,171

(in thousands of USD (Note 2))	2018			
	Total segment revenue	Operating profit (loss)	Property, plant and equipment	Depreciation
Building/House	$ 7,220,776	$ 1,072,012	$ 4,336	$ 1,935
Infra/Environment	2,299,158	21,867	196,775	26,177
Plant/Power	4,918,015	299,809	158,683	10,360
Others	1,043,362	97,340	808,321	63,821
Consolidation adjustments	(517,628)	(5,341)	116,720	713
	$ 14,963,683	$ 1,485,687	$ 1,284,835	$ 103,006

(in millions of Korean won)	2017			
	Total segment revenue	Operating profit (loss)	Property, plant and equipment	Depreciation
Building/House	₩ 8,197,939	₩ 1,389,544	₩ 4,323	₩ 3,154
Infra/Environment	2,613,388	33,406	271,591	33,527
Plant/Power	5,522,872	262,392	43,407	14,546
Others	966,861	88,822	956,036	80,036
Consolidation adjustments	(413,970)	4,800	123,434	2,738
	₩ 16,887,090	₩ 1,778,964	₩ 1,398,791	₩ 134,001

(in thousands of USD (Note 2))	2017			
	Total segment revenue	Operating profit (loss)	Property, plant and equipment	Depreciation
Building/House	$ 7,332,027	$ 1,242,773	$ 3,867	$ 2,821
Infra/Environment	2,337,347	29,877	242,904	29,985
Plant/Power	4,939,515	234,677	38,822	13,010
Others	864,736	79,440	855,054	71,582
Consolidation adjustments	(370,244)	4,293	110,396	2,449
	$ 15,103,381	$ 1,591,060	$ 1,251,043	$ 119,847

Reportable segments' accounting method is applied by the same measured metrics that are applied to the Group.

Profit or loss by geographical region for the years ended December 31, 2018 and 2017, are as follows:

(in millions of Korean won)	2018		
	Total segment revenue	Property, plant and equipment	Depreciation
Domestic	₩ 10,022,578	₩ 1,053,410	₩ 41,549
Asia	3,458,450	107,140	27,984
Middle Asia/Africa	3,264,778	120,015	41,005
Others	563,848	25,504	3,836
Consolidation adjustments	(578,760)	130,505	797
	₩ 16,730,894	₩ 1,436,574	₩ 115,171

(in thousands of USD (Note 2))	2018		
	Total segment revenue	Property, plant and equipment	Depreciation
Domestic	$ 8,963,937	$ 942,143	$ 37,160

Asia	3,093,149	95,823	25,028
Middle Asia/Africa	2,919,934	107,339	36,674
Others	504,291	22,810	3,431
Consolidation adjustments	(517,628)	116,720	713
	$ 14,963,683	$ 1,284,835	$ 103,006

(in millions of Korean won)	2017		
	Total segment revenue	**Property, plant and equipment**	**Depreciation**
Domestic	₩ 9,943,811	₩ 970,757	₩ 42,627
Asia	3,331,574	103,484	26,447
Middle Asia/Africa	3,382,657	157,905	51,088
Others	643,018	43,211	11,101
Consolidation adjustments	(413,970)	123,434	2,738
	₩ 16,887,090	₩ 1,398,791	₩ 134,001

(in thousands of USD (Note 2))	2017		
	Total segment revenue	**Property, plant and equipment**	**Depreciation**
Domestic	$ 8,893,490	$ 868,220	$ 38,124
Asia	2,979,674	92,554	23,654
Middle Asia/Africa	3,025,362	141,226	45,692
Others	575,099	38,647	9,928
Consolidation adjustments	(370,244)	110,396	2,449
	$ 15,103,381	$ 1,251,043	$ 119,847