

DOOSAN ENGINE CO., LTD.

**SEPARATE FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013,
AND INDEPENDENT AUDITORS' REPORT**

INDEPENDENT AUDITORS' REPORT

English Translation of Independent Auditors' Report Originally Issued in Korean on March 18, 2015

**To the Stockholders and Board of Directors of
Doosan Engine Co., Ltd.:**

Report on the Financial Statements

We have audited the accompanying separate financial statements of Doosan Engine Co., Ltd. (the "Company"), which comprise the separate statements of financial position as of December 31, 2014 and 2013, and the separate statements of income, separate, separate statements of comprehensive income statements of changes in stockholders' equity and separate statements of cash flows, for the years then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Separate Financial Statements

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

Auditors' Responsibility

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

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

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

Opinion

In our opinion, the separate financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2014 and 2013, and its financial performance and its cash flows for the years then ended in accordance with K-IFRS.

Others

We conducted our audit of separate financial statements of the Company as of and for the year ended December 31, 2013, in accordance with the former KSAs, known as auditing standards generally accepted in Korea.

Deloitte Anjin LLC

March 18, 2015

Notice to Readers

This report is effective as of March 18, 2015, the auditors' report date. Certain subsequent events or circumstances may have occurred between the auditors' report date and the time the auditors' report is read. Such events or circumstances could significantly affect the financial statements and may result in modifications to the auditors' report.

DOOSAN ENGINE CO., LTD. (the “Company”)

SEPARATE FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013

The accompanying separate financial statements including all footnote disclosures were prepared by, and are the responsibility of, Doosan Engine Co., Ltd.

Kim, Dong-Chul
Chief Executive Officer
Doosan Engine Co., Ltd.

DOOSAN ENGINE CO., LTD.
SEPARATE STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2014 AND 2013
(In Korean won)

<u>ASSETS</u>	<u>Notes</u>	<u>December 31, 2014</u>	<u>December 31, 2013</u>
CURRENT ASSETS			
Cash and cash equivalents	4 and 10	₩40,970,489,949	₩41,258,747,154
Short-term financial instruments	4, 5 and 10	37,810,000,000	145,000,000,000
Short-term investment securities	4, 8 and 10	7,000,000,000	-
Short-term loans receivables	4 and 10	1,100,900,000	9,155,850,000
Trade and other receivables	4, 6, 10, 14, 30 and 32	73,073,305,809	25,511,680,236
Gross amount due from customers for contract work	23	12,999,974,380	10,720,649,184
Prepaid income tax assets		1,059,722,158	1,136,878,000
Current derivative assets	9 and 10	2,489,829,322	40,237,290,875
Current firm commitment assets	9	41,236,094,869	20,346,022,821
Inventories	7	197,396,445,146	176,548,148,458
Other current assets		17,152,791,384	16,155,221,814
Total current assets		<u>432,289,553,017</u>	<u>486,070,488,542</u>
NON-CURRENT ASSETS			
Long-term financial instruments	4, 5, 10 and 31	1,934,858,690	1,803,167,918
Long-term investment securities	4, 8 and 10	72,048,000	7,072,048,000
Investments in subsidiary and associated companies	11 and 31	363,994,102,690	363,994,102,690
Long-term loans receivables	4 and 10	3,116,039,530	4,753,397,044
Long-term other receivables	4, 6 and 10	10,701,073,220	9,693,320,091
Property, plant and equipment	3 and 12	587,007,566,603	606,336,556,559
Intangible assets	3 and 13	41,679,003,150	24,908,539,891
Non-current derivative assets	9 and 10	722,321,724	6,095,491,976
Non-current firm commitment assets	9	25,860,296,653	26,435,478,337
Other non-current assets		1,665,692,890	1,754,793,606
Total non-current assets		<u>1,036,753,003,150</u>	<u>1,052,846,896,112</u>
TOTAL ASSETS		<u>₩1,469,042,556,167</u>	<u>₩1,538,917,384,654</u>

(Continued)

DOOSAN ENGINE CO., LTD.
SEPARATE STATEMENTS OF FINANCIAL POSITION (CONTINUED)
AS OF DECEMBER 31, 2014 AND 2013
(In Korean won)

<u>LIABILITIES AND STOCKHOLDERS' EQUITY</u>	<u>Notes</u>	<u>December 31, 2014</u>	<u>December 31, 2013</u>
CURRENT LIABILITIES			
Trade and other payable	4, 10 and 32	₩124,770,714,634	₩85,188,695,183
Gross amount due to customers for contract work	23	14,568,457,756	3,773,450,411
Short-term borrowings	4, 10, 14 and 30	3,857,092,800	-
Advance receipts		271,795,996,146	321,968,490,284
Current portion of long-term borrowings	4, 10 and 14	50,000,000,000	63,318,000,000
Income tax payable		-	3,822,392,136
Current derivative liabilities	9 and 10	14,866,327,518	2,615,663,130
Current firm commitment liabilities	9	14,768,025,920	34,731,375,957
Current financial warranty liabilities	10 and 31	73,636,042	34,344,231
Current liability provisions	3 and 16	1,916,319,087	-
Other current liabilities		16,588,492,436	12,434,433,449
Total current liabilities		<u>513,205,062,339</u>	<u>527,886,844,781</u>
NON-CURRENT LIABILITIES			
Long-term borrowings	4, 9, 10, and 14	45,000,000,000	50,000,000,000
Bonds	4, 10 and 14	189,259,736,473	189,044,616,891
Long-term other payable	4 and 10	1,918,290,120	1,112,640,295
Retirement benefit obligation	3 and 15	11,865,665,028	10,608,946,661
Non-current derivative liabilities	9 and 10	7,306,319,851	279,647,734
Non-current firm commitment liabilities	9	13,108,076,384	21,394,738,642
Financial warranty liabilities	10 and 31	4,581,819,663	2,942,780,895
Liability provisions	3 and 16	1,949,715,661	10,097,900,058
Deferred income tax liabilities	3 and 28	34,828,749,253	45,613,681,912
Total non-current liabilities		<u>309,818,372,433</u>	<u>331,094,953,088</u>
TOTAL LIABILITIES		<u>823,023,434,772</u>	<u>858,981,797,869</u>
STOCKHOLDERS' EQUITY			
Share capital	1 and 17	69,500,000,000	69,500,000,000
Capital surplus	17	367,214,701,425	367,214,701,425
Other capital items	18	550,159,285	355,389,958
Accumulated other comprehensive income	12 and 19	36,207,539,902	36,207,539,902
Retained earnings	20	172,546,720,783	206,657,955,500
TOTAL STOCKHOLDERS' EQUITY		<u>646,019,121,395</u>	<u>679,935,586,785</u>
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY		<u>₩1,469,042,556,167</u>	<u>₩1,538,917,384,654</u>

(Concluded)

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

DOOSAN ENGINE CO., LTD.
SEPARATE STATEMENTS OF INCOME
FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013
(In Korean won)

	Notes	2014	2013
SALES	3, 21, 22, 23 and 32	₩887,764,719,542	₩743,104,362,158
COST OF SALES	24, 30 and 32	(886,270,246,080)	(691,062,379,511)
SELLING AND ADMINISTRATIVE EXPENSES	24 and 25	(39,904,780,646)	(50,103,470,238)
OPERATING INCOME (LOSS)		(38,410,307,184)	1,938,512,409
Finance income	4, 10 and 26	91,160,334,537	100,716,557,461
Finance expense	4, 10 and 26	(93,987,658,722)	(104,139,106,746)
Other non-operating income	27	1,960,947,370	4,932,998,497
Other non-operating expense	27	(2,688,873,049)	(8,682,574,295)
LOSS BEFORE INCOME TAX BENEFIT (EXPENSE)		(41,965,557,048)	(5,233,612,674)
INCOME TAX BENEFIT (EXPENSE)	28	10,909,129,342	(918,226,429)
NET LOSS		(₩31,056,427,706)	(₩6,151,839,103)
EARNINGS PER SHARE:	29		
Basic earnings per share		(₩447)	(₩89)
Diluted earnings per share		(₩447)	(₩89)

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

DOOSAN ENGINE CO., LTD.
SEPARATE STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013
(In Korean won)

	Notes	2014	2013
NET LOSS		(₩31,056,427,706)	(₩6,151,839,103)
OTHER COMPREHENSIVE INCOME (LOSS)	19		
Items not reclassified subsequently to profit or loss:			
Re-measurements of net defined benefit liabilities	15	(3,054,807,011)	5,305,396,802
Revaluation of property, plant and equipment	12 and 19	-	36,207,539,902
Items reclassified subsequently to profit or loss:			
Gain (loss) on valuation of AFS financial assets	8	-	136,854,571
Total other comprehensive income (loss)		(3,054,807,011)	41,649,791,275
TOTAL COMPREHENSIVE INCOME (LOSS)		(₩34,111,234,717)	₩35,497,952,172

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

DOOSAN ENGINE CO., LTD.
SEPARATE STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013
(In Korean won)

	Share capital	Capital surplus	Other equity items	Accumulated other comprehensive income (loss)	Retained earnings (deficit)	Total
Balance at January 1, 2013	₩69,500,000,000	₩367,214,701,425	₩397,167,523	(₩136,854,571)	₩207,504,397,801	₩644,479,412,178
Total comprehensive income:						
Net loss	-	-	-	-	(6,151,839,103)	(6,151,839,103)
Re-measurements of net defined benefit liabilities	-	-	-	-	5,305,396,802	5,305,396,802
Revaluation surplus of land	-	-	-	36,207,539,902	-	36,207,539,902
Gain on valuation of AFS financial assets	-	-	-	136,854,571	-	136,854,571
Subtotal	-	-	-	36,344,394,473	(846,442,301)	35,497,952,172
Capital transactions with stockholders						
Stock-based payment	-	-	(41,777,565)	-	-	(41,777,565)
Balance at December 31, 2013	<u>₩69,500,000,000</u>	<u>₩367,214,701,425</u>	<u>₩355,389,958</u>	<u>₩36,207,539,902</u>	<u>₩206,657,955,500</u>	<u>₩679,935,586,785</u>
Balance at January 1, 2014	₩69,500,000,000	₩367,214,701,425	₩355,389,958	₩36,207,539,902	₩206,657,955,500	₩679,935,586,785
Total comprehensive income:						
Net loss	-	-	-	-	(31,056,427,706)	(31,056,427,706)
Re-measurements of net defined benefit liabilities	-	-	-	-	(3,054,807,011)	(3,054,807,011)
Subtotal	-	-	-	-	(34,111,234,717)	(34,111,234,717)
Capital transactions with stockholders						
Stock-based payment	-	-	194,769,327	-	-	194,769,327
Balance at December 31, 2014	<u>₩69,500,000,000</u>	<u>₩367,214,701,425</u>	<u>₩550,159,285</u>	<u>₩36,207,539,902</u>	<u>₩172,546,720,783</u>	<u>₩646,019,121,395</u>

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

DOOSAN ENGINE CO., LTD.
SEPARATE STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013
(In Korean won)

	2014	2013
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash generated from operations	(₩74,163,646,496)	(₩32,633,243,128)
Net loss	(31,056,427,706)	(6,151,839,103)
Adjustments	24,071,126,445	3,596,792,680
Changes in operating assets and liabilities	(67,178,345,235)	(30,078,196,705)
Interest received	4,777,756,405	6,814,938,658
Interest paid	(10,309,894,777)	(10,120,201,101)
Dividend received	-	826,620
Income tax paid	(2,645,758,218)	(19,383,887,975)
Net Cash Used in Operating Activities	(82,341,543,086)	(55,321,566,926)
CASH FLOWS FROM INVESTING ACTIVITIES		
Cash inflows from investing activities:		
Decrease in short-term financial instruments	107,190,000,000	25,016,124,100
Decrease in short-term loans	9,484,400,000	-
Decrease in long-term loans	1,247,017,256	446,615,987
Disposal of property, plant and equipment	57,367,071	34,998,878
Disposal of intangible assets	476,790,908	-
Disposal of non-current assets held for sale	-	4,872,000,000
Subtotal	118,455,575,235	30,369,738,965
Cash outflows for investing activities:		
Increase in short-term loans	-	6,994,550,000
Increase in long-term financial instruments	-	37,442,317
Increase in long-term loans	950,750,000	982,800,000
Acquisition of property, plant and equipment	1,705,065,565	7,443,889,427
Acquisition of intangible assets	19,338,691,563	8,345,179,608
Subtotal	(21,994,507,128)	(23,803,861,352)
Net Cash Provided by Investing Activities	₩96,461,068,107	₩6,565,877,613

(Continued)

DOOSAN ENGINE CO., LTD.
SEPARATE STATEMENTS OF CASH FLOWS (CONTINUED)
FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013
(In Korean won)

	2014	2013
CASH FLOWS FROM FINANCING ACTIVITIES		
Cash inflows from financing activities:		
Proceeds from short-term borrowings	₩3,857,092,800	₩-
Proceeds from long-term borrowings	45,000,000,000	-
Proceeds from issuance of bonds	-	89,421,600,000
Subtotal	48,857,092,800	89,421,600,000
Cash outflows for financing activities:		
Repayment of short-term borrowings	-	29,828,495,145
Repayment of long-term borrowings	63,318,000,000	64,266,000,000
Subtotal	(63,318,000,000)	(94,094,495,145)
Net cash used in financing activities	(14,460,907,200)	(4,672,895,145)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS		
	53,124,974	8,789,716
NET DECREASE IN CASH AND CASH EQUIVALENTS	(288,257,205)	(53,419,794,742)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	41,258,747,154	94,678,541,896
CASH AND CASH EQUIVALENTS, END OF YEAR	₩40,970,489,949	₩41,258,747,154

(Concluded)

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

DOOSAN ENGINE CO., LTD.
NOTES TO SEPARATE FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013

1. ORGANIZATION AND DESCRIPTION OF THE BUSINESS:

Doosan Engine Co., Ltd. (“DE” or the “Company”) was incorporated on December 30, 1999, under the Commercial Code of the Republic of Korea to manufacture and sell marine diesel engines. The Company’s headquarters and plants are located in Changwon, Korea.

Under the Company’s Articles of Incorporation, the Company is authorized to issue 120,000 thousand shares of capital stock (par value of ₩1,000). As of December 31, 2013, the Company issued 69,500 thousand common shares for ₩69,500,000 thousand.

On January 4, 2011, the Company’s shares were listed in the Korea Exchange.

The Company’s shares as of December 31, 2014, are owned as follows:

Name of stockholders	Number of shares owned	Ownership percentage (%)
Doosan Heavy Industries Construction Co., Ltd.	29,650,000	42.66%
Samsung Heavy Industries Co., Ltd.	9,815,000	14.12%
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	5,600,000	8.06%
Employee stock ownership association	1,507,241	2.17%
Others	22,927,759	32.99%
Total	<u>69,500,000</u>	<u>100.00%</u>

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

The Company maintains its official accounting records in Korean won and prepares separate financial statements in conformity with Korean statutory requirements and Korean International Financial Reporting Standards (“K-IFRS”), in the Korean language (Hangul).

(1) Basis of Preparation

The Company has prepared the separate financial statements in accordance with the K-IFRS. The Company’s financial statements are separate financial statements prepared in accordance with K-IFRS 1027, *Consolidated and Separated Financial Statements*, in which the controlling company, investors of associates or participants of joint control company have stated as cost method.

The significant accounting principles as applied in the separate financial statements correspond to those pertaining to the annual separate financial statements for the year ended December 31, 2013.

The accompanying separate financial statements have been prepared on the historical cost basis, except for certain properties/non-current assets and financial instruments that are measured at fair values, as explained in the accounting policies below. Historical cost is based on the fair values of the consideration given in exchange for assets.

The principal accounting policies are set out below.

- 1) Amendments to K-IFRSs and new interpretations that are mandatorily effective for the current year

Amendments to K-IFRS 1032 – *Financial Instruments: Presentation*

The amendments to K-IFRS 1032 clarify the requirement for the offset presentation of financial assets and financial liabilities: the right to offset must not be conditional upon the occurrence of future events and can be exercised anytime during the contract periods. The right to offset is executable even in the case of default or insolvency. As the Company does not have any financial assets and financial liabilities that qualify for offset based on the criteria set out in the amendments and concluded that the application of the amendments has no significant impact on the Company's separate financial statements.

Amendments to K-IFRS 1036 – *Impairment of Assets*

The amendments introduced disclosure requirements of recoverable amount when the recoverable amount of an asset or CGU is measured at fair value less costs of disposal. The application of these amendments has no impact on the disclosure in the Company's separate financial statements.

Enactment of K-IFRS 2121 – *Levies*

The enactment defines that the obligating event giving rise to the recognition of a liability to pay a levy is the activity that triggers the payment of the levy in accordance with the related legislation. The enactment has no significant impact on the Company's separate financial statements.

- 2) New and revised K-IFRSs in issue but not yet effective

Amendments to K-IFRS 1019 – *Employee Benefits*

The amendments permit the Company to recognize amount of contributions as a reduction in the service cost in which the related service is rendered if the amount of the contributions is independent of the number of years of service. The amendments are effective for the annual periods beginning on or after July 1, 2014.

Amendments to K-IFRS 1016 – *Property, Plant and Equipment*

The amendments to K-IFRS 1016 prohibit the Company from using a revenue-based depreciation method for items of property, plant and equipment. The amendments are effective for the annual periods beginning on or after January 1, 2016.

Amendments to K-IFRS 1038 – *Intangible Assets*

The amendments apply prospectively for annual periods beginning on or after January 1, 2016. The amendments to K-IFRS 1038 do not allow presumption that revenue is an appropriate basis for the amortization of an intangible assets, which the presumption can only be limited when the intangible asset expressed as a measure of revenue or when it can be demonstrated that revenue and consumption of the economic benefits of the intangible asset are highly correlated.

Amendments to K-IFRS 1111 – *Accounting for Acquisitions of Interests in Joint Operations*

The amendments to K-IFRS 1111 provide guidance on how to account for the acquisition of a joint operation that constitutes a business as defined in K-IFRS 1103, *Business Combinations*. A joint operator is also required to disclose the relevant information required by K-IFRS 1103 and other standards for business combinations. The amendments to K-IFRS 1111 are effective for the annual periods beginning on or after January 1, 2016.

Annual Improvements to K-IFRS 2010-2012 Cycle

The amendments to K-IFRS 1002 (i) changes the definitions of ‘vesting condition’ and ‘market condition’, and (ii) add definition for ‘performance condition’ and ‘service condition’ which were previously included within the definition of ‘vesting condition’. The amendments to K-IFRS 1103, *Business Combinations*, clarify the classification and measurement of the contingent consideration in business combination. The amendments to K-IFRS 1108 clarify that a reconciliation of the total of the reportable segments’ assets should only be provided if the segments’ assets are regularly provided to the chief operating decision maker. The amendments are effective for the annual periods beginning on or after July 1, 2014.

Annual Improvements to K-IFRS 2011-2013 Cycle

The amendments to K-IFRS 1103 clarify the scope of the portfolio exception for measuring the fair values of the group of financial assets and financial liabilities on a net basis, including all contracts that are within the scope; the standard does not apply to the accounting for the formation of all types of joint arrangement in the financial statements of the joint arrangement itself. The amendments to K-IFRS 1113, *Fair values Measurements*, and K-IFRS 1040, *Investment Properties*, exist and these amendments are effective to the annual periods beginning on or after July 1, 2014.

Amendments to K-IFRS 1027 – *Separate Financial Statements*

The following amendments discuss accounting for investment in subsidiaries, related parties and joint ventures at cost basis and allows the selection of the application of K-IFRS 1039, *Financial Instruments: Recognition and Measurement*, or the application of equity method accounting under K-IFRS 1028, *Investment in Associates and Joint Ventures*. The amendments are effective for the annual periods beginning on or after January 1, 2016.

The Company does not anticipate that the application of these new and revised K-IFRSs that have been issued, but not effective will have any impact on the Company’ separate financial statements.

(2) Subsidiaries, Joint Ventures and Associates

The Company has elected to use book value under previous GAAP as deemed cost for subsidiaries, joint ventures and associates at the date of transition to K-IFRS. After the date of transition, subsidiaries, joint ventures and associates are measured at cost.

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

(3) Goodwill

Goodwill resulting from an acquisition of a business is carried at cost as established at the date of acquisition of the business, less accumulated impairment losses, if any.

For the purpose of impairment testing, goodwill is allocated to each of the Company's cash-generating units that is expected to benefit from the synergies of the combination.

A cash-generating unit to which goodwill has been allocated is tested for impairment annually, or more frequently when there is indication that the unit may be impaired. If the recoverable amount of the cash-generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit on a pro rata basis based on the carrying amount of each asset in the unit. Any impairment loss for goodwill is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods.

On disposal of the relevant cash-generating unit, the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

(4) 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 continuing 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.

(5) Revenue Recognition

Revenue is measured at the fair value of the consideration received or receivable. Revenue is reduced for estimated customer returns, rebates and other similar allowances. The Company recognizes revenue when the amount of revenue can be reliably measured; when it is probable that future economic benefits will flow to the entity; and when specific criteria have been met for each of the Company's activities, as described below.

1) Sale of goods

Revenue from the sale of goods is recognized when the Company has transferred to the buyer the significant risks and rewards of ownership of the goods.

2) Rendering of services

Revenue from a contract to provide services is recognized by reference to the stage of completion of the contract. Depending on the nature of the transaction, the Company determines the stage of completion by reference to surveys of work performed, services performed to date as a percentage of total services to be performed, or the proportion that costs incurred to date bear to the estimated total costs of the transaction, as applicable.

3) Dividend and interest income

Dividend income from investments is recognized when the shareholder's right to receive payment has been established (provided that it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably).

Interest income from a financial asset is recognized when it is probable that the economic benefits will flow to the Company and the amount of income can be measured reliably. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective-interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

4) Rental income

The Company's policy for recognition of revenue from operating leases is described in Note 2.

(6) Construction contracts

Where the outcome of a construction contract can be estimated reliably, revenue and costs are recognized by reference to the stage of completion of the contract activity at the end of the reporting period, measured based on the proportion of contract costs incurred for work performed to date relative to the estimated total contract costs, except where this would not be representative of the stage of completion. Variations in contract work, claims and incentive payments are included to the extent that the amount can be measured reliably and its receipt is considered probable.

Where the outcome of a construction contract cannot be estimated reliably, contract revenue is recognized to the extent of contract costs incurred that it is probable will be recoverable. Contract costs are recognized as expenses in the period in which they are incurred.

When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognized as an expense immediately.

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 separate 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 separate statements of financial position under trade and other receivables.

(7) Lease

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

1) The Company as lessor

Amounts due from lessees under finance leases are recognized as receivables at the amount of the Company's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Company's net investment outstanding in respect of the leases.

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized on a straight-line basis over the lease term.

2) The Company as lessee

Assets held under finance leases are initially recognized as assets of the Company at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the separate statements of financial position as a finance lease obligation.

Lease payments are apportioned between finance expenses and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance expenses are recognized immediately in profit or loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance with the Company's general policy on borrowing costs (see Note 2. (9)). Contingent rentals are recognized as expenses in the periods in which they are incurred.

Operating lease payments are recognized as an expense on a straight-line basis over the lease term, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed. Contingent rentals arising under operating leases are recognized as an expense in the period in which they are incurred.

(8) Foreign currencies

The individual financial statements of each group entity are presented in the currency of the primary economic environment in which the entity operates (its functional currency). For the purpose of the separate financial statements, the results and financial position of each group entity are expressed in Korean won, which is the functional currency of the entity and the presentation currency for the separate financial statements.

In preparing the financial statements of the individual entities, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

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;
- exchange differences on transactions entered into in order to hedge certain foreign currency risks (see Note 2 (21) below for hedging accounting policies); 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.

(9) 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.

(10) Retirement benefit costs and termination benefits

Contributions to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement 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 separate statements of financial position with a charge or credit recognized in other comprehensive income in the period in which they occur. 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 Company 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.

The retirement benefit obligation recognized in the separate statements of financial position represents the actual deficit or surplus in the Company's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

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

(11) Share-based payment arrangements

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date.

The fair value determined at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Company's estimate of equity instruments that will eventually vest. At the end of each reporting period, the Company revises its estimate of the number of equity instruments expected to vest. The impact of the revision of the original estimates, if any, is recognized in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment in other component of equity.

(12) Taxation

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

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 profit or loss and 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 Company'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 tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the separate financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred 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 tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Company 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 tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred 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 tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset 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 tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

3) Current and deferred tax for the year

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity, respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

(13) Property, Plant and Equipment

Property, plant and equipment are initially stated at cost and subsequently recorded at cost, less accumulated depreciation and accumulated impairment losses, except for land, which is recorded using revaluation model. The cost of an item of property, plant and equipment is directly attributable to their purchase or construction, which includes any costs directly attributable to bring 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 in 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 Company and the cost of an asset can be measured reliably. Routine maintenance and repairs are expensed as incurred.

The Company does not depreciate land. Depreciation expense is computed using the straight-line method based on the estimated useful lives of the assets as follows:

	<u>Estimated useful lives (years)</u>
Buildings	20–40
Structures	10–20
Machinery	5–20
Others	3–10

If each part of an item of property, plant and equipment has a cost that is significant in relation to the total cost of the item, it is depreciated separately.

The Company 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.

(14) Investment property

Investment properties are properties held to earn rentals and/or for capital appreciation (including property under construction for such purposes). Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, investment properties are reported at cost, less accumulated depreciation and accumulated impairment losses.

Subsequent costs are recognized in 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 Company, 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 20–40 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.

(15) Intangible Assets

1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost, less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are carried at cost less accumulated impairment losses.

2) Internally-generated intangible assets - research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

Expenditure arising from development (or from the development phase of an internal project) is recognized as an intangible asset if, only if, the development project is designed to produce new or substantially improved products, and the Company can demonstrate the technical and economical feasibility, and measure reliably the resources attributable to the intangible asset during its development.

Subsequent to initial recognition, internally generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

3) Intangible assets acquired in a business combination

Intangible assets that are acquired in a business combination are recognized separately from goodwill and are initially recognized at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost, less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

4) Derecognition of intangible assets

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from its use. 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.

5) Depreciation of intangible assets

Intangible assets (membership) with indefinite useful lives are not amortized. Intangible assets other than not amortized intangible assets are using the straight-line method based on the estimated useful lives of the assets as follows:

	<u>Estimated useful lives (years)</u>
Development costs	5
Right of utilization	16
Software	5
Others	5

(16) Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the Company 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 (if any). When it is not possible to estimate the recoverable amount of an individual asset, the Company 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 whenever 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.

(17) Inventories

Inventories are stated at the lower of cost and net realizable value. Cost of inventories are measured under the specific identification method, and consists of the purchase price, cost of conversion and other costs incurred in bringing the inventories to their present location and condition. Net realizable value represents the estimated selling price for inventories, less all estimated costs of completion and costs necessary to make the sale.

When inventories are sold, the carrying amount of those inventories is recognized as an expense (cost of sales) in the period in which the related revenue is recognized. The amount of any write-down of inventories to net realizable value and all losses of inventories is recognized as an expense in the period the write-down or loss occurs. 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.

The cost of inventories is determined by the specific identification method for materials in transit. During the year, perpetual inventory systems are used to value inventories, which are adjusted to physical inventory counts performed at the end of the year.

(18) Provisions

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company 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. When 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 (where the effect of the time value of money is material). The discount rate used is a pretax rate that reflects current market assessments of the time value of money and the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage is recognized in profit or loss as borrowing cost.

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 the period.

(19) Financial Instruments

Financial assets and financial liabilities are recognized when an entity becomes a party to the contractual provisions of the instruments. Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss (FVTPL) are recognized immediately in profit or loss.

Financial assets are classified into the following specified categories: 'financial assets at FVTPL', 'held-to-maturity investments', 'available-for-sale (AFS) financial assets' and 'loans and receivables'. The classification depends on the nature and purpose of the financial assets, and is determined at the time of initial recognition.

1) Effective interest method

The effective interest method is a method of calculating the amortized cost of a debt instrument and of allocating interest income over the relevant period. The effective-interest rate is the rate that exactly discounts estimated future cash receipts (including all fees and points paid or received that form an integral part of the effective-interest rate, transaction costs and other premiums or discounts) through the expected life of the debt instrument, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Income is recognized on an effective interest basis for debt instruments other than those financial assets classified as at FVTPL.

2) Financial assets at FVTPL

Financial assets are classified as at FVTPL when the financial asset is either held for trading or it is designated as at FVTPL. A financial asset is classified as held for trading, if it has been acquired principally for the purpose of selling it in the near term; or on initial recognition it is part of a portfolio of identified financial instruments that the Company manages together and has a recent actual pattern of short-term profit-taking; or it is a derivative that is not designated and effective as a hedging instrument. Financial assets at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss.

3) Held-to-maturity investments

Non-derivative financial assets with fixed or determinable payments and fixed-maturity dates that the Company has the positive intent and ability to hold to maturity are classified as held-to-maturity investments. Held-to-maturity investments are measured at amortized cost using the effective interest method, less any impairment, with revenue recognized on an effective-yield basis.

4) AFS financial assets

AFS financial assets are non-derivatives that are either designated as AFS or are not classified as (a) loans and receivables, (b) held-to-maturity investments or (c) financial assets at FVTPL.

They are subsequently measured at fair value at the end of each reporting period. Changes in the carrying amount of AFS monetary financial assets relating to changes in foreign currency rates, interest income calculated using the effective interest method and dividends on AFS equity investments are recognized in profit or loss. Other changes in the carrying amount of AFS financial assets are recognized in other comprehensive income (as investments revaluation reserve). When the investment is disposed of, or is determined to be impaired, the cumulative gain or loss previously accumulated in other comprehensive income is reclassified to profit or loss.

Dividends on AFS equity instruments are recognized in profit or loss when the Company's right to receive the dividends is established.

AFS equity investments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured and derivatives that are linked to and must be settled by delivery of such unquoted equity investments are measured at cost, less any identified impairment losses at the end of each reporting period.

5) Loans and receivables

Trade receivables, loans and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as 'loans and receivables'. Loans and receivables are measured at amortized cost using the effective interest method, less any impairment. Interest income is recognized by applying the effective-interest rate, except for short-term receivables when the effect of discounting is immaterial.

6) Impairment of financial assets

Financial assets, other than those at FVTPL, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

For AFS equity investments, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

For certain categories of financial assets, such as trade receivables, assets that are assessed not to be impaired individually are, in addition, assessed for impairment on a collective basis. Objective evidence of impairment for a portfolio of receivables could include the Company's past experience of collecting payments, an increase in the number of delayed payments in the portfolio past the average credit period of 30 days, as well as observable changes in national or local economic conditions that correlate with default on receivables.

For financial assets carried at amortized cost, the amount of the impairment loss recognized is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective-interest rate.

For financial assets that are carried at cost, the amount of the impairment loss recognized is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

When an AFS financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the period.

For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

In respect of AFS equity securities, impairment losses previously recognized in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to an impairment loss is recognized in other comprehensive income. In respect of AFS debt securities, impairment losses are subsequently reversed through profit or loss if an increase in the fair value of the investment can be objectively related to an event occurring after the recognition of the impairment loss.

7) Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Company neither transfers, nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Company recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, the Company continues to recognize the financial asset and also recognizes a collateralized borrowing for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulated gain or loss that had been recognized in other comprehensive income and accumulated in equity is recognized in profit or loss.

On derecognition of financial assets other than in its entirety (e.g., when the Company retains an option to repurchase part of a transferred asset, or it retains a residual interest, and such a retained interest indicates that the transferor has neither transferred, nor retained substantially all the risks and rewards of ownership and has retained control of the transferred asset), the Company allocates the previous carrying amount of the financial asset between the part it continues to recognize under continuing involvement and the part it no longer recognizes on the basis of the relative fair value of those parts on the date of the transfer. The difference between the carrying amount allocated to the part that is no longer recognized and the sum of the consideration received for the part that is no longer recognized and any cumulative gain or loss allocated to it that had been recognized in other comprehensive income is recognized in profit or loss. A cumulative gain or loss that had been recognized in other comprehensive income is allocated between the part that continues to be recognized and the part that is no longer recognized on the basis of the relative fair value of those parts.

(20) Financial liabilities and equity instruments

1) Classification as debt or equity

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

2) 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 Company are recognized at the proceeds received, net of direct issue costs.

Repurchase of the Company'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 Company's own equity instruments.

3) Compound instruments

The component parts of compound instruments (convertible bonds) issued by the Company are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and equity instrument. Conversion option that will be settled by the exchange of a fixed amount of cash or another financial asset for a fixed number of the Company's own equity instruments is an equity instrument.

At the date of issue, the fair value of the liability component is estimated using the prevailing market-interest rate for a similar non-convertible instrument. This amount is recorded as a liability on an amortized cost basis using the effective interest method until extinguished upon conversion or at the instrument's maturity date.

The conversion option classified as equity is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognized and included in equity, net of income tax effects, and is not subsequently remeasured. In addition, the conversion option classified as equity will remain in equity until the conversion option is exercised, in which case, the balance recognized in equity will be transferred to share premium. No gain or loss is recognized in profit or loss upon conversion or expiration of the conversion option.

4) Financial liabilities

Financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments. Financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the issue of financial liabilities are deducted from the fair value of the financial liabilities on initial recognition. Transaction costs directly attributable to acquisition of financial liabilities at FVTPL are recognized immediately in profit or loss.

Financial liabilities are classified as either financial liabilities at FVTPL or other financial liabilities.

5) Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is either held for trading or it is designated as FVTPL.

Financial liabilities at FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gain or loss recognized in profit or loss incorporates any interest paid on the financial liability and is included in the 'Other non-operating income and expense' line item in the separate statements of income.

6) Other financial liabilities

Other financial liabilities are subsequently measured at amortized cost using the effective interest method, with interest expense recognized on an effective-yield basis.

7) Financial guarantee contracts

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 a debt instrument.

Financial guarantee contract liabilities are initially measured at their fair values and, if not designated as at FVTPL, 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 1018 *Revenue*

8) Derecognition of financial liabilities

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

(21) Derivative financial instruments

The Company enters into a variety of derivative financial instruments to manage its exposure to interest rate and foreign exchange rate risk, including foreign exchange forward contracts, interest rate swaps and cross currency swaps.

Derivatives are initially recognized at fair value at the date the derivative contract is entered into, and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gain or loss is recognized in profit or loss immediately, unless the derivative is designated and effective as a hedging instrument; in such case, the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

A derivative with a positive fair value is recognized as a financial asset; a derivative with a negative fair value is recognized as a financial liability. A derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the instrument is more than 12 months, and is not expected to be realized or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

1) Embedded derivatives

Derivatives embedded in non-derivative host contracts are treated as separate derivatives when they meet the definition of a derivative; their risks and characteristics are closely related to those of the host contracts and the contracts are not measured at FVTPL.

2) Hedge accounting

The Company designates certain hedging instruments, which include derivatives, embedded derivatives and non-derivatives in respect of foreign currency risk, as either fair value hedges, cash flow hedges or hedges of net investments in foreign operations. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Company documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item.

3) 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 statements of income relating to the hedged item.

Hedge accounting is discontinued when the Company revokes the hedging relationship, when the hedging instrument expires or is sold, terminated or exercised, or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortized to profit or loss from that date.

4) 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 'finance income and expense' 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 statements 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 Company revokes the hedging relationship, when 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.

(22) 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 Company 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 separate financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of K-IFRS 1102, Share-Based Payment, 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 at Note 10.

(23) Approval of separate financial statements

The separate financial statements for the year ended December 31, 2014, were approved by the Board of Directors on February 27, 2015.

3. CRITICAL ACCOUNTING JUDGEMENT AND KEY SOURCES OF ESTIMATION UNCERTAINTY:

In the application of the Company's accounting policies, which are described in Note 2, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

(1) Revenue recognition

Revenue from service or construction projects is recognized based on percentage-of-completion method. It needs to estimate a rate that can measure the service provided by the Company.

(2) Defined benefit obligation

The Company's defined benefit obligation is determined based on the actuarial valuation carried out at the end of each annual reporting period. Actuarial assumptions are the Company's best estimates of the variables in determining the cost of providing postretirement benefits, such as discount rates, rates of expected future salary increases and mortality rates.

(3) Provision for construction losses

Provisions for the expected cost of warranty obligations are recognized at the best estimate of the past expenditure experiences periodically.

(4) Revaluation model on land and fair value model on investment in real properties

As stated in Note 12, the Company uses evaluation technique, including inputs that are not based on observable market data, to approximate revalued amount of land classified as property, plant and equipment and fair value of investment property. Management assuming evaluation method has been considered appropriate.

(5) Deferred tax

Recognition and measurement of deferred tax assets and liabilities require the management's judgment, in particular, whether to recognize if the scope of deferred tax assets is affected by management's judgment and assumption in the future.

(6) Estimated useful lives of property, plant and equipment and intangible assets

Useful lives for depreciation is determined by the management's judgment.

4. FINANCIAL RISK MANAGEMENT:

The Company is exposed to various financial risks, such as market, credit and liquidity. The purpose of financial risk management of the Company is to enhance efficiency of financial management and improve the financial structure to create a stable and continuous management performance.

Financial risk management activities, such as identification, evaluation and hedge, are mostly performed by Treasury department under close cooperation of the relevant department. The Company focuses on minimizing effect of financial risk through regular monitoring.

(1) Market risk

1) Foreign exchange risk

The Company is exposed to foreign currency risk, as it makes transactions in foreign currencies. The Company's goal about foreign exchange risk control is to minimize uncertainty and income/loss volatility by exchange fluctuations. Foreign exchange risk control is managed by the Company's policy on foreign exchange risk management. Foreign exchange management of speculative purpose is strictly prohibited.

The Company reduces exposure to foreign currency risk by matching the inflow and the outflow of foreign currencies (natural hedge), and manages foreign currency risk by using currency derivatives, such as currency forwards, for the remaining exposure.

The book value of the Company's monetary assets and liabilities denominated in foreign currencies as of December 31, 2014 and 2013, is as follows (in thousands of Korean won):

	December 31, 2014					December 31, 2013				
	USD	EUR	CNY	Others (*)	Total	USD	EUR	CNY	Others (*)	Total
Assets	₩80,900,696	₩536,882	₩258,060	₩106,537	₩81,802,175	₩25,885,276	₩4,052,072	₩219,562	₩100,976	₩30,257,886
Liabilities	(7,555,119)	(22,968,235)	(38,774)	(5,744,506)	(36,306,634)	(68,573,294)	(15,602,111)	(66,244)	(3,890,433)	(88,132,082)
Net assets (liabilities)	₩73,345,577	(₩22,431,353)	₩219,286	(₩5,637,969)	₩45,495,541	(₩42,688,018)	(₩11,550,039)	₩153,318	(₩3,789,457)	(₩57,874,196)

(*) Others are assets and liabilities denominated in foreign currencies other than USD, EUR and CNY.

Net foreign currency translation gain/loss for the year ended December 31, 2014 and 2013, is ₩744,924 thousand and ₩721,671 thousand, respectively.

A sensitivity analysis on the Company's income before tax for the period, assuming a 10% increase and 10% decrease in currency exchange rates, as of December 31, 2014 and 2013, is as follows (in thousands of Korean won):

	December 31, 2014		December 31, 2013	
	10% increase in Korean won against foreign currency	10% decrease in Korean won against foreign currency	10% increase in Korean won against foreign currency	10% decrease in Korean won against foreign currency
Income before tax impact	₩4,549,554	(₩4,549,554)	(₩5,787,420)	₩5,787,420

The sensitivity analysis above is based on monetary assets and liabilities denominated in foreign currencies other than functional currency as of December 31, 2014 and 2013.

2) Interest rate risk

The Company's interest rate risk is related to borrowings and bank deposits with floating-interest rates, and related interest income and expense are exposed to interest rate risk. The Company is exposed to interest rate risk mainly due to its borrowings with floating-interest rates. Borrowings and bank deposits with fixed-interest rates do not have influence on net income and equity due to the changes in market-interest rates. The purpose of interest rate risk management is to minimize uncertainty and financial cost by interest rate volatility.

To manage its interest rate risk, the Company minimizes external borrowings using internal funds and reduces borrowings with high-interest rates, and maintains the appropriate balance between borrowings with floating-interest rate and fixed-interest rate and short-term and long-term borrowings. The Company manages its interest rate risk through regular monitoring and adjustments to the changing domestic and overseas market conditions and nature of its interest rates.

The book value of the Company's financial assets and liabilities with floating-interest rates exposed to interest-rate risk as of December 31, 2014 and 2013, is as follows (in thousands of Korean won):

	December 31, 2014	December 31, 2013
Financial assets	₩40,676,259	₩30,939,653
Financial liabilities	(20,000,000)	(63,318,000)
Net assets (liabilities)	₩20,676,259	(₩32,378,347)

A sensitivity analysis on the Company's income before tax assuming a 100bp increase and 100bp decrease in interest rates as of December 31, 2014 and 2013, is as follows (in thousands of Korean won):

	December 31, 2014		December 31, 2013	
	100bp increase	100bp decrease	100bp increase	100bp decrease
Income before tax impact	₩206,763	(₩206,763)	(₩323,783)	₩323,783

3) Price risk

The Company is exposed to equity price risks arising from its listed equity investments among AFS equity investments. The Company periodically measures the risk that the fair value or future cash flows of equity investments may fluctuate due to the changes in market prices. Important investments in the Company's portfolio are individually managed, and acquisition and disposal are approved by the management of the Company.

(2) Credit risk

As one of the parties to financial instrument may fail to perform the duty, the Company is exposed to credit risk, which may inflict financial losses to the other party. Credit risk primarily affects accounts receivable and other receivables for customers, as well as AFS investments, deposits, financial derivatives and payment guarantees. The Company transacts with customers that are above an acceptable level in order to manage credit risk and operate policy and procedure to reinforce financial assets.

When the Company enters into contracts with new customers, it will be provided with security or payment guarantees based on open financial information and information provided by credit-rating agencies.

Also, the Company reassesses the credit rating of customers periodically, reconsiders maximum credit limit and readjusts security level. The Company reports the delinquent account receivable situation and proper measures about financial assets that delayed collection.

The maximum exposure amount of credit risk of financial assets as of December 31, 2014 and 2013, is as follows (in thousands of Korean won):

		December 31, 2014	December 31, 2013
Loans and receivables	Cash and cash equivalents	₩40,970,490	₩41,258,747
	Financial instruments	39,744,859	146,803,168
	Trade and other receivables	73,073,306	25,511,680
	Long-term and short-term loans	4,216,940	13,909,247
	Long-term others receivables	10,701,073	9,693,320
Held-to-maturity investments	Long-term and short-term investment securities	7,000,000	7,000,000
Derivative assets		3,212,151	46,332,783
Total		₩178,918,819	₩290,508,945

Meanwhile, the Company's guarantee amount is equal to (see Note 31) contingent liabilities, which is the maximum amount for claiming a warranty by a financial guarantee contract, except financial assets.

Aging analysis of the Company's receivables as of December 31, 2014 and 2013, is as follows (in thousands of Korean won):

		December 31, 2014					
Individually assessed receivables		Receivables assessed for impairment on a collective basis					Total
		Within due	0-3 months	3-6 months	6-12 months	More than 12 months	
Short-term loans	₩-	₩1,100,900	₩-	₩-	₩-	₩-	₩1,100,900
Trade receivable	-	56,898,656	6,119,278	180,927	689,420	246,970	64,135,251
Other receivable	7,763,621	375,568	-	-	-	-	8,139,189
Accrued income	-	939,894	-	-	-	-	939,894
Long-term loans	-	3,398,735	-	-	-	-	3,398,735
Long-term accounts receivables	-	5,488,065	-	-	-	-	5,488,065
Total	₩7,763,621	₩68,201,818	₩6,119,278	₩180,927	₩689,420	₩246,970	₩83,202,034

		December 31, 2013					
Individually assessed receivables		Receivables assessed for impairment on a collective basis					Total
		Within due	0-3 months	3-6 months	6-12 months	More than 12 months	
Short-term loans	₩-	₩9,155,850	₩-	₩-	₩-	₩-	₩9,155,850
Trade receivable	-	₩15,345,360	1,924,468	1,280,108	966,963	761,109	20,278,008
Other receivable	6,236	4,470,604	-	-	-	-	4,476,840
Accrued income	-	1,273,289	-	-	-	-	1,273,289
Long-term loans	-	5,124,452	-	-	-	-	5,124,452
Long-term accounts receivables	-	3,284,133	-	-	-	-	3,284,133
Total	₩6,236	₩38,653,688	₩1,924,468	₩1,280,108	₩ 966,963	₩761,109	₩43,592,572

Receivables past due are assessed as impaired. An allowance account is recognized by applying individually recognized allowance rate for receivables that can be assessed to be impaired individually due to insolvency, bankruptcy and others. Group of financial assets that are not individually significant and have similar credit risk characteristics are assessed for impairment on a collective basis. An allowance account is recognized based on aging analysis and the Company's past experience of receivables' collection.

Other receivables, AFS and held-to-maturity financial assets, deposits in financial institution and derivative instruments are individually assessed for impairment.

(3) Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting its financial liability obligations related to its financing for its operation.

The Company forecasts cash flows from operating, investing and financing activities through a cash flow budget regularly. This secures and retains a necessary liquidity scale in advance. Also, this manages a possible liquidity risk for the future.

The Company's major non-derivative liabilities as of December 31, 2014 and 2013, have matured as follows (in thousands of Korean won):

		December 31, 2014					
		Nominal cash flows according to contract (*)					
	Book value	Total	Less than 1 year	1-2 years	2-5 years	More than 5 years	
Financial liability	₩414,805,834	₩415,546,097	₩178,627,807	₩1,918,290	₩235,000,000		₩-
Interest expense	-	35,496,786	11,882,036	10,591,000	13,023,750		-
Total	₩414,805,834	₩451,042,883	₩190,509,843	₩12,509,290	₩248,023,750		₩-

		December 31, 2013					
		Nominal cash flows according to contract (*)					
	Book value	Total	Less than 1 year	1-2 years	2-5 years	More than 5 years	
Financial liability	₩388,663,952	₩389,619,335	₩148,506,695	₩51,112,640	₩190,000,000		₩-
Interest expense	-	42,801,626	12,159,126	9,947,500	20,695,000		-
Total	₩388,663,952	₩432,420,961	₩160,665,821	₩61,060,140	₩210,695,000		₩-

(*) Maturity analysis above is based on undiscounted cash flows per the contracts, which differs from the financial liability recognized in the separate statements of financial position, and the above amount also includes guarantee amounts (see Note 31).

(4) Capital risk

The Company performs capital risk management to maintain its ability to continuously provide income to stockholders and parties in interest, and to maintain optimum capital structure to reduce capital expenses.

Debt-to-equity ratio calculated as total liabilities divided by equity is used as an index to manage the Company's capital similar to overall industry practice.

Debt-to-equity ratios at the end of the reporting date are as follows (in thousands of Korean won):

	December 31, 2014	December 31, 2013
Debt	₩823,023,435	₩858,981,798
Equity	646,019,121	679,935,587
Debt-to-equity ratio	127.40%	126.33%

5. RESTRICTED FINANCIAL INSTRUMENTS:

Details of restricted financial instruments as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

Account	December 31, 2014	December 31, 2013	Remarks
Short-term financial instruments	₩810,000	₩-	Establishment of a pledge to Korea Gas Corporation
Long-term financial instruments	6,500	6,500	Guarantee deposits for checking account
	<u>1,928,359</u>	<u>1,796,668</u>	Employee stock ownership loan secured by deposits
Total	<u>₩2,744,859</u>	<u>₩1,803,168</u>	

6. ACCOUNTS AND OTHER RECEIVABLES:

(1) Accounts and other receivables as of December 31, 2014 and 2013, consist of the following (in thousands of Korean won):

	December 31, 2014			December 31, 2013		
	Gross	Allowance for Doubtful accounts	Carrying value	Gross	Allowance for doubtful accounts	Carrying value
CURRENT:						
Trade receivables	₩64,135,251	(₩197,312)	₩63,937,939	₩20,278,008	(₩588,933)	₩19,689,075
Other receivables	8,139,189	(6,236)	8,132,953	4,476,840	(6,236)	4,470,604
Accrued income	939,894	-	939,894	1,273,289	-	1,273,289
Guarantee deposits	62,520	-	62,520	78,712	-	78,712
Subtotal	<u>73,276,854</u>	<u>(203,548)</u>	<u>73,073,306</u>	<u>26,106,849</u>	<u>(595,169)</u>	<u>25,511,680</u>
NON-CURRENT:						
Other receivables	₩4,886,885	₩-	₩4,886,885	₩3,159,442	₩-	₩3,159,442
Guarantee deposits	5,814,188	-	5,814,188	6,533,878	-	6,533,878
Subtotal	<u>10,701,073</u>	<u>-</u>	<u>10,701,073</u>	<u>9,693,320</u>	<u>-</u>	<u>9,693,320</u>
Total	<u>₩83,977,927</u>	<u>(₩203,548)</u>	<u>₩83,774,379</u>	<u>₩35,800,169</u>	<u>(₩595,169)</u>	<u>₩35,205,000</u>

(2) The changes in allowance for doubtful accounts are as follows (in thousands of Korean won):

	2014			
	January 1, 2014	Increase	Reversal	December 31, 2014
Trade receivable	(₩588,933)	₩-	₩391,621	(₩197,312)
Other receivables	(6,236)	-	-	(6,236)
	<u>(₩595,169)</u>	<u>₩-</u>	<u>₩391,621</u>	<u>(₩203,548)</u>

Bad debt expense from trade receivables is included in selling, general and administrative expenses, and bad debt expense from other receivables is included in other non-operating expense.

7. INVENTORIES:

Details of inventory valuation securities as of December 31, 2014 and 2013, are summarized as follows (in thousands of Korean won):

	December 31, 2014			December 31, 2013		
	Acquisition cost	Valuation allowance	Book value	Acquisition cost	Valuation allowance	Book value
Work in progress	₩107,955,272	(₩14,136,463)	₩93,818,809	₩96,425,489	(₩14,444,478)	₩81,981,011
Raw materials	94,332,184	(4,528,115)	89,804,069	77,734,173	(3,403,154)	74,331,019
Materials in transit	13,773,567	-	13,773,567	20,236,118	-	20,236,118
Total	<u>₩216,061,023</u>	<u>(₩18,664,578)</u>	<u>₩197,396,445</u>	<u>₩194,395,780</u>	<u>(₩17,847,632)</u>	<u>₩176,548,148</u>

The Company recorded gain (loss) on inventory valuation totaling (-)₩816,946 thousand and ₩15,290,243 thousand for the years ended December 31, 2014 and 2013, respectively.

8. LONG-TERM AND SHORT-TERM INVESTMENT SECURITIES:

Long-term and short-term investment securities as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	December 31, 2014		December 31, 2013	
	Current	Non-current	Current	Non-current
Investment in capital of partnership:				
Korea Marine Equipment Association	₩-	₩20,000	₩-	₩20,000
Electronic Contractors' Financial Cooperative	-	52,047	-	52,047
Equity securities:				
Casco	-	1	-	1
Subtotal	-	<u>72,048</u>	-	<u>72,048</u>
Long-term held-to-maturity financial assets				
Debt security:				
Subordinated beneficiary certificate	<u>7,000,000</u>	-	-	<u>7,000,000</u>
Total	<u>₩7,000,000</u>	<u>₩72,048</u>	<u>₩-</u>	<u>₩7,072,048</u>

Long-term held-to-maturity financial assets is expired on March 30, 2015. AFS financial assets are measured at acquisition cost as they cannot be reliably measured at fair value.

9. DERIVATIVES:

(1) Details of the derivatives and risk aversion accounting are as follows:

Purpose	Derivative instruments	Contract description
Risk aversion of fair value	Foreign currency forwards	When receiving the foreign receivables, determined foreign payables to fix the value of Korean won at maturity about exposed fluctuation risk of exchange rate
	Long-term foreign currency borrowings	When receiving the foreign receivables, it fixes the value of Korean won at maturity about exposed fluctuation risk of exchange rate

(2) Details of gain and loss on valuation of derivatives as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

		December 31, 2014						
		Buy		Sell		Assets	Gains	Firm
		Currency	Amount	Currency	Amount	(liabilities)	(losses)	commitment
Foreign currency forwards	KRW	752,196,632	USD	693,038,000	(₩13,870,143)	(₩19,654,828)	₩31,200,074	
	EUR	61,928,000	KRW	88,752,216	(4,976,801)	(4,933,113)	7,918,277	
	CHF	2,739,000	KRW	3,226,908	(113,552)	(139,961)	101,938	
Total						(₩18,960,496)	(₩24,727,902)	₩39,220,289
		December 31, 2013						
		Buy		Sell		Assets	Gains	Firm
		Currency	Amount	Currency	Amount	(liabilities)	(losses)	commitment
Foreign currency forwards	KRW	980,501,554	USD	874,516,016	₩45,805,211	₩32,569,776	(₩17,760,943)	
	KRW	1,455,617	EUR	959,000	53,373	(8,417)	(6,302)	
	EUR	76,841,000	KRW	115,738,313	(2,431,635)	(392,053)	4,120,036	
	CHF	3,033,000	KRW	3,674,256	10,523	14,969	(10,523)	
Borrowings in foreign currency	KRW	62,668,463	USD	60,000,000	-	-	4,313,118	
Total						₩43,437,472	₩32,184,275	(₩9,344,614)

10. FINANCIAL INSTRUMENTS:

- (1) Categories of financial instruments as of December 31, 2014 and 2013, are as follows
(in thousands of Korean won):

	December 31, 2014						
	Financial assets at FVTPL	Loans and receivables	AFS financial assets	Held-to-maturity investments	Derivatives designated as hedging instruments	Book value	Fair value
Cash and cash equivalents	₩-	₩40,970,490	₩-	₩-	₩-	₩40,970,490	₩40,970,490
Long- and short-term financial instruments	-	39,744,859	-	-	-	39,744,859	39,744,859
Trade and other receivables	-	73,073,306	-	-	-	73,073,306	73,073,306
Derivative assets	-	-	-	-	3,212,151	3,212,151	3,212,151
Long- and short-term loans	-	4,216,940	-	-	-	4,216,940	4,216,940
Long-term short-term investment securities	-	-	72,048	7,000,000	-	7,072,048	7,072,048
Long-term other receivables	-	10,701,073	-	-	-	10,701,073	10,701,073
Total	₩-	₩168,706,668	₩72,048	₩7,000,000	₩3,212,151	₩178,990,867	₩178,990,867

	December 31, 2014					
	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivatives designated as hedging instruments	Financial guarantee contract	Book value	Fair value
Trade and other payables	₩-	₩124,770,715	₩-	₩-	₩124,770,715	₩124,770,715
Borrowings and bonds	-	288,116,829	-	-	288,116,829	288,116,829
Derivative liabilities	-	-	22,172,647	-	22,172,647	22,172,647
Long-term non-trade payables	-	1,918,290	-	-	1,918,290	1,918,290
Financial guarantee liabilities	-	-	-	4,655,456	4,655,456	4,655,456
Total	₩-	₩414,805,834	₩22,172,647	₩4,655,456	₩441,633,937	₩441,633,937

December 31, 2013							
	Financial assets at FVTPL	Loans and receivables	AFS financial assets	Held-to-maturity investments	Derivatives designated as hedging instruments	Book value	Fair value
Cash and cash equivalents	₩-	₩41,258,747	₩-	₩-	₩-	₩41,258,747	₩41,258,747
Long- and short-term financial instruments	-	146,803,168	-	-	-	146,803,168	146,803,168
Trade and other receivables	-	25,511,680	-	-	-	25,511,680	25,511,680
Derivative assets	-	-	-	-	46,332,783	46,332,783	46,332,783
Long- and short-term loans	-	13,909,247	-	-	-	13,909,247	13,909,247
Long-term short-term investment securities	-	-	72,048	7,000,000	-	7,072,048	7,072,048
Long-term other receivables	-	9,693,320	-	-	-	9,693,320	9,693,320
Total	₩-	₩237,176,162	₩72,048	₩7,000,000	₩46,332,783	₩290,580,993	₩290,580,993

December 31, 2013						
	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivatives designated as hedging instruments	Financial guarantee contract	Book value	Fair value
Trade and other payables	₩-	₩85,188,695	₩-	₩-	₩85,188,695	₩85,188,695
Borrowings and bonds	-	302,362,617	-	-	302,362,617	302,362,617
Derivative liabilities	-	-	2,895,311	-	2,895,311	2,895,311
Long-term non-trade payables	-	1,112,640	-	-	1,112,640	1,112,640
Financial guarantee liabilities	-	-	-	2,977,125	2,977,125	2,977,125
Total	₩-	₩388,663,952	₩2,895,311	₩2,977,125	₩394,536,388	₩394,536,388

(2) Fair value measurements of financial instruments by fair value levels as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

Type	December 31, 2014			
	Level 1	Level 2	Level 3	Total
Financial assets:				
Derivatives designated as hedging instruments	₩-	₩3,212,151	₩-	₩3,212,151
Financial liabilities:				
Derivatives designated as hedging instruments	₩-	(₩22,172,647)	₩-	(₩22,172,647)
Total	₩-	(₩18,960,496)	₩-	(₩18,960,496)

Type	December 31, 2013			
	Level 1	Level 2	Level 3	Total
Financial assets:				
Derivatives designated as hedging instrumen	₩-	₩46,332,783	₩-	₩46,332,783
Financial liabilities:				
Derivatives designated as hedging instrumen	₩-	(₩2,895,311)	₩-	(₩2,895,311)
Total	₩-	₩43,437,472	₩-	₩43,437,472

For the convenience of practical, fair value of long-term investment securities that have been evaluated with a closing Level 3 before, we used the substitute value of fair value net assets of the investee.

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities

Level 2: Inputs other-than-quoted prices that are observable for the asset or liability, either directly or indirectly.

Level 3: Inputs that are not based on observable market data(unobservable inputs)

The fair value of financial instruments traded in active markets is based on quoted market prices at the dates of the separate statements of financial position. These instruments are included in Level 1. Instruments included in Level 1 comprise primarily listed equity investments classified as trading securities or AFS financial assets.

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity-specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in Level 2. On the other hand, derivatives designated as hedging instruments that are classified as Level 2 were used as the input forward exchange rates for the reporting period-end date.

If one or more of the significant inputs are not based on observable market data, the instrument is included in Level 3.

- (3) Valuation methodologies and inputs used for derivatives designated as hedging instruments (Level 2) are as follows:

Valuation methodology	Observable inputs	Explanation of input parameters
Discounted cash flow method	Forward exchange rate	It is based on forward exchange rate, disclosed on the market, its remaining period is the same to maturity of forward contracts. If the forward exchange rate is not disclosed on the market, it is calculated by using of interpolation method
	Discount rate	It is determined by using yield curve that is disclosed at the end of reporting period.

(4) Profit and loss by categories of financial instruments as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	2014								
	Interest	Dividend	Valuation	Impairment	Disposal	Foreign exchange	Others	Other comprehensive income	
Financial asset at FVTPL	₩-	₩-	₩-	₩-	₩-	₩-	₩-	₩-	₩-
Loans and receivables	4,173,629	-	-	391,621	-	4,013,103	-	-	-
AFS financial assets	-	-	-	-	-	-	-	-	-
Held-to-maturity investments	588,000	-	-	-	-	-	-	-	-
Total	₩4,761,629	₩-	₩-	₩391,621	₩-	₩4,013,103	₩-	₩-	₩-
Financial liabilities at FVTPL	₩-	₩-	₩-	₩-	₩-	₩-	₩-	₩-	₩-
Financial liabilities at amortized cost	(12,768,544)	-	-	-	-	692,241	-	-	-
Financial guarantee contracts	-	-	-	-	-	-	1,295,113	-	-
Total	(₩12,768,544)	₩-	₩-	₩-	₩-	₩692,241	₩1,295,113	₩-	₩-
	2013								
	Interest	Dividend	Valuation	Impairment	Disposal	Foreign exchange	Others	Other comprehensive income (*)	
Financial asset at FVTPL	₩-	₩-	₩-	₩-	₩-	₩-	₩-	₩-	₩-
Loans and receivables	6,245,741	-	-	3,530,160	-	161,550	-	-	-
AFS financial assets	-	827	-	(1,030,616)	-	-	-	-	180,547
Held-to-maturity investments	585,498	-	-	-	-	-	-	-	-
Total	₩6,831,239	₩827	₩-	₩2,499,544	₩-	₩161,550	₩-	₩-	₩180,547
Financial liabilities at FVTPL	₩-	₩-	₩-	₩-	₩-	₩-	₩-	₩-	₩-
Financial liabilities at amortized cost	(11,317,036)	-	-	-	-	(273,466)	-	-	-
Financial guarantee contracts	-	-	-	-	-	-	1,227,966	-	-
Total	(₩11,317,036)	₩-	₩-	₩-	₩-	(₩273,466)	₩1,227,966	₩-	₩-

(*) Other comprehensive income does not reflect corporate tax effect.

Apart from the above, the comprehensive income generated by the derivatives designated as hedging instruments is as follows.

	December 31, 2014			December 31, 2013		
	Valuation	Disposal	Other comprehensive income(*)	Valuation	Disposal	Other comprehensive income(*)
Derivatives designated as hedging instruments	(₩24,727,902)	₩1,348,755	₩-	₩32,184,276	(₩4,666,544)	₩-

(*) Other comprehensive profit or loss does not reflect corporate tax effect.

11. INVESTMENTS IN ASSOCIATES AND SUBSIDIARIES:

Investments in associates and subsidiaries as of December 31, 2014 and 2013, are summarized as follows (in thousands of Korean won):

<u>Company</u>	<u>Country</u>	<u>Percentage</u>	<u>December 31, 2014</u>	<u>December 31, 2013</u>
Subsidiary:				
Doosan Marine Industry (Dalian) Co., Ltd. (“DMI”)	China	100.00%	₩17,579,757	₩17,579,757
Associates:				
Dalian Samyoung Doosan Metal Product Co., Ltd. (*1)	China	10.80%	3,853,794	3,853,794
Doosan Infracore International, Inc. (“DII”) (*2)	America	11.59%	146,521,807	146,521,807
Doosan Holdings Europe Ltd. (“DHEL”) (*2)	Island	21.73%	196,038,744	196,038,744
Subtotal			346,414,345	346,414,345
Total			₩363,994,102	₩363,994,102

(*1) Although the Company’s ownership in each of these companies is less than 20%, the Company has significant influence over these companies through participation in various management decisions of these companies. As a result, the Company accounts for these investments using the equity method.

(*2) Investees have agreement with Doosan Infracore (“DI”), related party of the Company, for appointment of representative director, etc., and the Company accounts for these investments using the equity method. In addition, the Company provides share of DII and DHEL for its loans as collateral (see Note 31-(2)).

The Company does not have securities of subsidiaries and associates with posted market price.

12. PROPERTY, PLANT AND EQUIPMENT:

(1) Changes in property, plant and equipment for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	2014					
	Land	Buildings and structures	Machinery	Others	Construction in progress	Total
January 1, 2014	₩283,761,955	₩202,468,302	₩112,942,419	₩3,960,243	₩3,203,638	₩606,336,557
Acquisition	-	259,779	666,094	253,552	525,640	1,705,065
Transfer	-	-	3,114,650	34,708	(2,894,758)	254,600
Disposal	-	-	(2,891)	(2)	-	(2,893)
Depreciation	-	(6,999,690)	(12,658,323)	(1,627,749)	-	(21,285,762)
December 31, 2014	₩283,761,955	₩195,728,391	₩104,061,949	₩2,620,752	₩834,520	₩587,007,567
-Acquisition cost	₩236,132,293	₩247,600,188	₩240,599,422	₩56,331,582	₩834,520	₩781,498,005
-Accumulated depreciation	-	(51,871,797)	(136,537,473)	(53,710,830)	-	(242,120,100)
-Revaluation surplus	47,629,662	-	-	-	-	47,629,662
	2013					
	Land	Buildings and structures	Machinery	Others	Construction in progress	Total
January 1, 2013	₩236,951,695	₩208,461,582	₩122,057,502	₩6,513,135	₩2,445,682	₩576,429,596
Acquisition	-	1,782,661	2,074,160	437,710	3,149,358	7,443,889
Transfer (*1)	(819,402)	(726,594)	1,267,531	174,062	(2,391,402)	(2,495,805)
Net changes from revaluation	47,629,662	-	-	-	-	47,629,662
Disposal	-	-	(7,464)	(1,005)	-	(8,469)
Depreciation	-	(7,049,347)	(12,449,310)	(3,163,659)	-	(22,662,316)
December 31, 2013	₩283,761,955	₩202,468,302	₩112,942,419	₩3,960,243	₩3,203,638	₩606,336,557
-Acquisition cost	₩236,132,293	₩247,340,409	₩236,979,909	₩56,124,182	₩3,203,638	₩779,780,431
-Accumulated depreciation	-	(44,872,107)	(124,037,490)	(52,163,939)	-	(221,073,536)
-Revaluation surplus	47,629,662	-	-	-	-	47,629,662

(*1) Amounts related to transfer from construction in progress to original account and from property, plant and equipment (land and building) to assets held for sale

The Company has confirmed subsequent measurement as a revaluation for land, and the amount of land stated at cost is 236,132,293 thousand won as of December 31, 2014 and 2013.

- (2) The Company revalued its land assets as of December 31, 2014 and 2013, as follows:

For the year ended December 31, 2013, the Company initially remeasured all land assets using fair value at the date of the revaluation. As of December 31, 2013, the fair value of land assets is determined from appraisal that is undertaken by independently qualified valuers, Pacific Appraisal Group Limited (Pacific), on October 31, 2013. Fair value of land assets is not remeasured because the change of its value from December 31, 2013, to December 31, 2014, is not significant.

The Pacific is a member of Korea Association of Property Appraisers and comprises of certified professionals that have a significant amount of industry experience.

- (3) Fair value measurements of land assets by fair value hierarchy level as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

Type	2014			2013		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Land	₩-	₩-	₩283,761,955	₩-	₩-	₩283,761,955

- (4) Valuation methodologies and inputs used for fair value measurements of land assets (Level 3) are as follows:

Valuation methodology	Significant inputs that are not based on observable market data (unobservable inputs)	Correlation between unobservable inputs and fair value arguments
OARLP	Fluctuation rate of land price and others	Fair value increases (decreases) if rate of land price increases (decreases)
OARLP of similar parcels nearby the subject land and reflating corrections necessary for differences between the subject and the comparables	Parcel conditions and others	Fair value increases (decreases) if correction of parcel conditions and others increase (decreases)
	Land conditions affecting the sales price and others	Fair value increases (decreases) if correction of land conditions affecting the sales price increases (decreases)

- (5) Changes in land whose degree of fair value is classified as Level 3 for the years ended December 31, 2013, are as follows (in thousands of Korean won):

January 1, 2013	Transfer	Revaluation increase		Revaluation decrease	December 31, 2013
		Revaluation surplus	Deferred income tax liabilities		
₩236,951,695	(₩819,402)	₩36,207,540	₩11,559,663	(₩137,541)	₩283,761,955

- (6) Classification of depreciation expenses for the years ended December 31, 2014 and 2013, is as follows (in thousands of Korean won):

	2014	2013
Cost of sales	₩20,680,577	₩21,942,201
Selling and administrative expenses	321,066	435,924
Development costs	284,119	284,191
Total	₩21,285,762	₩22,662,316

13. INTANGIBLE ASSETS:

- (1) Changes in intangible assets for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	2014				
	Development costs	Rights of utilization	Software	Others	Total
January 1, 2014	₩12,850,498	₩416,193	₩8,563,624	₩3,078,225	₩24,908,540
Acquisition	16,563,904	-	38,000	2,736,788	19,338,692
Transfer	1,601,176	-	-	-	1,601,176
Disposal	-	-	-	(544,000)	(544,000)
Amortization	-	(208,096)	(2,978,172)	(433,197)	(3,619,465)
Impairment	-	-	-	(5,940)	(5,940)
December 31, 2014	<u>₩31,015,578</u>	<u>₩208,097</u>	<u>₩5,623,452</u>	<u>₩4,831,876</u>	<u>₩41,679,003</u>
-Acquisition cost	₩31,015,578	₩3,329,540	₩14,148,044	₩5,932,701	₩54,425,863
-Accumulated amortization	-	(3,121,443)	(8,524,592)	(1,100,825)	(12,746,860)
	2013				
	Development costs	Rights of utilization	Software	Others	Total
January 1, 2013	₩4,871,235	₩624,289	₩9,745,265	₩3,373,499	₩18,614,288
Acquisition	7,890,514	-	454,666	-	8,345,180
Transfer	820,204	-	883,276	-	1,703,480
Abandon	(731,455)	-	-	-	(731,455)
Amortization	-	(208,096)	(2,519,583)	-	(2,727,679)
Impairment	-	-	-	(295,274)	(295,274)
December 31, 2013	<u>₩12,850,498</u>	<u>₩416,193</u>	<u>₩8,563,624</u>	<u>₩3,078,225</u>	<u>₩24,908,540</u>
-Acquisition cost	₩12,850,498	₩3,329,540	₩14,110,044	₩4,774,867	₩35,064,949
-Accumulated amortization	-	(2,913,347)	(5,546,420)	(1,696,642)	(10,156,409)

Other intangible assets' book value, which have non-restrictive durable years, is ₩2,875,765 thousand and ₩3,078,225 thousand as of December 31, 2014 and 2013, respectively.

- (2) Expenditure on research and development recognized as expenses amounted to ₩5,673,011 thousand and ₩5,773,802 thousand for the years ended December 31, 2014 and 2013, respectively.
- (3) Borrowing costs added to the cost of intangible assets for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	2014	2013
Borrowing costs added to the cost of intangible assets	₩913,496	₩264,724
Interest rate (%)	4.36%	3.76%

- (4) Classification of amortization expense for the years ended December 31, 2014 and 2013, is as follows (in thousands of Korean won):

	<u>2014</u>	<u>2013</u>
Cost of sales	₩1,851,202	₩2,235,233
Selling and administrative expenses	1,648,263	492,446
Development costs	<u>120,000</u>	<u>-</u>
Total	<u>₩3,619,465</u>	<u>₩2,727,679</u>

14. **BORROWING AND BONDS:**

- (1) Bonds as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

<u>Details</u>	<u>Interest rate (%)</u>	<u>December 31, 2014</u>	<u>December 31, 2013</u>
The 6th	4.16	₩100,000,000	₩100,000,000
The 7th	5.00	<u>90,000,000</u>	<u>90,000,000</u>
Subtotal		<u>190,000,000</u>	<u>190,000,000</u>
Less: Discount on bonds		<u>(740,264)</u>	<u>(955,383)</u>
Net		<u>₩189,259,736</u>	<u>₩189,044,617</u>

- (2) Short-term and long-term borrowings as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

1) Short-term borrowings

<u>Type</u>	<u>Lender</u>	<u>Annual interest rate (%)</u>	<u>December 31, 2014</u>	<u>December 31, 2013</u>
Short-term borrowings in foreign currency	Korea Exchange Bank	1.08-1.10	₩3,857,093	₩-

Short-term borrowings are provided as collateral for the accounts receivable debt transactions that occurred in assigning receivables that do not meet the requirements for removal of financial instruments (see Note 30-(2)).

2) Long-term borrowings

Type	Lender	Interest rate(%)	December 31, 2014	December 31, 2013
Long-term borrowings in domestic currency	La-union	5.15	₩50,000,000	₩50,000,000
	NH Bank	MOR+2.0	20,000,000	-
	Korea Development Bank	4.42	25,000,000	-
	Subtotal		95,000,000	50,000,000
Long-term borrowings in foreign currency	Korea Development Bank	6M LIBOR+1.6	-	21,106,000
	The Export-Import Bank of Korea	6M LIBOR+1.6	-	10,553,000
	Shinhan Bank	6M LIBOR+1.6	-	8,442,400
	Industrial Bank of Korea	6M LIBOR+1.6	-	6,331,800
	Woori Bank	6M LIBOR+1.6	-	8,442,400
	Korea Exchange Bank	6M LIBOR+1.6	-	1,899,540
	Hana Bank	6M LIBOR+1.6	-	3,165,900
	Kookmin Bank	6M LIBOR+1.6	-	1,688,480
	HSBC	6M LIBOR+1.6	-	844,240
	First Gulf Bank	6M LIBOR+1.6	-	844,240
	Subtotal		-	63,318,000
	Subtotal		95,000,000	113,318,000
Less: Current portion		(50,000,000)	(63,318,000)	
Net		₩45,000,000	₩50,000,000	

15. RETIREMENT BENEFIT OBLIGATION:

The Company operates a retirement defined benefit plans for its employees. For defined benefit retirement benefit plans and plan assets, 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 by an external actuary who is professionally qualified.

- (1) Details of retirement benefit obligation as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	December 31, 2014	December 31, 2013
Present value of defined benefit obligation	₩31,811,723	₩22,972,104
Fair value of plan assets	(19,946,058)	(12,363,157)
Total	₩11,865,665	₩10,608,947

- (2) Expenses recognized in income and loss for the years ended December 31 2014 and 2013, are as follows (in thousands of Korean won):

	<u>2014</u>	<u>2013</u>
Current service cost	₩5,272,021	₩5,832,361
Net interest cost (interest cost – expected return on plan assets)	<u>469,569</u>	<u>708,982</u>
Total	<u>₩5,741,590</u>	<u>₩6,541,343</u>

- (3) Details of the total expense recognized in separate statements of income for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	<u>2014</u>	<u>2013</u>
Cost of sales	₩4,201,224	₩4,411,846
Selling and administrative expenses	1,256,804	1,858,208
Development	<u>283,562</u>	<u>271,289</u>
Total	<u>₩5,741,590</u>	<u>₩6,541,343</u>

- (4) Changes in defined benefit obligations for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	<u>2014</u>	<u>2013</u>
Beginning balance	₩22,972,104	₩24,670,006
Current service cost	5,272,021	5,832,361
Transfer in	52,077	174,293
Transfer out	(242,933)	(289,650)
Interest cost	969,018	881,061
Remeasurements of defined benefit liabilities:	3,846,663	(7,001,256)
- Actuarial loss (gain) arising from changes in demographic assumptions	1,095,264	(102,475)
- Actuarial loss (gain) arising from changes in financial assumptions	2,187,452	(5,668,269)
- Others	563,947	(1,230,512)
Benefit paid	<u>(1,057,227)</u>	<u>(1,294,711)</u>
Ending balance	<u>₩31,811,723</u>	<u>₩22,972,104</u>

- (5) Changes in plan assets for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	<u>2014</u>	<u>2013</u>
Beginning balance	₩12,363,157	₩4,854,163
Expected return on plan assets	499,449	172,080
Remeasurements of plan assets	(183,425)	(2,053)
Contributions by employer directly to plan assets	8,405,523	7,505,000
Benefit payment	(1,057,227)	(127,570)
Transfer in	19,158	7,825
Transfer out	(100,577)	(44,866)
National Pension Fund	-	(1,422)
Ending balance	<u>₩19,946,058</u>	<u>₩12,363,157</u>

- (6) Assumptions used on actuarial valuation as of December 31, 2014 and 2013, are as follows:

	<u>December 31, 2014</u>	<u>December 31, 2013</u>
Discount rate for defined benefit obligations	3.40%	4.40%
Expected rate of salary increase:		
Employee	2.40%	2.40%
Officer	3.40%	5.30%

- (7) Details of plan assets as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	<u>December 31, 2014</u>	<u>December 31, 2013</u>
Debt instruments	₩1,295,835	₩505,182
Securities	247,888	-
Loans	84,782	36,825
Deposits	18,251,926	11,800,483
Pension	65,627	20,667
Total	<u>₩19,946,058</u>	<u>₩12,363,157</u>

Most of the plan assets are invested in certain assets being traded on the price quoted by active markets.

- (8) Sensitivity analysis as of December 31, 2014 and 2013, showing how the defined benefit obligation would have been affected by changes in the relevant actuarial assumption is as follows (in thousands of Korean won):

	2014			
	Discount rate		Salary increase rate	
	1% increase	1% decrease	1% increase	1% decrease
Amount	(₩1,376,883)	₩1,525,215	₩1,525,065	(₩1,402,538)
Ratio	(-)4.33%	4.79%	4.79%	(-)4.41%

	2013			
	Discount rate		Salary increase rate	
	1% increase	1% decrease	1% increase	1% decrease
Amount	(₩1,661,059)	₩1,928,477	₩1,948,256	(₩1,706,271)
Ratio	(-)7.23%	8.39%	8.48%	(-)7.43%

- (9) Maturity of the defined benefit obligation as of December 31, 2014, is as follows (in thousands of Korean won):

	Less than 1 year	1 – 2 years	2 – 5 years	5 – 10 years	Total
Payment	₩4,588,493	₩6,809,797	₩14,885,066	₩21,555,345	₩47,838,701

The Company plans to contribute 9,507,173 thousand for the defined benefit plans in 2015.

16. PROVISIONS:

Changes in provisions for the year ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	2014						
	January 1, 2014	Accrual	Use	Others (*)	December 31, 2014	Current	Non-current
Provision for construction warranties	₩10,097,900	(₩3,282,509)	(₩4,060,524)	₩1,111,168	₩3,866,035	₩1,916,319	₩1,949,716
Provision for litigation	-	-	-	-	-	-	-
Total	<u>₩10,097,900</u>	<u>(₩3,282,509)</u>	<u>(₩4,060,524)</u>	<u>₩1,111,168</u>	<u>₩3,866,035</u>	<u>₩1,916,319</u>	<u>₩1,949,716</u>

	2013						
	January 1, 2013	Accrual	Use	Others (*)	December 31, 2013	Current	Non-current
Provision for construction warranties	₩17,568,072	(₩8,130,136)	(₩3,350,359)	₩4,010,323	₩10,097,900	₩-	₩10,097,900
Provision for litigation	<u>2,000,000</u>	-	<u>(2,000,000)</u>	-	-	-	-
Total	<u>₩19,568,072</u>	<u>(₩8,130,136)</u>	<u>(₩5,350,359)</u>	<u>₩4,010,323</u>	<u>₩10,097,900</u>	<u>₩-</u>	<u>₩10,097,900</u>

(*) The amounts represent those settled by professional engineers who are responsible for the warranty.

The Company estimates expenditure required to settle the Company's obligation for product warranty, refund, related after-sales service and other based on warranty period, historical claim rate and other.

17. CAPITAL STOCK AND CAPITAL SURPLUS:

Changes in capital stock and capital surplus for the year ended December 31, 2014, are as follows (in thousands of Korean won):

	Number of shares	Capital stock	Capital surplus
Balance at December 31, 2014	69,500,000	₩69,500,000	₩367,214,701

The Company's number of authorized shares is 120,000,000 shares, with par value of ₩1,000 per share. There are no issued shares with restricted voting rights under commercial law.

18. OTHER CAPITAL ITEMS:

(1) Other capital items as of December 31, 2014 and 2013, are summarized as follows (in thousands of Korean won):

Description	December 31, 2014	December 31, 2013
Share option	₩550,159	₩355,390

(2) Share-based payment

The Company granted share options to its directors. Share options are settled based on board of directors' decision on issuance of new shares, treasury shares or cash settlement. These share options carry a two-year service-vesting condition subsequent to the resolution at the stockholders' meeting.

1) Number of granted options as of December 31, 2014, is as follows:

Date of grant	Number of granted options	Exercisable period	Exercisable price	Expected fair value at the date of grant
2011.03.25	10,900	2014.03.25–2021.03.24	₩21,600	₩10,343
2012.03.30	30,000	2015.03.30–2022.03.29	₩13,300	₩4,653
2013.03.29	87,100	2016.03.29–2023.03.28	₩9,050	₩3,383
2014.03.28	27,700	2017.03.28–2024.03.27	₩9,490	₩3,583

2) The Company calculated expenses applying fair value approach. Assumptions used in determining fair value of stock options are as follows:

Date of grant	Risk-free interest rate (*)	Expected exercisable period	Expected volatility	Expected dividend yield ratio
2011.03.25	3.66%	3 years	68.77%	0.00%
2012.03.30	3.57%	3 years	55.03%	0.00%
2013.03.29	2.45%	3 years	52.35%	0.00%
2014.03.28	2.88%	3 years	52.27%	0.00%

(*) Risk-free interest rate is based on a three-year treasury bond yield rate.

3) Changes in share option for the year ended December 31, 2014, are as follows:

a) Number of common shares to be issued:

Date of grant	January 1, 2014	Granted	Exercised	Canceled	December 31, 2014
2011.03.25	10,900	-	-	-	10,900
2012.03.30	30,000	-	-	-	30,000
2013.03.29	92,800	-	-	(5,700)	87,100
2014.03.28	-	27,700	-	-	27,700
Total	133,700	27,700	-	(5,700)	155,700

b) Valuation amount (in thousands of Korean won):

Date of grant	January 1, 2014	Granted	Exercised	Canceled	December 31, 2014
2011.03.25	₩112,739	₩-	₩-	₩-	₩112,739
2012.03.30	122,931	16,659	-	-	139,590
2013.03.29	119,720	157,187	-	(17,009)	259,898
2014.03.28	-	37,932	-	-	37,932
Total	₩355,390	₩211,778	₩-	(₩17,009)	₩550,159

Expense to be recognized in the future period amounted to ₩96,078 thousands.

19. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS):

Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	December 31, 2014	December 31, 2013
Revaluation surplus of land	₩36,207,540	₩36,207,540

20. RETAINED EARNINGS:

(1) Retained earnings as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	December 31, 2014	December 31, 2013
Legal reserve (*)	₩1,200,000	₩1,200,000
Optional reserve	2,700,000	2,700,000
Retained earnings before appropriations	168,646,721	202,757,956
Total	₩172,546,721	₩206,657,956

(*) Retained earnings appropriated to the legal reserve cannot be used as cash dividends under the applicable laws and regulations. The Korean Commercial Code requires the Company to appropriate an amount equal to at least 10% of the cash dividend, until the reserve equals 50% of stated capital.

- (2) Changes in retained earnings for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	<u>2014</u>	<u>2013</u>
Beginning balance	₩206,657,956	₩207,504,398
Profit (loss) for the period	(31,056,428)	(6,151,839)
Actuarial gains (losses) recognized in retained earnings	<u>(3,054,807)</u>	<u>5,305,397</u>
Ending balance	<u>₩172,546,721</u>	<u>₩206,657,956</u>

- (3) Changes in retained earnings (deficit) for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	<u>2014</u>	<u>2013</u>
Unappropriated retained earnings:		
Beginning of year	₩202,757,956	₩203,604,398
Net income (loss) for year	(31,056,428)	(6,151,839)
Actuarial gains (losses)	<u>(3,054,807)</u>	<u>5,305,397</u>
End of year	<u>168,646,721</u>	<u>202,757,956</u>
Appropriations:		
Reserve for research and human resource development	<u>-</u>	<u>-</u>
Unappropriated retained earnings to be carried forward to next year	<u>₩168,646,721</u>	<u>₩202,757,956</u>

The appropriations of retained earnings for the year ended December 31, 2014, will be approved at the general stockholders' meeting on March 27, 2015.

21. SALES:

Details of sales for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	<u>2014</u>	<u>2013</u>
Sales of goods	₩861,252,945	₩702,412,246
Construction sales	20,726,389	35,329,121
Others	<u>5,785,386</u>	<u>5,362,995</u>
Total	<u>₩887,764,720</u>	<u>₩743,104,362</u>

22. SEGMENT INFORMATION:

The Company has a single reportable segment determined by considering the characteristics of the nature of goods and assets to create sales.

- (1) The following table provides sale information by geographical segment for the years ended December 31, 2014 and 2013 (in thousands of Korean won):

	2014	2013
Domestic	₩443,173,636	₩463,575,548
Overseas	444,591,084	279,528,814
Total	₩887,764,720	₩743,104,362

- (2) There is a single external customer who accounted for 10% or more of the Company's sales for the years ended December 31, 2014 and 2013 (in thousands of Korean won):

	2014	2013
Samsung Heavy Industries Co., Ltd.	₩102,549,771	₩64,938,459
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	208,448,596	268,583,594
Total	₩310,998,367	₩333,522,053

23. CONSTRUCTION CONTRACTS:

- (1) Details of profit and unbilled (overbilled) construction receivables (payables) under construction contract for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	2014					
	Construction revenue	Construction cost	Construction profit	Contract receivables		Gross amount due to customers
				Claimed	Not claimed	
Diesel engine	₩188,147,457	₩147,311,231	₩40,836,226	₩-	₩12,999,974	₩14,568,458
	2013					
	Construction revenue	Construction cost	Construction profit	Contract receivables		Gross amount due to customers
				Claimed	Not claimed	
Diesel engine	₩167,747,983	₩128,992,095	₩38,755,888	₩-	₩10,720,649	₩3,773,450

(2) Details of construction contract for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

		2014			
Order	Description	January 1, 2014	Increase by contract	Decrease by sales	December 31, 2014
KHNP and other five companies	Singori No. 3 and No. 4 emergency generators, alternative AC power diesel engine and other 13	₩84,587,474	₩33,641,027	(₩20,726,389)	₩97,502,112

		2013			
Order	Description	January 1, 2013	Increase by contract	Decrease by sales	December 31, 2013
KHNP and other five companies	Singori No. 3 and No. 4 emergency generators, alternative AC power diesel engine and other 10	₩121,423,210	(₩1,506,615)	(₩35,329,121)	₩84,587,474

24. EXPENSES CLASSIFIED BY NATURE:

Expenses classified by nature for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	2014	2013
Changes in inventories	(₩20,848,297)	₩28,652,693
Purchase of raw materials	659,637,406	465,933,930
Employee benefits	70,292,771	74,495,561
Other employee benefits	12,972,919	14,871,281
Depreciation and amortization	24,501,107	25,105,804
Commission expenses	73,419,063	58,183,793
Others	106,200,058	73,922,788
Total	₩926,175,027	₩741,165,850

25. SELLING AND ADMINISTRATIVE EXPENSES:

Selling and administrative expenses for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

<u>Account</u>	<u>2014</u>	<u>2013</u>
Salaries	₩16,976,222	₩21,780,305
Other employee benefits	3,318,995	4,711,259
Provision for retirement and severance benefits	1,256,804	2,012,139
Commission expenses	6,124,980	9,807,224
Depreciation	321,066	435,924
Amortization	1,648,263	492,446
Advertising and marketing expenses	430,633	2,791,675
Rental expenses	1,321,020	1,290,948
Reversal of allowance for bad debt	(391,621)	(3,536,396)
Research and ordinary development costs	5,673,011	5,773,802
Others	3,225,408	4,544,144
Total	₩39,904,781	₩50,103,470

26. FINANCE INCOME AND EXPENSES:

Finance income and expenses for the years ended December 31, 2014 and 2013, are summarized as follows (in thousands of Korean won):

<u>Account</u>	<u>2014</u>	<u>2013</u>
Finance income:		
Interest income	₩4,761,629	₩6,831,239
Dividend income	-	827
Income from financial guarantee	1,295,113	1,227,966
Gain on foreign currency transaction	20,150,971	18,217,367
Gain on foreign currency translation	1,662,678	1,226,406
Gain on derivative transaction	20,974,261	17,685,464
Gain on valuation of derivatives	520,055	33,595,948
Gain on valuation of firm commitments	41,795,628	21,931,340
Subtotal	91,160,335	100,716,557
Finance expenses:		
Interest expenses	12,768,544	11,317,036
Expense for financial guarantee	471,641	409,783
Loss on foreign currency transaction	16,190,551	19,050,953
Loss on foreign currency translation	917,754	504,736
Loss on derivative transaction	19,625,506	22,352,008
Loss on valuation of derivatives	25,247,957	1,411,672
Loss on valuation of firm commitments	18,765,706	49,092,919
Subtotal	(93,987,659)	(104,139,107)
Net finance expenses	(₩2,827,324)	(₩3,422,550)

27. OTHER NON-OPERATING INCOME AND EXPENSES:

Other non-operating income and expenses for the years ended December 31, 2014 and 2013, consist of the following (in thousands of Korean won):

<u>Account</u>	<u>2014</u>	<u>2013</u>
Other non-operating income:		
Commission	₩472,587	₩266,567
Rental income	220,455	230,750
Gain on disposal of property, plant and equipment	54,473	29,466
Gain on disposal of intangible assets	700	-
Gain on disposal of assets held for sale	-	1,385,970
Other income	1,212,732	3,020,245
Subtotal	1,960,947	4,932,998
Other non-operating expenses:		
Impairment of AFS financial assets	-	1,030,616
Loss on disposal of property, plant and equipment	-	2,938
Revaluation loss on land	-	137,541
Loss on disposal of intangible assets	67,909	-
Loss on intangible assets abandoned	-	731,455
Impairment loss of intangible assets	5,940	295,274
Donations	154,862	2,726,776
Other bad debt expenses	-	6,236
Other loss	2,460,162	3,751,738
Subtotal	(2,688,873)	(8,682,574)
Net other non-operating expenses	(₩727,926)	(₩3,749,576)

28. INCOME TAX EXPENSE:

(1) Components of income tax expense for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

<u>Details</u>	<u>2014</u>	<u>2013</u>
Current income tax expense	(₩1,099,478)	₩3,874,287
Changes in deferred income tax assets (liabilities) related to temporary differences	(10,784,932)	10,341,101
Deferred income tax assets (liabilities) directly reflected in stockholders' equity	975,281	(13,297,162)
Income tax expense (profit)	(₩10,909,129)	₩918,226

(2) Changes in deferred tax assets and liabilities for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

Details	January 1, 2014	Change		December 31, 2014
		Income	Capital	
Foreign currency translation, net	₩1,585,241	(₩1,773,058)	₩-	(₩187,817)
Depreciation	1,753,382	584,781	-	2,338,163
Allowance for doubtful accounts	43,656	(43,656)	-	-
Accrued income	(308,136)	202,692	-	(105,444)
Loss on inventory obsolescence	4,664,942	109,408	-	4,774,350
Currency forwards	(10,511,868)	15,100,308	-	4,588,440
Firm commitment assets	2,261,396	(11,752,706)	-	(9,491,310)
Loss on investment assets	970,458	-	-	970,458
Long-term loan	(58,338)	58,338	-	-
Subcost on membership	420,920	(243,841)	-	177,079
Accrued expenses	408,218	666,902	-	1,075,120
Unearned revenue	(2,644,405)	401,415	-	(2,242,990)
Long-term borrowings	172,788	(172,788)	-	-
Financial guarantee liabilities	(48,310)	(18,072)	-	(66,382)
Provision for construction warranties	2,443,692	(1,508,112)	-	935,580
Transfer price to DMI	806,191	(806,191)	-	-
Omission to sale of ship steel	167,810	(167,810)	-	-
Provision for severance indemnities	1,808,972	(681,702)	975,281	2,102,551
Gain on revaluation of land and buildings	(53,261,636)	-	-	(53,261,636)
Advanced payment	-	444,427	-	444,427
Others	₩152,955	(₩88,554)	₩-	₩64,401
Subtotal	(49,172,072)	311,781	975,281	(47,885,010)
Tax loss carryforwards	931,422	744,380	-	1,675,802
Donations in excess of tax limit	659,880	37,476	-	697,356
Unrealized income	1,967,090	8,716,013	-	10,683,103
Subtotal	3,558,392	9,497,869	-	13,056,261
Total	(₩45,613,680)	₩9,809,650	₩975,281	(₩34,828,749)

Details	January 1, 2013	Change		December 31, 2013
		Income	Capital	
Foreign currency translation, net	₩3,144,901	(₩1,559,660)	₩-	₩1,585,241
Depreciation	904,550	848,832	-	1,753,382
Allowance for doubtful accounts	777,951	(734,295)	-	43,656
Accrued income	(335,313)	27,177	-	(308,136)
Loss on inventory obsolescence	8,453,474	(3,788,532)	-	4,664,942
Currency forwards	(10,890,067)	378,199	-	(10,511,868)
Firm commitment assets	(2,081,115)	4,342,511	-	2,261,396
Loss on investment assets	764,741	249,409	(43,692)	970,458
Long-term loan	(72,836)	14,498	-	(58,338)
Subcost on membership	349,463	71,457	-	420,920
Accrued expenses	441,290	(33,072)	-	408,218
Unearned revenue	(3,565,154)	920,749	-	(2,644,405)
Long-term borrowings	804,408	(631,620)	-	172,788
Financial guarantee liabilities	(27,493)	(20,817)	-	(48,310)
Provision for construction warranties	4,251,473	(1,807,781)	-	2,443,692
Litigation reserve	484,000	(484,000)	-	-
Transfer price to DMI	-	806,191	-	806,191
Omission to sale of ship steel	-	167,810	-	167,810
Provision for severance indemnities	3,737,878	(235,099)	(1,693,807)	1,808,972
Gain on revaluation of land and buildings	(42,554,397)	852,424	(11,559,663)	(53,261,636)
Others	46,667	106,288	-	152,955
Subtotal	<u>(35,365,579)</u>	<u>(509,331)</u>	<u>(13,297,162)</u>	<u>(49,172,072)</u>
Tax loss carryforwards	93,000	838,422	-	931,422
Donations in excess of tax limit	-	659,880	-	659,880
Unrealized income	-	1,967,090	-	1,967,090
Subtotal	<u>93,000</u>	<u>3,465,392</u>	<u>-</u>	<u>3,558,392</u>
Total	<u>(₩35,272,579)</u>	<u>₩2,956,061</u>	<u>(₩13,297,162)</u>	<u>(₩45,613,680)</u>

- (3) Temporary differences, net loss and tax credit carryforwards, which have not been recognized as deferred income tax assets, are expired and unused for the years ended December 31, 2014 and 2013.

The probability of deferred tax assets being realized depends on the Company's ability to generate taxable income in future years, the economic situation and industry forecast. The Company periodically reviews such matters.

- (4) Temporary differences associated with investments in subsidiaries, which are not recognized as deferred tax assets, as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

	December 31, 2014	December 31, 2013	Remarks
Subsidiary	(₩5,242,062)	(₩5,242,062)	The Group is able to control the reversal of the temporary difference
Associates	394,451,511	394,451,511	It is probable that the temporary difference will not reverse in the foreseeable future
Total	₩389,209,449	₩389,209,449	

- (5) Deferred income tax assets (liabilities) and income tax benefits (expense) added to (deducted from) stockholders' equity as of December 31, 2014 and 2013, are as follows (in thousands of Korean won):

Details	December 31, 2014			December 31, 2013		
	Gross	Tax effect	Net of tax	Gross	Tax effect	Net of tax
Actuarial gain or loss	(₩4,429,215)	₩1,071,870	(₩3,357,345)	(₩399,127)	₩96,589	(₩302,538)
Revaluation surplus of land	47,767,203	(11,559,663)	36,207,540	47,767,203	(11,559,663)	36,207,540
Total	₩43,337,988	(₩10,487,793)	₩32,850,195	₩47,368,076	(₩11,463,074)	₩35,905,002

- (6) An explanation of the relationship between income tax expense and accounting income (loss) before income tax expense for the years ended December 31, 2014 and 2013, is as follows (in thousands of Korean won):

Details	2014	2013
Income (loss) before income tax expense	(₩41,965,557)	(₩5,233,613)
Income tax expense at statutory income tax rate (less than ₩200 million: 11% more than ₩200 million: 24.2%)	(10,155,665)	(1,266,534)
Differences (Note 1)	(753,464)	2,184,760
Income tax expense (profit)	(₩10,909,129)	₩918,226
Effective tax rate	(Note 2)	(Note 2)
(Note 1) Difference:		
Additional payment (refund) of income tax	(₩1,099,478)	₩3,874,287
Non-temporary difference	134,184	(748,206)
Tax credits	(744,379)	(838,422)
Others	956,209	(102,899)
Total	(₩753,464)	₩2,184,760

(Note 2) Net loss before tax does not calculate the effective tax rate

29. EARNINGS PER SHARE:

(1) Basic earnings per share

Basic earnings per share are computed by dividing net income attributable to owners of the parent company by the weighted-average number of common shares outstanding during the period (in thousands of Korean won, except for share data).

	<u>2014</u>	<u>2013</u>
Net income available to common shares	(₩31,056,428)	(₩6,151,839)
Weighted-average number of common shares outstanding (*)	<u>69,500,000</u>	<u>69,500,000</u>
Basic net income per share	<u>(₩447)</u>	<u>(₩89)</u>

(*) The weighted-average number of common shares outstanding for the years ended December 31, 2014 and 2013, is equal to the number of shares outstanding.

(2) Diluted earnings per share

The Company does not compute diluted earnings per common share for the years ended December 31, 2014 and 2013, because there is no item related to dilution. Diluted earnings per share are equal to earnings per share for the years ended December 31, 2014 and 2013.

Due to the antidilutive effect for the years ended December 31, 2014 and 2013, the Company is not considering share option, which could dilute the basic earnings per share in the future.

	<u>2014</u>	<u>2013</u>
Number of common shares to be issued	155,700	133,700

30. COMMITMENTS AND CONTINGENCIES:

(1) Notes and checks provided as collateral

As of December 31, 2014, the Company has provided five (as of December 31, 2013: Four) blank promissory notes and 20 (as of December 31, 2013: 50) promissory notes amounting to USD 10,829,062 (as of December 31, 2013: USD 25,102,190) to Daewoo Shipbuilding & Marine Engineering Co., Ltd., and five other companies as security in connection with contract performance guarantees and guarantees for advance receipts.

(2) Trade receivables sold at discount

Financial liabilities related to transferred trade receivables that did not meet the derecognition criteria amounted to ₩3,857,093 thousand as of December 31, 2014. The amount of trade receivables was recognized as short-term borrowing.

(3) Pending litigation (in thousands of Korean won):

Site	Plaintiff	Defendant	Claim	Claimed amount	Progress
Greece	GAEI (Guam Advance Enterprises. Inc.)	Doosan Engine Co., Ltd.	Damages for cancellation of contract (related to Greece Chios diesel plant)	EUR 3,059,635	Pending in the court of second instance
				EUR 473,162	Pending in the court of first instance
				EUR 300,000	Pending in the court of first instance
Seoul Central District Court	Steamar Transportes Maritimos LDA and other 1	Doosan Engine Co., Ltd. and other 1	Damages for stopping sailing	USD 125,163	Pending in the court of first instance
				EUR 266,865	Pending in the court of first instance
Chang won District Court	Lee, Sangwoo and other 461 Kim, Kyoungho and other 59	Doosan Engine Co., Ltd.	Wage claims for normal wage of workers	₩2,310,000	Pending in the court of first instance
				₩6,000	Pending in the court of first instance

As of December 31, 2014, the outcome of the cases is unpredictable.

The Company is accused in lawsuits that are in relation to subcontract of power plant on Chois island in 2008 and Court of Greece decided the Company to pay EUR 2,204,705 to the plaintiff on November 20, 2013. Meanwhile, the Company assumes that it is less likely to pay the amount to plaintiff domestically.

(4) Commitments with financial institutions

As of December 31, 2014, major commitments with various financial institutions are as follows (in foreign currency and thousands of Korean won):

Commitment	Financial institution	Credit limit	Used amount
Bank overdraft facilities	Korea Exchange Bank	₩1,000,000	₩-
General loan facilities	Korea Exchange Bank	30,000,000	-
	Korea Development Bank	40,000,000	-
	Woori Bank	30,000,000	-
	Kookmin Bank	30,000,000	-
	Kyoungnam Bank	60,000,000	-
	NH Bank	30,000,000	-
Electronic loan facilities	Woori Bank	30,000,000	20,509,841
	Kookmin Bank	18,000,000	700,217
	Hana Bank	20,000,000	239,027
	Industrial Bank of Korea	20,000,000	4,827,568
	Kyongnam Bank	10,000,000	2,102,058
Issuance of letter of credit	Korea Exchange Bank	USD 60,000,000	USD 3,313,000
	Woori Bank	USD 40,000,000	USD 12,291,676
	Hana Bank	USD 10,000,000	USD 107,773
	Kookmin Bank	USD 3,000,000	USD 596,253
	Korea Development Bank	USD 20,000,000	USD 4,356,247
Other guarantees	Korea Exchange Bank	USD 60,000,000	USD 51,127,405
		EUR 498,590	
		CNY 51,000,000	CNY 50,712,500
	Woori Bank	USD 110,000,000	USD 50,146,953
	Hana Bank	USD 40,000,000	USD 2,901,000
	NH Bank	USD 30,000,000	USD 18,081,349
	Kookmin Bank	USD 27,000,000	USD 5,927,660
	Korea Exchange Bank	20,000,000	11,443,189
	Woori Bank	10,000,000	5,533,973

(5) Technology transfer contract

The Company has eight technical license agreements with several foreign companies for the purpose of manufacturing engines. In accordance with the agreements, the Company is committed to pay a royalty calculated based on the cumulative horse power of engines manufactured during the year. The royalty amounted to ₩73,419,063 thousand and ₩58,183,793 thousand for the years ended December 31, 2014 and 2013, respectively.

(6) Wage claims for normal wage of workers in accordance with the Supreme Court ruling

We have paid a regular salary in past, including bonuses that were not included in the existing ordinary wages paid. If the item is usually available for wages paid in future then it can be classified as additionally payable. The Supreme Court ruling dated December 18, 2013, is usually associated with wages on the basis of additional benefits associated with regular bonuses and other payments to the excessive financial burden due to the expected management company that will likely result in accounting difficulties; therefore, we have presumed the amount to be low. On the other hand, related impact on the separate financial statements of K-IFRS 1037, Provisions, Contingent Liabilities and Contingent Assets, paragraph 92 according to the comments is omitted.

31. GUARANTEES AND PLEDGED ASSETS:

(1) Guarantees

Guarantees received by the Company from third parties as of December 31, 2014, are as follows (in foreign currencies and thousands of Korean won):

<u>Guarantee received from</u>	<u>Guaranteed amount (foreign currency)</u>		<u>Description of guarantee</u>
Korea Exchange Bank	USD	51,127,405	Guarantee for advance receipts, intermediate payment and defect
		498,590	Guarantee for bidding and fulfillment of a contract
	EUR		
Woori Bank	KRW	11,443,189	Guarantee for advance receipts, fulfillment of a contract and defect
	USD	50,146,953	Guarantee for advance receipts, defect and fulfillment of a contract
Hana Bank	KRW	5,533,973	
NH Bank	USD	2,901,000	Guarantee for advance receipts
Kookmin Bank	USD	18,081,349	Guarantee for advance receipts
	USD	5,927,660	Guarantee for advance receipts
Total	USD	128,184,367	
	EUR	498,590	
	KRW	16,977,162	

Guarantees provided by the Company as of December 31, 2014, are as follows (in thousands of Korean won):

Warrantee	Amount	Description of guarantee	Institution	Related party
Employee stock ownership association	KRW 7,307,143	Guarantee for the borrowings	Korea Securities Finance Co., Ltd	Stockholders
DMI	CNY 58,200,500	Guarantee for the borrowings	Korea Exchange Bank The Export-Import Bank of Korea	Subsidiary
	USD 4,300,000			

(2) Pledged assets

On May 28, 2014, DII and DHEL repaid all the borrowings of amount USD 1,720,000 thousand funded in 2011 and entered into new loan agreement under which they raised a total of USD 1,700,000 thousand. The Group provided stocks of DII and DHEL as collateral to the credit banks, amounting to USD 1,300,000 thousand and borrowing limit amounting to USD 100,000 thousand. Collateral provided by the Group as of December 31, 2014, are as follows (see Note 11) (in foreign currencies and thousands of Korean won):

Institution	Borrowing amount (foreign currency)	Asset	Book value	Related party
Citigroup Global Markets Inc. and other	USD 1,193,500,000	DII DHEL	₩146,521,807 196,038,744	Associates

Also the Company has been providing the long-term financial instruments as collateral in relation to ESOP loans.(see Note 5)

32. TRANSACTIONS AND BALANCES WITH RELATED PARTIES:

Significant transactions and account balances with related parties as of and for the years ended December 31, 2014 and 2013, are as follows:

(1) Relationship between parents and subsidiaries as of December 31, 2014, is as follows:

Relationship with the Company	Company name
Ultimate controlling party	Doosan Corporation (“DS”)
Next most senior parent	Doosan Heavy Industries Construction Co., Ltd. (“DHIC”)
Subsidiary	Doosan Marine Industry (Dalian) Co., Ltd. (“DMI”)
Associates	Dalian Samyoung Doosan Metal Product Co., Ltd. (“DSDMP”) Doosan Infracore International, Inc. (“DII”) Doosan Holdings Europe Ltd. (“DHEL”)
Other related parties	Doosan Infracore Co., Ltd. Doosan Infracore Bobcat Holdings Co., Ltd. (“DIBH”) Doosan Engineering & Construction Co., Ltd. (“Doosan E&C”) Doosan Cuvex Co., Ltd. Doosan Tower Co., Ltd. (“Doosan Tower”) Doosan Defense Systems & Technology Co., Ltd. Oricom Inc. (“Oricom”) Doosan Bears Inc.

(2) Significant transactions with related parties for the years ended December 31, 2014 and 2013, are summarized as follows (in thousands of Korean won):

		December 31, 2014				
Description	The name of the related parties	Sales	Other income	Purchases	Acquisition of property, plant and equipment and intangible assets	Other expenses
Ultimate controlling party	DS	₩2,024,054	₩795,088	₩4,779,734	₩554,418	₩5,136,727
Next most senior parent	DHIC	12,848	-	103,227,220	-	-
Subsidiary	DMI	-	522,129	8,382,457	-	-
Associates	DII	-	587,776	-	-	-
	DHEL	-	592,272	-	-	-
Other related parties	Doosan E&C	3,030,449	-	174,965	-	-
	Others	-	-	449,641	92,796	263,585
Total		<u>₩5,067,351</u>	<u>₩2,497,265</u>	<u>₩117,014,017</u>	<u>₩647,214</u>	<u>₩5,400,312</u>

		December 31, 2013				
Description	The name of the related parties	Sales	Other income	Purchases	Acquisition of property, plant and equipment and intangible assets	Other expenses
Ultimate controlling party	DS	₩1,972,855	₩745,440	₩12,205,346	₩488,458	₩7,504,423
Next most senior parent	DHIC	-	-	66,345,969	-	-
Subsidiary	DMI	-	292,111	5,164,989	-	-
Associates	DII	-	490,715	-	-	-
	DHEL	-	634,657	-	-	-
Other related parties	Doosan E&C	2,656,682	258,566	181,892	-	-
	Others	-	7,991	1,539,470	46,398	4,722,702
Total		<u>₩4,629,537</u>	<u>₩2,429,480</u>	<u>₩85,437,666</u>	<u>₩534,856</u>	<u>₩12,227,125</u>

- (3) As of December 31, 2014 and 2013, related significant balances are as follows (in thousands of Korean won):

		December 31, 2014				
Description	The name of the related parties	Trade receivables	Other receivables	Loans	Trade payables	Other payables
Ultimate controlling party	DS	₩-	₩11,708	₩-	₩1,502,883	₩1,926,863
Next most senior parent	DHIC	-	-	-	8,354,026	2,768
Subsidiary	DMI	-	1,310,907	-	477,531	-
Associates	DII	-	2,619,298	-	-	-
	DHEL	-	2,267,588	-	-	-
Other related parties	Doosan E&C	-	9,033,008	-	-	15,086
	Others	-	138,179	-	207,060	89,385
Total		₩-	₩15,380,688	₩-	₩10,541,500	₩2,034,102

		December 31, 2013				
Description	The name of the related parties	Trade receivables	Other receivables	Loans	Trade payables	Other payables
Ultimate controlling party	DS	₩-	₩221,228	₩-	₩3,740,920	₩1,829,969
Next most senior parent	DHIC	-	-	-	2,085,037	2,767
Subsidiary	DMI	-	744,248	-	1,581,107	-
Associates	DII	-	1,377,035	-	-	-
	DHEL	-	1,782,407	-	-	-
Other related parties	Doosan E&C	-	6,441,970	-	-	65,849
	Others	-	910,915	-	441,269	203,420
Total		₩-	₩11,477,803	₩-	₩7,848,333	₩2,102,005

The Company does not recognized amount of allowance for doubtful accounts of the related party's receivables.

- (4) As of December 31, 2014, guarantees by the Company for related parties are disclosed in Note 31.
- (5) The Company defines key management personnel as registered officer and non-registered officer who have the authority and responsibility for planning, operation and control and are in charge of business or division unit. Compensation to key management personnel of the Company for the years ended December 31, 2014 and 2013, is as follows (in thousands of Korean won):

Description	2014	2013
Employee benefits	₩4,423,045	₩4,748,129
Retirement benefits	423,460	380,585
Share-based payment	194,769	(41,778)
Total	₩5,041,274	₩5,086,936

33. SEPARATE STATEMENTS OF CASH FLOWS:

- (1) The adjustments and changes in operating assets and liabilities in the separate statements of cash flows for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won):

Description	2014	2013
Adjustments:		
Expenses not involving cash outflows:		
Interest expenses	₩12,768,544	₩11,317,036
Income tax expense	(10,909,129)	918,226
Retirement benefits	5,458,028	6,270,054
Loss from valuation inventories	816,946	-
Depreciation	21,001,643	22,378,125
Amortization	3,499,465	2,727,679
Other bad debt expenses	-	6,236
Share-based payment	194,769	(41,778)
Loss on foreign currency translation	917,754	504,736
Loss on valuation of derivatives	25,247,957	1,411,672
Loss on valuation of firm commitments	18,765,706	49,092,919
Impairment loss of AFS financial assets	-	1,030,616
Loss on disposal of property, plant and equipment	-	2,938
Loss on revaluation of property, plant and equipment	-	137,541
Loss on disposal of intangible assets	67,909	-
Loss on intangible assets abandoned	-	731,455
Impairment loss of intangible assets	5,940	295,274
Income not involving cash inflows:		
Interest income	(4,761,629)	(6,831,239)
Dividend income	-	(827)
Reversal loss from valuation inventories	-	(15,290,243)
Reversal of allowance for doubtful accounts	(3,282,509)	(8,130,136)
Reversal of bad debt expenses	(391,621)	(3,536,396)
Income on financial guarantee	(1,295,113)	(1,227,966)
Gain on foreign currency translation	(1,662,678)	(1,226,406)
Gain on valuation of derivatives	(520,055)	(33,595,948)
Gain on valuation of firm commitments	(41,795,628)	(21,931,340)
Gain on disposal of property, plant and equipment	(54,473)	(29,466)
Gain on disposal of assets held for sale	-	(1,385,970)
Gain on disposal of intangible assets	(700)	-
Total	<u>₩24,071,126</u>	<u>₩3,596,792</u>

Description	2014	2013
Changes in operating assets and liabilities:		
Accounts receivable – trade	(₩43,806,983)	₩65,735,243
Accounts receivable – other	(3,486,522)	(2,804,485)
Unbilled construction receivables	(2,279,325)	(10,714,719)
Inventories	(21,665,243)	43,942,936
Other current assets	(1,212,317)	4,206,326
Long-term accounts receivable – other	1,820,142	3,506,083
Other non-current assets	(1,883)	(1,767,438)
Derivative instruments	37,670,066	33,747,082
Firm commitments	(25,534,981)	(9,217,316)
Accounts payable – trade	33,732,597	(50,217,774)
Accounts payable – other	3,471,421	(26,815,393)
Overbilled construction payables	10,795,007	(15,643,152)
Advance receipts	(50,172,494)	(52,224,511)
Other current liabilities	4,150,837	(1,777,197)
Long-term other payable	805,650	55,190
Plan assets	(7,266,878)	(7,338,968)
Payment of severance benefits	(1,057,227)	(1,294,711)
Transfer in	52,077	174,293
Transfer out	(242,933)	(289,650)
Provision for construction warranties	(2,949,356)	(1,340,036)
Total	<u>(₩67,178,345)</u>	<u>(₩30,078,197)</u>

- (2) Significant non-cash transactions for the years ended December 31, 2014 and 2013, are as follows (in thousands of Korean won) :

Description	2014	2013
Reclassification of guarantee deposits to property, plant and equipment	₩-	₩1,873,500
Reclassification of construction in progress to property, plant and equipment	3,149,358	2,391,402
Reclassification of long-term borrowings to current portion of long-term borrowing	50,000,000	63,318,000
Reclassification of held-to-maturity investments financial assets	7,000,000	-
Reclassification of provision for construction warranties	1,916,319	-