



DOOSAN ENGINE CO., LTD.

SEPARATE FINANCIAL STATEMENTS

**AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012,
AND INDEPENDENT AUDITORS' REPORT**

Deloitte Anjin LLC

Independent Auditors' Report

English Translation of a Report Originally Issued in Korean

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

We have audited the accompanying separate financial statements of Doosan Engine Co., Ltd. (the "Company"). The financial statements consist of the separate statements of financial position as of December 31, 2013 and 2012, and the related separate statements of income, separate statements of comprehensive income, separate statements of changes in stockholders' equity and separate statements of cash flows, all expressed in Korean won, for the year ended December 31, 2013 and 2012. The Company's management is responsible for the preparation and fair presentation of the separate financial statements and our responsibility is to express an opinion on these separate financial statements based on our audits.

We conducted our audit in accordance with auditing standards generally accepted in the Republic of Korea. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2013 and 2012, and the results of its operations and its cash flows for the year ended December 31, 2013 and 2012, in conformity with Korean International Financial Reporting Standards ("K-IFRS").

Accounting principles and auditing standards and their application in practice vary among countries. The accompanying separate financial statements are not intended to present the financial position, results of operations and cash flows in accordance with accounting principles and practices generally accepted in countries other than the Republic of Korea. In addition, the procedures and practices utilized in the Republic of Korea to audit such financial statements may differ from those generally accepted and applied in other countries. Accordingly, this report and the accompanying separate financial statements are for use by those knowledgeable about Korean accounting principles and auditing standards and their application in practice.

Deloitte Anjin LLC.

March 18, 2014

Notice to Readers

This report is effective as of March 18, 2014, 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 separate financial statements and may result in modifications to the auditors' report.

DOOSAN ENGINE CO., LTD.

SEPARATE FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012

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, 2013 AND 2012
(In Korean won)

<u>ASSETS</u>	<u>Notes</u>	<u>December 31, 2013</u>	<u>December 31, 2012</u>
CURRENT ASSETS			
Cash and cash equivalents	4 and 10	₩41,258,747,154	₩94,678,541,896
Short-term financial instruments	4 and 10	145,000,000,000	170,016,124,100
Short-term loans receivable	4 and 10	9,155,850,000	1,128,650,000
Trade and other receivables	4, 6, 10, 15, 31 and 33	25,511,680,236	85,273,333,022
Gross amount due from customers for contract work	24	10,720,649,184	5,930,477
Deferred income tax assets		1,136,878,000	-
Current derivative assets	4, 9 and 10	40,237,290,875	38,090,761,839
Current firm commitment assets	9	20,346,022,821	20,627,029,543
Inventories	7	176,548,148,458	205,200,840,990
Other current assets		16,155,221,814	18,275,910,318
Total current assets		486,070,488,542	633,297,122,185
NON-CURRENT ASSETS			
Long-term financial instruments	4, 5, 10 and 32	1,803,167,918	1,765,725,601
Long-term investment securities	4, 8, 10	7,072,048,000	7,922,117,114
Investments in subsidiary and associated companies	11 and 32	363,994,102,690	363,994,102,690
Long-term loans receivable	4 and 10	4,753,397,044	5,155,220,988
Long-term other receivable	4, 6 and 10	9,693,320,091	14,958,733,970
Property, plant and equipment	2 and 12	606,336,556,559	576,429,596,197
Intangible assets	13	24,908,539,891	18,614,288,888
Non-current derivative assets	4, 9 and 10	6,095,491,976	12,352,565,282
Non-current firm commitment assets	9	26,435,478,337	36,354,513,147
Other non-current assets		1,754,793,606	2,124,322,657
Total non-current assets		1,052,846,896,112	1,039,671,186,534
TOTAL ASSETS		₩ 1,538,917,384,654	₩ 1,672,968,308,719

(Continued)

DOOSAN ENGINE CO., LTD.
SEPARATE STATEMENTS OF FINANCIAL POSITION (CONTINUED)
AS OF DECEMBER 31, 2013 AND 2012
(In Korean won)

<u>LIABILITIES AND STOCKHOLDERS' EQUITY</u>	<u>Notes</u>	<u>December 31, 2013</u>	<u>December 31, 2012</u>
CURRENT LIABILITIES			
Trade and other payable	4, 10 and 33	₩85,188,695,183	₩164,983,624,600
Gross amount due to customers for contract work	24	3,773,450,411	19,416,602,363
Short-term borrowings	4, 10, 15 and 31	-	29,828,495,145
Advance receipts		321,968,490,284	374,193,000,937
Current portion of long-term borrowings	4, 10, 15 and 31	63,318,000,000	64,266,000,000
Income tax payable		3,822,392,136	18,195,115,048
Current derivative liabilities	9 and 10	2,615,663,130	3,330,156,254
Current firm commitment liabilities	9	34,731,375,957	26,500,340,834
Current financial warranty liabilities	10, 31 and 32	34,344,231	-
Other current liabilities	2	12,434,433,449	10,218,520,833
Total current liabilities		527,886,844,781	710,931,856,014
NON-CURRENT LIABILITIES			
Long-term borrowings	4, 9, 10, and 15	50,000,000,000	114,266,000,000
Bonds	4, 10 and 15	189,044,616,891	99,461,490,305
Long-term other payable	4 and 10	1,112,640,295	1,057,450,866
Retirement benefit obligation	3 and 16	10,608,946,661	19,815,842,555
Non-current derivative liabilities	9 and 10	279,647,734	2,112,892,517
Non-current firm commitment liabilities	9	21,394,738,642	21,881,552,439
Financial warranty liabilities	10, 31 and 32	2,942,780,895	4,121,160,256
Liability provisions	3 and 17	10,097,900,058	19,568,071,955
Deferred income tax liabilities	3 and 29	45,613,681,912	35,272,579,634
Total non-current liabilities		331,094,953,088	317,557,040,527
TOTAL LIABILITIES		858,981,797,869	1,028,488,896,541
STOCKHOLDERS' EQUITY			
Share capital	1 and 18	69,500,000,000	69,500,000,000
Capital surplus	18	367,214,701,425	367,214,701,425
Other capital items	19	355,389,958	397,167,523
Accumulated other comprehensive income	8, 12 and 20	36,207,539,902	(136,854,571)
Retained earnings	21	206,657,955,500	207,504,397,801
TOTAL STOCKHOLDERS' EQUITY		679,935,586,785	644,479,412,178
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY		₩1,538,917,384,654	₩1,672,968,308,719

(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, 2013 AND 2012
(In Korean won)

	Notes	2013	2012
SALES	3, 22, 23, 24 and 33	₩743,104,362,158	₩1,377,618,958,445
COST OF SALES	25, 31 and 33	(691,062,379,511)	(1,224,471,146,479)
GROSS PROFIT		52,041,982,647	153,147,811,966
Selling and administrative expenses	25 and 26	(50,103,470,238)	(83,848,547,463)
OPERATING INCOME		1,938,512,409	69,299,264,503
Finance income	4, 10 and 27	100,716,557,461	120,952,187,860
Finance expense	4, 10 and 27	(104,139,106,746)	(119,418,727,442)
Other non-operating income	10 and 28	4,932,998,497	13,234,832,799
Other non-operating expense	10 and 28	(8,682,574,295)	(11,812,205,822)
PROFIT(LOSS) BEFORE INCOME TAX			
BENEFIT		(5,233,612,674)	72,255,351,898
INCOME TAX BENEFIT	29	(918,226,429)	(17,888,846,837)
NET INCOME (LOSS)		(₩6,151,839,103)	₩54,366,505,061
EARNINGS PER SHARE:	30		
Basic earnings per share		(₩89)	₩782
Diluted earnings per share		(₩89)	₩782

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, 2013 AND 2012
(In Korean won)

	<u>Notes</u>	<u>2013</u>	<u>2012</u>
NET INCOME (LOSS)		<u>(W6,151,839,103)</u>	<u>W54,366,505,061</u>
OTHER COMPREHENSIVE INCOME (LOSS)	20		
Items not reclassified subsequently to profit or loss:			
Re-measurements of net defined benefit liabilities	16	5,305,396,802	(643,917,859)
Revaluation of property, plant and equipment	12 and 20	36,207,539,902	-
Items reclassified subsequently to profit or loss:			
Gain (loss) on valuation of AFS financial assets	8	136,854,571	(136,854,571)
Gain on valuation of cash flow hedge derivatives	9 and 10	<u>-</u>	<u>333,792,311</u>
Total other comprehensive gain (loss)		<u>41,649,791,275</u>	<u>(446,980,119)</u>
TOTAL COMPREHENSIVE INCOME		<u>W35,497,952,172</u>	<u>W53,919,524,942</u>

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, 2013 AND 2012
(In Korean won)

	Share capital	Capital surplus	Other equity items	Accumulated other comprehensive income (loss)	Retained earnings (deficit)	Total
Balance at January 1, 2012	₩69,500,000,000	₩367,214,701,425	₩135,447,961	(₩333,792,311)	₩153,781,810,599	₩590,298,167,674
Total comprehensive income:						
Net income	-	-	-	-	54,366,505,061	54,366,505,061
Re-measurements of net defined benefit liabilities	-	-	-	-	(643,917,859)	(643,917,859)
Losses on valuation of AFS financial assets	-	-	-	(136,854,571)	-	(136,854,571)
Gain on valuation of cash flow hedge derivatives	-	-	-	333,792,311	-	333,792,311
Subtotal	-	-	-	196,937,740	53,722,587,202	53,919,524,942
Capital transactions with stockholders						
Stock base payment	-	-	261,719,562	-	-	261,719,562
Balance at December 31, 2012	<u>₩69,500,000,000</u>	<u>₩367,214,701,425</u>	<u>₩397,167,523</u>	<u>(₩136,854,571)</u>	<u>₩207,504,397,801</u>	<u>₩644,479,412,178</u>
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>

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, 2013 AND 2012
(In Korean won)

	2013	2012
CASH FLOWS FROM OPERATING ACTIVITIES		
Cash generated from operations	(₩32,633,243,128)	(₩178,882,630,155)
Net income	(6,151,839,103)	54,366,505,061
Adjustments	3,596,792,680	47,315,630,720
Changes in operating assets and liabilities	(30,078,196,705)	(280,564,765,936)
Interest received	6,814,938,658	14,153,701,528
Interest paid	(10,120,201,101)	(9,195,894,449)
Dividend received	826,620	-
Income tax paid	(19,383,887,975)	(13,579,136,957)
Net Cash Used in Operating Activities	(55,321,566,926)	(187,503,960,033)
CASH FLOWS FROM INVESTING ACTIVITIES		
Cash inflows from investing activities:		
Decrease in short-term financial instruments	25,016,124,100	-
Decrease in short-term loans	-	1,343,900,000
Decrease in long-term financial instruments	-	2,524,467,359
Decrease in long-term loans	446,615,987	1,496,624,257
Disposal of property, plant and equipment	34,998,878	863,458,275
Disposal of intangible assets	-	197,561,362
Disposal of non-current assets held for sale	4,872,000,000	-
Subtotal	30,369,738,965	6,426,011,253
Cash outflows for investing activities:		
Increase in short-term financial instruments	-	23,401,597,898
Increase in short-term loans	6,994,550,000	-
Increase in long-term financial instruments	37,442,317	-
Acquisition of long-term investment securities	-	7,000,000,000
Increase in long-term loans	982,800,000	971,800,000
Acquisition of property, plant and equipment	7,443,889,427	13,288,098,532
Acquisition of intangible assets	8,345,179,608	6,806,526,149
Subtotal	(23,803,861,352)	(51,468,022,579)
Net Cash Provided by (Used in) Investing Activities	₩6,565,877,613	(₩45,042,011,326)

(Continued)

DOOSAN ENGINE CO., LTD.
SEPARATE STATEMENTS OF CASH FLOWS (CONTINUED)
FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012
(In Korean won)

	2013	2012
CASH FLOWS FROM FINANCING ACTIVITIES		
Cash inflows from financing activities:		
Proceeds from short-term borrowings	₩-	₩6,521,796,822
Proceeds from long-term borrowings	-	50,000,000,000
Proceeds from issuance of bonds	89,421,600,000	99,461,490,305
Subtotal	89,421,600,000	155,983,287,127
Cash outflows for financing activities:		
Repayment of short-term borrowings	29,828,495,145	-
Repayment of long-term borrowings	64,266,000,000	69,198,000,000
Repayment of bonds	-	80,000,000,000
Subtotal	(94,094,495,145)	(149,198,000,000)
Net Cash Provided by (used in) Financing Activities	(4,672,895,145)	6,785,287,127
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	8,789,716	(30,350,523)
NET DECREASE IN CASH AND CASH EQUIVALENTS	(53,419,794,742)	(225,791,034,755)
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	94,678,541,896	320,469,576,651
CASH AND CASH EQUIVALENTS, END OF YEAR	₩41,258,747,154	₩94,678,541,896

(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, 2013 AND 2012

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 head-office 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, 2013, 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	1,704,754	2.45%
Others	22,730,246	32.71%
Total	69,500,000	100.00%

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

DE (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 adopted the K-IFRS for the annual period beginning on January 1, 2011.

The Company's separate financial statements are 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 presented investments based on its direct equity investment, not on investee's reported performance and net assets.

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, 2012, except for the effects of the changes in accounting policies and accounting for land in property, plant and equipment from cost model to revaluation model as follows.

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

- 1) Changes in accounting policies by newly adopted standards and interpretations for the current year are as follows:

K-IFRS 1001 Presentation of Financial Statements

The amendments to K-IFRS 1001 require items of other comprehensive income to be grouped into two categories in the other comprehensive income section: (a) items that will not be reclassified subsequently to profit or loss and (b) items that may be reclassified subsequently to profit or loss when specific conditions are met. The amendments have an effect on only presentation of separate financial statements and no effect on the financial position and operating results. The amendments have been applied retrospectively for the comparative period.

K-IFRS 1019 Employee Benefits

The amendments to K-IFRS 1019 require the recognition of actuarial gains and losses in other comprehensive income and eliminate the 'corridor approach' and 'immediate recognition in profit and loss approach' permitted under the previous version of K-IFRS 1019. Expected return on plan assets is measured by using the discount rate used in measuring defined benefit obligations instead of using an independent expected return and presented in net interest on the net defined benefit liability. Meanwhile, the Company shall recognize past service cost as an expense or income at the earlier date between when the plan amendment or curtailment occurs and when the entity recognizes related restructuring costs or termination benefits.

The amendment, however, that requires using the discount rate to measure the expected return on plan assets has not been applied retrospectively for the comparative period as the retroactivity in calculation does not have a significant effect on the separate financial statements.

K-IFRS 1107 Financial Instruments: Disclosures

The Company may have transferred financial assets in such a way that part or all of the transferred financial assets do not qualify for derecognition. The amendments to K-IFRS 1107 increase the disclosure requirements for transactions involving transfers of financial assets in order to provide greater transparency around the nature of the transferred assets, the nature of the risks and rewards of ownership to which the Company is exposed, description of the nature of the relationship between the transferred assets and the associated liabilities and carrying value of the associated liabilities. When the Company continues its involvement on the transferred assets, although the transferred assets are derecognized in their entirety, the Company

discloses the carrying amounts of the transferred assets and the associated liabilities and information showing the maximum exposure to loss. As the Company has neither any offsetting financial instruments under K-IFRS 1032 *Financial Instruments: Presentation* nor any rights of offset or related arrangements in place, the application of the amendments has had no material impact on the disclosures or on the amounts recognized in the separate financial statements.

K-IFRS 1113 *Fair Value Measurement*

K-IFRS 1113 establishes a single source of guidance for fair value measurements and disclosure about fair value measurements. The standard defines fair value, establishes a framework for measuring fair value and requires disclosures about fair value measurements. K-IFRS 1113 defines fair value as 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. Fair value is measured by taking into account the characteristics of the asset or liability that market participants would take when pricing the asset or liability at the measurement date. A fair value measurement under K-IFRS 1113 requires an entity to determine the particular asset or liability that is subject of the measurement, the principal (or most advantageous) market for the asset or liability and the valuation technique(s) appropriate for the measurement. In addition, K-IFRS 1113 requires extensive disclosures about fair value measurements.

There are some other amendments made to K-IFRSs as part of the Annual Improvements to K-IFRSs 2009 – 2011, such as the tax effect of distribution to holders of equity instruments (the amendments to K-IFRS 1032), which has not resulted in material effects on the financial statements.

- 2) The Company has not applied the following new or revised K-IFRSs that have been issued but are not yet effective:

K-IFRS 1032 *Financial Instruments: Presentation*

The amendments to K-IFRS 1032 clarify existing application issue relating to the offset of financial assets and financial liabilities requirements. Specifically, the amendments clarify the meaning of ‘currently has a legally enforceable right of setoff’ and ‘simultaneous realization and settlement’.

The Company’s right to offset must not be conditional on the occurrence of future events, but enforceable anytime during the contract periods, during the ordinary course of business with counterparty, a default of counterparty and master netting agreement or in some forms of non-recourse debt. The amendments to K-IFRS 1032 are effective for annual periods beginning on January 1, 2014.

K-IFRS 1039 *Financial Instruments: Recognition and Measurement*

The amendments to K-IFRS 1039 allow the continuation of hedge accounting when a derivative is novated to a clearing counterparty or entity acting in a similar capacity and certain conditions are met. The amendments to K-IFRS 1039 are effective for annual periods beginning on or after January 1, 2014.

K-IFRS interpretation 2121 *Levies*

K-IFRS 2121 defines a levy as a payment to a government for which an entity receives no specific goods or services. The interpretation requires that a liability is recognized when the obligating event occurs. The obligating event is the activity that triggers payment of the levy and is typically specified in the legislation that imposes the levy. The interpretation is effective for annual periods beginning on or after January 1, 2014.

The list above does not include some other amendments such as the Amendments to K-IFRS 1036 *Impairment of Assets*, relating to recoverable amount disclosures for non-financial assets that are effective from January 1, 2014 with earlier application permitted.

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's separate financial statements.

- 3) For the year ended December 31, 2013, the Company altered its accounting for land in property, plant and equipment from cost model to revaluation model. The effect of the change in an accounting policy on the separate statement of financial position as of December 31, 2013, is as follows (in thousands of Korean won):

Description	Before	After	Changes	Description		
				Revaluation surplus	Deferred tax liabilities	Revaluation deficit
Land	₩236,132,293	₩283,761,955	₩47,629,662	₩36,207,540	₩11,559,663	₩(137,541)
Asset	1,491,287,723	1,538,917,385	47,629,662			
Liability	847,422,135	858,981,798	11,559,663			
Equity	643,865,588	679,935,587	36,069,999			

Revaluation surplus of ₩36,207,540 thousand resulting from an increase in the land's value is recognized in other comprehensive income and ₩137,541 thousand of revaluation deficit resulting from a decrease in the land's value is recognized in loss.

- 4) Correction of classification

For the year ended December 31, 2013, the Company corrected the classifications of certain line items previously reported in the separate financial statements for the year ended December 31, 2012, and for year ended December 31, 2012, to conform to the separate financial statement presentation as follows (in thousands of Korean won):

Description	Before correction	After correction	Amounts	Correction to
Account payable for employee	Trade and other payable	Other current liabilities	₩6,811,828	Statement of financial position as of December 31, 2012
Increase in security deposit	Cash flows from investing activities	Cash flows from operating activities	(2,598,063)	Statement of cash flows for the year ended December 31, 2012

(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.

(3) Foreign Currency Translation

1) Functional currency and presentation currency

The Company's separate financial statements are presented in the currency of the primary economic environment in which it operates (its functional currency). The functional currency of DE and the presentation currency for the separate financial statements of the Company are Korean won.

2) Foreign currency transaction and translation of balance

Transactions in currencies other than the Company's functional currency are recognized at the rates of exchange prevailing at the dates of the transactions. Foreign currency gain (loss) from settlements of foreign currency transactions or translation of monetary items denominated in foreign currencies is recognized in income or loss, whereas the gain (loss) from qualified cash flow hedge and net investment hedge for foreign operations is deferred as an equity item.

(4) Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, demand deposits, short-term, highly liquid investments with maturities (or date of redemption) of three months or less upon acquisition. Bank overdraft is classified as short-term borrowings in the separate statements of financial position.

(5) Financial Assets

1) Classification of financial assets

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

a) FVTPL

FVTPL includes financial assets classified as held for trading financial assets and financial assets designated at FVTPL upon initial recognition. A financial asset is classified as held for trading financial assets, if it has been acquired principally for the purpose of selling or repurchasing in near term. All derivative assets including an embedded derivative separated from the host contract and accounted for as derivative are classified as held for trading financial assets unless they are designated as effective hedging instruments. These categories of assets are classified as current assets or non-current assets depending on the timing of settlement.

b) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables, with maturities of more than 12 months from the end of the reporting period, are classified as non-current assets. Otherwise they are classified as current assets.

c) AFS financial assets

AFS financial assets are non-derivative financial assets that are designated as available for sale or are not classified as loans and receivables, held-to-maturity investments or FVTPL. AFS financial assets are classified as non-current assets, unless management has intention to sell them within 12 months.

d) Held-to-maturity investments

Held-to-maturity investments are non-derivative financial instruments with fixed or determinable payments and fixed maturity that the Company has the positive intention and ability to hold to maturity. Held-to-maturity investments, with maturities of more than 12 months from the end of the reporting period, are classified as non-current assets. Otherwise they are classified as current assets.

2) Recognition and measurement

All financial assets are recognized on trade date when the purchase or sale of a financial asset is under a contract and are initially measured at fair value, plus transaction costs, except for FVTPL, which are initially measured at fair value and related transaction costs are recognized in income or loss.

FVTPL and AFS are subsequently measured at fair value. Loans and receivables and held-to-maturity investments are measured at amortized cost using the effective interest method. Gains or losses arising from changes in fair value of financial assets at FVTPL are recognized in the other non-operating income and expense line item in the separate statement of income. Dividends on FVTPL are recognized in the finance income when the Company's right to receive the dividends is established.

Changes in fair value of monetary and non-monetary financial assets that are classified as AFS are recognized in other comprehensive income. When the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously accumulated in the equity is reclassified into other non-operating income and expense in the statement of income.

Interest from AFS calculated using the effective interest method, is recognized in finance income in the separate statement of income. Dividends on AFS equity instruments are recognized in finance income when the Company's right to receive the dividends is established.

3) Impairment of financial assets

a) Financial assets measured at amortized cost

The Company assesses at the end of each reporting period whether there is any objective evidence that a financial asset is impaired. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected. Impairment loss 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 at initial recognition. The carrying amount of the financial asset is reduced by the impairment loss and the amount of the loss is recognized in income or loss. The Company measures impairment loss based on fair value of financial assets from observable market data.

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 and recognized in income or loss.

b) AFS

The Company assesses at the end of each reporting period whether there is any objective evidence that a financial asset or group of financial assets is impaired. For equity investments classified as AFS, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment. If there is objective evidence of impairment on AFS, the cumulative loss that has been recognized in other comprehensive income, less any impairment loss previously recognized in income or loss, is reclassified from equity to income or loss. Impairment losses recognized in income or loss for an investment in an equity instrument classified as AFS are not reversed through income or loss. Meanwhile, if, in a subsequent period, the fair value of a debt instrument classified as AFS increases and the increase can be objectively related to an event occurring after the impairment loss was recognized in income or loss, the impairment loss is reversed through income or loss.

4) 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.

(6) Accounts receivable

Accounts receivables are amounts owed by customer for products and services provided in the ordinary course of business. Receivables expected to be collected within one year are classified as current assets. Otherwise they are classified as non-current assets. Trade receivables are initially measured at fair value and are presented as net of allowance for doubtful accounts, estimated on an individual basis based on past bad debt experience.

(7) The gross amounts due from (to) customers

The gross amount due from customers for contract work is the net amount of costs incurred plus recognized profits and the sum of recognized losses and progress billings for all contract in progress for which costs incurred plus recognized profits exceed progress billings. Total costs include cost to specific contract and fixed and variable common cost, which are distributed in normal operation.

Contracts in progress for which costs incurred plus recognized profits (less recognized losses) exceed progress billings, a gross amount due from customers for contract work is recognized as an asset in the separate statements of financial position. Similarly, at each separate statement of financial position date, for all contracts in progress for which progress billings exceed costs incurred plus recognized profits (less recognized losses), a gross amount due to customers for contract work is recognized as a liability in the separate statements of financial position.

(8) Inventories

Inventories are stated at the lower of cost and net realizable value. Cost of inventories includes fixed and variable manufacturing overhead costs that are systematically allocated to inventories by appropriate methods based on each category of inventory. 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.

The Company periodically reviews changes in net realizable value of inventories (current replacement cost for raw materials) due to damage, obsolescence, decline in selling prices and others and recognizes loss on inventory valuation.

Loss on inventory valuation is charged to cost of sales when it is ordinary and to other non-operating expense when it is extraordinary. When the circumstances that previously caused inventories to be written down below cost no longer exist and the new market value of inventories subsequently recovers, the valuation loss is reversed to the extent of the original valuation loss and the reversal is deducted from cost of sales.

(9) Property, Plant and Equipment

Property, plant and equipment are stated at cost, less subsequent accumulated depreciation and accumulated impairment losses. The cost of an item of property, plant and equipment is directly attributable to their purchase or construction, including the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent costs incurred to replace part of previously recognized item of property, plant and equipment are added to the carrying amount of an asset, or recognized 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. The carrying amount of what was replaced is derecognized. Routine maintenance and repairs are expensed as incurred.

The Company does not depreciate land. Depreciation expense for property, plant and equipment other than land is computed using the straight-line method, which reflects most closely the pattern in which the asset's economic benefits are expected to be consumed by the Company, over the estimated useful lives of the assets as follows:

	Estimated useful lives (years)
Buildings	20 – 40
Structures	10 – 20
Machinery	5 – 20
Vehicles	3 – 5
Tools	10
Office equipment	3 – 5

If a part of a property, plant and equipment has a cost that is significant in relation to the total cost of property, plant and equipment, 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.

The Company eliminates the carrying amount of asset when it is hard to expect inflow of future economic benefits incurred by disposal or using it. Upon the derecognition of a property, plant and equipment, the difference between the net disposal proceed and carrying amount of the item is recognized in other non-operating income (expense).

(10) Intangible Assets

Intangible assets are initially measured at cost and are carried at cost, less accumulated amortization and accumulated impairment losses. Subsequent expenditure on an intangible asset is capitalized only when it is probable that the expected future economic benefits that are attributable to the asset will increase.

Intangible assets other than goodwill and intangibles with indefinite useful lives are amortized using the straight-line method with no residual value, with amortization beginning when the asset is available for use.

The estimated useful lives of the assets are as follows:

	Estimated useful lives (years)
Development costs	5
Right of utilization	16
Software	5
Others	5

However, useful lives of membership and other intangible assets with similar nature are determined to be indefinite as there is no foreseeable limit to the period over which the assets are expected to generate net cash inflows for the Company and they are not amortized, but tested for impairment once a year.

Expenditures relating to development activities are capitalized when the result of the development is for the development of new products or substantial improvement of functions of existing products; there is technical and commercial feasibility of completing the development; and the Company has the ability to measure reliably the expenditure attributable to the development. Capitalized development cost includes expenditure on materials, salaries, wages and other employment-related costs of personnel directly engaged in generating assets and related overhead cost that is systematically allocated. The expenditure on research and development that does not meet conditions noted above is recognized as an expense when it is incurred.

The estimated useful life and amortization method for intangible assets with finite useful lives are reviewed at the end of each reporting period and for the assets that have been assessed as having indefinite useful life, that assessment is revisited each period, with the effect of any changes in estimate being accounted for as a change in accounting estimate.

(11) Investment Property

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, the book value of investment property is presented at cost, less accumulated depreciation and accumulated impairment. While land is not depreciated, all other investment property is depreciated using the straight-line method over 40 years.

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 being accounted for as a change in accounting estimate.

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.

(12) 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, 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.

(13) Impairment of non-financial assets, except for goodwill

At the end of each reporting period, the Company reviews the carrying amounts of its non-financial assets, except for goodwill, 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). Where 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. 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.

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. An impairment loss is recognized immediately 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, 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.

(14) 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 a 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 when the proceeds are received, net of direct issue costs.

When the Company reacquires its own shares, those shares are deducted from equity. No gain or loss is recognized in income or loss on the purchase, sale, issue or cancellation of an entity's own equity instruments.

3) Compound instruments

The component parts of compound instruments issued by the Company are classified separately as financial liabilities and equity in accordance with the substance of the contractual arrangement. Conversion option over an entity's own equity is accounted for as equity only when it will be settled by the entity delivering (or receiving) a fixed number of its own equity instruments and receiving (or delivering) a fixed amount of cash or another financial asset.

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 added to or deducted from the fair value of the financial liabilities, as appropriate, on initial recognition. Transaction costs that are directly attributable to acquisition of FVTPL are recognized immediately in income or loss.

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

5) FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is either held for trading or it is designated as FVTPL. A financial liability other than a financial liability held for trading may be designated as at FVTPL upon initial recognition. FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in income or loss. The net gain or loss recognized in income or loss incorporates any interest paid on the financial liability and is included in the 'other gains and losses' line item in the separate statement of comprehensive 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.

The effective interest method is a method of calculating the amortized cost of a financial liability, and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial liability, or (when appropriate) a shorter period, to the net carrying amount on initial recognition. When calculating the estimated future cash payments or receipts, certain factors, such as commission income and expense; points; transaction costs; and premiums and discounts, are factored into the calculation.

(15) Financial guarantee contract liabilities

The Company measures payments required to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the original or modified terms of a debt instrument and recognizes financial liability.

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 the K-IFRS 1018 *Revenue*

(16) Retirement Benefit Obligation

The Company operates a defined benefit pension plan. 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 and the return on plan assets (excluding interest), is reflected immediately in the separate statement 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 and 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 statement 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.

(17) 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 pre-tax 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.

(18) Derivative Financial Instruments

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 it is not expected to be realized or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

1) Hedge accounting

The Company designates certain derivatives as either hedges of recognized assets or liabilities or firm commitments (fair value hedges), hedges of highly probable forecast transactions or hedges of foreign currency risk of firm commitments (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.

a) Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognized in income or loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

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. 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.

b) Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gain or loss relating to the ineffective portion is recognized immediately in profit or loss, and is included in the 'other gains and losses' line item.

Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to profit or loss in the periods when the hedged item is recognized in profit or loss in the same line of the separate statement of income as the recognized 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. 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.

2) Other derivatives

Derivatives, except for those designated and qualify as effective hedging instruments are measured at fair values and the changes in fair values are recognized in income or loss.

(19) Dividend

Dividend payable is recognized as liability when declaration of the dividend is approved at the stockholders' meeting.

(20) Share-Based Payment Arrangement

The Company recognizes share options granted to employees at the fair value at the grant date. The fair value determined at the grant date of the share option is expensed on a straight-line basis over the vesting period. The Company determines fair value of share option using the Black-Scholes option-pricing model.

(21) Revenue Recognition

Revenue is measured at the fair value of the consideration received or receivable for the sale of goods and rendering of services arising in the course of the ordinary activities of the Company. Revenue is reduced for value-added tax, estimated customer returns, rebates and trade discounts and is presented after eliminating intercompany transactions. The Company recognizes revenue when the amount of revenue can be measured reliably and it is probable that the economic benefits associated with the transaction will flow to the Company and when transaction meets the revenue recognition criteria specified by activity. When measuring revenue, the Company reliably estimates on contingencies related to sales based on historical data, such as customer type, transaction type and trading terms.

1) Sale of goods

Revenue from the sale of goods is recognized when the Company has transferred the significant risks and rewards of ownership of the goods to the buyer. Revenue is recognized on initial delivery of the goods net of expected discounts and returns estimated based on historical data. The Company estimates and recognizes provision for warranty and sales return arising from sale of goods.

2) Rendering of service

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.

The reliable method to measure the value of the services performed is determined based on the nature of transaction. The process involved in the execution of the task is studied to understand the percentage of completeness and measure the progress by calculating the ratio of accumulated costs incurred to the total estimated costs.

3) Other revenue

Revenues arising from dividends are recognized when the right to receive the dividend payment is established.

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 recognized using the effective interest method. Rental income is recognized on a straight-line basis.

(22) Income Tax and Deferred Tax

Income tax expense is composed of current tax and deferred tax. Current tax and deferred tax are recognized in income or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current tax and deferred tax are also recognized in other comprehensive income or directly in equity, respectively.

Income tax (current tax) expense is the sum of corporate tax for each fiscal year and tax added to corporate tax under corporate income tax law and other law. Additional income taxes or tax refunds for the prior periods are included in income tax expense for the current period when recognized. 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. 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 income.

Deferred tax assets and liabilities are not recognized if the temporary difference arises from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable income nor the accounting income.

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 is realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

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 assets and liabilities are not recognized if the temporary difference arises from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable income nor the accounting income.

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 is realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent it is no longer probable that sufficient taxable income will be available to allow all or part of the asset to be recovered.

(23) 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.

(24) 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*.

(25) Approval of separate financial statements

The separate financial statements for the year ended December 31, 2013, were approved by the Board of Directors on March 5, 2014.

3. SIGNIFICANT ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTIES

In the application of the Company's accounting policies that are described at 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 underlying assumptions are reviewed on an ongoing basis.

The following are critical assumptions and key sources of estimation uncertainty at the end of reporting period that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

(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, and can be critically changed by relevant factors.

(2) Provision for construction losses

The Company provides warranty for product at the time of related revenue recognition (at the time of sale). Provisions for the expected cost of warranty obligations are recognized at the best estimate of the expenditure required to settle the Company's current and future obligations. These estimates could be changed in the future period by additional provision under local legislation and practice.

(3) Defined benefit obligation

The Company operates a defined benefit pension plan, which is funded by the Company and managed by insurance companies and trustees, based on actuarial calculations periodically performed. The assumptions about the method are based on discount rate, expected rate of salary increase and expected rate of return on plan assets; these estimates may contain significant uncertainty.

(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.

(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.

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 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, which represents the maximum exposure to foreign currency risk, as of December 31, 2013 and 2012, is as follows (in thousands of Korean won):

	December 31, 2013					December 31, 2012				
	USD	EUR	CNY	Others (*)	Total	USD	EUR	CNY	Others (*)	Total
Assets	₩25,885,276	₩4,052,072	₩219,562	₩100,976	₩30,257,886	₩56,714,253	₩130,227	₩259,422	₩69,683	₩57,173,585
Liabilities	(68,573,294)	(15,602,111)	(66,244)	(3,890,433)	(88,132,082)	(136,346,001)	(21,637,843)	-	(7,872,807)	(165,856,651)
Net assets										
(liabilities)	(₩42,688,018)	(₩11,550,039)	₩153,318	(₩3,789,457)	(₩57,874,196)	(₩79,631,748)	(₩21,507,616)	₩259,422	(₩7,803,124)	(₩108,683,066)

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

Net foreign currency translation gain/loss for the nine months ended December 31, 2013 and 2012, is ₩721,671 thousand and ₩9,492,542 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, 2013 and 2012, is as follows (in thousands of Korean won):

	December 31, 2013		December 31, 2012	
	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	(₩5,787,420)	₩5,787,420	(₩10,868,307)	₩10,868,307

The sensitivity analysis above is based on monetary assets and liabilities denominated in foreign currencies other than functional currency as of December 31, 2013 and 2012.

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, 2013 and 2012, is as follows (in thousands of Korean won):

	December 31, 2013	December 31, 2012
Financial assets	₩30,939,653	₩31,820,591
Financial liabilities	(63,318,000)	(128,532,000)
Net assets (liabilities)	(₩32,378,347)	(₩96,711,409)

A sensitivity analysis on the Company's income before tax assuming a 1% increase and 1% decrease in interest rates as of December 31, 2013 and 2012, is as follows (in thousands of Korean won):

	December 31, 2013		December 31, 2012	
	1%	1%	1%	1%
	increase	decrease	increase	decrease
Income before tax impact	(W323,783)	W323,783	(W967,114)	W967,114

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, 2013 and 2012, is as follows (in thousands of Korean won):

		December 31, 2013	December 31, 2012
Loans and receivables	Cash and cash equivalents	₩41,258,747	₩94,678,542
	Financial instruments	146,803,168	171,781,850
	Accounts and other receivables	25,511,680	85,273,333
	Loans	13,909,247	6,283,871
	Long-term others receivables	9,693,320	14,958,734
Held-to-maturity investments	Long-term investment securities	7,000,000	7,000,000
Derivative assets		46,332,783	50,443,327
	Total	₩290,508,945	₩430,419,657

Meanwhile, the Company's guarantee amount is equal to (see Note 32) 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, 2013 and 2012, is as follows (in thousands of Korean won):

		December 31, 2013					
	Individually impaired 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	
Accounts 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 accounts receivable	-	3,284,133	-	-	-	-	3,284,133
Total	₩6,236	₩ 24,373,386	₩1,924,468	₩1,280,108	₩ 966,963	₩761,109	₩29,312,270

(*) Full amount impaired.

December 31, 2012							
Individually impaired 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		
Accounts receivable	₩- ₩ 58,147,108	₩16,989,814	₩4,720,012	₩ 395,915	₩5,939,295		₩86,192,144
Other receivable	- 1,757,746	-	-	-	-		1,757,746
Accrued income	- 1,385,592	-	-	-	-		1,385,592
Long-term accounts receivable	- 4,460,205	-	-	-	-		4,460,205
Total	₩- ₩ 65,750,651	₩16,989,814	₩4,720,012	₩ 395,915	₩5,939,295		₩93,795,687

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, 2013 and 2012, have matured as follows (in thousands of Korean won):

		December 31, 2013				
		Nominal cash flows according to contract (*)				
		Less than			More than	
	Book value	Total	1 year	1-2 years	2-5 years	5 years
Financial liability	₩388,663,952	₩389,619,335	₩148,506,695	₩51,112,640	₩190,000,000	₩-
Interest expense	-	41,761,626	12,159,126	9,947,500	20,695,000	-
Total	₩388,663,952	₩431,380,961	₩160,665,821	₩61,060,140	₩210,695,000	₩-

		December 31, 2012				
		Nominal cash flows according to contract (*)				
		Less than			More than	
	Book value	Total	1 year	1-2 years	2-5 years	5 years
Financial liability	₩473,863,061	₩474,401,571	₩259,078,120	₩65,323,451	₩150,000,000	₩-
Interest expense	-	33,364,587	10,070,763	8,238,824	15,055,000	-
Total	₩473,863,061	₩507,766,158	₩269,148,883	₩73,562,275	₩165,055,000	₩-

(*) 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 32).

(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, 2013	December 31, 2012
Debt	₩858,981,798	₩1,028,488,897
Equity	679,935,587	644,479,412
Debt-to-equity ratio	126.33%	159.58%

5. RESTRICTED DEPOSITS:

Details of restricted deposits as of December 31, 2013 and 2012, are as follows (in thousands of Korean won):

Account	December 31 2013	December 31 2012	Remarks
Long-term financial instruments	₩6,500	₩5,500	Guarantee deposits for checking account
	1,796,668	1,760,226	Employee stock ownership loan secured by deposits
Total	₩1,803,168	₩1,765,726	

6. ACCOUNTS AND OTHER RECEIVABLES:

(1) Accounts and other receivables as of December 31, 2013 and 2012, consist of the following (in thousands of Korean won):

	December 31, 2013			December 31, 2012		
	Gross	Allowance for doubtful accounts	Carrying value	Gross	Allowance for doubtful accounts	Carrying value
CURRENT:						
Trade receivables	₩20,278,008	(₩588,933)	₩19,689,075	₩86,192,144	(₩4,125,329)	₩82,066,815
Other receivables	4,476,840	(6,236)	4,470,604	1,757,746	-	1,757,746
Accrued income	1,273,289	-	1,273,289	1,385,592	-	1,385,592
Guarantee deposits	78,712	-	78,712	63,180	-	63,180
Subtotal	₩26,106,849	(₩595,169)	₩25,511,680	₩89,398,662	(₩4,125,329)	₩85,273,333
NON-CURRENT:						
Other receivables	₩3,159,442	W-	₩3,159,442	₩4,234,765	W-	₩4,234,765
Guarantee deposits	6,533,878	-	6,533,878	10,723,969	-	10,723,969
Subtotal	9,693,320	-	9,693,320	14,958,734	-	14,958,734
Total	₩35,800,169	(₩595,169)	₩35,205,000	₩104,357,396	(₩4,125,329)	₩100,232,067

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

	2013			
	January 1, 2013	Increase	Reversal	December 31, 2013
Trade receivable	(₩4,125,329)	W-	₩3,536,396	(₩588,933)
Other receivables	-	(6,236)	-	(6,236)
	(₩4,125,329)	(₩6,236)	₩3,536,396	(₩595,169)

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, 2013 and 2012, are summarized as follows (in thousands of Korean won):

	December 31, 2013			December 31, 2012		
	Acquisition cost	Valuation allowance	Book value	Acquisition cost	Valuation allowance	Book value
Work in progress	₩96,425,489	(₩14,444,478)	₩81,981,011	₩97,857,640	(₩28,642,954)	₩69,214,686
Raw materials	77,734,173	(3,403,154)	74,331,019	125,658,125	(4,494,921)	121,163,204
Materials in transit	20,236,118	-	20,236,118	14,822,951	-	14,822,951
Total	₩194,395,780	(₩17,847,632)	₩176,548,148	₩238,338,716	(₩33,137,875)	₩205,200,841

The Company recorded gain (loss) on inventory valuation totaling (-)₩15,290,243 thousand and (-)₩4,951,524 thousand for the years ended December 31, 2013 and 2012, respectively.

8. LONG-TERM INVESTMENT SECURITIES:

(1) Long-term investment securities as of December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	December 31, 2013	December 31, 2012
Non-marketable securities:		
Korea Marine Equipment Association	₩20,000	₩20,000
Electronic Contractors' Financial Cooperative	52,047	52,047
Equity securities:		
Casco	1	850,070
Subtotal	72,048	922,117
Long-term held-to-maturity financial assets		
Subordinated beneficiary certificate	7,000,000	7,000,000
Total	₩7,072,048	₩7,922,117

The securities are measured at acquisition cost as they cannot be reliably measured at fair value.

(2) Changes in AFS financial assets for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

2013				
	January 1, 2013	valuation	Profits and losses	December 31, 2013
Equity securities:	(W180,547)	W-	W180,547	W-
Tax effect	43,692	-	(43,692)	-
Total	<u>(W136,855)</u>	<u>W-</u>	<u>W136,855</u>	<u>W-</u>

2012				
	January 1, 2012	valuation	Profits and losses	December 31, 2012
Equity securities:	W-	(W180,547)	W-	(W180,547)
Tax effect	-	43,692	-	43,692
Total	<u>W-</u>	<u>(W136,855)</u>	<u>W-</u>	<u>(W136,855)</u>

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, 2013 and 2012, are as follows (in thousands of Korean won):

December 31, 2013							
	Buy		Sell		Assets	Gains	Firm
	Currency	Amount	Currency	Amount	(liabilities)	(losses)	commitment
Foreign currency	KRW	980,501,554	USD	874,516,016	₩45,805,211	₩32,569,776	(₩17,760,943)
forwards	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	1,959,000	KRW	2,383,297	10,523	14,969	(10,523)
Borrowings in foreign							
currency	KRW	90,875,738	USD	60,000,000	-	-	4,313,118
Total					₩43,437,472	₩32,184,275	(₩9,344,614)

December 31, 2012							
	Buy		Sell		Assets	Gains	Firm
	Currency	Amount	Currency	Amount	(liabilities)	(losses)	commitment
Foreign currency	KRW	1,069,515,571	USD	939,422,616	₩50,040,614	₩62,790,797	(₩2,543,792)
forwards	KRW	4,892,394	EUR	3,224,000	250,241	250,241	(250,241)
	EUR	69,956,000	KRW	106,093,746	(5,225,493)	(4,293,414)	7,094,360
	CHF	2,034,000	KRW	2,501,533	(65,084)	(65,084)	64,316
Borrowings in foreign							
currency	KRW	125,272,463	USD	120,000,000	-	-	4,235,006
Total					₩45,000,278	₩58,682,540	₩8,599,649

Derivative instruments classified as financial assets (liabilities) at FVTPL are classified as current assets or current liabilities. Derivatives that are designated as hedging instruments are classified as non-current assets (liabilities) when their maturities are more than 12 months from the end of the reporting period. Otherwise, they are classified as current assets (liabilities).

10. FINANCIAL INSTRUMENTS:

(1) Categories of financial instruments as of December 31, 2013 and 2012, are as follows (in thousands of Korean won):

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
Long- and short-term financial instruments	-	146,803,168	-	-	-	146,803,168
Trade and other receivables	-	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
Long-term investment securities	-	-	72,048	7,000,000	-	7,072,048
Long-term other receivables	-	9,693,320	-	-	-	9,693,320
Total	₩-	₩237,176,162	₩72,048	₩7,000,000	₩46,332,783	₩290,580,993

December 31, 2013				
Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivatives designated as hedging instruments	Book value	Fair value
Trade and other payables	₩-	₩85,188,695	₩-	₩85,188,695
Borrowings and bonds	-	302,362,617	-	302,362,617
Derivative liabilities	-	-	2,895,311	2,895,311
Long-term non-trade payables	-	1,112,640	-	1,112,640
Financial guarantee liabilities	-	2,977,125	-	2,977,125
Total	₩-	₩391,641,077	₩2,895,311	₩394,536,388

December 31, 2012

	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	W-	W94,678,542	W-	W-	W-	W94,678,542	W94,678,542
Long- and short-term financial instruments	-	171,781,850	-	-	-	171,781,850	171,781,850
Trade and other receivables	-	85,273,333	-	-	-	85,273,333	85,273,333
Derivative assets	-	-	-	-	50,443,327	50,443,327	50,443,327
Long- and short-term loans	-	6,283,871	-	-	-	6,283,871	6,283,871
Long-term investment securities	-	-	922,117	7,000,000	-	7,922,117	7,922,117
Long-term other receivables	-	14,958,734	-	-	-	14,958,734	14,958,734
Total	W-	W372,976,330	W922,117	W7,000,000	W50,443,327	W431,341,774	W431,341,774

December 31, 2012

	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivatives designated as hedging instruments	Book value	Fair value
Trade and other payables	W-	W164,983,625	W-	W164,983,625	W164,983,625
Borrowings and bonds	-	307,821,985	-	307,821,985	307,821,985
Derivative liabilities	-	-	5,443,049	5,443,049	5,443,049
Long-term non-trade payables	-	1,057,451	-	1,057,451	1,057,451
Financial guarantee liabilities	-	4,121,160	-	4,121,160	4,121,160
Total	W-	W477,984,221	W5,443,049	W483,427,270	W483,427,270

(2) Fair value measurements of financial instruments by fair value levels as of December 31, 2013 and 2012, are as follows (in thousands of Korean won):

Type	December 31, 2013			
	Level 1	Level 2	Level 3	Total
Financial Assets:				
Derivatives designated as hedging instruments	₩-	₩46,332,783	₩-	₩46,332,783
Total	₩-	₩46,332,783	₩-	₩46,332,783
Financial Liabilities:				
Derivatives designated as hedging instruments	₩-	(₩2,895,311)	₩-	(₩2,895,311)
Total	₩-	(₩2,895,311)	₩-	(₩2,895,311)
Type	December 31, 2012			
	Level 1	Level 2	Level 3	Total
Financial Assets:				
Derivatives designated as hedging instruments	₩-	₩50,443,327	₩-	₩50,443,327
AFS financial assets	-	-	850,070	850,070
Total	₩-	₩50,443,327	₩850,070	₩51,293,397
Financial Liabilities:				
Derivatives designated as hedging instruments	₩-	(₩5,443,049)	₩-	(₩5,443,049)
Total	₩-	(₩5,443,049)	₩-	(₩5,443,049)

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.

On the other hand, as for trade and other receivables, the book value approximates a reasonable estimate of fair value.

(3) Profit and loss by categories of financial instruments as of December 31, 2013 and 2012, are as follows (in thousands of Korean won)

2013								
	Interest	Dividend	Valuation	Impairment	Disposal	Foreign exchange	Others	Other comprehensive income (*)
Financial asset at FVTPL	W-	W-	W-	W-	W-	W-	W-	W-
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	W 6,831,239	W827	W-	W2,499,544	W-	W 161,550	W-	W180,547
Financial liabilities at FVTPL	W-	W-	W-	W-	W-	W-	W-	W-
Financial liabilities at amortized cost	(11,317,036)	-	-	-	-	(273,466)	1,227,966	-
Total	(W11,317,036)	W-	W-	W-	W-	(W273,466)	W1,227,966	W-

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

	Interest	Dividend	Valuation	Impairment	Disposal	Foreign exchange	Others	Other comprehensive income (*)
Financial asset at FVTPL	W-	W-	W-	W-	W-	W-	W-	W-
Loans and receivables	12,734,995	-	-	(65,109)	-	(6,417,016)	-	-
AFS financial assets	-	-	-	-	-	-	-	(180,547)
Held-to-maturity investments	538,726	-	-	-	-	-	-	-
Total	<u>W13,273,721</u>	<u>W-</u>	<u>W-</u>	<u>(W65,109)</u>	<u>W-</u>	<u>(W 6,417,016)</u>	<u>W-</u>	<u>(W180,547)</u>
Financial liabilities at FVTPL	W-	W-	W-	W-	W-	W-	W-	W-
Financial liabilities at amortized cost	(9,250,350)	-	-	-	-	13,768,145	384,463	-
Total	<u>(W9,250,350)</u>	<u>W-</u>	<u>W-</u>	<u>W-</u>	<u>W-</u>	<u>W13,768,145</u>	<u>W384,463</u>	<u>W-</u>

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

	December 31, 2013			December 31, 2012		
	Valuation	Disposal	Other comprehensive income(*)	Valuation	Disposal	Other comprehensive income(*)
Derivatives designated as hedging instruments	W32,184,276	(W4,666,544)	W-	W58,682,541	W1,450,638	W440,359
Total	<u>W32,184,276</u>	<u>(W4,666,544)</u>	<u>W-</u>	<u>W58,682,541</u>	<u>W1,450,638</u>	<u>W440,359</u>

(*) 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, 2013 and 2012, are summarized as follows (in thousands of Korean won):

	Country	Percentage	December 31, 2013	December 31, 2012
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 32-(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, 2013 and 2012, are as follows (in thousands of Korean won):

	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	<u>₩283,761,955</u>	<u>₩202,468,302</u>	<u>₩112,942,419</u>	<u>₩3,960,243</u>	<u>₩3,203,638</u>	<u>₩606,336,557</u>
-Acquisition cost	₩283,761,955	₩247,340,409	₩236,979,909	₩56,124,182	₩3,203,638	₩827,410,093
-Accumulated depreciation	-	(44,872,107)	(124,037,490)	(52,163,939)	-	(221,073,536)

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

2012						
	Land	Buildings and structures	Machinery	Others	Construction in progress	Total
January 1, 2012	₩210,006,099	₩ 201,589,735	₩128,695,455	₩9,100,750	₩1,992,176	₩551,384,215
Acquisition	1,204,211	2,687,333	5,008,207	1,996,946	2,391,402	13,288,099
Transfer (*2)	25,741,385	11,158,986	1,011,426	156,200	(1,937,896)	36,130,101
Disposal	-	-	(534,431)	(114,500)	-	(648,931)
Depreciation	-	(6,974,471)	(12,123,155)	(4,626,261)	-	(23,723,887)
December 31, 2012	<u>₩236,951,695</u>	<u>₩208,461,582</u>	<u>₩122,057,502</u>	<u>₩6,513,135</u>	<u>₩2,445,682</u>	<u>₩576,429,596</u>
-Acquisition cost	₩236,951,695	₩246,747,019	₩233,770,941	₩56,095,398	₩2,445,682	₩776,010,735
-Accumulated depreciation	-	(38,285,437)	(111,713,439)	(49,582,263)	-	(199,581,139)

(*2) Amounts related to transfer from construction in progress to original account and from investment properties(land and building) to property, plant and equipment.

(2) The Company revalued its land assets as of December 31, 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 Company Limited (Pacific), on October 31, 2013. The Pacific is member of Korea Association of Property Appraisers and comprise of certified professionals that have a significant amount of industry experience.

Fair value of land assets is determined by reference to Officially Assessed Reference Land Price (OARLP), announced by Ministry of Land, Transport and Maritime Affairs, and recent market transactions of similar, recently sold parcels nearby the subject land in order to derive an indication of the most probable sales price (or value) of the subject land.

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

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

- (4) Valuation methodologies and inputs used for fair value measurements of land assets 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 the 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		
W236,951,695	(W819,402)	W36,207,540	W11,559,663	(W137,541)	W283,761,955

- (6) Classification of depreciation expenses for the years ended December 31, 2013 and 2012 is as follows (in thousands of Korean won):

	2013	2012
Cost of sales	W21,942,201	W22,714,434
Selling and administrative expenses	435,924	916,985
Development	284,191	92,468
Total	W22,662,316	W23,723,887

13. INTANGIBLE ASSETS:

(1) Changes in intangible assets for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	2013				
	Development costs	Rights of utilization	Software	Others	Total
January 1, 2012	₩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, 2012	<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	₩35,796,404
-Accumulated amortization	-	(2,913,347)	(5,546,420)	(1,696,642)	(10,887,864)
	2012				
	Development costs	Rights of utilization	Software	Others	Total
January 1, 2012	₩221,440	₩832,385	₩10,135,687	₩3,346,620	₩14,536,132
Acquisition	4,649,795	-	1,664,457	492,274	6,806,526
Disposal	-	-	-	(150,500)	(150,500)
Amortization	-	(208,096)	(2,054,879)	-	(2,262,975)
Impairment	-	-	-	(314,895)	(314,895)
December 31, 2012	<u>₩4,871,235</u>	<u>₩624,289</u>	<u>₩9,745,265</u>	<u>₩3,373,499</u>	<u>₩18,614,288</u>
-Acquisition cost	₩4,871,235	₩3,329,540	₩12,772,102	₩4,779,934	₩25,752,811
-Accumulated amortization	-	(2,705,251)	(3,026,837)	(1,406,435)	(7,138,523)

Other intangible assets' book value, which have nonrestrictive durable years, is ₩3,078,225 thousand and ₩3,373,499 thousand as of December 31, 2013 and 2012, respectively.

(2) Expenditure on research and development recognized as expenses amounted to ₩5,773,802 thousand and ₩1,272,321 thousand for the years ended December 31, 2013 and 2012, respectively.

(3) Borrowing costs added to the cost of intangible assets for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	2013	2012
Borrowing costs added to the cost of intangible assets	₩264,724	₩-
Interest rate(%)	3.76%	-

(4) Classification of amortization expense for the years ended December 31, 2013 and 2012, is as follows (in thousands of Korean won):

	2013	2012
Cost of sales	₩2,235,233	₩1,934,173
Selling and administrative expenses	492,446	328,802
Total	₩2,727,679	₩2,262,975

14. INVESTMENT PROPERTIES:

(1) Changes in investment properties for the year ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	2013		
	Land	Building	Total
January 1, 2013	₩-	₩-	₩-
Transfer	-	-	-
December 31, 2013	₩-	₩-	₩-

	2012		
	Land	Building	Total
January 1, 2012	₩25,386,996	₩10,743,105	₩36,130,101
Transfer	(25,386,996)	(10,743,105)	(36,130,101)
December 31, 2012	₩-	₩-	₩-

For the years ended December 31, 2012, investment properties are transferred to fixed asset for the purpose of owner-occupied property.

15. BONDS AND LONG-TERM BORROWINGS:

(1) Bonds as of December 31, 2013 and 2012, are as follows (in thousands of Korean won):

Details	Interest rate (%)	December 31, 2013	December 31, 2012
The 6th	4.16	₩100,000,000	₩100,000,000
The 7th	5.00	90,000,000	-
Subtotal		190,000,000	100,000,000
Less: Discount on bonds		(955,383)	(538,510)
Net		₩189,044,617	₩99,461,490

(2) Long-term and short-term borrowings as of December 31, 2013 and 2012, are as follows (in thousands of Korean won):

1) Short-term borrowings

Type	Lender	Annual interest rate (%)	December 31, 2013	December 31, 2012
Short-term borrowings in Korean won	Woori Bank and others	1.08-1.1	₩ -	₩29,828,495
	Total		₩ -	₩29,828,495

Short-term borrowings are provided as collateral for the accounts receivable debt transactions that occurred in the assignment of receivables that do not meet the requirements for removal of financial instruments (See Note 31-(2)).

Long-term borrowings

Type	Lender	Interest rate(%)	December 31, 2013	December 31, 2012
Syndicate loans				
(domestic currency)	La-union	5.15	₩50,000,000	₩50,000,000
Syndicate loans	Korea Development			
(foreign currency)	Bank	6M LIBOR+1.6	21,106,000	42,844,000
	The Export-Import			
	Bank of Korea	6M LIBOR+1.6	10,553,000	21,422,000
	Shinhan Bank	6M LIBOR+1.6	8,442,400	17,137,600
	Industrial Bank of			
	Korea	6M LIBOR+1.6	6,331,800	12,853,200
	Woori Bank	6M LIBOR+1.6	8,442,400	17,137,600
	Korea Exchange			
	Bank	6M LIBOR+1.6	1,899,540	3,855,960
	Hana Bank	6M LIBOR+1.6	3,165,900	6,426,600
	Kookmin Bank	6M LIBOR+1.6	1,688,480	3,427,520
	HSBC	6M LIBOR+1.6	844,240	1,713,760
	First Gulf Bank	6M LIBOR+1.6	844,240	1,713,760
	Subtotal((Foreign currency)		63,318,000	128,532,000
Subtotal			113,318,000	178,532,000
Less: Current portion			(63,318,000)	(64,266,000)
Net			₩50,000,000	₩114,266,000

16. 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, 2013 and 2012, are as follows (in thousands of Korean won):

	<u>December 31, 2013</u>	<u>December 31, 2012</u>
Present value of defined benefit obligation	₩22,972,104	₩24,670,006
Fair value of plan assets	<u>(12,363,157)</u>	<u>(4,854,163)</u>
Total	<u>₩10,608,947</u>	<u>₩19,815,843</u>

- (2) Expenses recognized in income and loss for the years ended December 31 2013 and 2012, are as follows (in thousands of Korean won):

	<u>2013</u>	<u>2012</u>
Current service cost	₩5,832,361	₩6,716,871
Net interest cost (interest cost – expected return on plan assets)	708,982	1,346,131
Effect of reduction and liquidation	<u>-</u>	<u>31,569</u>
Total	<u>₩6,541,343</u>	<u>₩8,094,571</u>

- (3) Details of the total expense recognized in separate statements of income for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	<u>2013</u>	<u>2012</u>
Cost of sales	₩4,411,846	₩6,512,157
Selling and administrative expenses	1,858,208	1,582,414
Development	<u>271,289</u>	<u>-</u>
Total	<u>₩6,541,343</u>	<u>₩8,094,571</u>

- (4) Changes in defined benefit obligations for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	2013	2012
Beginning balance	₩24,670,006	₩32,783,618
Current service cost	5,832,361	6,716,871
Transfer in	174,293	175,547
Transfer out	(289,650)	(1,177,824)
Interest cost	881,061	1,560,385
Remeasurements of defined benefit liabilities:	(7,001,256)	836,327
- Actuarial loss (gain) arising from changes in demographic assumptions	(102,475)	1,141
- Actuarial loss (gain) arising from changes in financial assumptions	(5,668,269)	1,596,554
- Others	(1,230,512)	(761,368)
Effect of reduction and liquidation	-	31,569
Benefit paid	(1,294,711)	(16,256,487)
Ending balance	₩22,972,104	₩24,670,006

- (5) Changes in plan assets for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	2013	2012
Beginning balance	₩4,854,163	₩6,193,303
Expected return on plan assets	172,080	214,254
Remeasurements of plan assets	(2,053)	(13,170)
Contributions by employer directly to plan assets	7,505,000	-
Benefit payment	(127,570)	(537,947)
Transfer in	7,825	175,547
Transfer out	(44,866)	(1,177,824)
National Pension Fund	(1,422)	-
Ending balance	₩12,363,157	₩4,854,163

Meanwhile, the actual revenue of plan assets as of December 31, 2013 and 2012 is ₩170,027 thousand and ₩201,084 thousand, respectively.

- (6) Assumptions used on actuarial valuation as of December 31, 2013 and 2012, are as follows:

	<u>December 31, 2013</u>	<u>December 31, 2012</u>
Discount rate for defined benefit obligations	4.40%	3.70%
Expected rate of salary increase:		
Employee	2.40%	5.00%
Officer	5.30%	8.00%

Assumption about death is based on the statistics and experiences, and the main estimates of assumptions used on actuarial valuation are based on the report of external actuary's who is professionally qualified.

- (7) Details of plan assets as of December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	<u>December 31, 2013</u>	<u>December 31, 2012</u>
Debt instruments	₩505,182	₩548,754
Loans	36,825	16,133
Deposits	11,800,483	4,287,855
Pension	20,667	1,421
Total	<u>₩12,363,157</u>	<u>₩4,854,163</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, 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):

	<u>Discount rate</u>		<u>Salary increase rate</u>	
	<u>1% increase</u>	<u>1% decrease</u>	<u>1% increase</u>	<u>1% decrease</u>
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, 2013 is as follows (in thousands of Korean Won):

	<u>Less than 1year</u>	<u>1 – 2years</u>	<u>3 – 5years</u>	<u>6 – 10years</u>	<u>Total</u>
Payment	₩1,897,927	₩4,122,638	₩7,936,710	₩15,440,074	₩29,397,349

17. PROVISIONS:

Changes in provisions for the year ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	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	2,000,000	-	(2,000,000)	-	-	- -
Total	₩19,568,072	(₩8,130,136)	(₩5,350,359)	₩4,010,323	₩10,097,900	₩- ₩10,097,900

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

	2012				
	January 1, 2012	Accrual	Use	December 31, 2012	Current Non-current
Provision for construction warranties	₩20,507,108	₩1,109,508	(₩4,048,544)	₩17,568,072	₩- ₩17,568,072
Provision for Litigation	-	2,000,000	-	2,000,000	- 2,000,000
Total	₩20,507,108	₩3,109,508	(₩4,048,544)	₩19,568,072	₩- ₩19,568,072

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.

18. CAPITAL STOCK AND CAPITAL SURPLUS:

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

	<u>Number of shares</u>	<u>Capital stock</u>	<u>Capital surplus</u>
Balance at December 31, 2013	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.

19. OTHER CAPITAL ITEMS:

- (1) Other capital items as of December 31, 2013 and 2012, are summarized as follows (in thousands of Korean won):

<u>Description</u>	<u>December 31, 2013</u>	<u>December 31, 2012</u>
Share option	₩355,390	₩397,168

- (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, 2013, is as follows:

<u>Date of grant</u>	<u>Number of granted options</u>	<u>Exercisable period</u>	<u>Exercisable price</u>	<u>Expected fair value at the date of grant</u>
2011.03.25	33,900	2014.03.25-2021.03.24	₩21,600	₩10,343
2012.03.30	48,600	2015.03.30-2022.03.29	₩13,300	₩4,653
2013.03.29	92,800	2016.3.29-2023.3.28	₩9,050	₩3,383

- 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%

(*) 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, 2013, are as follows:

a) Number of common shares to be issued:

Date of grant	January 1, 2013	Granted	Exercised	Canceled	December 31, 2013
2011.03.25	33,900	-	-	(23,000)	10,900
2012.03.30	48,600	-	-	(18,600)	30,000
2013.03.29	-	92,800	-	-	92,800
Total	82,500	92,800	-	(41,600)	133,700

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

Date of grant	January 1, 2013	Granted	Exercised	Canceled	December 31, 2013
2011.03.25	₩311,242	₩28,339	₩-	(₩226,842)	₩112,739
2012.03.30	85,926	70,959	-	(33,954)	122,931
2013.03.29	-	119,720	-	-	119,720
Total	₩397,168	₩219,018	₩-	(₩260,796)	₩355,390

Expense recognized related to the share option grant amounted to (-)₩41,778 thousand and ₩261,720 thousand for the years ended December 31, 2013 and 2012, respectively. Expense to be recognized in the future period amounted to ₩211,214 thousand.

20. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS):

Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	<u>December 31, 2013</u>	<u>December 31, 2012</u>
Unrealized loss on valuation of AFS financial assets	₩-	(₩136,855)
Revaluation surplus of land	<u>36,207,540</u>	<u>-</u>
Total	<u>₩36,207,540</u>	<u>(₩136,855)</u>

21. RETAINED EARNINGS:

(1) Retained earnings as of December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	<u>December 31, 2013</u>	<u>December 31, 2012</u>
Legal reserve (*)	₩1,200,000	₩1,200,000
Optional reserve	2,700,000	2,700,000
Retained earnings before appropriations	<u>202,757,956</u>	<u>203,604,398</u>
Total	<u>₩206,657,956</u>	<u>₩207,504,398</u>

(*) 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, 2013 and 2012, are as follows (in thousands of Korean won):

	<u>2013</u>	<u>2012</u>
Beginning balance	₩207,504,398	₩153,781,811
Profit (loss) for the period	(6,151,839)	54,366,505
Actuarial gains (losses) recognized in retained earnings	<u>5,305,397</u>	<u>(643,918)</u>
Ending balance	<u>₩206,657,956</u>	<u>₩207,504,398</u>

(3) Changes in retained earnings (deficit) for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	2013	2012
Unappropriated retained earnings:		
Beginning of year	₩203,604,398	₩149,881,811
Net income (loss) for year	(6,151,839)	54,366,505
Actuarial gains (losses)	5,305,397	(643,918)
End of year	202,757,956	203,604,398
Appropriations:		
Reserve for research and human resource development	-	-
Unappropriated retained earnings to be carried forward to next year	₩202,757,956	₩203,604,398

The appropriations of retained earnings for the year ended December 31, 2013, will be approved at the general stockholders' meeting on March 29, 2013.

22. SALES:

Details of sales for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	2013	2012
Sales of goods	₩702,412,246	₩1,313,720,647
Construction sales	35,329,121	58,523,635
Others	5,362,995	5,374,676
Total	₩743,104,362	₩1,377,618,958

23. 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, 2013 and 2012 (in thousands of Korean won):

	2013	2012
Domestic	₩463,575,548	₩702,836,130
Overseas	279,528,814	674,782,828
Total	₩743,104,362	₩1,377,618,958

- (2) There is a single external customer who accounted for 10% or more of the Company's sales for the years ended December 31, 2013 and 2012 (in thousands of Korean won):

	2013	2012
Samsung Heavy Industries Co., Ltd.	₩64,938,459	₩188,721,483
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	268,583,594	320,541,592
JIANGSU NEW YANGZI	13,125,220	169,749,061
Total	₩346,647,273	₩679,012,136

24. CONSTRUCTION CONTRACTS:

- (1) Details of profit and unbilled (overbilled) construction receivables (payables) under construction contract for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	2013					
	Construction cost	Construction revenue	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

2012						
	Construction cost	Construction revenue	Construction profit	Contract receivables		Gross amount due to customers
				Claimed	Not claimed	
Diesel engine	₩222,031,899	₩201,388,804	₩20,643,095	₩-	₩5,930	₩19,416,602

(2) Details of construction contract for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

2013					
Order	Description	January 1, 2013	Increase by contract	Decrease by sales	December 31, 2013
KHNP and other five companies	Singori #3 and #4 emergency generators, alternative AC power diesel engine and other 10	₩121,423,210	(₩1,506,615)	(₩35,329,121)	₩84,587,474

2012					
Order	Description	January 1, 2012	Increase by contract	Decrease by sales	December 31, 2012
KHNP and other five companies	Singori #3 and #4 emergency generators, alternative AC power diesel engine and other 14	₩71,390,789	₩108,556,056	(₩58,523,635)	₩121,423,210

25. EXPENSES CLASSIFIED BY NATURE:

Expenses classified by nature for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

	2013	2012
Changes in inventories	₩28,652,693	₩42,030,734
Purchase of raw materials	465,933,930	853,182,922
Employee benefits	74,495,561	111,078,097
Other employee benefits	14,871,281	19,997,018
Depreciation and amortization	25,105,804	25,986,862
Commission expenses	58,183,793	114,611,217
Others	73,922,788	141,432,844
Total	₩741,165,850	₩1,308,319,694

26. SELLING AND ADMINISTRATIVE EXPENSES:

Selling and administrative expenses for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

Account	2013	2012
Salaries	₩21,780,305	₩25,342,222
Other employee benefits	4,711,259	6,540,565
Provision for retirement and severance benefits	2,012,139	16,427,840
Commission expenses	9,807,224	19,118,407
Depreciation	435,924	916,985
Amortization	492,446	328,802
Advertising and marketing expenses	2,791,675	4,230,849
Transportation expenses	71,418	111,626
Rental expenses	1,290,948	1,355,568
Bad debt expenses (reversal of allowance for bad debt)	(3,536,396)	65,109
Research and ordinary development costs	5,773,802	1,272,321
Others	4,472,726	8,138,253
Total	₩50,103,470	₩83,848,547

27. FINANCE INCOME AND EXPENSES:

Finance income and expenses for the years ended December 31, 2013 and 2012, are summarized as follows (in thousands of Korean won):

Account	2013	2012
Finance income:		
Interest income	₩6,831,239	₩13,273,721
Dividend income	827	-
Income from financial guarantee	1,227,966	384,463
Gain on foreign currency transaction	18,217,367	23,508,193
Gain on foreign currency translation	1,226,406	10,849,404
Gain on derivative transaction	17,685,464	5,240,688
Gain on valuation of derivatives	33,595,948	63,110,805
Gain on valuation of firm commitments	21,931,340	4,584,914
Subtotal	100,716,557	120,952,188
Finance expenses:		
Interest expenses	11,317,036	9,250,350
Expense for financial guarantee	409,783	968,533
Loss on foreign currency transaction	19,050,953	25,649,607
Loss on foreign currency translation	504,736	1,356,862
Loss on derivative transaction	22,352,008	3,790,050
Loss on valuation of derivatives	1,411,672	4,428,264
Loss on valuation of firm commitments	49,092,919	73,975,062
Subtotal	(104,139,107)	(119,418,728)
Net finance income	(₩3,422,550)	₩1,533,460

28. OTHER NON-OPERATING INCOME AND EXPENSES:**(1) Details of other operating income and expenses**

Other operating income and expenses for the years ended December 31, 2013 and 2012, consist of the following (in thousands of Korean won):

Account	2013	2012
Other operating income:		
Commission	₩266,567	₩524,571
Rental income	230,750	22,232
Gain on disposal of property, plant and equipment	29,466	223,357
Gain on disposal of intangible assets	-	54,552
Gain on disposal of assets held for sale	1,385,970	-
Other income	3,020,245	12,410,121
Subtotal	4,932,998	13,234,833
Other operating expenses:		
Impairment of AFS financial assets	1,030,616	-
Loss on disposal of property, plant and equipment	2,938	8,830
Revaluation loss on land	137,541	-
Loss on disposal of intangible assets	-	7,491
Loss on intangible assets abandoned	731,455	-
Impairment loss of intangible assets	295,274	314,895
Donations	2,726,776	8,096,140
Other bad debt expenses	6,236	-
Other loss	3,751,738	3,384,850
Subtotal	(8,682,574)	(11,812,206)
Total	(₩3,749,576)	₩1,422,627

29. INCOME TAX EXPENSE:

- (1) Components of income tax expense for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

Details	2013	2012
Current income tax expense	₩3,874,287	₩25,453,846
Changes in deferred income tax assets (liabilities) related to temporary differences	10,341,101	(7,707,702)
Deferred income tax assets directly reflected in stockholders' equity	(13,297,162)	142,703
Income tax expense	₩918,226	₩17,888,847

- (2) Changes in deferred tax assets and liabilities for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won):

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

(Continued)

Gain on revaluation of land and buildings	(W42,554,397)	W819,139	(W11,559,663)	(W53,294,921)
Others	46,667	139,573	-	186,240
Subtotal	(35,365,579)	(509,331)	(13,297,162)	(49,172,072)
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	93,000	3,465,392	-	3,558,392
Total	(W35,272,579)	W2,956,061	(W13,297,162)	(W45,613,680)

Details	January 1, 2012	Change		December 31, 2012
		Income	Capital	
Foreign currency translation, net	W4,409,556	(W1,264,655)	W-	W3,144,901
Depreciation	233,386	671,164	-	904,550
Allowance for doubtful accounts	587,851	190,100	-	777,951
Accrued income	(599,879)	264,566	-	(335,313)
Loss on inventory obsolescence	9,659,101	(1,205,627)	-	8,453,474
Currency forwards	9,464,948	(20,248,448)	(106,567)	(10,890,067)
Firm commitment assets	(31,395,057)	29,313,942	-	(2,081,115)
Loss on investment assets	-	721,049	43,692	764,741
Loss on equity-method investees	670,709	(670,709)	-	-
Long-term loan	(119,911)	47,075	-	(72,836)
Subcost on membership	273,259	76,204	-	349,463
Accrued expenses	1,414,624	(973,334)	-	441,290
Unearned revenue	(9,357,452)	5,792,298	-	(3,565,154)
Long-term borrowings	4,787,244	(3,982,836)	-	804,408
Financial guarantee liabilities	84,458	(111,951)	-	(27,493)
Provision for construction warranties	4,962,720	(711,247)	-	4,251,473
Litigation reserve	-	484,000	-	484,000
Provision for severance indemnities	4,451,447	(919,147)	205,578	3,737,878
Gain on revaluation of land and buildings	(42,554,397)	-	-	(42,554,397)
Others	47,112	(445)	-	46,667
Subtotal	(42,980,281)	7,471,999	142,703	(35,365,579)
Tax credits	-	93,000	-	93,000
Total	(W42,980,281)	W7,564,999	W142,703	(W35,272,579)

- (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, 2013 and 2012.

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, 2013 and 2012, are as follows (in thousands of Korean won):

	December 31, 2013	December 31, 2012
Subsidiary	(₩5,242,062)	(₩5,242,062)
Associates	394,451,511	394,451,511
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, 2013 and 2012, are as follows (in thousands of Korean won):

Details	December 31, 2013			December 31, 2012		
	Gross	Tax effect	Net of tax	Gross	Tax effect	Net of tax
Loss on valuation of marketable securities	₩-	₩-	₩-	(₩180,547)	₩43,692	(₩136,855)
Actuarial gain or loss	(399,127)	96,589	(302,538)	(7,398,331)	1,790,396	(5,607,935)
Revaluation surplus of land	47,767,203	(11,559,663)	36,207,540	-	-	-
Total	₩47,368,076	(₩11,463,074)	₩35,905,002	(₩7,578,878)	₩1,834,088	(₩5,744,790)

- (6) An explanation of the relationship between income tax expense and accounting income (loss) before income tax expense for the years ended December 31, 2013 and 2012, is as follows (in thousands of Korean won):

Details	2013	2012
Income (loss) before income tax expense	(₩5,233,613)	₩72,255,352
Income tax expense at statutory income tax rate (less than ₩200 million: 11% more than ₩200 million: 24.2%)	(1,266,534)	15,476,177
Differences (Note 1)	<u>2,184,760</u>	<u>2,412,670</u>
Income tax expense	<u>₩918,226</u>	<u>₩17,888,847</u>
Effective tax rate	<u>(Note2)</u>	<u>24.76%</u>
(Note 1) Difference:		
Additional payment of income taxes	₩3,874,287	₩2,270,685
Non-temporary difference	(748,206)	117,059
Tax credits	(838,422)	-
Others	<u>(102,899)</u>	<u>24,926</u>
Total	<u>₩2,184,760</u>	<u>₩2,412,670</u>

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

30. 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>2013</u>	<u>2012</u>
Net income available to common shares	(W6,151,839)	W54,366,505
Weighted-average number of common shares outstanding (*1)	<u>69,500,000</u>	<u>69,500,000</u>
Basic net income per share	<u>(W89)</u>	<u>W782</u>

(*1) The weighted-average number of common shares outstanding for the years ended December 31, 2013 and 2012, 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, 2013 and 2012, because there is no item related to dilution. Diluted earnings per share are equal to earnings per share for the years ended December 31, 2013 and 2012.

Due to the antidilutive effect for the years ended December 31, 2013 and 2012, the Company is not considering share option, which could dilute the basic earnings per share in the future.

	<u>2013</u>	<u>2012</u>
Number of common shares to be issued	133,700	82,500

31. COMMITMENTS AND CONTINGENCIES:

(1) Notes and checks provided as collateral

As of December 31, 2013, the Company has provided 4 (as of December 31, 2012: 3) blank promissory notes and 50 (as of December 31, 2012: 50) promissory notes amounting to USD 25,102,190 (as of December 31, 2012: 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 ₩29,828,495 thousand as of December 31, 2012. The amount of trade receivables was recognized as short-term borrowing.

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

<u>Site</u>	<u>Plaintiff</u>	<u>Defendant</u>	<u>Claim</u>	<u>Claimed amount</u>	<u>Progress</u>
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	Scheduled in the court of second instance
Chang won District Court	Steamar Transportes Maritimos LDA and other 1	Doosan Engine Co., Ltd. and other 1	Damages for stopping sailing	USD 125,163 EUR 266,865	Pending in the court of first instance

As of December 31, 2013, the outcome of the cases is unpredicted.

The Company are 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, 2013, 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	40,000,000	-
	Korea Development Bank	40,000,000	-
	Woori Bank	30,000,000	-
	Kookmin Bank	16,000,000	-
	Kyongnam Bank	20,000,000	-
Electronic loan facilities	Woori Bank	80,000,000	4,760,432
	Kookmin Bank	18,000,000	183,261
	Hana Bank	20,000,000	6,623,300
	Kyongnam Bank	20,000,000	1,947,000
Issuance of letter of credit	Korea Exchange Bank	USD 30,000,000	USD 3,649,110
	Woori Bank	USD 50,000,000	USD 17,790,402
	Hana Bank	USD 10,000,000	USD 2,145,736
	Korea Development Bank	USD 20,000,000	USD 275,011
Other guarantees	Korea Exchange Bank	USD 70,000,000	USD 50,475,416
		CNY 51,000,000	CNY 40,570,000
	Woori Bank	USD 200,000,000	USD 66,068,629
	Hana Bank	USD 40,000,000	USD 2,847,700
	Nonghyup Bank	USD 60,000,000	USD 8,099,500
	Kookmin Bank	USD 45,000,000	USD 9,997,085
	Seoul Guarantee Insurance	-	EUR 3,777,040
	Korea Exchange Bank	₩20,000,000	₩3,422,920
	Woori Bank	30,000,000	5,092,217
	Seoul Guarantee Insurance	-	5,477,755

The Company entered into a loan agreement with lenders consisting of the Korea Development Bank and nine other financial institutions for the long-term borrowing (as of December 31, 2013, USD 60,000 thousand) in connection with the Company's capital contributions to DII and DHEL. The agreement requires the Company to maintain its earnings before interest, taxes, depreciation, and amortization ("EBITDA") more than 1.5 times of its net interest expense and its financial debt less than six times of its EBITDA. Meanwhile, as of December 31, 2013, the Company's financial debt exceeds six times of its EBITDA, but under the confirmation from creditors on February 6, 2014, it does not lose the benefit of time.

(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 ₩58,183,793 thousand and ₩114,611,217 thousand for the years ended December 31, 2013 and 2012, 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.

32. GUARANTEES AND PLEDGED ASSETS:

- (1) Guarantees received by the Company from third parties as of December 31, 2013, are as follows (in foreign currencies and thousands of Korean won):

Guarantee received from	Guaranteed amount (foreign currency)		Description of guarantee
Korea Exchange Bank	USD	50,475,416	Guarantee for advance receipts, contract performance guarantee, defect and contract performance guarantee
	KRW	3,422,920	
Woori Bank	USD	66,068,629	Guarantee for advance receipts, defect and contract performance guarantee
	KRW	5,092,217	
Hana Bank	USD	2,847,665	Guarantee for advance receipts
Nonghyup Bank	USD	8,099,500	Guarantee for advance receipts
Kookmin Bank	USD	9,997,085	Guarantee for advance receipts
Seoul Guarantee Insurance	EUR	3,777,040	Guarantee for contract performance guarantee
	KRW	5,477,755	
Total	USD	137,488,295	
	EUR	3,777,040	
	KRW	13,992,892	

- (2) As of December 31, 2013, guarantees provided by the Company for third parties are as follows (in thousands of Korean won):

Guarantee	Guaranteed amount	Description of guarantee
Korea Securities Finance Co., Ltd	₩14,472,395	Guarantee for the borrowings
Korea Exchange Bank	CNY 40,570,000	Guarantee for the borrowings

- (3) The Company provided stocks of DII and DHEL as collateral to the lender who appoints Korea Development Bank as an agent for the long-term borrowing of DII and DHEL as of December 31, 2013, as follows (in foreign currencies and thousands of Korean won):

Institution	Asset	Borrowing amount (foreign currency)	Collateralized value
Korea Development Bank	DII		₩ 146,521,807
and other	DHEL	USD 1,720,000,000	₩ 196,038,744

DII and DHEL have signed a new long-term borrowing of USD 750,000 thousand and USD 970,000 thousand, respectively, on November 30, 2011. The Company provided the stock of DII and DHEL as collateral on September 28, 2012 and October 11, 2012 (See Note 11).

Also the company has been providing the long-term financial instruments as collateral in relation to Employee stock ownership loan (See Note 5).

33. TRANSACTIONS AND BALANCES WITH RELATED PARTIES:

Significant transactions and account balances with related parties as of and for the years ended December 31, 2013 and 2012, are as follows:

(1) Relationship between parents and subsidiaries as of December 31, 2013, is as follows:

<u>Relationship with the Company</u>	<u>Company name</u>
Ultimate controlling party	Doosan Corporation
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. Doosan Infracore International, Inc. ("DII") Doosan Holdings Europe Ltd. ("DHEL")
Other related parties	Doosan Infracore Co., Ltd. Doosan Construction & Engineering Co., Ltd. Doosan Donga Co., Ltd. ("Doosan Donga") Doosan Cuvex Co., Ltd. Yeongang Foundation N. Shaper Corp. Doosan Tower Co., Ltd. ("Doosan Tower") Doosan Defense Systems & Technology Co., Ltd. Oricom Inc. ("Oricom") Doosan Eco Biznet Doosan Bears Inc.

(2) Significant transactions with related parties for the years ended December 31, 2013 and 2012, are summarized as follows (in thousands of Korean won):

	<u>December 31, 2013</u>				
	<u>Sales</u>	<u>Other income</u>	<u>Purchases</u>	<u>Acquisition of property, plant and equipment, intangible assets</u>	<u>Other expenses</u>
Ultimate controlling party	₩1,616,191	₩1,102,104	₩12,205,346	₩488,458	₩7,504,423
Next most senior parent	-	-	66,345,969	-	-
Subsidiary	-	292,111	5,164,989	-	-
Associates	-	1,125,372	-	-	-
Other related parties	2,215,537	707,703	1,721,363	46,398	4,722,702
Total	<u>₩3,831,728</u>	<u>₩3,227,290</u>	<u>₩85,437,667</u>	<u>₩534,856</u>	<u>₩12,227,125</u>

December 31, 2012					
	Sales	Other income	Purchases	Acquisition of property, plant and equipment, intangible assets	Other expenses
Ultimate controlling party	₩-	₩2,544,179	₩29,590,993	₩4,110,168	₩10,774,978
Next most senior parent	-	-	165,925,013	631,320	19,556
Subsidiary	-	520,683	8,944,096	-	-
Associates	-	300,712	-	-	-
Other related parties	-	2,805,883	3,111,167	1,800	13,565,739
Total	₩-	₩6,171,457	₩207,571,269	₩4,743,288	₩24,360,273

(3) As of December 31, 2013 and 2012, related significant balances are as follows (in thousands of Korean won):

December 31, 2013					
	Trade receivables	Other receivables	Loans	Trade payables	Other payables
Ultimate controlling party	₩-	₩221,228	₩-	₩3,740,920	₩1,829,969
Next most senior parent	-	-	-	2,085,037	2,767
Subsidiary	-	744,248	-	1,581,107	-
Associates	-	3,159,442	-	-	-
Other related parties	-	7,352,885	-	441,269	269,269
Total	₩-	₩11,477,803	₩-	₩7,848,333	₩2,102,005

December 31, 2012					
	Trade receivables	Other receivables	Loans	Trade payables	Other payables
Ultimate controlling party	₩-	₩212,977	₩-	₩5,096,335	₩3,492,879
Next most senior parent	-	250,000	-	28,208,202	-
Subsidiary	-	494,391	-	2,141,837	-
Associates	-	4,234,765	-	-	-
Other related parties	-	4,890,253	-	1,234,198	619,418
Total	₩-	₩10,082,386	₩-	₩36,680,572	₩4,112,297

- (4) 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, 2013 and 2012 is as follows (in thousands of Korean won):

Description	2013	2012
Employee benefits	₩4,748,129	₩6,216,164
Retirement benefits	380,585	681,897
Share-based payment	<u>(41,778)</u>	<u>261,720</u>
Total	<u>₩5,086,936</u>	<u>₩7,159,781</u>

The Company provided guarantees and other to associates and other related parties as of December 31, 2013 (see Note 32).

34. 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, 2013 and 2012, are as follows (in thousands of Korean won):

Description	2013	2012
Adjustments:		
Expenses not involving cash outflows:		
Interest expenses	₩11,317,036	₩9,250,350
Income tax expense	918,226	17,888,847
Retirement benefits	6,270,054	8,094,571
Bad debt expenses	(3,536,396)	65,109
Other bad debt expenses	6,236	-
Depreciation	22,378,125	23,723,887
Amortization	2,727,679	2,262,975
Share-based payment	(41,778)	261,720
Loss on foreign currency translation	504,736	1,356,862
Loss on valuation of derivatives	1,411,672	4,428,264
Loss on valuation of firm commitments	49,092,919	73,975,062
Impairment loss of AFS financial assets	1,030,616	-
Loss on disposal of property, plant and equipment	2,938	8,830
Loss on revaluation of property, plant and equipment	137,541	-
Loss on disposal of intangible assets	-	7,491
Loss on intangible assets abandoned	731,455	-
Impairment loss of intangible assets	295,274	314,895
Provision	-	3,109,508
Income not involving cash inflows:		
Interest income	(6,831,239)	(13,273,721)
Dividend income	(827)	-
Reversal of write-down of inventories	(15,290,243)	(4,951,524)
Reversal of allowance for doubtful accounts	(8,130,136)	-
Income on financial guarantee	(1,227,966)	(384,463)
Gain on foreign currency translation	(1,226,406)	(10,849,404)
Gain on valuation of derivatives	(33,595,948)	(63,110,805)
Gain on valuation of firm commitments	(21,931,340)	(4,584,914)
Gain on disposal of property, plant and equipment	(29,466)	(223,357)
Gain on disposal of assets held for sale	(1,385,970)	-
Gain on disposal of intangible assets	-	(54,552)
Total	₩3,596,792	₩47,315,631

Description	2013	2012
Changes in operating assets and liabilities:		
Accounts receivable – trade	₩65,735,243	₩46,879,289
Accounts receivable – other	(2,804,485)	16,616,743
Unbilled construction receivables	(10,714,719)	49,946
Inventories	43,942,936	46,982,258
Other current assets	4,206,326	22,943,183
Long-term accounts receivable – other	3,506,083	(2,598,063)
Other non-current assets	(1,767,438)	1,647,406
Derivative instruments	33,747,082	(25,095,303)
Firm commitments	(9,217,316)	51,741,841
Accounts payable – trade	(50,217,774)	(45,980,395)
Accounts payable – other	(26,815,393)	(43,268,351)
Overbilled construction payables	(15,643,152)	(14,662,775)
Advance receipts	(52,224,511)	(316,169,685)
Other current liabilities	(1,777,197)	1,390,930
Long-term other payable	55,190	(1,274,705)
Plan assets	(7,338,968)	1,540,224
Payment of severance benefits	(1,294,711)	(16,256,487)
Transfer in	174,293	175,547
Transfer out	(289,650)	(1,177,824)
Provision for construction warranties	(1,340,036)	(4,048,544)
Total	<u>(₩30,078,197)</u>	<u>(₩280,564,765)</u>

- (2) Significant non-cash transactions for the years ended December 31, 2013 and 2012, are as follows (in thousands of Korean won) :

Description	2013	2012
Reclassification of associates to AFS financial assets	₩-	₩850,070
Reclassification of guarantee deposits to property, plant and equipment	1,873,500	-
Reclassification of construction in progress to property, plant and equipment	2,391,402	1,937,896
Reclassification of investment properties (lands) to property, plant and equipment	-	25,386,996
Reclassification of investment properties (buildings) to property, plant and equipment	-	10,743,105
Reclassification of long-term borrowings to current portion of long-term borrowing	<u>63,318,000</u>	<u>64,266,000</u>
Total	<u>₩67,582,902</u>	<u>₩103,184,067</u>

The Company presented net cash increase or decrease incurred from the transactions of short-term financial instrument, short-term loan and short-term borrowing, which have short-term maturities and are according to the frequent transaction, total amount of cash in and out is huge.