Deloitte.

DOOSAN ENGINE CO., LTD. AND SUBSIDIARIES

CONSOLIDATED FINANCIAL STATEMENTS
AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2011 AND 2010,
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 consolidated financial statements of Doosan Engine Co., Ltd. and subsidiaries (the "Company"). The consolidated financial statements consist of the consolidated statement of financial position as of December 31, 2011, and the related consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of changes in stockholders' equity and consolidated statement of cash flows, all expressed in Korean won, for the year ended December 31, 2011. The Company's management is responsible for the preparation and fair presentation of the consolidated financial statements and our responsibility is to express an opinion on these consolidated financial statements based on our audit. In addition, the consolidated financial statements of the Company as of and for the year ended December 31, 2010, were audited by us, as per our report dated March 30, 2011. We expressed an unqualified opinion on those statements. Such financial statements do not reflect the transition effects to Korean International Financial Reporting Standards ("K-IFRS") as described in Note 5 in the accompanying consolidated financial statements. However, the consolidated financial statements of the Company as of and for the year ended December 31, 2010, presented for comparative purposes, in the consolidated accompanying financial statements, reflect such transition effects to K-IFRS.

We conducted our audits 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 audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2011, and the results of its operations and its cash flows for the year then ended in conformity with K-IFRS.

Accounting principles and auditing standards and their application in practice vary among countries. The accompanying consolidated 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 consolidated financial statements are for use by those knowledgeable about Korean accounting principles and auditing standards and their application in practice.

March 22, 2012

Notice to Readers

This report is effective as of March 22, 2012, 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 consolidated financial statements and may result in modifications to the auditors' report.

DOOSAN ENGINE CO., LTD.

CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2011, DECEMBER 31, 2010 AND
JANUARY 1, 2010 (DATE OF TRANSITION),
AND FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010

The accompanying consolidated financial statements, including all footnote disclosures, were prepared by and are the responsibility of the Company.

Cho, Nam-Suk
CEO

Doosan Engine Co., Ltd.

DOOSAN ENGINE CO., LTD. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2011, DECEMBER 31, 2010 AND JANUARY 1, 2010

ASSETS	Notes	December 31, 2011	December 31, 2010	January 1, 2010
			(Korean won)	
CURRENT ASSETS:				
Cash and cash equivalents	2,3,11	₩ 325,415,227,256	₩ 343,239,756,430	₩ 201,770,887,405
Short-term financial instruments	2,3,11	146,614,526,202	150,000,000,000	40,000,000,000
Trade and other receivable	2,3,5,7,11,32,33	150,224,166,634	137,767,241,418	235,940,171,543
Gross amount due from customers for contract work	2,5,25	55,876,191	77,639,194	49,094,912
Advance payments		11,169,137,608	345,155,856	13,957,657,525
Prepaid expenses		15,887,342,852	778,745,236	1,749,366,658
Short-term loans receivable	3,11	1,247,550,000	958,650,000	798,738,000
Current derivative instruments assets	2,3,5,10,11	8,153,605,085	36,292,902,375	68,500,032,065
Current firm commitment assets	2,5,10	66,708,349,474	84,638,958,348	188,821,647,961
Inventories	2,5,8	247,442,035,097	296,299,716,541	419,158,821,664
Income tax refund receivable	30	-	1,112,056,770	704,248,861
Other current assets	3,11	20,906,962,938	21,462,720,225	26,527,204,106
Total current assets		993,824,779,337	1,072,973,542,393	1,197,977,870,700
NON-CURRENT ASSETS:				
Long-term financial instruments	2,3,6,11	4,655,212,960	2,261,051,200	5,500,000
Long-term investment securities	2,3,9,11	72,047,000	72,202,000	142,282,000
Investments in associates	2,5,12	330,239,108,086	318,367,310,930	582,501,548,882
Long-term loans receivable	3,11	7,251,719,621	15,049,108,142	13,816,401,462
Long-term accounts receivable	3,7,11	-	27,351,281,930	18,730,243,097
Long-term advance payments		210,529,044	14,195,110,188	-
Long-term prepaid expenses		5,281,013,503	3,265,352,058	1,544,853,463
Property, plant and equipment	2,5,13	570,124,615,272	579,050,634,091	602,908,116,027
Intangible assets	2,5,14	14,863,062,759	5,391,466,111	6,235,230,136
Investment property	2,5,15	36,130,101,804	17,902,709,338	17,510,463,895
Guarantee deposits	3,5,11	8,131,176,298	8,410,566,923	9,723,450,576
Non-current derivative instruments assets	2,3,5,10,11	3,752,006,943	16,352,413,066	3,250,199,009
Non-current firm commitment assets	2,5,10	74,959,113,548	105,356,456,705	265,967,872,962
Non-current deferred income tax assets	2,5,30	323,460,694	19,959,465,878	91,373,741,897
Total non-current assets		1,055,993,167,532	1,132,985,128,560	1,613,709,903,406
TOTAL ASSETS		₩ 2,049,817,946,869	₩ 2,205,958,670,953	₩ 2,811,687,774,106

(Continued)

DOOSAN ENGINE CO., LTD. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2011, DECEMBER 31, 2010 AND JANUARY 1, 2010 (CONTINUED)

LIABILITIES AND STOCKHOLDERS' EQUITY	Notes	December 31, 2011	December 31, 2010	January 1, 2010
			(Korean won)	
CURRENT LIABILITIES:				
Trade and other payable	3,11,32,33	₩ 266,637,556,263	₩ 320,885,533,629	₩ 324,139,275,499
Gross amount due to customers for contract work	2,5,25	34,079,376,921	19,705,746,669	26,695,750,569
Short-term borrowings	2,3,5,11,16,32	24,719,325,723	34,785,719,261	64,909,789,921
Advance receipts	2,32	690,500,336,727	959,237,610,786	1,256,319,887,997
Current portion of long-term Borrowings	2,3,11,16	70,840,590,000	68,334,000,000	70,056,000,000
Current portion of bonds	3,11,16	79,945,544,602	49,988,459,035	409,476,957,999
Income tax payable	30	6,475,336,706	-	121,810,179
Current derivative instrument liabilities	2,3,10,11	33,108,336,398	12,715,460,127	206,123,090,188
Current firm commitment liabilities	2,10	6,933,180,782	18,238,751,601	2,062,408,537
Other current liabilities	3,11	3,741,394,564	4,054,291,242	7,647,577,386
Total current liabilities		1,216,980,978,686	1,487,945,572,350	2,367,552,548,275
NON-CURRENT LIABILITIES:				
Long-term borrowings	2,3,10,11,16,32	143,323,770,000	212,764,500,000	284,695,997,289
Bonds	3,11,16	-	79,765,291,428	49,936,214,390
Retirement benefit obligation	2,4,5,17	26,590,315,593	18,961,166,192	13,713,528,835
Long-term accounts payable – other	3,11	2,546,074,795	375,373,110	236,067,520
Non-current derivative instrument liabilities	2,3,10,11	17,936,849,494	8,861,426,127	21,692,428,443
Non-current firm commitment liabilities	2,10	5,002,643,700	15,312,351,611	1,811,218
Financial warranty liabilities	2,3,5,11,32	349,001,248	16,151,120,082	18,730,243,098
Provision for construction losses	2,4,18	20,507,108,230	16,459,728,802	22,047,235,834
Deferred income tax liabilities	2,5,30	42,897,472,993	-	-
Total non-current liabilities		259,153,236,053	368,650,957,352	411,053,526,627
TOTAL LIABILITIES		1,476,134,214,739	1,856,596,529,702	2,778,606,074,902
STOCKHOLDERS' EQUITY				
Share capital	1,19	69,500,000,000	69,500,000,000	62,500,000,000
Capital surplus	19,20	367,214,701,425	367,214,701,425	242,622,751,092
Other capital items	2,21	135,447,961	-	-
Accumulated other comprehensive income	10,22	(2,717,688,995)	(20,617,470,013)	(18,145,458,968)
Retained earnings (deficits)	23	139,551,271,739	(66,735,090,161)	(253,895,592,920)
TOTAL STOCKHOLDERS' EQUITY		573,683,732,130	349,362,141,251	33,081,699,204
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY		₩ 2,049,817,946,869	₩ 2,205,958,670,953	₩ 2,811,687,774,106

(Concluded)

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

DOOSAN ENGINE CO., LTD. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010
(In Korean won)

	NOTES	2011	2010
SALES	2,4,5,24,25,33	₩ 2,005,252,617,740	₩ 1,831,761,730,693
COST OF SALES	2,5,8,17,26,32,33	(1,641,314,823,708)	(1,516,919,527,621)
GROSS PROFIT		363,937,794,032	314,842,203,072
Selling, general and administrative expenses	2,7,17,26,27	(67,818,994,004)	(59,428,936,271)
Other operating income	2,15,28	7,547,385,992	34,262,640,145
Other operating expense	2,7,28	(23,254,549,754)	(12,223,696,461)
OPERATING INCOME		280,411,636,266	277,452,210,485
Share of profits (loss) of associates	2,12	11,891,932,502	24,487,608,929
Finance income	2,3,29	82,944,989,434	87,804,004,332
Finance expense	2,3,7,29	(78,361,900,794)	(117,416,516,657)
PROFIT BEFORE INCOME TAX		296,886,657,408	272,327,307,089
TAX EXPENSE	2,30	(72,110,794,238)	(71,621,607,173)
NET INCOME		₩ 224,775,863,170	₩ 200,705,699,916
Attributable to:			
Owners of the parent		₩ 224,775,863,170	₩ 200,705,699,916
Non-controlling interests		₩ -	₩ -
EARNINGS PER SHARE:	31		
Basic earnings per share		₩ 3,234	₩ 3,207
Diluted earnings per share		₩ 3,234	₩ 3,207

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

DOOSAN ENGINE CO., LTD. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010
(In Korean won)

	2011	2010
NET INCOME	₩ 224,775,863,170	₩ 200,705,699,916
DECREASE IN RETAINED EARNINGS OF ASSOCIATES	(15,142,864,024)	(11,874,482,258)
OTHER COMPREHENSIVE INCOME:		
Gain on translation of foreign operations	1,025,300,329	153,861,917
Gain on valuation of cash flow hedge derivatives	1,751,752,013	2,208,130,091
Increase (decrease) in equity of associates	15,122,728,676	(4,834,003,053)
Actuarial loss	(3,296,634,638)	(1,667,382,348)
Total other comprehensive income (loss)	14,603,146,380	(4,139,393,393)
TOTAL COMPREHENSIVE INCOME	₩ 224,236,145,526	₩ 184,691,824,265

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

DOOSAN ENGINE CO., LTD. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010
(In Korean won)

	Share capital	Capital surplus	Other equity items	Accumulated other comprehensive income (loss)	Retained earnings (deficit)	Total
Balance at January 1, 2010	₩62,500,000,000	₩242,622,751,092	₩ -	(₩18,145,458,968)	(₩253,895,592,920)	₩33,081,699,204
Comprehensive income:						
Net income	-	-	-	-	200,705,699,916	200,705,699,916
Gain on translation of foreign operations	-	-	-	153,861,917	-	153,861,917
Gain on valuation of cash flow hedge derivatives	-	-	-	2,208,130,091	-	2,208,130,091
Actuarial losses on retirement benefit obligations	-	-	-	-	(1,667,382,348)	(1,667,382,348)
Decrease in equity of associates	-	-	-	(4,834,003,053)	-	(4,834,003,053)
Decrease in retained earnings of associates	-	-	-	-	(11,874,482,258)	(11,874,482,258)
Paid-in capital increase	7,000,000,000	124,591,950,333	-	-	-	131,591,950,333
Others	-	-	-	-	(3,332,551)	(3,332,551)
Balance at December 31, 2010	₩69,500,000,000	₩367,214,701,425	₩-	(₩20,617,470,013)	(₩66,735,090,161)	₩349,362,141,251
Balance at January 1, 2011	₩69,500,000,000	₩367,214,701,425	₩-	(₩20,617,470,013)	(₩66,735,090,161)	₩349,362,141,251
Total comprehensive income:						
Net income	-	-	-	-	224,775,863,170	224,775,863,170
Gain on translation of foreign operations	-	-	-	1,025,300,329	-	1,025,300,329
Gain on valuation of cash flow hedge derivatives	-	-	-	1,751,752,013	-	1,751,752,013
Increase in equity of associates	-	-	-	15,122,728,676	-	15,122,728,676
Actuarial losses on retirement benefit obligations	-	-	-	-	(3,296,634,638)	(3,296,634,638)
Decrease in retained earnings of associates	-	-	-	-	(15,142,864,024)	(15,142,864,024)
Share options	-	-	135,447,961	-	-	135,447,961
Others	-	-	-	-	(50,002,608)	(50,002,608)
Balance at December 31, 2011	₩69,500,000,000	₩367,214,701,425	₩135,447,961	(₩2,717,688,995)	₩139,551,271,739	₩573,683,732,130

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

DOOSAN ENGINE CO., LTD. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010

	2011	2010
CASH FLOWS FROM OPERATING ACTIVITIES:		
Cash generated from operations	₩ 145,006,140,307	₩ 310,903,630,131
Net income	224,775,863,170	200,705,699,916
Adjustments	119,655,397,393	125,922,436,628
Changes in operating assets and liabilities	(199,425,120,256)	(15,724,506,413)
Interest received	17,897,383,096	7,508,766,462
Interest paid	(14,407,359,862)	(35,756,721,017)
Dividend received	700,000	-
Income tax paid	(858,772,440)	(689,479,365)
Net cash provided by operating activities	147,638,091,101	281,966,196,211
CASH FLOWS FROM INVESTING ACTIVITIES:		
Cash inflows from investing activities:		
Decrease in short-term financial instruments	2,558,707,627	-
Decrease in short-term loans	-	1,057,788,000
Disposal of associates in investment securities	-	271,913,361,570
Decrease in long-term loans	7,508,488,521	-
Disposal of property, plant and equipment	535,643,477	16,521,614
Decrease in guarantee deposits	282,861,402	1,309,946,649
Subtotal	10,885,701,027	274,297,617,833
Cash outflows for investing activities:		
Increase in short-term financial instruments	-	110,000,000,000
Increase in long-term financial instruments	2,371,986,760	2,185,471,200
Increase in long-term loans	-	2,623,565,000
Acquisition of property, plant and equipment	16,758,235,249	3,709,686,422
Acquisition of intangible assets	10,357,127,363	1,708,283
Acquisition of investment property	18,553,079,365	595,679,040
Subtotal	(48,040,428,737)	(119,116,109,945)
Net cash (used in) provided by investing activities	(37,154,727,710)	155,181,507,888

(Continued)

DOOSAN ENGINE CO., LTD. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)
FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010

	2011	2010
CASH FLOWS FROM FINANCING ACTIVITIES:		
Cash inflows from financing activities:		
Proceeds from long-term borrowings	₩ -	₩ 3,221,365,568
Proceeds from issuance of bonds	-	79,643,900,000
Proceeds from issuance of common stock	-	131,591,950,333
Subtotal	-	214,457,215,901
Cash outflows for financing activities:		
Repayment of short-term borrowings	10,143,870,938	30,130,616,260
Repayment of long-term borrowings	68,334,000,000	70,056,000,000
Repayment of bonds	50,000,000,000	410,000,000,000
Subtotals	(128,477,870,938)	(510,186,616,260)
Net cash used in financing activities	(128,477,870,938)	(295,729,400,359)
EFFECT OF EXCHANGE RATE CHANGES ON CASH AND CASH EQUIVALENTS	169,978,373	50,565,285
NET INCREASE (DECREASE) IN CASH AND CASH EQUIVALENTS	(17,824,529,174)	141,468,869,025
CASH AND CASH EQUIVALENTS, BEGINNING OF YEAR	343,239,756,430	201,770,887,405
CASH AND CASH EQUIVALENTS, END OF YEAR	₩ 325,415,227,256	₩ 343,239,756,430

(Concluded)

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

DOOSAN ENGINE CO., LTD. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2011, DECEMBER 31, 2010 AND
JANUARY 1, 2010 (DATE OF TRANSITION),
AND FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010

1. GENERAL:

(1) Parent Company

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

Under the DE’s Articles of Incorporation, DE is authorized to issue 120,000 thousand shares of capital stock (par value ₩1,000). As of December 31, 2011, DE issued 69,500 thousand common shares.

DE’s shares were listed in the Korea Exchange on January 4, 2011.

DE’s shares as of December 31, 2011, are owned as follows:

	Number of shares	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	8,502,931	12.23%
Others	15,932,069	22.93%
Total	₩69,500,000	100.00%

(2) Consolidated Subsidiaries

1) The details in investment for the Company are as follows:

Corporate name	Type of business	Percentage of shareholding	Country	A setting day
Doosan Marine Industry (Dalian) Co., Ltd. ("DMI")	Manufacturing a marine engine parts	100%	China	December, 31

2) Summary of financial information of DMI as of December 31, 2011, December 31, 2010 and January 1, 2010, is summarized as follows (in thousands of Korean won):

Account	December 31 2011	December 31 2010	January 1 2010
Asset	₩36,067,753	₩29,007,024	₩28,397,802
Liabilities	17,268,133	10,738,803	10,818,045
Equity	18,799,620	18,268,221	17,579,757

Account	2011	2010
Sales	₩ 12,047,534	₩ 12,308,397
Net income	(307,444)	1,011,599

(3) Changes in the scope of consolidation

There is no change in the scope of consolidation for the year ended December 31, 2011.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

DE and its subsidiaries (the "Company") maintains its official accounting records in Korean won and prepares consolidated financial statements in conformity with Korean statutory requirements and Korean International Financial Reporting Standards ("K-IFRS"), in the Korean language (Hangul). Accordingly, these consolidated financial statements are intended for use by those who are informed about K-IFRS and Korean practices.

(1) Basis of Preparation

The Company has adopted the K-IFRS for the annual period beginning on January 1, 2011. In accordance with K-IFRS 1101 *First-time adoption of International Financial Reporting Standards*, the transition date to K-IFRS is January 1, 2010.

The significant accounting policies under K-IFRS followed by the Company in the preparation of its consolidated financial statements are summarized below, and these accounting policies have been applied consistently to the consolidated financial statements for the current period and the accompanying comparative period.

The consolidated financial statements are prepared on the historical cost basis, except otherwise stated in the notes below.

K-IFRS require application of significant estimates in preparing consolidated financial statements and management's judgments in application of accounting policies. Items requiring critical judgments or significant assumptions and estimates are explained in Note 4, and significant accounting policies are explained in Note 2.

Unless stated otherwise, these accounting policies have been applied consistently to the consolidated financial statements for the current period and the accompanying comparative period.

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

K- IFRS 1107 *Financial Instruments: Disclosures*

The amendments to K-IFRS 1107 increase the disclosure requirements for transactions involving transfers of financial assets. These amendments are intended to provide greater transparency around risk exposures when a financial asset is transferred, but the transferor retains some level of continuing exposure in the asset. The amendments also require disclosures where transfers of financial assets are not evenly distributed throughout the period. K-IFRS 1107 is effective for annual period beginning on or after July 1, 2011.

K-IFRS 1012 *Income Taxes*

The amendments to K-IFRS 1012 provide an exception to the general principles in K-IFRS 1012 that the measurement of deferred tax assets and deferred tax liabilities should reflect the tax consequences that would follow from the manner in which the entity expects to recover the carrying amount of an asset. The amendments to K-IFRS 1012 are effective for annual period beginning on or after January 1, 2012.

K-IFRS 1019 *Employee Benefits*

The amendments to K-IFRS 1019 change the accounting for defined benefit plans and termination benefits. The most significant change relates to the accounting for changes in defined benefit obligations and plan assets. The amendments require the recognition of changes in defined benefit obligations and in fair value of plan assets when they occur and, hence, eliminate the 'corridor approach' permitted under the previous version of K-IFRS 1019 and accelerate the recognition of past service costs. The amendments to K-IFRS 1019 are effective for annual period beginning on or after January 1, 2013, and require retrospective application with certain exceptions.

K-IFRS 1113 *Fair Value Measurement*

K-IFRS 1113 establishes a single source of guidance for fair value measurements and disclosures 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 is effective for annual period beginning on or after January 1, 2013, with earlier application permitted.

The Company does not anticipate that the amendments referred above will have a significant effect on the Company’s consolidated financial statements and disclosures.

The amendment to the difference in equity as of January 1, 2010 and December 31, 2010, that was according to prior K-IFRS, and consolidated statements of income as of December 31, 2010, are detailed in Note 5.

(2) Consolidation

The consolidated financial statements incorporate the financial statements of the Parent and entities controlled by the Parent (or its subsidiaries).

1) Subsidiaries

Subsidiaries generally include those companies over which the Company exercises control. Control over an entity is presumed to exist when the Company owns, directly or indirectly through subsidiaries, over 50% of the voting rights of the entity. The Company has the power to govern the operating and financial policies of the entity through agreement or the Company has the power to appoint or remove the majority of the members of the board of the entity. It is required to consider the existence and effect of potential voting rights currently exercisable or convertible when assessing whether the Company has control over another entity.

Subsidiaries are fully consolidated from the date when control is transferred to the Company and deconsolidated from the date when control ceases to exist.

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Company, liabilities incurred by the Company to the former owners of the acquiree and the equity interests issued by the Company in exchange for control of the acquiree. When the consideration transferred by the Company in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognized amounts of the acquiree's identifiable net assets.

Goodwill is measured as the excess of the sum of a) the consideration transferred, b) the amount of any non-controlling interests in the acquiree and c) the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of a) the consideration transferred, b) the amount of any non-controlling interests in the acquiree and c) the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognized immediately in income or loss as a bargain purchase gain.

All intragroup transactions, balances, income and expenses are eliminated in full on consolidation. When necessary, adjustments are made to the financial statements of subsidiaries to make their accounting policies in line with those used by the Company.

Transactions with non-controlling interests are considered as those with owners of the Company. The difference between the consideration for the acquisition of interests from non-controlling interests and the proportionate share of carrying amount of subsidiary’s net assets is accounted for as equity transactions. Changes in the Company’s ownership interests in subsidiaries that do not result in the Company losing control over the subsidiaries are accounted for as equity transactions. When the Company loses control of a subsidiary, the income or loss on disposal is calculated as the difference between the aggregate of the fair value of the consideration received and the fair value of any retained interest and the previous carrying amount.

2) Investments in associates

An associate is an entity over which the Company has significant influence, and which is neither a subsidiary nor an interest in a joint venture and the Company generally holds, directly or indirectly through subsidiaries, more than 20% of the voting power of the entity. A joint venture is a contractual arrangement, whereby the Company and other parties undertake an economic activity that is subject to the joint control. These investments are initially recognized at cost and accounted for using the equity method.

The carrying amount of the investments contains goodwill arising on the acquisition and presented at the amount less accumulated impairment losses.

After acquisition, the Company's share of the income or loss and other comprehensive income of the associates and jointly controlled entities are recognized as income or loss and other comprehensive income. The Company's share of the changes in retained earnings of the associates and joint ventures is recognized as retained earnings. When the Company's share of losses of the associates and joint ventures exceeds the Company's interest in those entities (which includes any long-term interests that, in substance, form part of the Company's net investments in the associates), the Company discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Company has incurred legal or constructive obligations or made payments on behalf of the associates and joint ventures.

Unrealized gains from transactions between the Company and its associates and joint ventures are eliminated up to the interests in those entities. Unrealized losses are also eliminated, unless evidence of impairment in assets transferred is provided.

When necessary, the Company may revise associates’ and joint ventures’ financial statements, to apply consistent accounting policies as the Company, prior to applying the equity method of accounting for its investments in the associates and joint ventures.

For overseas investees whose financial statements are prepared in foreign currencies, the equity method of accounting is applied after assets and liabilities are translated in accordance with the accounting treatments for the translation of the financial statements of overseas’ subsidiaries for the consolidated financial statements. The Company’s proportionate share of the difference between assets, net of liabilities and equity after translating into Korean won is accounted for as “increase (decrease) in equity of associates,” included in accumulated other comprehensive income (loss).

(3) Foreign currency translation

1) Functional currency and presentation currency

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

3) Translation of foreign operations

For the purpose of presenting the consolidated financial statements, the assets and liabilities of the Company's foreign operations, having functional currencies different from that of the Company, are translated into presentation currency of the Company using exchange rates prevailing at the end of the reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuated significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity (attributed to non-controlling interests as appropriate).

Exchange differences from the net investment in the foreign operation, and borrowings and other foreign currency instruments designated as hedging instrument for the net investment in the foreign operation are recognized in other comprehensive income. On the disposal of a foreign operation resulting in loss of control, all of the accumulated exchange differences in respect of that operation are reclassified to income or loss. Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

(4) Cash and cash equivalents

Cash and cash equivalents include cash on hand, demand deposits and short-term, highly liquid investments with maturities (or date of redemption) of three months or less upon acquisition. Bank overdraft is included in short-term borrowing account in the consolidated 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' and '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) Financial assets at FVTPL

FVTPL includes financial assets classified as held for trading and financial assets designated at FVTPL upon initial recognition. A financial asset is classified as FVTPL if it has been acquired principally for the purpose of selling or repurchasing in the near term. All derivative assets, except for derivatives that are designated and effective hedging instruments, are classified as held for trading financial assets. These categories of assets are classified as current assets.

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, which have 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 those non-derivative financial assets that are designated as AFS or are not classified as loans and receivables, held-to-maturity investments or financial assets at FVTPL. AFS financial assets are classified as non-current assets, unless management has the 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, which have 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 of financial assets

All financial assets are recognized on trade date where the purchase or sale of a financial asset is under a contract whose terms require delivery of the financial asset within the time frame established by the market concerned and are initially measured at fair value, plus transaction costs, except for those financial assets classified as at FVTPL, which are initially measured at fair value and related transaction costs are recognized in income or loss.

Financial assets at FVTPL and AFS financial assets 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 gains and losses line item in the consolidated statements of comprehensive income. Dividends on financial assets at FVTPL are recognized in the other gains when the Company’s right to receive the dividends is established.

Other AFS financial assets are measured at fair value. Gains and losses arising from changes in fair value are recognized in other comprehensive income and accumulated in the investments revaluation reserve. Where the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously accumulated in the investments revaluation reserve is reclassified to the other gains and losses line item in the consolidated statements of comprehensive income.

Interest calculated using the effective interest method is recognized in financial income or loss. Dividends on AFS equity instruments are recognized in income or loss 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. 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 the 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 financial assets

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 financial assets, 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.

5) Offsetting financial assets and financial liabilities

Financial assets and financial liabilities are offset as a net amount in the consolidated statements of financial position when the Company has a legally enforceable right to set off the recognized amounts of the assets and liabilities and intends to settle on a net basis, or to realize the assets and the liabilities simultaneously.

(6) Accounts receivable

Accounts receivable is the amount 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.

(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 consolidated statements of financial position. Similarly, at each 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 consolidated statements of financial position.

(8) Inventories

Inventories are stated at the lower of cost or net realizable value. Cost of inventories includes fixed and variable manufacturing overhead costs, which 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, the moving-average method for raw materials, and the gross average method for all other inventories. 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 due to damage, obsolescence, decline in selling prices and others and recognizes loss on inventory valuation. Net realizable value for merchandise, finished goods and work in progress represents the estimated selling price for inventories, less all estimated costs of completion and costs necessary to make the sale and current replacement cost for raw materials.

Loss on inventory valuation is charged to cost of sales when it is ordinary and to other 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 the cost of sales.

(9) Property, plant and equipment

Property, plant and equipment are stated at cost, less subsequent accumulated depreciation and accumulated impairment losses. When useful life of each part of an item of property, plant and equipment is different compared to that of the item, the part is recognized separately. 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 add or 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.

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.

When the carrying amount of property, plant and equipment is higher than the recoverable amount, the carrying amount is adjusted to the recoverable amount and the difference is recognized as an impairment loss. Meanwhile, when the recoverable amount subsequently exceeds the carrying amount of the impaired asset, the excess is recorded as a reversal of impairment loss to the extent that the reversed asset does not exceed the carrying amount before previous impairment as adjusted by depreciation. Upon the derecognition of a property, plant and equipment, the gain or loss arising is determined as the difference between the net disposal proceeds, if any, and the carrying amount of the item and recognized in other income line item.

(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)
Industrial rights	16
Other intangible assets	5

However, useful lives of membership and other intangible assets are determined to be indefinite since 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, and tested for impairment once a year.

Capitalized development costs include expenditure on materials, salaries, wages and other employment-related costs of personnel directly engaged in generating assets and related overhead cost, which is systematically allocated. Capitalized development costs are presented at the acquisition cost, less accumulated amortization and accumulated impairment losses. Capitalized development costs are amortized using the straight-line method over the estimated useful life and amortization expenses are included in cost of goods manufactured and amortization in selling, general and administrative expenses. The expenditure on research and development, which does not meet the 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. For the assets which have been assessed as having indefinite useful life, the assessment is revisited each period, with the effect of any changes in estimate being accounted for on a prospective basis.

(11) Investment property

Investment properties are properties held to earn rentals and/or 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 the cost, less accumulated depreciation and accumulated impairment.

While land is not depreciated, all other investment property is depreciated using the straight-line method over 20 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 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 or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. All other borrowing costs are recognized in income or loss in the period in which they are incurred.

(13) Impairment of non-financial assets

Assets with indefinite useful lives such as goodwill are not amortized, but tested for impairment annually. Assets which are amortized or depreciated are tested for impairment to determine whether events and circumstances indicating those assets have suffered impairment exist. Impairment loss is the excess of the carrying amount over recoverable amount. Recoverable amount is the higher of fair value, less costs to sell and value in use. When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. When a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units; otherwise, they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified. Except for goodwill, all non-financial assets that have incurred impairment are tested for reversal of impairment at the end of each reporting period.

(14) Borrowings

Borrowings are measured at fair value, net of transaction costs and subsequently measured at amortized cost using the effective interest method, with interest expense being recognized on an effective yield basis. The difference between the amount received and the redemption amount is amortized using the effective interest method and recognized in income or loss. Borrowings are classified as non-current liabilities when the Company has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period. Otherwise, borrowings are classified as current liabilities.

(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. In general, the Company funds its benefit obligation, calculated based on periodic actuarial estimates, through insurance companies who manage the Company’s funds.

Defined benefit plans are postemployment benefit plans, other than defined contribution plans. Generally under defined benefit plan, amounts to be paid as retirement benefits are determined by reference to a formula usually based on employees' earnings and/or years of service and age. The retirement benefit obligation recognized in the consolidated statements of financial position represents the present value of the defined benefit obligation, less fair value of plan assets and adjustment for unrecognized past service cost. Defined benefit obligations are calculated by an actuary using the projected unit credit method.

The present value of the defined benefit obligation is denominated in the same currency in which the benefits are expected to be paid and is calculated at the discount rate, which is the yield at the reporting date, on high-quality corporate bonds that have maturity dates approximating the terms of the Company's obligation.

Actuarial gain or loss from changes in actuarial assumptions or differences between actuarial assumptions and actual results are recognized in other comprehensive income in the consolidated statements of comprehensive income, which are immediately recognized as retained earnings.

(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. A provision is measured using the present value of the cash flows estimated to settle the present obligation when the effect of the time value of money is material. 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. The increase in provision due to the passage of time is recognized as interest expense. If the existence of an obligation to transfer economic benefit is no longer probable, the related provision is reversed during the period. 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. In the consolidated statements of income, a net amount is presented, which is the anticipated cost of the obligation, less the reimbursement.

(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 as mentioned below.

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.

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. Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to income or loss in the periods when the hedged item is recognized in income or loss. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously accumulated in equity are transferred from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

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

2) Other derivatives

Derivatives, except for those designated and qualifying 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 by shareholders’ 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 the straight-line basis over the vesting period. The Company determines fair value of share option using the Black-Scholes 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 to the buyer the significant risks and rewards of ownership of the goods. 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.

Revenue from service or construction projects is recognized based on percentage-of-completion method. When the loss from service or construction projects is probable, the loss is immediately recognized as a provision for construction losses and charged to cost of sales or cost of construction in the same period. In addition, when the Company has an obligation for construction warranty after the construction is completed, total estimated construction warranty expense is included in cost of construction in the fiscal year during which the construction is completed, and records the provision for construction warranties liability in the consolidated statements of financial position.

3) Other revenue

Other revenue is recognized when the earning process is complete, the amount of revenue can be measured reliably and is probable and the economic benefits associated with the transaction will flow to the Company.

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 from investment properties is recognized on the straight-line basis over the term of the lease.

(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.

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred 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 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 that it is no longer probable that sufficient taxable income will be available to allow all or part of the asset to be recovered.

(23) Non-current assets held for sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continued use. 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 and are no longer depreciated or amortized. If the fair value less costs to sell of the non-current assets held for sale (and disposal groups) decreases, impairment loss is recognized immediately in income or loss. A gain should be recognized for any subsequent increase in fair value less costs to sell of an asset, but not in excess of the cumulative impairment loss recognized.

3. FINANCIAL RISK MANAGEMENT:

The Company is exposed to various financial risks, such as market risk, credit risk and liquidity risk. The purpose of financial risk management of the Company is to enhance efficiency of financial management, 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 the effect of financial risk through regular monitoring.

(1) Market risk

1) Foreign exchange risk

The Company is exposed to foreign currency risk since 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, 2011 and 2010. is as follows (in thousands of Korean won):

	December 31, 2011				
	USD	EUR	CNY	Others (*)	Total
Assets	₩195,507,250	₩62,002	₩5,611,406	₩79,255	₩201,259,913
Liabilities	(212,541,340)	(22,023,549)	(8,534,871)	(37,224,585)	(280,324,345)
Net assets (liabilities)	(₩17,034,090)	(₩21,961,547)	(₩2,923,465)	(₩37,145,330)	(₩79,064,432)

	December 31, 2010				
	USD	EUR	CNY	Others (*)	Total
Assets	₩114,415,504	₩1,140,716	₩5,218,369	₩94,300	₩120,868,889
Liabilities	(299,013,516)	(66,631,953)	(42,216,940)	(28,452,189)	(436,314,598)
Net assets (liabilities)	(₩184,598,012)	(₩65,491,237)	(₩36,998,571)	(₩28,357,889)	(₩315,445,709)

(*) 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, 2011 and 2010, are (₩1,990,533) thousand and ₩5,671,214 thousand, respectively.

A sensitivity analysis on the Company's income before tax for the period, assuming a 10% increase and decrease in currency exchange rates, as of December 31, 2011 and 2010, is as follows (in thousands of Korean won):

	December 31, 2011		December 31, 2010	
	10% decrease in KRW against foreign currency	10% increase in KRW against foreign currency	10% decrease in KRW against foreign currency	10% increase in KRW against foreign currency
Income before tax impact	(₩7,906,443)	₩7,906,443	(₩31,544,571)	₩31,544,571

The sensitivity analysis above is based on monetary assets and liabilities denominated in foreign currencies other than functional currency as of December 31, 2011 and 2010.

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 borrowing with floating interest rates. Borrowings and bank deposits with fixed interest rates do not have influence on net income and equity by 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, 2011 and 2010, is as follows (in thousands of Korean won):

	December 31, 2011	December 31, 2010
Financial assets	₩ 55,661,446	₩ 78,457,653
Financial liabilities	(172,995,000)	(170,835,000)
Net assets (liabilities)	(₩ 117,333,554)	(₩ 92,377,347)

A sensitivity analysis on the Company's income before tax assuming a 1% increase and decrease in interest rates as of December 31, 2011 and 2010, is as follows (in thousands of Korean won):

	December 31, 2011		December 31, 2010	
	1% increase	1% decrease	1% increase	1% decrease
Income before tax impact	(₩ 1,173,336)	₩ 1,173,336	(₩ 923,773)	₩ 923,773

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 we anticipate that one of the parties will fail to perform the duty. Credit risk affects primarily account receivables 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, which delayed collection.

The maximum exposure amount of credit risk of financial assets as of December 31, 2011, December 31, 2010 and January 1, 2010, is as follows (in thousands of Korean won):

		December 31, 2011	December 31, 2010	January 1, 2010
Loans and receivables	Cash and cash equivalents	₩325,415,227	₩343,239,756	201,770,887
	Current financial instruments	146,614,526	150,000,000	40,000,000
	Accounts and other receivables	150,224,166	137,767,241	235,940,172
	Long-term loans	7,251,720	15,049,108	13,816,401
	Long-term non-trade receivables	-	27,351,282	18,730,243
	Others	14,097,119	11,693,448	10,737,263
Held-to-maturity investments		-	155	70,235
Derivative assets		11,905,612	52,645,315	71,750,231
	Total	₩655,508,370	₩737,746,305	₩592,815,432

Meanwhile, the Company's guarantee amount is equal to _contingent liabilities (see Note 32), which is the maximum amount for claiming a warrantee by a financial guarantee contract except financial assets.

Aging analysis of the Company's receivables as of December 31, 2011, December 31, 2010 and January 1, 2010, is as follows (in thousands of Korean won):

	December 31, 2011						
	Individually impaired receivables	Receivables assessed for impairment on a collective basis					
		Within due	0–3 months	3–6 months	6–12 months	More than 12 months	Total
Accounts receivable	₩ -	₩105,700,111	₩22,281,776	₩153,125	₩6,057,820	₩242,534	₩134,435,366
Other receivable	-	17,370,184	-	-	-	-	17,370,184
Accrued income	-	2,478,837	-	-	-	-	2,478,837
Total	₩ -	₩125,549,132	₩22,281,776	₩153,125	₩6,057,820	₩242,534	₩154,284,387

	December 31, 2010						
	Individually impaired receivables	Receivables assessed for impairment on a collective basis					
		Within due	0–3 months	3–6 months	6–12 months	More than 12 months	Total
Accounts receivable	₩ 279,374	₩120,338,632	₩15,711,436	₩1,578,897	₩24,500	₩2,504,586	₩140,437,425
Other receivable	74,483	2,266,165	-	-	-	-	2,340,648
Accrued income	-	133,875	-	-			133,875
Long-term non-trade receivables	-	29,068,348	-	-	-	-	29,068,348
Total	₩ 353,857	₩151,807,020	₩15,711,436	₩1,578,897	₩24,500	₩2,504,586	₩171,980,296

	January 1, 2010						
	Individually impaired receivables	Receivables assessed for impairment on a collective basis					
		Within due	0–3 months	3–6 months	6–12 months	More than 12 months	Total
Accounts receivable	₩ -	₩100,829,198	₩19,815,597	₩24,646,206	₩52,669,910	₩27,299,648	₩225,260,559
Other receivable	-	9,657,087	-	-	-	-	9,657,087
Accrued income	-	1,319,495	-	-	-	-	1,319,495
Long-term non-trade receivables	-	21,445,251	-	-	-	-	21,445,251
Total	₩ -	₩133,251,031	₩19,815,597	₩24,646,206	₩52,669,910	₩27,299,648	₩257,682,392

An allowance account is recognized by applying appropriate allowance rate for receivables that can be assessed to be impaired individually due to insolvency, bankruptcy and others. The financial assets of the Company 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, held-to-maturity financial assets, deposit 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 liabilities 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, 2011, December 31, 2010 and January 1, 2010, are matured as follows (in thousands of Korean won):

		December 31, 2011				
		Nominal cash flows according to contract (*)				
	Book value	Total	Less than 1 year	1–2 years	2–5 years	More than 5 years
Financial liability	₩590,130,650	₩590,185,105	₩443,966,259	₩73,172,746	₩73,046,100	₩-
Interest expense	-	10,032,723	6,515,428	1,707,563	1,809,732	-
Total	₩590,130,650	₩600,217,828	₩450,481,687	₩74,880,309	₩74,855,832	₩-

		December 31, 2010				
		Nominal cash flows according to contract (*)				
	Book value	Total	Less than 1 year	1–2 years	2–5 years	More than 5 years
Financial liability	₩784,003,617	₩785,381,973	₩476,247,573	₩150,272,673	₩158,861,727	₩-
Interest expense	-	15,774,788	6,143,917	5,554,573	4,076,298	-
Total	₩784,003,617	₩801,156,761	₩482,391,490	₩155,827,246	₩162,938,025	₩-

		January 1, 2010				
		Nominal cash flows according to contract (*)				
	Book value	Total	Less than 1 year	1–2 years	2–5 years	More than 5 years
Financial liability	₩1,223,190,508	₩1,227,030,898	₩871,515,171	₩121,846,631	₩233,669,096	₩-
Interest expense	-	42,146,957	31,738,602	5,715,290	4,693,065	-
Total	₩1,223,190,508	₩1,269,177,855	₩903,253,773	₩127,561,921	₩238,362,161	₩-

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

(4) Capital risk

The Company performs capital risk management to maintain its ability to continuously provide income to shareholders 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, 2011	December 31, 2010	January 1, 2010
Debt	₩ 1,476,134,215	₩ 1,856,596,530	₩ 2,778,606,075
Equity	573,683,732	349,362,141	33,081,699
Debt-equity ratio	257.31%	531.42%	8,399.22%

4. CRITICAL JUDGMENTS IN APPLYING ACCOUNTING POLICIES:

The estimates and underlying assumptions are reviewed on an ongoing basis. The estimates and underlying assumptions are based on historical experiences and other factors, including expectation on possible future events. Actual results may differ from these estimates. The critical assumptions and key sources of estimation uncertainty at the end of the 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 are as follows:

(1) Revenue recognition

Revenue from service or construction projects is recognized based on the percentage-of-completion method. It is recognized by reference to the stage of completion of the contract, which is is presumed actual cost ratio of cost will be occurred Revenue can be critically changed by stage and scope of project, cost, period of construction and customer's plan.

(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. Due to the nature of long-term defined benefit retirement, these estimates may contain significant uncertainty.

5. TRANSITION TO K-IFRS:

The Company’s consolidated financial statements for the year ended December 31, 2011, are prepared in accordance with K-IFRS. The consolidated financial statements for the years ended December 31, 2010 and January 1, 2010, comparatively presented herein, which were originally prepared in accordance with previous accounting principles generally accepted in the Republic of Korea (“Korean GAAP”) have been restated in accordance with K-IFRS 1101 with a transition date of January 1, 2010, and adoption date of January 1, 2011.

(1) Significant differences in accounting policies

Transition adjustments from previous GAAP (Korean GAAP) to K-IFRS that affected the Company’s financial position, financial performance and cash flows are as follows:

1) K-IFRS 1101 – Optional exemptions

K-IFRS 1101 provides for a number of optional exemptions from the general principle of full retrospective applications. The optional exemptions for first-time adoption of IFRS of the Company are as follows:

a) Business combination

Business combinations that occurred before the date of transition to K-IFRS are not retrospectively restated.

b) Fair value or revaluation as deemed cost

The Company has elected to use a revaluation model in accordance with previous GAAP as deemed cost for the land and buildings at the date of transition to K-IFRS.

c) Accumulated translation difference

The Company regards “zero” as the accumulated translation difference for all foreign transactions, which occur at the place of business.

d) Borrowing costs

The Company capitalizes borrowing costs relating to qualifying assets for which the commencement date for capitalization occurred after January 1, 2010.

2) Change of revenue recognition standard

Under previous GAAP, a marine engine recognizes progress of construction. When an important risk and compensation transfer to ordering body under K-IFRS, the Company recognizes profit on delivery time.

3) Construction contract

At the end of each reporting period, for all 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 (unclaimed construction receivable) in the consolidated statements of financial position.

Similarly, at the end of each reporting period, 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 (excess billing on construction) in the consolidated statements of financial position.

Also, the Company is offsetting payables by receivables in the same construction site under previous GAAP. However, the Company is not offsetting payables by receivables in the same construction site but calculates the total amount of both unclaimed construction receivable, and excess billing on construction.

4) Financial guarantee liabilities

The Company recognizes financial guarantee liabilities for which it evaluates fair value of the financial guarantee contract provided to a third party or to associates according to K-IFRS.

5) Employee benefits

Under previous GAAP, the Company accrued for estimated severance indemnities calculated as if all employees with more than one year of service were to terminate as of the period-end date in accordance with the Company’s severance policy. Under K-IFRS, the Company recognizes the retirement benefit obligation by using actuarial assessment.

6) Income tax

Under previous GAAP, deferred tax assets and liabilities were classified as either current or non-current based on the classification of their underlying assets and liabilities. If there are no corresponding assets or liabilities, deferred tax assets and liabilities were classified based on the periods the temporary differences were expected to reverse. Under K-IFRS, deferred tax assets and liabilities are all classified as non-current in the consolidated statements of financial position.

7) Derivative financial instruments

The Company applies risk aversion accounting for short option under previous GAAP, but the related effect does not reflect in the K-IFRS statement of financial position on January 1, 2010, because the short option does not apply risk aversion means under K-IFRS.

8) Other account reclassification

a) Reclassification of membership and deposit

The Company accounted the membership deal in other non-current assets under previous GAAP. But, under K-IFRS, facilities costs reclassify intangible assets, which have nonrestrictive durable years, and deposit that meets the definition of financial instrument is classified as loan and accounts receivable.

b) Reclassification of investment properties and intangible assets

The Company classified the properties that gain rent or profit as property, plant and equipment under previous GAAP. But, under K-IFRS, the properties that gain rent or profit are reclassified as investment properties and related intangible assets of construction in process are reclassified as intangible assets.

c) Transfer of financial assets

Under previous GAAP, when the Company transferred a financial asset to financial institutions and it was determined that control over the asset has been transferred, the Company derecognized the financial asset. Under K-IFRS, if the Company retains substantially all the risks and rewards of ownership of the asset, the asset is not derecognized, but instead the related cash proceeds are recognized as financial liabilities.

(2) Effect on financial statement, business performance and cash flow

1) Adjustments in financial position as of the date of transition, January 1, 2010, are as follows (in thousands of Korean won):

	Reference Note 5	Assets	Liabilities	Equity
Previous GAAP (Korean GAAP)		₩2,473,192,347	₩2,395,238,152	₩ 77,954,195
Adjustments:				
Security borrowing deal of accounts receivable	(1),(8)	34,429,277	34,429,277	-
Change of revenue recognition	(1),(2)	299,276,284	337,259,800	(37,983,516)
Derivative financial instruments (removing risk aversion accounting of short option)	(1),(7)	(92,913,051)	-	(92,913,051)
Retirement benefit obligation	(1),(5)	-	(1,345,966)	1,345,966
Evaluating fair value of financial guarantee liabilities	(1),(4)	18,730,243	18,730,243	-
IFRS conversion effect for subsidiaries and associates		50,898,679	-	50,898,679
Other	(1),(3),(6),(8)	1,061,612	(5,705,431)	6,767,043
Effect on corporate tax according to adjustment		27,012,383	-	27,012,383
Total adjustments		338,495,427	383,367,923	(44,872,496)
K-IFRS		₩2,811,687,774	₩2,778,606,075	₩33,081,699

2) Adjustments in financial position as of December 31, 2010, and financial performance for the year ended December 31, 2010, are as follows (in thousands of Korean won):

	Reference Note 5	Assets	Liabilities	Equity	Total Comprehensive income
Previous GAAP (Korean GAAP)		₩1,952,570,439	₩1,613,254,772	₩339,315,667	₩129,769,520
Adjustments:					
Security borrowing deal of account receivables	(1),(8)	33,450,569	33,450,569	-	-
Change of revenue recognition	(1),(2)	171,040,674	230,671,852	(59,631,178)	(21,647,662)
Derivative financial instruments (removing risk aversion accounting of short option)	(1),(7)	(89,512,831)	(1,462,752)	(88,050,079)	4,862,972
Retirement benefit obligation	(1),(5)	-	111,993	(111,993)	(1,457,960)
Evaluating fair value of financial guarantee liabilities	(1),(4)	16,151,120	16,151,120	-	-
IFRS conversion effect for subsidiaries and associates		107,134,398	(4,143)	107,138,541	56,233,341
Other	(1),(3),(6),(8)	(12,281,061)	(35,576,881)	23,295,820	16,931,613
Effect on corporate tax according to adjustment		27,405,363	-	27,405,363	-
Total adjustments		253,388,232	243,341,758	10,046,474	54,922,304
K-IFRS		₩2,205,958,671	₩1,856,596,530	₩349,362,141	₩184,691,824

3) Difference in operating income and expense due to the transition to K-IFRS

Under K-IFRS, other operating income and expense, which were non-operating income and expense under previous GAAP, are now included in operating income (loss). Interest income, interest expense, dividend income and gain/loss from exchange rate difference (gain/loss from foreign currency transaction and translation) are classified as non-operating income and expense under K-IFRS and previous GAAP.

6. RESTRICTED DEPOSITS:

Details of restricted deposits as of December 31, 2011, December 31, 2010 and January 1, 2010, are as follows (in thousands of Korean won):

Account	December 31 2011	December 31 2010	January 1 2010	Remarks
Long-term financial instruments	₩ 5,500	₩ 5,500	₩ 5,500	Guarantee deposits for checking account
Long-term financial instruments	4,284,693	2,255,551	-	Pledged as collateral for note
Total	₩ 4,290,193	₩ 2,261,051	₩ 5,500	

7. ACCOUNTS AND OTHER RECEIVABLES:

(1) Accounts and other receivables as of December 31, 2011, December 31, 2010 and January 1, 2010, consist of the following (in thousands of Korean won):

	December 31, 2011			December 31, 2010			January 1, 2010		
	Gross	Allowance for doubtful accounts	Carrying value	Gross	Allowance for doubtful accounts	Carrying value	Gross	Allowance for doubtful accounts	Carrying value
CURRENT									
Accounts receivable	₩134,435,366	(₩4,060,220)	₩130,375,146	₩140,437,425	(₩5,070,224)	₩135,367,201	₩225,260,559	(₩296,969)	₩224,963,590
Other receivables	17,370,184	-	17,370,184	2,340,648	(74,483)	2,266,165	9,657,087	-	9,657,087
Accrued income	2,478,836	-	2,478,836	133,875	-	133,875	1,319,495	-	1,319,495
Subtotal	154,284,386	(4,060,220)	150,224,166	142,911,948	(5,144,707)	137,767,241	236,237,141	(296,969)	235,940,172
NON-CURRENT									
Other receivables	-	-	-	27,351,282	-	27,351,282	18,730,243	-	18,730,243
Total	₩154,284,386	(₩4,060,220)	₩150,224,166	₩170,263,230	(₩5,144,707)	₩165,118,523	₩254,967,384	(₩296,969)	₩254,670,415

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

	2011			
	January 1, 2011	Increase	Reversal	December 31, 2011
Accounts receivable	(₩5,070,224)	₩-	₩1,010,004	(₩4,060,220)
Other receivables	(74,483)	-	74,483	-
Total	(₩5,144,707)	₩-	₩1,084,487	(₩4,060,220)

Receivables past due are assessed as impaired. An allowance account is individually recognized for receivables that can be assessed individually for impairment. An allowance account is recognized based on aging analysis and the Company's past experience of receivables collection of financial assets that are not individually significant and have similar credit risk characteristics.

Bad debt expense is included in selling, general and administrative expenses and other operating expense item in the consolidated statements of income.

8. INVENTORIES:

Details of inventory valuation securities as of December 31, 2011, December 31, 2010 and January 1, 2010, are summarized as follows (in thousands of Korean won):

	December 31, 2011			December 31, 2010			January 1, 2010		
	Acquisition cost	Valuation allowance	Book value	Acquisition cost	Valuation allowance	Book value	Acquisition cost	Valuation allowance	Book value
Work in progress	₩238,024,433	(₩34,901,030)	₩203,123,403	₩273,387,831	(₩9,263,400)	₩264,124,431	₩378,212,433	(₩3,025,833)	₩375,186,600
Raw materials	38,319,011	(3,188,369)	35,130,642	23,635,743	(1,979,726)	21,656,017	43,263,028	(3,461,311)	39,801,717
Materials in transit	9,187,990	-	9,187,990	10,519,268	-	10,519,268	4,170,505	-	4,170,505
Total	₩285,531,434	(₩38,089,399)	₩247,442,035	₩307,542,842	(₩11,243,126)	₩296,299,716	₩425,645,966	(₩6,487,144)	₩419,158,822

The Company recorded loss on inventory valuation totaling ₩26,846,273 thousand for 2011 (₩4,755,982 thousand for 2010).

9. LONG-TERM INVESTMENT SECURITIES:

(1) Long-term investments as of December 31, 2011, December 31, 2010 and January 1, 2010, are as follows (in thousands of Korean won):

	December 31, 2011	December 31, 2010	January 1, 2010
AFS financial assets	₩ 72,047	₩ 72,047	₩ 72,047
Held-to-maturity financial assets	-	155	70,235
Total	₩ 72,047	₩ 72,202	₩ 142,282

(2) AFS financial assets

AFS securities as of December 31, 2011, December 31, 2010 and January 1, 2010, are summarized as follows (in thousands of Korean won):

	December 31, 2011	December 31, 2010	January 1, 2010
Non-marketable securities:			
Korea Marine Equipment Association	₩ 20,000	₩ 20,000	₩ 20,000
Electronic Contractors' Financial Cooperative	52,047	52,047	52,047
Total	₩ 72,047	₩ 72,047	₩ 72,047

(3) Held-to-maturity financial assets

Long-term held-to-maturity financial assets as of December 31, 2011, December 31, 2010 and January 1, 2010, are summarized as follows (in thousands of Korean won):

	December 31, 2011	December 31, 2010	January 1, 2010
Government bonds and public bonds	₩ -	₩ 155	₩ 70,235

10. 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 fix the value of won at maturity about exposed fluctuation risk of exchange rate
	Foreign exchange fluctuation insurance	When receiving the foreign receivables, it fixes the value of 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 won at maturity about exposed fluctuation risk of exchange rate
Cash flow hedge	Interest rate swap	A contract to receive floating rate indexed to LIBOR in foreign currency and pay fixed interest in foreign currency at the date of payment to avoid risk of increasing LIBOR rate

(2) Details of gain and loss on valuation of derivatives as of December 31, 2011, December 31, 2010 and January 1, 2010, are as follows (in thousands of Korean won):

	December 31, 2011							
	Purchase		Sale		Assets	Gains	Other comprehensive	Firm
	Currency	Amount	Currency	Amount	(liabilities)	(losses)	income (*)	commitment
Foreign currency forwards	KRW	1,772,628,682	USD	1,553,979,950	(₩35,606,043)	(₩43,758,615)	₩-	₩112,514,081
	EUR	109,671,000	KRW	169,925,153	(3,090,172)	(3,090,172)	-	3,090,172
	CNY	46,926,481	USD	7,380,000	(28,217)	55,835	-	-
Foreign exchange fluctuation insurance	KRW	2,385,342	USD	2,033,000	25,217	(22,924)	-	(25,217)
Borrowings in foreign currency	KRW	192,184,282	USD	180,000,000	-	-	-	14,152,603
Interest rate swap					(440,359)	-	(440,359)	-
Total					(₩39,139,574)	(₩46,815,876)	(₩440,359)	₩129,731,639

	December 31, 2010								
	Purchase		Sale		Assets	Gains	Other comprehensive	Firm
	Currency	Amount	Currency	Amount	(liabilities)	(losses)	income (*)	commitment
Foreign currency forwards	KRW	2,198,773,160	USD	1,887,682,800	₩33,668,245	₩48,158,430	₩-	₩139,526,982
	CNY	59,013,000	USD	9,000,000	37,674	37,310	-	-
Foreign exchange fluctuation insurance	KRW	5,541,673	USD	4,739,000	99,950	99,950	-	(99,950)
Borrowings in foreign currency	KRW	254,917,629	USD	240,000,000	-	-	-	17,017,280
Interest rate swap					(2,737,440)	-	(2,737,440)	-
Total					₩31,068,429	₩48,295,690	(₩2,737,440)	₩156,444,312

	January 1, 2010						
	Purchase		Sale		Assets	Other comprehensive	Firm
	Currency	Amount	Currency	Amount	(liabilities)	income (*)	commitment
Foreign currency forwards	KRW	2,115,329,136	USD	1,775,997,000	(₩150,400,810)	₩-	₩419,524,082
Borrowings in foreign currency	KRW	317,104,822	USD	300,000,000	-	-	33,201,219
Interest rate swap					(5,664,478)	(5,664,478)	-
Total					(₩156,065,288)	(₩5,664,478)	₩452,725,301

(*) Other comprehensive income is not reflected in corporate tax effect.

Derivative instruments classified as financial assets (liabilities) at FVTPL are classified as current assets or current liability. 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). On the other hand, if cash flow hedge is applied, risk aversion which recognizes the profits and losses for the current term is not ineffective.

11. FINANCIAL INSTRUMENTS:

(1) Categories of financial instruments as of December 31, 2011, December 31, 2010 and January 1, 2010, are as follows (in thousands of Korean won):

	December 31, 2011						
	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	₩-	₩325,415,227	₩-	₩-	₩-	₩325,415,227	₩325,415,227
Short-term financial instruments	-	146,614,526	-	-	-	146,614,526	146,614,526
Trade and other receivables	-	150,224,167	-	-	-	150,224,167	150,224,167
Derivative assets	-	-	-	-	11,905,612	11,905,612	11,905,612
Long-term loans	-	7,251,720	-	-	-	7,251,720	7,251,720
Others	-	14,097,119	72,047	-	-	14,169,166	14,169,166
Total	₩-	₩643,602,759	₩72,047	₩-	₩11,905,612	₩655,580,418	₩655,580,418

	December 31, 2011				
	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivatives designated as hedging instruments	Book value	Fair value
Trade and other payables	₩-	₩266,637,556	₩-	₩266,637,556	₩266,637,556
Borrowings and bonds	-	318,829,230	-	318,829,230	318,829,230
Derivative liabilities	28,217	-	51,016,969	51,045,186	51,045,186
Long-term non-trade payables	-	2,546,075	-	2,546,075	2,546,075
Others	-	2,117,789	-	2,117,789	2,117,789
Total	₩28,217	₩590,130,650	₩51,016,969	₩641,175,836	₩641,175,836

	December 31, 2010						
	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	₩-	₩343,239,756	₩-	₩-	₩-	₩343,239,756	₩343,239,756
Short-term financial instruments	-	150,000,000	-	-	-	150,000,000	150,000,000
Trade and other receivables	-	137,767,241	-	-	-	137,767,241	137,767,241
Derivative assets	37,674	-	-	-	52,607,641	52,645,315	52,645,315
Long-term loans	-	15,049,108	-	-	-	15,049,108	15,049,108
Long-term non-trade receivables	-	27,351,282	-	-	-	27,351,282	27,351,282
Others	-	11,693,448	72,047	155	-	11,765,650	11,765,650
Total	₩37,674	₩685,100,835	₩72,047	₩155	₩52,607,641	₩737,818,352	₩737,818,352

	December 31, 2010				
	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivatives designated as hedging instruments	Book value	Fair value
Trade and other payables	₩-	₩320,885,534	₩-	₩320,885,534	₩320,885,534
Borrowings and bonds	-	445,637,970	-	445,637,970	445,637,970
Derivative liabilities	-	-	21,576,886	21,576,886	21,576,886
Long-term non-trade payables	-	375,373	-	375,373	375,373
Others	-	17,104,740	-	17,104,740	17,104,740
Total	₩-	₩784,003,617	₩21,576,886	₩805,580,503	₩805,580,503

	January 1, 2010						
	Financial assets at FVTPL	Loans and receivables	AFS financial assets	Held-to-maturit y investments	Derivatives designated as hedging instruments	Book value	Fair value
Cash and cash equivalents	₩-	₩201,770,887	₩-	₩-	₩-	₩201,770,887	₩201,770,887
Short-term financial instruments	-	40,000,000	-	-	-	40,000,000	40,000,000
Trade and other receivables	-	235,940,172	-	-	-	235,940,172	235,940,172
Derivative assets	-	-	-	-	71,750,231	71,750,231	71,750,231
Long-term loans	-	13,816,401	-	-	-	13,816,401	13,816,401
Long-term non-trade receivables	-	18,730,243	-	-	-	18,730,243	18,730,243
Others	-	10,737,263	72,047	70,235	-	10,879,545	10,879,545
Total	₩-	₩520,994,966	₩72,047	₩70,235	₩71,750,231	₩592,887,479	₩592,887,479

	January 1, 2010				
	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivatives designated as hedging instruments	Book value	Fair value
Trade and other payables	₩-	₩324,139,275	₩-	₩324,139,275	₩324,139,275
Borrowings and bonds	-	879,074,960	-	879,074,960	879,074,960
Derivative liabilities	-	-	227,815,519	227,815,519	227,815,519
Long-term non-trade payables	-	236,068	-	236,068	236,068
Others	-	19,740,205	-	19,740,205	19,740,205
Total	₩-	₩1,223,190,508	₩227,815,519	₩1,451,006,027	₩1,451,006,027

(2) Fair value measurements of financial instruments by fair value hierarchy levels as of December 31, 2011, December 31, 2010 and January 1, 2010, are as follows (in thousands of Korean won):

Type	December 31, 2011 Level 1	Level 2	Level 3	Total
Financial assets:				
Derivatives designated as hedging instruments	₩-	₩11,905,612	₩-	₩11,905,612
Total	₩-	₩11,905,612	₩-	₩11,905,612
Financial liabilities:				
Financial liabilities at FVTPL	₩-	₩ (28,217)	₩-	₩ (28,217)
Derivatives designated as hedging instruments	-	(51,016,969)	-	(51,016,969)
Total	₩-	(₩51,045,186)	₩-	(₩51,045,186)

Type	December 31, 2010 Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets at FVTPL	₩-	₩37,674	₩-	₩37,674
Derivatives designated as hedging instruments	-	52,607,641	-	52,607,641
Total	₩-	₩52,645,315	₩-	₩52,645,315
Financial liabilities:				
Derivatives designated as hedging instruments	₩-	₩ (21,576,886)	₩-	₩ (21,576,886)
Total	₩-	(₩21,576,886)	₩-	(₩21,576,886)

Type	January 1, 2010 Level 1	Level 2	Level 3	Total
Financial assets:				
Derivatives designated as hedging instruments	₩-	₩71,750,231	₩-	₩71,750,231
Total	₩-	₩71,750,231	₩-	₩71,750,231
Financial liabilities:				
Derivatives designated as hedging instruments	₩-	₩ (227,815,519)	₩-	₩ (227,815,519)
Total	₩-	(₩227,815,519)	₩-	(₩227,815,519)

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).

12. INVESTMENTS IN ASSOCIATES:

(1) Investments in associates as of December 31, 2011, December 31, 2010 and January 1, 2010, are summarized as follows (in thousands of Korean won):

Company	Percentage of ownership (%)	Acquisition cost			Book value			Proportionate share of net assets		
		December 31, 2011	December 31, 2010	January 1, 2010	December 31, 2011	December 31, 2010	January 1, 2010	December 31, 2011	December 31, 2010	January 1, 2010
Dalian Samyoung Doosan Metal Product Co., Ltd. (*1)	15.00	₩2,675,402	₩2,675,402	₩2,675,402	₩3,977,571	₩3,582,623	₩3,853,795	₩3,977,571	₩3,582,623	₩3,853,795
Casco (*1)	16.21	4,010,160	4,010,160	4,010,160	1,246,569	2,763,668	3,802,141	1,246,569	2,505,735	3,544,208
Doosan Infracore International, Inc. (*2,3)	11.59	355,596,311	355,596,311	355,596,311	172,690,480	158,641,749	187,003,601	166,975,983	152,927,253	181,289,105
Doosan Holdings Europe Ltd. (*3)	21.73	382,594,143	382,594,143	382,594,143	152,324,488	153,379,271	206,820,296	152,324,488	153,379,271	206,820,296
Doosan Infracore (*4)	6.03	-	-	200,685,113	-	-	181,021,716	-	-	76,587,431
Total		₩744,876,016	₩744,876,016	₩945,561,129	₩330,239,108	₩318,367,311	₩582,501,549	₩324,524,611	₩312,394,882	₩472,094,835

(*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) The Company includes differential investment for which book value is ₩5,714,496 thousand for investments in associates (DII).

(*3) The percentage of equity interest in each investee represents combined ownership in common stock and preferred stock. The Company's ownership ratio in common stock of Doosan Infracore International, Inc. ("DII") and Doosan Holdings Europe Ltd. ("DHEL") as of December 31, 2011, are 13.22% and 27.69%, respectively.

(*3) Acquisition cost decreases in value compared with recoverable value due to cumulative deficit. As a result, the Company has ₩2,771,524 thousand for impairment losses for the year ended December 31, 2011.

(*4) The Company disposed it and for the year ended December 31, 2010, ₩68,907,445 thousand is recorded as gain on disposal.

(2) Changes in investments in associates for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

Company	Year ended December 31, 2011					
	January 1, 2011	Acquisition (disposal)	Share of profit (loss)	Increase (decrease) in equity of associates	Other (*1)	December 31, 2011
DSDMP	₩3,582,623	₩-	₩143,559	₩251,389	₩-	₩3,977,571
Casco	2,763,668	-	(1,141,747)	(375,352)	-	1,246,569
DII	158,641,749	-	11,208,066	8,589,604	(5,748,939)	172,690,480
DHEL	153,379,271	-	(7,181,153)	6,657,088	(530,718)	152,324,488
Total	₩318,367,311	₩-	₩3,028,725	₩ 15,122,729	(₩ 6,279,657)	₩330,239,108

Company	Year ended December 31, 2010					
	January 1, 2011	Acquisition (disposal)	Share of profit (loss)	Increase (decrease) in equity of associates	Other	December 31, 2011
DSDMP	₩3,853,795	₩-	₩49,681	(₩242,689)	(₩78,164)	₩3,582,623
Casco	3,802,141	-	(1,064,051)	25,578	-	2,763,668
DII	187,003,601	-	(7,610,251)	(9,227,140)	(11,524,461)	158,641,749
DHEL	206,820,296	-	(44,540,937)	(8,263,980)	(636,108)	153,379,271
Doosan Infracore	181,021,716	(203,005,918)	8,823,887	12,874,228	286,087	-
Total	₩582,501,549	(₩203,005,918)	(₩44,341,671)	(₩4,834,003)	(₩11,952,646)	₩318,367,311

(3) Market price information of shares, which are invested in subsidiary and associates as of December 31, 2011, December 31, 2010 and January 1, 2010, is summarized as follows (in thousands of Korean won):

	December 31, 2011		December 31, 2010		January 1, 2010	
	Book value	Fair value	Book value	Fair value	Book value	Fair value
Associates:						
Doosan Infracore	₩ -	₩ -	₩ -	₩ -	₩ 181,701,549	₩ 165,821,100

(4) The condensed financial information of the investees as of December 31, 2011, December 31, 2010 and January 1, 2010, and for the years ended December 31, 2011 and 2010, is as follows (in thousands of Korean won):

	As of and for the year ended December 31, 2011				As of and for the year ended December 31, 2010				January 1, 2010	
Company	Assets	Liabilities	Sales	Net income (loss)	Assets	Liabilities	Sales	Net income (loss)	Assets	Liabilities
DSDMP	₩61,281,273	₩34,764,130	₩34,275,337	₩52,166	₩52,780,183	₩27,731,293	₩44,035,453	₩347,357	44,210,944	₩25,558,201
Casco	96,851,826	89,159,646	65,784,275	(8,960,317)	67,069,069	51,606,977	49,025,994	(6,565,918)	58,918,287	37,048,113
DII	3,737,072,137	2,028,695,554	2,170,782,865	40,217,907	3,442,334,037	2,434,232,155	1,602,969,437	(28,244,711)	3,479,420,950	2,355,422,898
DHEL	3,076,625,822	2,049,436,709	1,520,494,515	(25,937,768)	4,335,628,298	3,322,182,689	1,067,630,929	(160,877,989)	4,387,532,559	3,159,950,749
Doosan Infracore	₩-	₩-	₩-	₩-	₩-	₩-	₩-	₩-	₩11,040,400,383	₩9,379,734,225

13. PROPERTY, PLANT AND EQUIPMENT:

Changes in property, plant and equipment for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

	2011					
	Land	Buildings and structures	Machinery	Others	Construction in progress	Total
January 1, 2011	₩ 204,247,324	₩ 213,331,088	₩ 145,532,443	₩ 15,154,979	₩ 784,800	₩ 579,050,634
Acquisition	5,758,775	5,670,616	2,216,498	1,880,170	1,232,176	16,758,235
Other	-	-	-	24,800	(24,800)	-
Disposal	-	(32,750)	(86,614)	(317,547)	-	(436,911)
Depreciation	-	(6,857,410)	(12,788,951)	(6,627,562)	-	(26,273,923)
Foreign difference	-	613,424	354,979	58,177	-	1,026,580
December 31, 2011	₩210,006,099	₩212,724,968	₩135,228,355	₩10,173,017	₩1,992,176	₩570,124,615
-Acquisition cost	₩210,006,099	₩244,939,751	₩238,927,762	₩57,019,532	₩1,992,176	₩752,885,320
-Accumulated depreciation	-	(32,214,783)	(103,699,407)	(46,846,515)	-	(182,760,705)

	2010					
	Land	Buildings and structures	Machinery	Others	Construction in progress	Total
January 1, 2010	₩204,247,324	₩219,901,206	₩156,069,070	₩22,690,515	₩ -	₩ 602,908,115
Acquisition	-	44,866	176,816	20,331	3,467,673	3,709,686
Other	-	82,225	2,110,058	490,590	(2,682,873)	
Disposal	-	-	(167,309)	(5,277)	-	(172,586)
Depreciation	-	(6,783,858)	(12,717,444)	(8,177,142)	-	(27,678,444)
Foreign difference	-	86,649	61,252	135,962	-	283,863
December 31, 2010	₩204,247,324	₩213,331,088	₩145,532,443	₩15,154,979	₩784,800	₩579,050,634
-Acquisition cost	₩204,247,324	₩238,594,713	₩ 236,333,244	₩58,370,281	₩784,800	₩738,330,362
-Accumulated depreciation	-	(25,263,625)	(90,800,801)	(43,215,302)	-	(159,279,728)

14. INTANGIBLE ASSETS:

(1) The changes in intangible assets for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

	2011				
	Development costs	Rights of utilization	Software	Others	Total
January 1, 2011	₩ -	₩1,040,481	₩ -	₩4,350,985	₩5,391,466
Acquisition	221,440	-	10,135,687	-	10,357,127
Amortization	-	(208,096)	-	(106,178)	(314,274)
Impairment	-	-	-	(588,569)	(588,569)
Foreign difference	-	-	-	17,313	17,313
December 31, 2011	₩221,440	₩832,385	₩10,135,687	₩3,673,551	₩14,863,063
-Acquisition cost	₩221,440	₩3,329,540	₩11,107,645	₩ 5,012,104	₩19,670,729
-Accumulated amortization	-	(2,497,155)	(971,958)	(1,338,553)	(4,807,666)

	2010			
	Rights of utilization	Software	Others	Total
January 1, 2010	₩1,248,577	₩30,633	₩4,956,020	₩6,235,230
Acquisition	-	-	1,708	1,708
Amortization	(208,096)	(30,633)	(107,101)	(345,830)
Impairment	-	-	(502,971)	(502,971)
Foreign difference	-	-	3,329	3,329
December 31, 2010	₩1,040,481	₩-	₩4,350,985	₩5,391,466
-Acquisition cost	₩3,329,540	₩971,958	₩4,980,625	₩9,282,123
-Accumulated amortization	(2,289,059)	(971,958)	(629,640)	(3,890,657)

Other intangible assets' book value, which have nonrestrictive durable years, is ₩3,346,620 thousand, ₩3,935,189 thousand and ₩4,438,160 thousand as of December 31, 2011, December 31, 2010 and January 1, 2010.

(2) Expenditure on research and development recognized as expenses amounted to ₩6,439,851 thousand and ₩5,049,087 thousand for the years ended December 31, 2011 and 2010, respectively.

15. INVESTMENT PROPERTIES:

(1) Changes in investment properties for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

	2011		
	Land	Building	Total
January 1, 2011	₩ 12,082,210	₩ 5,820,500	₩ 17,902,710
Acquisition	13,304,786	5,248,293	18,553,079
Depreciation	-	(325,687)	(325,687)
December 31, 2011	₩25,386,996	₩10,743,106	₩36,130,102
-Acquisition cost	₩25,386,996	₩11,559,810	₩36,946,806
-Accumulated depreciation	-	(816,704)	(816,704)

Investment properties are evaluated using cost method the fair value of land is ₩67,218,280 thousand and building is ₩27,328,762.

	2010		
	Land	Building	Total
January 1, 2010	₩ 12,082,210	₩ 5,428,254	₩ 17,510,464
Acquisition	-	595,680	595,680
Depreciation	-	(203,434)	(203,434)
December 31, 2010	₩12,082,210	₩5,820,500	₩17,902,710
-Acquisition cost	₩12,082,210	₩6,311,517	₩18,393,727
-Accumulated depreciation	-	(491,017)	(491,017)

(2) Rental income related to investment properties is ₩1,350,440 thousand and ₩756,121 thousand for the years ended December 31, 2011 and 2010, respectively, regarding investment properties.

16. BONDS AND LONG-TERM BORROWINGS:

(1) Bonds as of December 31, 2011, December 31, 2010 and January 1, 2010, are as follows (in thousands of Korean won):

Details	Interest rate (%)	Dec. 31, 2011	Dec. 31, 2010	Jan. 1, 2010
The 2nd	5.93	₩-	₩-	₩180,000,000
The 3-1st	8.10	-	-	50,000,000
The 3-2nd	8.30	-	50,000,000	50,000,000
The 4-1st	8.10	-	-	130,000,000
The 4-2nd	8.20	-	-	50,000,000
The 5th	5.90	80,000,000	80,000,000	-
Subtotal		80,000,000	130,000,000	460,000,000
Less: Current portion of bonds		(79,945,545)	(49,988,459)	(409,476,958)
Less: Discount on bonds		(54,455)	(246,250)	(586,828)
Net		₩-	₩ 79,765,291	₩ 49,936,214

(2) Long-term and short-term borrowings as of December 31, 2011, December 31, 2010 and January 1, 2010, are as follows (in thousands of Korean won):

1) Short-term borrowings

Type	Lender	Annual interest rate (%)	December 31, 2011	December 31, 2010	January 1, 2010
Short-term borrowings in Korean won	Woori Bank and others	1.25–1.30	₩23,306,698	₩33,450,569	₩34,429,277
	Woori Bank	7.50	-	-	10,000,000
	Kumho Investment Bank	8.00	-	-	15,000,000
	Korea Exchange Bank	6.22	1,412,627	1,335,150	4,745,204
Usance	Korea Exchange Bank	4.46–4.49	-	-	735,309
	Total		₩24,719,325	₩34,785,719	₩64,909,790

2) Long-term borrowings

Type	Lender	Interest rate (%)	December 31, 2011	December 31, 2010	January 1, 2010
Syndicate loans	Korea Development Bank	6M LIBOR+1.6	₩69,198,000	₩91,112,000	₩116,760,000
	The Export-Import Bank of Korea	6M LIBOR+1.6	34,599,000	45,556,000	58,380,000
	Shinhan Bank	6M LIBOR+1.6	27,679,200	36,444,800	46,704,000
	Industrial Bank of Korea	6M LIBOR+1.6	20,759,400	27,333,600	35,028,000
	Woori Bank	6M LIBOR+1.6	27,679,200	36,444,800	46,704,000
	Korea Exchange Bank	6M LIBOR+1.6	6,227,820	8,200,080	10,508,400
	Hana Bank	6M LIBOR+1.6	10,379,700	13,666,800	17,514,000
	Kookmin Bank	6M LIBOR+1.6	5,535,840	7,288,960	9,340,800
	HSBC	6M LIBOR+1.6	2,767,920	3,644,480	4,670,400
	First Gulf Bank	6M LIBOR+1.6	2,767,920	3,644,480	4,670,400
	China Construction Bank	6.22	6,570,360	7,762,500	4,471,997
Subtotal			214,164,360	281,098,500	354,751,997
Less: Current portion			(70,840,590)	(68,334,000)	(70,056,000)
Net			₩ 143,323,770	₩ 212,764,500	₩ 284,695,997

17. RETIREMENT BENEFIT OBLIGATION:

(1) Details of retirement benefit obligation as of December 31, 2011, December 31, 2010 and January 1, 2010, are as follows (in thousands of Korean won):

	December 31, 2011	December 31, 2010	January 1, 2010
Present value of defined benefit obligation	₩ 32,783,618	₩ 25,973,706	₩ 22,552,822
Fair value of plan assets	(6,193,303)	(7,012,540)	(8,839,293)
Total	₩26,590,315	₩ 18,961,166	₩ 13,713,529

(2) Expenses recognized in income and loss for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

	2011	2010
Current service cost	₩ 5,356,915	₩ 4,888,937
Interest cost	1,275,348	1,330,810
Expected return on plan assets	(276,952)	(373,812)
Total	₩ 6,355,311	₩ 5,845,935

(3) Details of the total expense recognized in the consolidated statements of income for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

	2011	2010
Cost of sales	₩ 4,972,663	₩ 4,615,613
Selling and administrative expenses	1,382,648	1,230,322
Total	₩ 6,355,311	₩ 5,845,935

(4) Changes in defined benefit obligations for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

	2011	2010
Beginning balance	₩ 25,973,706	₩ 22,552,822
Current service cost	5,356,915	4,888,937
Transfer in	26,331	-
Transfer out	(32,286)	(69,036)
Interest cost	1,275,348	1,330,810
Actuarial gain or loss	4,376,521	2,094,518
Benefit paid	(4,192,917)	(4,824,345)
Ending balance	₩ 32,783,618	₩ 25,973,706

(5) Changes in plan assets for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

	2011	2010
Beginning balance	₩ 7,012,540	₩ 8,839,293
Expected return on plan assets	276,952	373,813
Actuarial gain or loss	(34,645)	(43,152)
Benefit payment	(1,061,544)	(2,157,414)
Ending balance	₩ 6,193,303	₩ 7,012,540

(6) Assumptions used on actuarial as of December 31, 2011 and 2010, are as follows:

	December 31, 2011	December 31, 2010	January 1, 2010
Discount rate for defined benefit obligations	5.00%	5.30%	6.30%
Expected rate of return on plan assets	4.50%	4.50%	4.50%
Expected rate of salary increase			
Employee	5.40%	5.40%	5.40%
Officer	8.00%	8.00%	8.00%

Assumption about death is based around the statistics and experiences. The main estimates of assumptions used on actuarial valuation are based on the report of external actuarial company that is professionally qualified.

(7) Details of plan assets at the end of the reporting period are as follows (in thousands of Korean won):

	Dec. 31, 2011	Dec. 31, 2010	Jan. 1, 2010
Debt instruments	₩ 5,502,592	₩ 4,135,228	₩ 4,553,910
Loans	13,701	420,532	578,338
Deposits	673,332	2,453,102	3,703,367
Pension	3,678	3,678	3,678
Total	₩ 6,193,303	₩ 7,012,540	₩ 8,839,293

The expected return on plan assets is determined considering applicable expected return on plan assets under current investment policy. The expected return on debt securities is based on redemption yields at the end of the reporting period. The expected return on equity securities and other assets reflect historical market return data by asset category.

18. PROVISIONS:

Changes in provisions for the year ended December 31, 2011, are as follows (in thousands of Korean won):

	2011					
	January 1, 2011	Accrual	Use	December 31, 2011	Current	Non-current
Provision for construction warranties	₩16,459,729	₩6,540,752	(₩2,493,373)	₩20,507,108	₩-	₩20,507,108

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.

19. CAPITAL STOCK AND CAPITAL SURPLUS:

Changes in capital stock and capital surplus for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

1) 2011

	Number of shares	Capital stock	Capital surplus
Beginning balance (2011.1.1)	₩ 69,500,000	₩ 69,500,000	₩ 367,214,701
Ending balance (2011.12.31)	₩ 69,500,000	₩ 69,500,000	₩ 367,214,701

2) 2010

	Number of shares	Capital stock	Capital surplus
Beginning balance (2010.1.1)	₩ 12,500,000	₩ 62,500,000	₩ 242,622,751
Stock split (2010.9.1)	62,500,000	62,500,000	242,622,751
Proceeds from issuance of common stock (2010.12.28)	7,000,000	7,000,000	124,591,950
Ending balance (2010.12.31)	₩ 69,500,000	₩ 69,500,000	₩ 367,214,701

The DE's number of shares authorized is 120,000,000 shares with par value of ₩1,000 per share. The number of shares issued by the Company is 69,500,000 and 69,000,000 as of December 31, 2011 and 2010, respectively. There are no issued shares with restricted voting rights under commercial law.

20. OTHER CAPITAL SURPLUS:

Other capital surplus as of December 31, 2011, does not include capital surplus.

21. OTHER CAPITAL ITEMS:

(1) Other capital items as of December 31, 2011, December 31, 2010 and January 1, 2010, are summarized as follows (in thousands of Korean won):

Description	December 31, 2011	December 31, 2010	January 1, 2010
Share option	₩135,448	₩-	₩-

(2) Share-based payment

The Company granted share options to its directors. Share options are settled based on board of directors' decision by issuance of new shares, treasury shares or cash settlement. These share options carry a two-year service vesting condition subsequent to the resolution of the stockholders' meeting. Number of granted options as of December 31, 2011, is as follows:

Date of grant	Number of granted options	Exercisable period	Exercisable price	Expected fair value at the date of grant
2011.03.25	33,900	2014.03.25–2021.03.24	₩ 21,600	₩ 10,343

Changes in share option for the year ended December 31, 2011, are as follows:

1) Number of common shares to be issued:

Date of grant	January 1, 2011	Granted	Exercised	Forfeited	December 31, 2011
2011.03.25	-	33,900	-	-	33,900

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

Date of grant	January 1, 2011	Exercised	Change	December 31, 2011
2011.03.25	₩ -	₩ 135,448	₩ -	₩ 135,448

Expense recognized related to the share option grant amounted to ₩135,448 thousand for the years ended December 31, 2011 and 2010. Expense to be recognized in the future period amounted to ₩215,180 thousand.

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%

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

22. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS):

(1) Changes in accumulated other comprehensive income (loss) at the end of the reporting period are as follows (in thousands of Korean won):

	December 31, 2011	December 31, 2010	January 1, 2010
Unrealized gain on valuation of derivatives	(₩333,792)	(₩2,085,544)	(₩4,293,674)
Increase (decrease) in equity of associates	(3,563,059)	(18,685,788)	(13,851,785)
Overseas operation translation credit (debit)	1,179,162	153,862	-
Total	(₩2,717,689)	(₩20,617,470)	(₩18,145,459)

(2) Tax effects directly recognized in accumulated other comprehensive income (loss) as of December 31, 2011, December 31, 2010 and January 1, 2010, are as follows (in thousands of Korean won):

	December 31, 2011		
Description	Before tax	Deferred income tax assets (liabilities)	After tax
Unrealized gain on valuation of derivatives	(₩440,359)	₩106,567	(₩333,792)
Increase (decrease) in equity of associates	(3,563,059)	-	(3,563,059)
Overseas operation translation credit (debit)	1,179,162	-	1,179,162
Total	(₩2,824,256)	₩106,567	(₩2,717,689)

	December 31, 2010		
Description	Before tax	Deferred income tax assets (liabilities)	After tax
Unrealized gain on valuation of derivatives	(₩2,737,440)	₩651,896	(₩2,085,544)
Increase (decrease) in equity of associates	(18,685,788)	-	(18,685,788)
Overseas operation translation credit (debit)	153,862	-	153,862
Total	(₩21,269,366)	₩651,896	(₩20,617,470)

	January 1, 2010		
Description	Before tax	Deferred income tax assets (liabilities)	After tax
Unrealized gain on valuation of derivatives	(₩5,664,478)	₩1,370,804	(₩4,293,674)
Increase (decrease) in equity of associates	(13,851,785)	-	(13,851,785)
Overseas operation translation credit (debit)	-	-	-
Total	(₩19,516,263)	₩1,370,804	(₩18,145,459)

23. RETAINED EARNINGS (DEFICIT):

(1) Retained earnings as of December 31, 2011, December 31, 2010 and January 1, 2010, are as follows (in thousands of Korean won):

	December 31, 2011	December 31, 2010	January 1, 2010
Legal reserve (*)	₩ 1,200,000	₩ 1,200,000	₩ 1,200,000
Optional reserve	3,700,000	5,700,000	7,700,000
Retained earnings before appropriations	134,651,272	(73,635,090)	(262,795,593)
Total	₩139,551,272	(₩66,735,090)	(₩253,895,593)

(*) 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, 2011 and 2010, are as follows (in thousands of Korean won):

	2011	2010
Beginning balance	(₩66,735,090)	(₩253,895,593)
Profit for the period	224,775,863	200,705,700
Actuarial loss and losses recognized in retained earnings	(3,346,637)	(1,670,715)
Change of retained earnings in associates	(15,142,864)	(11,874,482)
Ending balance	₩139,551,272	(₩66,735,090)

24. SALES:

Details of sales for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

	2011	2010
Sales of goods	₩ 1,968,655,460	₩ 1,807,053,983
Others	36,597,158	24,707,748
Total	₩ 2,005,252,618	₩ 1,831,761,731

25. CONSTRUCTION CONTRACTS:

(1) Details of profit and unbilled (overbilled) construction receivables (payables) under construction contract for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

2011				Contract receivables		
	Construction cost	Construction revenue	Construction profit	Claimed	Not claimed	Gross amount due to customers
Diesel engine	₩ 220,895,885	₩ 239,953,814	₩ 19,057,929	₩ 106,385	₩ 55,876	₩ 34,079,377

2010				Contract receivables		
	Construction cost	Construction revenue	Construction profit	Claimed	Not claimed	Gross amount due to customers
Diesel engine	₩ 192,994,448	₩ 202,767,035	₩ 9,772,587	₩ 10,661,256	₩ 77,639	₩ 19,705,747

(2) Details of construction contract for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

	2011				
Order	Description	January 1, 2011	Increase by contract	Decrease by sales	December 31, 2011
KHNP and other 5 companies	Singori #3,4 emergency generator, alternative AC power diesel engine and other 13	₩159,479,714	(₩51,491,767)	(₩36,597,158)	₩71,390,789

	2010				
Order	Description	January 1, 2010	Increase by contract	Decrease by sales	December 31, 2010
KHNP and other 9 companies	Singori #3,4 emergency generator, alternative AC power diesel engine and other 19	₩184,728,992	(₩541,530)	(₩24,707,748)	₩159,479,714

26. EXPENSES CLASSIFIED BY NATURE:

Expenses classified by nature for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

	2011	2010
Changes in inventories	₩ 48,857,681	₩ 122,859,105
Purchase of raw materials	1,225,641,584	1,038,829,406
Employee benefits	94,288,757	89,402,391
Other employee benefits	16,031,482	17,885,938
Depreciation and amortization	26,913,883	28,227,708
Commission expenses	139,981,900	139,170,260
Transportation expenses	16,726,523	21,653,039
Commissions	23,229,713	26,488,760
Amount paid to subcontractors	21,176,671	17,463,995
Outsourcing	18,691,136	18,395,941
Lab fees	3,291,765	4,547,647
Others	74,302,723	51,424,274
Total	₩ 1,709,133,818	₩ 1,576,348,464

27. SELLING AND ADMINISTRATIVE EXPENSES:

Selling and administrative expenses for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

Account	2011	2010
Salaries	₩ 25,254,346	₩ 19,458,751
Other employee benefits	4,282,167	4,283,472
Provision for retirement and severance benefits	1,382,648	1,186,824
Commission expenses	14,883,354	13,434,476
Depreciation	1,388,387	1,586,418
Amortization	106,166	111,484
Advertising and marketing expenses	3,830,686	1,491,926
Transportation expenses	6,029	8,528
Rental expenses	1,272,076	1,290,776
Bad debt expenses	-	4,773,255
Research and ordinary development costs	6,439,851	5,049,087
Others	8,973,284	6,753,939
Total	₩ 67,818,994	₩ 59,428,936

28. OTHER OPERATING INCOME AND EXPENSES:

(1) Details of other operating income and expenses

Other operating income and expenses for the years ended December 31, 2011 and 2010, consist of the following (in thousands of Korean won):

Account	2011	2010
Other operating income:		
Commission	₩ -	₩ 93,964
Reversal of allowance for doubtful accounts	1,084,487	-
Rental income	2,293,103	1,501,777
Gain on disposal of property, plant and equipment	196,294	16,187
Reversal of impairment of intangible assets	-	16,594
Other income	3,973,502	32,634,118
Subtotal	7,547,386	34,262,640
Other operating expenses:		
Loss on disposal of property, plant and equipment	97,562	173,510
Donations	10,038,685	829,540
Impairment loss of intangible assets	588,569	519,566
Other bad debt expenses	-	74,483
Other loss	12,529,734	10,626,597
Subtotal	(23,254,550)	(12,223,696)
Total	(₩ 15,707,164)	₩ 22,038,944

(2) Difference of operating profit and loss in prior accounting standards and K-IFRS

Under K-IFRS, other operating income and expense which were non-operating income and expense under previous GAAP, are now included in operating income (loss). Interest income, interest expense, dividend income and gain/loss from exchange rate difference (gain/loss from foreign currency transaction and translation) are classified as non-operating income and expense under both K-IFRS and previous GAAP.

29. FINANCE INCOME AND EXPENSES:

Finance income and expenses for the years ended December 31, 2011 and 2010, are summarized as follows (in thousands of Korean won):

Account	2011	2010
Finance income:		
Interest income	₩ 20,289,470	₩ 7,417,783
Dividend income	700	-
Income on financial guarantee	3,400,911	3,533,833
Gain on foreign currency transaction	4,659,089	5,746,952
Gain on foreign currency translation	1,087,998	7,624,251
Gain on derivative transaction	2,237,491	3,267,553
Gain on valuation of derivatives	1,700,290	53,751,891
Gain on valuation of firm commitments	49,569,040	6,461,741
Subtotal	82,944,989	87,804,004
Finance expenses:		
Interest expenses	14,624,878	36,453,371
Expense on financial guarantee	1,317,816	1,915,373
Loss on foreign currency transaction	6,081,724	2,378,609
Loss on foreign currency translation	3,078,531	1,953,037
Loss on derivative transaction	1,674,433	6,387,319
Loss on valuation of derivatives	48,516,166	5,456,201
Loss on valuation of firm commitments	3,068,353	62,872,607
Subtotal	(78,361,901)	(117,416,517)
Net finance income (expense)	₩ 4,583,088	(₩29,612,513)

30. INCOME TAX EXPENSE:

(1) Components of income tax expense for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

Details	2011	2010
Current income tax expense	₩ 9,008,113	₩ 455,951
Changes in deferred income tax assets (liabilities) related to temporary differences (Note 1)	62,533,479	71,414,276
Deferred income tax assets (liabilities) directly reflected in stockholders' equity (Note 2)	569,202	(248,620)
Income tax expense	₩ 72,110,794	₩ 71,621,607

(Note 1) Changes in deferred income tax assets (liabilities) related to temporary differences for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

Details	2011	2010
Ending deferred income tax assets (liabilities), net	(₩ 42,574,013)	₩ 19,959,466
Beginning deferred income tax assets, net	19,959,466	91,373,742
Changes in deferred income tax assets	₩ 62,533,479	₩ 71,414,276

(Note 2) Changes in deferred income tax assets (liabilities) directly added to (deducted from) stockholders' equity for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

Details	2011	2010
Ending deferred income tax assets	₩ 1,691,385	₩ 1,122,183
Beginning deferred income tax assets	1,122,183	1,370,803
Changes in deferred income tax assets	₩ 569,202	(₩ 248,620)

(2) The Company offsets deferred tax assets and deferred tax liabilities if the Company has a legally enforceable right to set off current tax assets against current tax liabilities, and the deferred tax assets and the deferred tax liabilities relate to income taxes levied by the same taxation authority. Changes in deferred tax assets and liabilities for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

Details	January 1, 2011	Change	December 31, 2011
Accrued income	(₩ 32,398)	(₩ 567,481)	(₩ 599,879)
Provision for construction warranties	3,179,510	1,783,210	4,962,720
Loss on inventory obsolescence	5,758,579	3,459,057	9,217,636
Provision for severance indemnities	3,981,895	1,967,442	5,949,337
Reserve for research and development	(242,000)	242,000	-
Currency forwards	(7,996,313)	17,354,694	9,358,381
Firm commitment assets	(54,873,283)	23,478,226	(31,395,057)
Long-term borrowings	5,351,319	(564,075)	4,787,244
Loss on investment assets	6,490	649	7,139
Deposits for severance indemnities	(1,541,950)	44,060	(1,497,890)
Depreciation	(205,133)	41,781	(163,352)
Unearned revenue	(14,997,064)	5,639,612	(9,357,452)
Allowance for doubtful accounts	917,175	(329,324)	587,851
Loss on inventory obsolescence	441,465	-	441,465
Accrued bonus	751,980	662,644	1,414,624
Subcost on membership	8,278	828	9,106
Excess limit of depreciation	1,383,075	146,822	1,529,897
Guarantee commission	35,935	3,593	39,528
Foreign currency translation, net	6,414,000	(2,004,444)	4,409,556
Depreciation of building	476,432	445,146	921,578
Tax loss carryforwards	69,703,377	(69,703,377)	-
Donations in excess of tax limit	5,035,229	(5,035,229)	-
Tax credits	7,431,340	(7,431,340)	-
Actuarial gain or loss	470,287	(470,287)	-
Gain (loss)on valuation of interest rate swap	651,896	(545,329)	106,567
Gain on revaluation of land and buildings	(38,685,815)	(3,868,582)	(42,554,397)
Loss on equity-accounted investees 지	-	670,709	670,709
Accumulated depreciation of machines	-	(2,054,737)	(2,054,737)
Gross amount due to customers	-	445	445
Membership	-	264,153	264,153
Long-term loan	-	152,912	152,912
Long-term prepaid expense	-	(188,365)	(188,365)
Others	26,535,160	(26,128,892)	406,268
Total	₩ 19,959,466	(₩ 62,533,479)	(₩ 42,574,013)

Details	January 1, 2010	Change	December 31, 2010
Accrued income	(₩ 319,318)	₩ 286,920	(₩ 32,398)
Provision for construction warranties	5,115,738	(1,936,228)	3,179,510
Loss on inventory obsolescence	2,265,504	3,493,075	5,758,576
Provision for severance indemnities	4,047,565	(65,670)	3,981,895
Reserve for research and development	(726,000)	484,000	(242,000)
Currency forwards	(231,769,776)	223,773,463	(7,996,313)
Firm commitment assets	137,027,718	(191,901,001)	(54,873,283)
Long-term borrowings	9,016,920	(3,665,601)	5,351,319
Loss on investment assets	7,139	(649)	6,490
Deposits for severance indemnities	(2,138,219)	596,269	(1,541,950)
Depreciation	(287,941)	82,808	(205,133)
Unearned revenue	(12,893,618)	(2,103,443)	(14,997,061)
Allowance for doubtful accounts	515,576	401,599	917,175
Loss on inventory obsolescence	-	441,465	441,465
Accrued bonus	127,976	624,004	751,980
Subcost on membership	9,106	(828)	8,278
Excess limit of depreciation	1,284,621	98,454	1,383,075
Guarantee commission	38,772	(2,837)	35,935
Foreign currency translation, net	7,761,288	(1,347,288)	6,414,000
Depreciation of building	203,746	272,686	476,432
Tax loss carryforwards	170,538,410	(100,835,033)	69,703,377
Donations in excess of tax limit	5,035,229	-	5,035,229
Tax credits	7,156,751	274,589	7,431,340
Actuarial gain or loss	-	470,287	470,287
Gain (loss)on valuation of interest rate swap	1,370,803	(718,907)	651,896
Gain on revaluation of land and buildings	(38,685,815)	-	(38,685,815)
Others	27,030,108	(136,410)	26,535,160
Total	₩ 91,373,742	(₩ 71,414,276)	₩ 19,959,466

(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, 2011 and 2010.

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 from associated investments in subsidiaries, which are not recognized as deferred tax assets, are as follows (in thousands of Korean won):

	December 31, 2011	December 31, 2010	January 1, 2010
Subsidiaries and other	₩415,700,975	₩420,972,456	₩357,990,931

(5) Deferred income tax assets (liabilities) and income tax benefits (expense) added to (deducted from) stockholders' equity as of December 31, 2011, December 31, 2010 and January 1, 2010, are as follows (in thousands of Korean won):

	December 31, 2011			December 31, 2010			January 1, 2010		
Details	Gross	Tax effect	Net of tax	Gross	Tax effect	Net of tax	Gross	Tax effect	Net of tax
Loss on valuation of derivatives	(₩440,359)	₩106,568	(₩333,791)	(₩2,737,440)	₩651,896	(₩2,085,544)	(₩5,665,478)	₩1,370,804	(₩4,294,674)
Actuarial gain or loss	(6,548,835)	1,584,817	(4,964,018)	(2,137,670)	470,287	(1,667,383)	-	-	-
Total	(₩6,989,194)	₩1,691,385	(₩5,297,809	(₩4,875,110)	₩1,122,183	(₩3,752,927)	(₩5,665,478)	₩1,370,804	(₩4,294,674)

(6) An explanation of the relationship between income tax expense and accounting income (loss) before income tax expense for the years ended December 31, 2011 and 2010, is as follows (in thousands of Korean won):

Details	2011	2010
Income (loss) before income tax expense	₩296,886,657	₩272,327,307
Income tax expense at statutory income tax rate (Less than ₩200 million: 11% Over ₩200 million: 24.2%)	71,820,171	65,876,808
Differences (Note 1)	290,623	5,744,799
Income tax expense	₩ 72,110,794	₩ 71,621,607
Effective tax rates	24.29%	26.30%
(Note 1) Differences:		
Non-temporary difference	₩ 233,456	₩ 324,248
Unrecognized difference related to equity-method investment securities	(1,878,935)	8,732,568
Difference of tax rates	3,446,010	(2,057,150)
Tax credits	(934,325)	(274,589)
Others	(575,583)	(980,278)
Total	₩ 290,623	₩ 5,744,799

31. EARNINGS PER SHARE:

(1) Basic earnings per share

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

	2011	2010
Net income (loss) available to common shares	₩224,775,863	₩200,705,700
Weighted-average number of common shares outstanding (*1)	69,500,000	62,576,712
Basic net income (loss) per share	₩ 3,234	₩ 3,207

(*1) The weighted-average number of common shares outstanding used in basic earnings per share calculation is as follows:

	Date	Number of shares	Weights	Number of common shares outstanding
January 1, 2011	2011.1.1	69,500,000	365/365	69,500,000
Weighted-average number of common shares outstanding				69,500,000

	Date	Number of shares	Weights	Number of common shares outstanding
January 1, 2010	2010.1.1	69,500,000	365/365	69,500,000
Paid-in capital increase	2010.12.28	7,000,000	4/365	76,712
Weighted-average number of common shares outstanding				62,576,712

(2) Diluted earnings per share

The Company does not compute diluted earnings per common share for the years ended December 31, 2011 and 2010, because there is no item related to dilution. Diluted earnings per share are equal to earnings per share for the years ended December 31, 2011 and 2010.

Due to the anti-dilutive effect for the years ended December 31, 2011 and 2010, it is not considering share option, which could dilute the basic earnings per share in the future.

	2011	2010
Share option	33,900	-

32. COMMITMENTS AND CONTINGENCIES:

(1) Notes and checks provided as collateral

As of December 31, 2011, the Company has provided 3 (as of December 31, 2010: 3) blank promissory notes and 117 (as of December 31, 2010: 173) promissory notes amounting to USD 61,030,834 (as of December 31, 2010: USD 90,059,218) 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

Outstanding trade receivables sold with recourse by the Company are in the amount of ₩23,306,698 thousand as of December 31, 2011.

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

Site	Plaintiff	Defendant	Claim	Claimed amount	Progress
Greece	GAEI (Guam Advance Enterprises Inc.)	Doosan Engine Co., Ltd.	Damages for cancellation of contract (related Greece Chios diesel plant)	EUR 3,059,635	Pending in the court of first instance
Changwon	C&Heavy Industries Co., Ltd.	Doosan Engine Co., Ltd.	Violating the Prevention of Unfair Competition Act	₩ 56,700	Pending in the court of first instance
Seoul	JINDO CO., LTD.	Doosan Engine Co., Ltd.	Appeal advance payment	₩ 3,000,000	Pending in the court of first instance
The Korean Commercial Abitration Board	C&Shipping Co., Ltd.	Doosan Engine Co., Ltd.	Appeal advance payment	₩ 15,000,000	Pending in the court of first instance
Dairen	Sung-heung Construction Co., Ltd.	Subsidiary	A claim for construction payment	CNY 7,736,666	Pending in the court of second instance

As of December 31, 2011, the outcome of the cases cannot be reasonably determined.

(4) Commitments with financial institutions

As of December 31, 2011, 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		-
	Woori Bank		30,000,000		-
	Kookmin Bank		16,000,000		-
Electronic loan facilities	Woori Bank		40,000,000		15,750,816
	Kookmin Bank		18,000,000		1,547,891
	Hana Bank		20,000,000		13,125,534
	Kyongnam Bank		20,000,000		9,014,211
Issuance of letter of credit	Korea Exchange Bank	USD	30,000,000	USD	14,978,591
	Woori Bank	USD	50,000,000	USD	11,982,012
	Hana Bank	USD	30,000,000	USD	15,196,010
	Korea Development Bank	USD	40,000,000	USD	27,017,820
Other guarantees	Korea Exchange Bank	USD	100,000,000	USD	90,108,676
	Woori Bank	USD	250,000,000	USD	89,702,816
	Hana Bank	USD	40,000,000	USD	32,096,396
	Nonghyup Bank	USD	60,000,000	USD	37,037,890
	Kookmin Bank	USD	45,000,000	USD	9,994,485
	Korea Exchange Bank	₩	20,000,000	₩	16,140,724

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, 2011, is USD 180,000 thousand) in connection with the Company's capital contributions to DII and DHEL. The agreement requires for the Company to maintain its EBITDA more than 1.5 times of its net interest expense and its financial debt less than 6 times of its EBITDA. If it is not in compliance with the debt covenants, the Company may be able to lose benefit of time in case of creditor's demand.

(5) Technology transfer contract

The Company has seven 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 incurred for the years ended December 31, 2011 and 2010, amounted to ₩139,352,668 thousand and ₩138,513,304 thousand, respectively.

(6) Guarantees

1) Guarantees received by the Company from third parties as of December 31, 2011, 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	90,092,437	Guarantee for advance receipts, defect and contract performance guarantee
	EUR	12,535	Guarantee for defect
Woori Bank	USD	89,702,816	Guarantee for advance receipts and contract performance guarantee
Kookmin Bank	USD	9,994,485	Guarantee for advance receipts, defect and contract performance guarantee
Nonghyup Bank	USD	37,037,890	Guarantee for advance receipts
Hana Bank	USD	32,096,396	Guarantee for advance receipts
Seoul Guarantee Insurance	EUR	17,351,521	Guarantee for advance receipts and contract performance guarantee
	KRW	14,180,991	Guarantee for advance receipts and contract performance guarantee
	USD	258,924,024	
Total	EUR	17,364,056	
	KRW	14,180,991	

2) Guarantees provided by the Company to unrelated parties as of December 31, 2011, are as follows (in thousands of Korean won):

Guarantee	Guaranteed amount	Description of guarantee
Korea Securities Finance Co., Ltd.	₩ 24,761,586	Guarantee for the borrowings

33. TRANSACTIONS AND BALANCES WITH RELATED PARTIES:

Significant transactions and account balances with related parities as of and for the years ended December 31, 2011 and 2010, are as follows:

(1) Relationship between parents and subsidiaries as of December 31, 2011, is as follows:

Relationship	The name of the related parties
Shareholders with significant influence	Doosan Corporation
	Doosan Heavy Industries Construction Co., Ltd. (“DHIC”)
Subsidiary	DMI
Associates	Dalian Samyoung Doosan Metal Product Co., Ltd.
	CASCO Co., Ltd.
	DII
	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”)
	Neoplux Co., Ltd.
	Donghyun Engineering Co., Ltd.
	Doosan Defense Systems & Technology Co., Ltd.
	Oricom Inc. (“Oricom”)
	Doosan Eco Biznet
	Doosan Bears Inc.
	BNG Securities Co., Ltd.

(2) Significant transactions with related parties for the years ended December 31, 2011 and 2010, are summarized as follows (in thousands of Korean won):

Description	2011 Sales and others	2011 Purchases and others	2010 Sales and others	2010 Purchases and others
Shareholder with significant influence	₩ 2,470,488	₩ 296,547,613	₩ 987,143	₩ 255,121,157
Associates	4,243,335	29,493,462	4,260,354	24,528,643
Other related parties	4,002	36,136,051	3,762	4,547,603
Total	₩ 6,717,825	₩ 362,177,126	₩ 5,251,259	₩ 284,197,403

(3) As of December 31, 2011, December 31, 2010 and January 1, 2010, related significant balances are as follows (in thousands of Korean won):

Description	December 31, 2011 Receivables	December 31, 2011 Payables	December 31, 2010 Receivables	December 31, 2010 Payables	January 1, 2010 Receivables	January 1, 2010 Payables
Shareholder with significant influence	₩331,422	₩12,802,735	₩178,017	₩30,667,243	₩112,071	₩42,085,775
Associates	16,821,104	3,381,529	12,410,583	5,400,853	8,355,613	5,865,149
Other related parties	834,201	1,917,358	2,386,556	825,705	815,563	3,356,465
Total	₩17,986,727	₩18,101,622	₩14,975,156	₩36,893,801	₩9,283,247	₩51,307,389

(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, 2011 and 2010, is as follows (in thousands of Korean won):

Description	2011	2010
Short-term employee benefits and other	₩ 9,529,449	₩ 6,326,040
Provision for retirement and severance benefits	364,140	420,336
Share-based payment	135,448	-
Total	₩ 10,029,037	₩ 6,746,376

Guarantees provided by the Company to unrelated parties as of December 31, 2011, are ₩24,761,586 thousand (see Note 32).

34. CONSOLIDATED STATEMENTS OF CASH FLOWS:

(1) The adjustments and changes in operating assets and liabilities in the consolidated statements of cash flows for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won):

Description	2011	2010
Adjustments:		
Expenses not involving cash payments:		
Interest expenses	₩ 14,624,878	₩ 36,453,371
Income tax expense	72,110,794	71,621,607
Bad debt expenses	-	4,773,255
Other bad debt expenses	-	74,483
Loss on foreign currency translation	3,078,531	1,953,037
Depreciation	26,599,609	27,881,878
Amortization	314,274	345,830
Impairment loss of intangible assets	588,569	519,566
Loss on disposal of property, plant and equipment	97,562	173,510
Loss on valuation of inventories	26,846,273	4,755,982
Provision for construction warranties	6,540,753	6,179,233
Loss on valuation of derivatives	48,516,166	5,456,201
Loss on valuation of firm commitments	3,068,352	62,872,607
Share-based payment	135,448	-
Retirement benefits	6,355,311	5,845,935
Amortization of long-term prepaid expenses	-	325,832
Share of loss of equity-accounted investees	8,322,900	53,215,239
Loss on disposal of investments in associates	-	78,164
Interest income	(20,289,470)	(7,417,783)
Dividend income	(700)	-
Gain on foreign currency translation	(1,087,998)	(7,624,251)
Reversal of allowance for doubtful accounts	(1,084,487)	-
Income on financial guarantee	(3,400,911)	(3,533,833)
Gain on valuation of derivatives	(1,700,290)	(53,751,891)
Gain on valuation of firm commitments	(49,569,040)	(6,461,741)
Gain on disposal of property, plant and equipment	(196,294)	(16,187)
Reversal of impairment of intangible assets	-	(16,594)
Share of profit of equity-accounted investees	(11,351,626)	(8,873,568)
Gain on disposal of investment in associates	(8,863,206)	(68,907,445)
Total	₩ 119,655,398	₩ 125,922,437

Description	2011	2010
Changes in operating assets and liabilities:		
Accounts receivable – trade	₩ 5,877,424	₩ 85,260,554
Accounts receivable – other	1,143,500	(451,067)
Unbilled construction receivables	21,763	(28,544)
Advance payments	3,162,031	(581,954)
Prepaid expenses	(14,685,721)	970,621
Inventories	22,061,946	118,110,675
Other current assets	(522,164)	5,070,820
Long-term advance payments	(76,472)	-
Long-term prepaid expenses	(2,429,119)	606,047
Derivative instruments	25,086,124	(136,206,262)
Firm commitments	73,213,360	239,870,122
Accounts payable – trade	(35,131,996)	(15,776,007)
Accounts payable – other	15,151,721	(4,733,961)
Overbilled construction payables	(35,450,497)	14,196,736
Accrued expenses	14,373,630	(6,990,004)
Advance receipts	(268,737,274)	(297,082,277)
Other current liabilities	815,167	(3,593,286)
Plan assets	1,061,544	2,157,414
Non-current accrued expenses	2,332,156	135,989
Provision for construction warranties	(2,493,373)	(11,766,741)
Transfer in	26,333	(69,036)
Transfer out	(32,286)	-
Payment of severance benefits	(4,192,917)	(4,824,345)
Total	(₩ 199,425,120)	(₩ 15,724,506)

(2) Significant non-cash transactions for the years ended December 31, 2011 and 2010, are as follows (in thousands of Korean won) :

Description	2011	2010
Accrued expenses	₩ 24,800	₩ 2,682,873
Overbilled construction payables	80,000,000	50,000,000
Advance receipts	69,198,000	68,334,000
Total	₩ 149,222,800	₩ 121,016,873

It was offset from cash flow of short-term financial instruments, loans and borrowings for which transaction occurs frequently, mature in short term and the total amount of cash is huge.

Cash and cash equivalents in the consolidated statements of financial position are the same as cash and cash equivalents in the consolidated statements of cash flows.

35. SEGMENT INFORMATION:

(1) The following table provides sale information by geographical segment for the years ended December 31, 2011 and 2010 (in thousands of Korean won):

	2011	2010
Domestic	₩ 1,304,720,353	₩1,144,983,783
Overseas	711,120,254	698,940,004
Subtotal	2,015,840,607	1,843,923,787
Adjustments	(10,587,989)	(12,162,056)
After consolidation	₩ 2,005,252,618	₩1,831,761,731

(2) There is a single external customer who accounted for 10% or more of the Company's sales for the years ended December 31, 2011 and 2010 (in thousands of Korean won):

	2011	2010
Samsung Heavy Industries Co., Ltd.	₩ 592,986,550	₩ 348,502,619
Daewoo Shipbuilding & Marine Engineering Co., Ltd.	375,791,774	574,059,899
Total	₩ 968,778,324	₩ 922,562,518