



**DOOSAN INFRACORE CO., LTD.**

**SEPARATE FINANCIAL STATEMENTS  
FOR THE YEAR ENDED DECEMBER 31, 2011  
AND INDEPENDENT AUDITORS' REPORT**

## **Independent Auditor's Report**

English Translation of a Report Originally Issued in Korean

To the Shareholders and Board of Directors of  
Doosan Infracore Co., Ltd.:

We have audited the accompanying separate financial statements of Doosan Infracore Co., Ltd. (the "Company"). The financial statements consist of the separate statement of financial position as of December 31, 2011, and the related separate statement of income, separate statement of comprehensive income, separate statement of changes in equity and separate 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 separate financial statements and our responsibility is to express an opinion on these separate financial statements based on our audit. In addition, the separate 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 4, 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 financial statements. However, the separate financial statements of the Company as of and for the year ended December 31, 2010 presented for comparative purposes, in the accompanying financial statements, reflect such transition effects to K-IFRS.

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

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2011, and the results of its operations and its cash flows for the year ended December 31, in conformity with Korean International Financial Reporting Standards ("K-IFRS").

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

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 accompanying separate financial statements and may result in modification to the auditors' report.

## **DOOSAN INFRACORE CO., LTD.**

SEPARATE FINANCIAL STATEMENTS

AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2011 and 2010,

AND AS OF JANUARY 1, 2010

(DATE OF TRANSITION)

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

**Kim, Yong Seong; Lee, Oh Gyu**  
**DOOSAN INFRACORE CO., LTD. CEO**

**DOOSAN INFRACORE CO., LTD.**  
**SEPARATE STATEMENTS OF FINANCIAL POSITION**  
**AS OF DECEMBER 31, 2011, DECEMBER 31, 2010 AND JANUARY 1, 2010**  
(In Korean Won)

<u>ASSETS</u>	<u>Notes</u>	<u>December 31, 2011</u>	<u>December 31, 2010</u>	<u>January 1, 2010</u>
<b>CURRENT ASSETS:</b>				
Cash and cash equivalents	2,3,12	₩ 161,804,233,569	₩ 63,882,728,375	₩ 35,869,145,646
Short-term financial instruments	2,3,6,12	32,247,096,581	40,044,425,311	32,329,981,216
Short-term investment securities	2,3,8,12	1,200,000,000	-	-
Trade and other receivables, less allowance for doubtful accounts	2,3,5,7,12,33,35	912,662,318,916	933,313,995,060	714,620,581,423
Derivative assets	2,3,11,12	19,307,871,952	27,005,401,925	190,507,850,999
Inventories	2,9	603,574,889,637	456,525,802,360	357,466,732,335
Assets held for sale	2,37	1,675,933,149	-	-
Other current assets	11,12	22,949,514,340	166,929,873,848	511,209,440,243
<b>Total Current Assets</b>		<b>1,755,421,858,144</b>	<b>1,687,702,226,879</b>	<b>1,842,003,731,862</b>
<b>NON-CURRENT ASSETS:</b>				
Long-term financial instruments	2,3,6,12	11,500,000	11,500,000	11,500,000
Long-term investment securities	2,3,10,12	1,899,785,788	31,226,319,734	31,527,969,734
Other non-current receivables, less allowance for doubtful accounts	3,7,12	114,672,683,819	37,775,212,500	36,195,600,000
Property, plant and equipment, net	2,14,34	1,260,400,794,858	1,271,289,016,620	1,214,136,297,351
Intangible assets	2,15	278,057,007,666	212,612,088,313	177,262,283,802
Investment property	2,16	29,032,623,853	29,281,131,928	29,529,640,003
Investment in subsidiaries, joint ventures and associates	2,13,33,35	2,365,903,655,798	1,633,085,522,744	1,564,160,682,063
Other non-current assets	12	39,175,525,744	11,931,361,288	14,671,470,155
<b>Total Non-current Assets</b>		<b>4,089,153,577,526</b>	<b>3,227,212,153,127</b>	<b>3,067,495,443,108</b>
<b>TOTAL ASSETS</b>		<b>₩ 5,844,575,435,670</b>	<b>₩ 4,914,914,380,006</b>	<b>₩ 4,909,499,174,970</b>

(Continued)

**DOOSAN INFRACORE CO., LTD.**  
**SEPARATE STATEMENTS OF FINANCIAL POSITION (CONTINUED)**  
**AS OF DECEMBER 31, 2011, DECEMBER 31, 2010 AND JANUARY 1, 2010**  
**(In Korean Won)**

<u>LIABILITIES AND EQUITY</u>	<u>Notes</u>	<u>December 31, 2011</u>	<u>December 31, 2010</u>	<u>January 1, 2010</u>
<b>CURRENT LIABILITIES :</b>				
Trade and other payables	3,12,17,35	₩ 691,131,028,352	₩ 761,345,719,187	₩ 500,096,359,584
Short-term borrowings	2,3,12,18,33,34	124,793,719,903	175,019,638,952	609,926,777,284
Current portion of bonds	3,12,18	232,824,289,736	434,932,023,062	461,715,293,534
Current portion of long-term borrowings	2,3,12,18,33,34	225,323,655,212	165,275,547,841	177,146,333,479
Deferred income taxes payable	2,30	57,005,432,512	5,644,424,376	39,184,118,494
Derivative liabilities	2,3,11,12	436,932,319,506	15,138,264,342	106,940,461,060
Provisions	2,4,20	22,088,921,028	23,627,496,390	10,436,936,007
Other current liabilities		128,072,193,378	95,511,964,070	57,449,192,994
<b>Total Current Liabilities</b>		<u>1,918,171,559,627</u>	<u>1,676,495,078,220</u>	<u>1,962,895,472,436</u>
<b>NON-CURRENT LIABILITIES :</b>				
Bonds	3,12,18	1,594,857,576,069	700,732,217,048	666,594,608,077
Long-term borrowings	2,3,12,18,33,34	473,371,975,696	636,234,341,473	701,356,731,605
Other non-current payables	12,17	-	-	2,838,928,030
Retirement benefit obligation	2,5,19	117,225,821,175	84,194,062,326	55,552,983,019
Non-current derivative liabilities	2,3,11,12	286,042,423	329,479,880,654	268,628,617,470
Income tax liabilities	2,5,30	6,573,669,701	26,896,187,514	28,531,570,223
Other non-current liabilities	2,3,12	45,458,992,319	29,213,825,408	39,942,320,038
<b>Total Non-current Liabilities</b>		<u>2,237,774,077,383</u>	<u>1,806,750,514,423</u>	<u>1,763,445,758,462</u>
<b>Total Liabilities</b>		<u>4,155,945,637,010</u>	<u>3,483,245,592,643</u>	<u>3,726,341,230,898</u>
<b>EQUITY:</b>				
Capital stock	1,21	842,779,420,000	842,242,420,000	841,543,420,000
Capital surplus	21	22,077,027,652	5,298,993,755	1,960,219,955
Other equity items	22	(30,645,598,038)	5,597,318,258	3,591,419,287
Accumulated other comprehensive income	10,11,23	(37,506,129,338)	(21,488,246,547)	(85,033,373,718)
Retained earnings	19,24	891,925,078,384	600,018,301,897	421,096,258,548
<b>Total Equity</b>		<u>1,688,629,798,660</u>	<u>1,431,668,787,363</u>	<u>1,183,157,944,072</u>
<b>TOTAL LIABILITIES AND EQUITY</b>		<u>₩ 5,844,575,435,670</u>	<u>₩ 4,914,914,380,006</u>	<u>₩ 4,909,499,174,970</u>

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

**DOOSAN INFRACORE CO., LTD.**  
**SEPARATE STATEMENTS OF INCOME**  
**FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010**  
**(In Korean Won)**

	<u>Notes</u>	<u>2011</u>	<u>2010</u>
SALES	2,25,35	₩ 4,426,917,140,025	₩ 3,879,948,121,493
COST OF SALES	2,9,19,26,35	<u>(3,473,611,992,603)</u>	<u>(2,887,206,009,634)</u>
GROSS PROFIT		953,305,147,422	992,742,111,859
Selling and administrative expenses	19,26,27	(583,928,836,275)	(463,491,974,000)
Other operating income	28	32,698,430,728	20,269,210,308
Other operating expense	28	<u>(29,668,151,599)</u>	<u>(59,514,946,910)</u>
OPERATING INCOME		372,406,590,276	490,004,401,257
Profit(loss) on disposal of investment in subsidiaries		145,439,954,713	(53,186,427,036)
Finance income	11,29	190,306,482,424	378,015,209,778
Finance expense	11,29	<u>(382,943,650,662)</u>	<u>(638,360,412,546)</u>
INCOME FROM CONTINUING OPERATIONS BEFORE INCOME TAX EXPENSE		325,209,376,751	176,472,771,453
INCOME TAX EXPENSE	2,30	<u>(81,632,442,230)</u>	<u>(5,740,063,851)</u>
INCOME FROM CONTINUING OPERATIONS		243,576,934,521	170,732,707,602
INCOME FROM DISCONTINUED OPERATIONS	37	<u>70,227,457,107</u>	<u>18,925,314,785</u>
NET INCOME		<u>₩ 313,804,391,628</u>	<u>₩ 189,658,022,387</u>
Diluted earnings per share from continuing operations			
EARNINGS PER SHARE:	2,31		
From continuing operations			
Basic		₩ 1,445	₩ 1,014
Diluted		₩ 1,445	₩ 1,014
From continuing and discontinued operations			
Basic		₩ 1,862	₩ 1,126
Diluted		₩ 1,862	₩ 1,126

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

**DOOSAN INFRACORE CO., LTD.**  
**SEPARATE STATEMENTS OF COMPREHENSIVE INCOME**  
**FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010**  
**(In Korean Won)**

	2011	2010
NET INCOME	₩ 313,804,391,628	₩ 189,658,022,387
OTHER COMPREHENSIVE INCOME		
Actuarial losses	(21,897,615,141)	(15,483,382,541)
Loss on valuation of available-for-sale financial assets	(42,746,482)	(142,712,683)
Gain(loss) on valuation of cash flow hedge derivatives	(15,975,136,309)	63,687,839,854
Total other comprehensive income(loss)	(37,915,497,932)	48,061,744,630
TOTAL COMPREHENSIVE INCOME	₩ 275,888,893,696	₩ 237,719,767,017

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

**DOOSAN INFRACORE CO., LTD.**  
**SEPARATE STATEMENTS OF CHANGES IN EQUITY**  
**FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010**  
**(In Korean Won)**

	Capital stock	Capital surplus	Other equity items	Accumulated other comprehensive income (loss)	Retained earnings	Total
Balance at January 1, 2010	₩841,543,420,000	₩1,960,219,955	₩3,591,419,287	(₩85,033,373,718)	₩421,096,258,548	₩1,183,157,944,072
Net income	-	-	-	-	189,658,022,387	189,658,022,387
Actuarial losses	-	-	-	-	(15,483,382,541)	(15,483,382,541)
Share options	699,000,000	3,338,773,800	2,005,898,971	-	-	6,043,672,771
Loss on valuation of available-for-sale financial assets, net	-	-	-	(142,712,683)	-	(142,712,683)
Gain on valuation of cash flow hedge derivatives, net	-	-	-	63,687,839,854	-	63,687,839,854
Other	-	-	-	-	4,747,403,503	4,747,403,503
Balance at December 31, 2010	<u>₩842,242,420,000</u>	<u>₩5,298,993,755</u>	<u>₩5,597,318,258</u>	<u>(₩21,488,246,547)</u>	<u>₩600,018,301,897</u>	<u>₩1,431,668,787,363</u>

(Continued)

**DOOSAN INFRACORE CO., LTD.**  
**SEPARATE STATEMENTS OF CHANGES IN EQUITY (CONTINUED)**  
**FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010**  
**(In Korean Won)**

	Capital stock	Capital surplus	Other equity items	Accumulated other comprehensive income (loss)	Retained earnings	Total
Balance at January 1, 2011	₩842,242,420,000	₩5,298,993,755	₩5,597,318,258	(₩21,488,246,547)	₩600,018,301,897	₩1,431,668,787,363
Net income	-	-	-	-	313,804,391,628	313,804,391,628
Actuarial losses	-	-	-	-	(21,897,615,141)	(21,897,615,141)
Share options	537,000,000	2,989,345,800	2,826,820,317	-	-	6,353,166,117
Transfer of operation amongst consolidated entities	-	-	(39,069,736,613)	-	-	(39,069,736,613)
Changes by merger	-	13,788,688,097	-	-	-	13,788,688,097
Loss on valuation of available-for sale financial assets, net	-	-	-	(42,746,482)	-	(42,746,482)
Loss on valuation of cash flow hedge derivatives, net	-	-	-	(15,975,136,309)	-	(15,975,136,309)
Balance at December 31, 2011	<u>₩842,779,420,000</u>	<u>₩22,077,027,652</u>	<u>(₩30,645,598,038)</u>	<u>(₩37,506,129,338)</u>	<u>₩891,925,078,384</u>	<u>₩1,688,629,798,660</u>

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

**DOOSAN INFRACORE CO., LTD.**  
**SEPARATE STATEMENTS OF CASH FLOWS**  
**FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010**  
**(In Korean Won)**

	2011	2010
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Cash generated from operations	₩ 241,724,188,157	₩ 931,882,818,289
Net income	313,804,391,628	189,658,022,387
Adjustments	187,769,735,233	577,237,756,215
Changes in operating assets and liabilities	(259,849,938,704)	164,987,039,687
Interest received	16,659,822,821	12,953,123,919
Interest paid	(117,512,959,103)	(143,206,956,198)
Dividend received	37,939,500,000	62,841,940,299
Income tax paid	(66,896,116,986)	(34,789,300,726)
	<b>111,914,434,889</b>	<b>829,681,625,583</b>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Cash inflows from investing activities		
Decrease in short-term financial instruments	7,797,328,730	-
Decrease in loans	-	1,015,700,000
Disposal of long-term investment securities	27,650,000,000	359,802,883
Disposal of property, plant and equipment	7,913,259,968	7,285,403,999
Disposal of intangible assets	465,657,706	21,608,200
Disposal of interests in subsidiaries	190,000,000,000	46,881,483,156
Proceeds from transfer of operations	216,357,543,407	-
	<b>450,183,789,811</b>	<b>55,563,998,238</b>
Cash outflows for investing activities:		
Acquisition of short-term financial instruments	-	7,714,444,095
Increase in loans	19,309,300,000	3,459,900,000
Acquisition of long-term investment securities	31,460,000	1,412,607,230
Acquisition of property, plant and equipment	154,793,984,884	127,298,552,651
Acquisition of intangible assets	55,413,229,797	64,516,566,958
Acquisition of interests in subsidiaries and associates	774,013,801,428	167,858,523,698
	<b>(1,003,561,776,109)</b>	<b>(372,260,594,632)</b>
Net Cash Used in Investing Activities	<b>(553,377,986,298)</b>	<b>(316,696,596,394)</b>

(Continued)

**DOOSAN INFRACORE CO., LTD.**  
**SEPARATE STATEMENTS OF CASH FLOWS (CONTINUED)**  
**FOR THE YEARS ENDED DECEMBER 31, 2011 AND 2010**  
(In Korean Won)

	2011	2010
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Cash inflows from financing activities:		
Increase of borrowings	1,077,868,449,530	1,740,174,797,485
Issuance of bonds	1,125,790,683,323	468,056,800,000
Exercise of share option	2,207,040,000	2,480,700,000
Sub-total	2,205,866,172,853	2,210,712,297,485
Cash outflows for financing activities:		
Repayment of borrowings	1,231,293,606,337	2,233,682,977,008
Repayment of bonds	435,000,000,000	462,000,000,000
Sub-total	(1,666,293,606,337)	(2,695,682,977,008)
Net Cash Provided by (Used in) Financing Activities	539,572,566,516	(484,970,679,523)
<b>EFFECT OF EXCHANGE RATE CHANGES IN CASH AND CASH EQUIVALENTS</b>	(187,509,913)	(766,937)
<b>NET INCREASE IN CASH AND CASH EQUIVALENTS</b>	97,921,505,194	28,013,582,729
<b>CASH AND CASH EQUIVALENTS, BEGINNING OF THE YEAR</b>	63,882,728,375	35,869,145,646
<b>CASH AND CASH EQUIVALENTS, END OF THE YEAR</b>	₩ 161,804,233,569	₩ 63,882,728,375

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

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

**1. ORGANIZATION AND DESCRIPTION OF THE BUSINESS**

Doosan Infracore Co., Ltd. (“DI”) was incorporated on October 23, 2000 as a spin-off from Daewoo Heavy Industries Ltd. (“DHI”) under the Corporate Restructuring Agreement dated January 20, 2000 between DHI and its creditors, approved by DHI’s shareholders on June 27, 2000. DI operates and manages DHI’s manufacturing, selling, and construction businesses of industrial machinery and equipment.

In connection with the spin-off, effective September 30, 2000, DHI transferred to DI certain assets and liabilities amounting to ₩2,494 billion and ₩2,806 billion, respectively.

DI was listed on the stock market of Korean Exchange on February 2, 2001, and changed its name to Doosan Infracore Co., Ltd. from Daewoo Heavy Industries & Machinery Ltd. on April 29, 2005. DI’s common stock as of December 31, 2011 amounts to ₩842,779 million, of which 44.80% is owned by Doosan Heavy Industries and Construction Co., Ltd.

**2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

DI (the “Company”) maintains its official accounting records in Korean Won and prepares separate financial statements in conformity with Korean statutory requirements and Korean International Financial Reporting Standards (“K-IFRS”), in the Korean language (Hangul). Accordingly, these separate 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 effect of transition to K-IFRS is explained in Note 5.

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

The separate 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 separate 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 separate financial statements for the current period and accompanying comparative period.

The Company has not applied the following new or revised K-IFRSs 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 these amendments referred above will have a significant effect on the Company's separate financial statements and disclosures.

## (2) Subsidiaries, Joint Ventures and Associates

The Company's separate financial statements are prepared in accordance with the K-IFRS 1027 *Consolidated and Separate Financial Statements*. The Company has elected to use book value under previous GAAP as deemed cost for subsidiaries, joint ventures and associates at the date of transition to K-IFRS. After the date of transition, subsidiaries, joint ventures and associates are measured at cost. Dividends from subsidiaries, joint ventures and associates are recognized as **income** when the right to receive payment is established.

## (3) Foreign Currency Translation

### 1) Functional currency and presentation currency

The Company's financial statements are presented in the currency of the primary economic environment in which it operates (its functional currency). The functional currency of DI and the presentation currency for the separate 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 are recognized in **income** or loss whereas the gain(loss) from qualified cash flow hedge and net investment hedge for foreign operations is deferred as an equity item.

## (4) Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, demand deposits, short-term, highly liquid investments with maturities (or date of redemption) of three months or less upon acquisition.

## (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 financial assets' (AFS), 'held-to-maturity investments'. The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition.

#### a) FVTPL

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

b) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and receivables, 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

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

d) Held-to-maturity investments

Held-to-maturity investments are non-derivative financial instruments with fixed or determinable payments and fixed maturity that the Company has the positive intention and ability to hold to maturity. Held-to-maturity investments, 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

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

FVTPL and AFS are subsequently measured at fair value. Loans and receivables and held-to-maturity investments are measured at amortized cost using the effective interest method. Gains or losses arising from changes in fair value of FVTPL and dividends on FVTPL are recognized in profit or loss

Investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are measured at cost. Also, derivatives which are linked to and settled by delivery of those unquoted equity investments are measured at cost. Other AFS is measured at fair value. Gains and losses arising from changes in fair value of AFS are accumulated in the other comprehensive income. Where the investment is disposed of or is determined to be impaired, the cumulative gain or loss previously accumulated in the equity is reclassified into other gains and losses in the statement of comprehensive income.

The fair value of AFS monetary assets denominated in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of the reporting period. The foreign exchange gains and losses that are recognized in **income** or loss are determined based on the amortized cost of the monetary asset. Other foreign exchange gains and losses are recognized in other comprehensive income. Exchange differences from non-monetary financial assets and liabilities which are classified as FVTPL are regarded as changes in fair value and recognized in **income** or loss. Exchange differences from changes in fair value of AFS are recognized in other comprehensive income. Interest from AFS calculated using the effective interest method is recognized in finance income in the statement of income. Dividends on AFS equity instruments are recognized in the other gains when the Company's right to receive the dividends is established.

### 3) Impairment of financial assets

#### a) Financial assets measured at amortized cost

The Company assesses at the end of each reporting period whether there is any objective evidence that a financial asset is impaired. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected. Impairment loss is the difference between the asset's carrying amount and the present value of estimated future cash flows, excluding future credit losses that have not been incurred, discounted at the financial asset's original effective interest rate at initial recognition. The carrying amount of the financial asset is reduced by the impairment loss and the amount of the loss is recognized in **income** or loss. The Company measures impairment loss based on fair value of financial assets from observable market data.

If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed and recognized in **income** or loss.

#### b) AFS

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

### 4) Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

### 5) Offsetting financial assets and financial liabilities

Financial assets and financial liabilities are offset as a net amount in the statement 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) Financial Liabilities and Equity Instruments

### 1) Classification as debt or equity

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

### 2) Equity instruments

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

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

### 3) Compound instruments

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

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

The equity component is determined by deducting the amount of the liability component from the fair value of the compound instrument as a whole. This is recognized and included in equity, net of income tax effects, and is not subsequently remeasured.

Transaction costs related to issuance of convertible bonds are allocated between the liability and equity components in proportion to relative fair value. Transaction costs allocated to equity are recognized directly in equity. Transaction costs allocated to liability are included in book value of liability and amortized using effective interest method.

### 4) Financial liabilities

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

## 5) FVTPL

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

A financial liability is classified as held for trading if:

- it has been acquired principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Company manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and K-IFRS 1039 *Financial Instruments: Recognition and Measurement* permits the entire combined contract (asset or liability) to be designated as at FVTPL.

FVTPL are stated at fair value, with any gains or losses arising on remeasurement recognized in **income** or loss. The net gain or loss recognized in **income** or loss incorporates any interest paid on the financial liability.

## 6) Other financial liabilities

Other financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs.

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

The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

## 7) Financial guarantee contract liabilities

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*

#### 8) Derecognition of financial liabilities

The Company derecognizes financial liabilities when, and only when, the Company's obligations are discharged, cancelled or expired. The difference between consideration paid and book value of financial liabilities derecognized is recognized in **income** or loss.

#### (7) Trade Receivables

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

#### (8) Inventories

Inventories are stated at the lower of cost and 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, 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 (current replacement cost for raw materials) due to damage, obsolescence, decline in selling prices and others and recognizes loss on inventory valuation. Loss on inventory valuation is charged to cost of sales when it is ordinary and to other expense when it is extraordinary. When the circumstances that previously caused inventories to be written down below cost no longer exist and the new market value of inventories subsequently recovers, the valuation loss is reversed to the extent of the original valuation loss and the reversal is deducted from cost of sales.

#### (9) Property, Plant and Equipment

Property, plant and equipment are stated at cost less subsequent accumulated depreciation and accumulated impairment losses. 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 replace part of previously recognized item of property, plant and equipment are added to the carrying amount of an asset, or recognized as a separate asset, if it is probable that future economic benefits associated with the assets will flow into the Company and the cost of an asset can be measured reliably. The carrying amount of what was replaced is derecognized. Routine maintenance and repairs are expensed as incurred.

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

	<u>Estimated useful lives (years)</u>
Buildings	20 – 40
Structures	20
Machinery	8 – 15
Vehicles	5
Tools	5
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 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 difference between the net disposal proceed and carrying amount of the item is recognized in other operating income(loss).

#### (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. However, useful lives of membership and other intangible assets with similar nature 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 but tested for impairment once a year.

The estimated useful lives of the assets are as follows:

	<u>Estimated useful lives (years)</u>
Industrial rights	5 – 10, 20, 40
Development costs	5
Other intangible assets	4 – 10

Expenditures relating to development activities are capitalized when the result of the development is for the development of new products or substantial improvement of functions of existing products; there is technical and commercial feasibility of completing the development; and the Company has the ability to measure reliably the expenditure attributable to the development. Capitalized development cost 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 and administrative expenses.

The expenditure on research and development which does not meet conditions noted above is recognized as an expense when it is incurred.

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

#### (11) Investment Property

Investment properties are properties held to earn rentals and/or for capital appreciation. Investment properties are measured initially at cost, including transaction costs. Subsequent to initial recognition, the book value of investment property is presented at 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 being accounted for as a change in accounting estimate.

#### (12) 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, or 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.

### (13) Borrowings

Borrowings are measured initially 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 twelve months after the end of the reporting period. Otherwise borrowings are classified as current liabilities.

### (14) 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 post-employment benefit plans other than defined contribution plans. Generally under a 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, ages and other. The retirement benefit obligation recognized in the statement 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 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 is recognized in other comprehensive income, which is immediately recognized as retained earnings.

### (15) 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 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 statement of income, a net amount is presented, being the anticipated cost of the obligation less the reimbursement.

A possible obligation that arises from past events and whose existence will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the entity, or a present obligation that arises from past events but is not recognized because it is not probable that an outflow of resources embodying economic benefits will be required to settle the obligation or the amount of the obligation cannot be measured with sufficient reliability is defined as contingent liability which is disclosed.

## (16) 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 as hedges of recognized assets or liabilities or firm commitments (fair value hedges) or hedges of highly probable forecast transactions (cash flow hedges).

At the inception of the hedging relationship, the Company 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. 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.

#### *Fair value hedge*

Changes in the fair value of derivatives (foreign currency gain(loss) if non-derivative financial instruments are designated as hedging instruments) 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.

#### *Cash flow hedge*

The effective portion of changes in the fair value of derivatives (foreign currency gain(loss) if non-derivative financial instruments are designated as hedging instruments) 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) Embedded derivative

An embedded derivative shall be separated from host contract and accounted for as a derivative if the economic characteristics and risks of the embedded derivative are not closely related to the economic characteristics and risks of the host contract, a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative and the hybrid (combined) instrument is not classified as FVTPL. Fair value changes in embedded derivatives separated from host contracts are recognized in income or loss.

## 3) Other derivative

Derivative 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.

## (17) Dividend

Dividend payable is recognized as liability when declaration of the dividend is approved by shareholders` meeting.

## (18) Share-Based Payment Arrangement

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

## (19) 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) 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 a straight-line basis over the term of the lease.

#### (20) Government Grants

Government grants are not recognized until there is reasonable assurance that the Company will comply with the conditions attached to them and that the grants will be received. The benefit of a government loan at a below-market interest rate is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates. When the related assets are acquired, they are recorded as a deduction from the acquired assets and are offsetting against the depreciation of the acquired assets over their useful lives. Government grants related to revenue are recognized in income or loss over the periods in which the Company recognizes expenses of the related costs for which the grants are intended to compensate. Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Company with no future related costs are recognized in income or loss in the period in which they become receivable.

#### (21) Income Tax and Deferred Tax

Income tax expense is composed of current and deferred tax. Current 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 and deferred tax are also recognized in other comprehensive income or directly in equity, respectively.

Income tax (current tax) expense is the sum of corporate tax for each fiscal year and tax added to corporate tax under corporate income tax law and other law. Additional income taxes or tax refunds for the prior periods are included in income tax expense for the current period when recognized. The Company's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period. Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable income.

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

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

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

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

#### (22) Earnings Per Share

Basic earnings per common share is computed by dividing net income attributable to owners of the Company by the weighted average number of common shares outstanding during the period. Diluted earnings per common share is computed by dividing diluted net income attributable to owners of the Company, which is adjusted by adding back the after-tax amount of expenses related to dilutive potential ordinary shares, by weighted average number of common shares and dilutive potential ordinary shares outstanding during the period. Antidilutive potential ordinary shares are disregarded in the calculation of diluted earnings per share.

#### (23) Assets Held for Sale

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. 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) decrease, 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 (foreign currency risk, interest rate risk), credit risk and liquidity risk relating to the operations of the Company. The purpose of risk management policy which is approved by foreign currency risk management committee and board of directors is to minimize potential risks which could have adverse effect on financial performance.

The foreign currency risk management committee and board of directors provide documented policies on overall risk management as well as specific risk management such as foreign currency risk and interest rate risk. Financial risk management activities such as identification, evaluation and management of financial risks at the Company level are performed by treasury and international finance department, in accordance with the aforementioned documented risk management policies. In addition, the Company enters into derivative contracts to hedge against certain risks.

#### (1) Market Risk

##### 1) Foreign currency risk

The Company is exposed to foreign currency risk since it makes international transactions in foreign currencies. Foreign currency risk arises from forecast transactions, recognized assets and liabilities and net investments in foreign operations.

Foreign currency risk is managed by the Company's policy on foreign currencies. The Company's basis for foreign currency management is to reduce income/loss volatility. 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 exposures.

The book value of the Company's monetary assets and liabilities denominated in foreign currencies, and exposed to foreign currency risk as of December 31, 2011 and 2010 is as follows (in millions of Korean Won):

	December 31, 2011					December 31, 2010				
	USD	EUR	CNY	Others (*)	Total	USD	EUR	CNY	Others (*)	Total
Assets	₩691,036	₩147,696	₩564	₩42,578	₩881,874	₩526,743	₩115,754	₩-	₩38,729	₩681,226
Liabilities	750,194	94,425	200	66,737	911,556	180,175	97,517	131	52,750	330,573
Net assets (liabilities)	(₩59,158)	₩53,271	₩364	(₩24,519)	(₩29,682)	₩346,568	₩18,237	(₩131)	(₩14,021)	₩350,653

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

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

	Year ended December 31, 2011		Year ended December 31, 2010		
	10% appreciation in KRW against foreign currency	10% depreciation in KRW against foreign currency	10% appreciation in KRW against foreign currency	10% depreciation in KRW against foreign currency	
Net income before income tax expense		(₩2,968)	₩2,968	₩35,066	(₩35,066)

## 2) Interest rate risk

The Company's interest rate risk is related to borrowings and bank deposits with floating interest rates and the 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 due to the changes in market interest rates.

To manage the Company's interest rate risk in advance, the Company tries to minimize external borrowings using internal funds, reduce borrowings with high interest rates, improve the structure of long-term and short-term borrowings, maintain the appropriate balance between borrowings with floating interest rate and fixed interest rate, and regularly monitor domestic and international interest rate changes with action plans.

The book value of the Company's financial liabilities with floating interest rates exposed to interest rate risk as of December 31, 2011 and 2010 is as follows (in millions of Korean Won):

	<u>December 31, 2011</u>	<u>December 31, 2010</u>
Financial liabilities	₩ 770,721	₩ 596,721

A sensitivity analysis on the Company's net income before income tax expense, assuming a 1% increase and decrease in interest rate but other factors being unchanged, for the years ended December 31, 2011 and 2010 is follows (in millions of Korean Won):

	<u>Year ended December 31, 2011</u>		<u>Year ended December 31, 2010</u>	
	<u>1% increase</u>	<u>1% decrease</u>	<u>1% increase</u>	<u>1% decrease</u>
Net income before income tax expense	(₩7,707)	₩7,707	(₩5,967)	₩5,967

### 3) Price risk

The Company is exposed to equity price risks such as fair value or future cash flow changes 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

The credit risk refers to risk of financial losses to the Company when the counterpart defaults on the obligations of the contract and arises from the Company's normal transaction and investing activity. To manage credit risk, the Company evaluates the credit worthiness of each customer or counterparty considering the financial status, past experience and other factors. The Company establishes credit limit for each customer and counterparty.

Credit risk arises from cash and cash equivalent, derivatives and deposit in banks and financial institutions as well as the Company's receivables and firm commitment.

The purpose of credit risk management is to maintain an efficient management of credit risk, provide prompt support for decision making and minimize loss through safety measures for receivables. When default is expected for the receivables which have indication of impairment or are past due as of December 31, 2011, the Company evaluates the risk and an allowance is recognized in the statement of financial position.

1) Exposure to credit risk

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

	December 31, 2011	December 31, 2010	January 1, 2010
Cash and cash equivalent (*)	₩161,804	₩63,874	₩35,869
Loans and receivables			
Current and non-current financial instrument	32,259	40,056	32,341
Trade and other receivables	912,662	933,314	714,621
Other non-current receivables	114,673	37,775	36,196
Held-to-maturity investments	1,296	28,914	28,861
AFS	1,804	2,312	2,667
Derivative assets	19,308	27,005	686,728
Total	<u>₩1,243,806</u>	<u>₩1,133,250</u>	<u>₩1,537,283</u>

(\*) Cash on hand is excluded.

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

	December 31, 2011						Total
	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	
Trade receivables	₩2,531	₩623,465	₩165,192	₩5,918	₩15,425	₩17,712	₩830,243
Other receivables	-	2,735	12,131	34,918	3,854	51,014	104,652
Accrued income	-	8,892	-	-	-	-	8,892
Short-term loans	-	2,000	-	-	-	-	2,000
Other receivables (non-current)	-	58,593	-	-	-	-	58,593
Long-term loans	-	56,079	-	-	-	-	56,079
Total	<u>₩2,531</u>	<u>₩751,764</u>	<u>₩177,323</u>	<u>₩40,836</u>	<u>₩19,279</u>	<u>₩68,726</u>	<u>₩1,060,459</u>

  

	December 31, 2010						Total
	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	
Trade receivables	₩6,070	₩612,527	₩134,772	₩20,890	₩12,391	₩12,179	₩798,829
Other receivables	244	52,914	22,095	47,937	446	31,639	155,275
Accrued income	-	9,385	-	-	-	-	9,385
Long-term loans	-	37,775	-	-	-	-	37,775
Total	<u>₩6,314</u>	<u>₩712,601</u>	<u>₩156,867</u>	<u>₩68,827</u>	<u>₩12,837</u>	<u>₩43,818</u>	<u>₩1,001,264</u>

January 1, 2010

	Individually impaired receivables	Receivables assessed for impairment on a collective basis					Total
		Within due	0 – 3 months	3 – 6 months	6 – 12 months	More than 12 months	
Trade receivables	₩2,232	₩469,231	₩89,129	₩23,341	₩47,536	₩27,608	₩659,077
Other receivables	-	5,397	36,725	1,127	22,271	17,172	82,692
Accrued income	-	5,629	-	-	-	-	5,629
Long-term loans	-	36,196	-	-	-	-	36,196
<b>Total</b>	<b>₩2,232</b>	<b>₩516,453</b>	<b>₩125,854</b>	<b>₩24,468</b>	<b>₩69,807</b>	<b>₩44,780</b>	<b>₩783,594</b>

An allowance is recognized by applying appropriate allowance rate for receivables that can be assessed to be impaired individually due to insolvency, bankruptcy and others. Group of financial assets that are not individually significant and have similar credit risk characteristics are assessed for impairment on a collective basis 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 for three months and twelve months. Through these forecasts, the Company maintains the required liquidity volume and manages liquidity risk in advance.

The Company's major non-derivative liabilities as of December 31, 2011, December 31, 2010 and January 1, 2010 are matured as follows (in millions of Korean Won):

	Book value	December 31, 2011				
		Nominal cash flows according to contract (*)				
		Total	Less than 1 year	1-2 years	2-5 years	More than 5 years
Trade and other payables	₩691,131	₩691,131	₩691,131	₩-	₩-	₩-
Short-term borrowings	124,794	124,794	124,794	-	-	-
Long-term borrowings	698,696	701,926	225,324	263,031	212,465	1,106
Bonds	1,827,682	1,836,584	233,000	470,000	1,133,584	-
Financial guarantee liability	44,659	2,102,638	2,102,638	-	-	-
<b>Total</b>	<b>₩3,386,962</b>	<b>₩5,457,073</b>	<b>₩3,376,887</b>	<b>₩733,031</b>	<b>₩1,346,049</b>	<b>₩1,106</b>

	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
Trade and other payables	₩761,346	₩761,412	₩761,412	₩-	₩-	₩-
Short-term borrowings	175,020	175,020	175,020	-	-	-
Long-term borrowings	801,510	801,510	165,276	215,319	418,730	2,185
Bonds	1,135,664	1,138,000	435,000	233,000	470,000	-
Financial guarantee liability	29,214	1,930,638	1,930,638	-	-	-
<b>Total</b>	<b>₩2,902,754</b>	<b>₩4,806,580</b>	<b>₩3,467,346</b>	<b>₩448,319</b>	<b>₩888,730</b>	<b>₩2,185</b>

	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
Trade and other payables	₩502,935	₩503,184	₩500,278	₩2,906	₩-	₩-
Short-term borrowings	609,927	609,927	609,927	-	-	-
Long-term borrowings	878,503	878,505	177,148	252,307	445,852	3,198
Bonds	1,128,310	1,130,000	462,000	435,000	233,000	-
Financial guarantee liability	35,732	1,962,779	1,962,779	-	-	-
<b>Total</b>	<b>₩3,155,407</b>	<b>₩5,084,395</b>	<b>₩3,712,132</b>	<b>₩690,213</b>	<b>₩678,852</b>	<b>₩3,198</b>

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

#### (4) Capital Risk

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

The Company manages its' capital structure, through dividend payments to shareholders, return of capital to shareholders, and issues of new shares and sales of its assets for debt reduction. 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 as of December 31, 2011 and 2010 and January 1, 2010 are as follows (in millions of Korean Won):

	December 31, 2011	December 31, 2010	January 1, 2010
Debt	₩4,155,946	₩3,483,246	₩3,726,341
Equity	1,688,630	1,431,669	1,183,158
<b>Debt-equity ratio</b>	<b>246.11%</b>	<b>243.30%</b>	<b>314.95%</b>

#### **4. SIGNIFICANT ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTIES**

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

##### **(1) Warranty Provision**

The Company provides warranty for product when related revenue is recognized. At the end of each reporting period, provisions for the expected cost of warranty obligations for the best estimate of the expenditure required to settle the Company's current and future obligations. The Company continuously introduces new products using advanced complex technology and accordingly these estimates may change in future period due to additional provisions required under local legislation and practice.

##### **(2) Impairment of Goodwill**

The Company performs test for goodwill impairment annually. Recoverable amount of cash-generating units are based on calculation of value in use. The value in use calculation requires accounting estimates.

##### **(3) Allowance for Doubtful Accounts of the Impairment of Receivables**

In order to calculate the impairment of receivables, the management of the Company estimates an expected bad debt considering the aging of receivables, past experience of bad debt, and economic and industrial factors.

##### **(4) Measurement of Property, Plant and Equipment and Intangible Assets**

If the Company acquires property, plant and equipment or intangible assets from business combination, it is required to estimate the fair value of these assets at the acquisition date. It is also required to estimate useful lives for depreciation and amortization. For these estimation processes, the management's judgments shall take an important role.

#### **5. TRANSITION TO K-IFRS**

The Company's separate financial statements for the year ended December 31, 2011 are prepared in accordance with K-IFRS. The separate financial statements for the year ended December 31, 2010, comparatively presented herein, which were originally prepared in accordance with previous GAAP (Korean GAAP) have been restated in accordance with K-IFRS 1101 *First-time adoption of Korean International Financial Reporting Standards* with a date of transition of January 1, 2010.

(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 *First-time adoption of K-IFRS*

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 K-IFRSs 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 land at the date of transition to K-IFRS.

c) Borrowing costs

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

d) Cumulative translation differences

Cumulative translation differences for all foreign operations have been deemed to be zero at the date of transition to K-IFRS.

e) Investments in associates

The Company has elected to use the book value under previous GAAP as deemed cost for investments in associates at the date of transition to K-IFRS.

2) 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.

3) Goodwill or bargain purchase gain acquired by business combinations

Under previous GAAP, the Company amortized goodwill or bargain purchase gain (negative goodwill) acquired as a result of business combinations on a straight-line method over a certain period. Under K-IFRS, goodwill is not amortized but reviewed for impairment annually and bargain purchase gain is recognized immediately in the statement of income.

4) 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.

5) Deferred 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 on the statement of financial position.

Under previous GAAP, the differences between the carrying value and the tax base of the investments in subsidiaries, joints ventures and associates were reviewed as a whole for the recognition of the related deferred tax assets and liabilities. Under K-IFRS, the temporary differences associated with those investments are recognized as deferred tax assets and liabilities reflecting the manner in which they are extinguished.

6) Valuation of put option for preferred shares

As the put option granted by the Company for the preferred shares of its subsidiary qualifies for derivatives instruments, the fair value of the put options is recognized as a financial liability

7) 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.

(2) Explanation of the transition effects to K-IFRS

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

	Reference to Note 5	Assets	Liabilities	Equity
Previous GAAP (Korean-GAAP)		₩4,778,605	₩3,497,683	₩1,280,922
Adjustments:				
Employee benefits	(1)- 2)	-	8,417	(8,417)
Transfer of financial assets	(1)- 4)	47,542	47,542	-
Put option for preferred share	(1)- 6)	81,748	253,723	(171,975)
Financial guarantee contract liabilities	(1)- 7)	34,656	35,732	(1,076)
Deferred tax and tax effect of adjustments	(1)- 5)	<u>(33,052)</u>	<u>(116,756)</u>	<u>83,704</u>
Total adjustment		<u>130,894</u>	<u>228,658</u>	<u>(97,764)</u>
K-IFRS		<u>₩4,909,499</u>	<u>₩3,726,341</u>	<u>₩1,183,158</u>

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

	Reference to Note 5	Assets	Liabilities	Equity	Net income	Comprehensive income
Previous GAAP (Korean-GAAP)		₩4,443,220	₩3,129,944	₩1,313,276	₩38,252	₩24,846
Adjustments:						
Reversal of equity method and equity transaction amongst associates	(1)-1), 3)	282,589	-	282,589	227,211	298,197
Employee benefits	(1)- 2)	-	19,956	(19,956)	8,312	(11,539)
Transfer of financial assets	(1)- 4)	83,694	83,694	-	-	-
Put option for preferred share	(1)- 6)	81,748	325,693	(243,945)	(71,969)	(71,969)
Financial guarantee contract liabilities	(1)- 7)	28,530	29,213	(683)	391	392
Deferred tax and tax effect of adjustments	(1)- 5)	(37,531)	(105,254)	67,723	(12,552)	(34,871)
Other		32,664	-	32,664	13	32,664
Total adjustment		471,694	353,302	118,392	151,406	212,874
K-IFRS		<u>₩4,914,914</u>	<u>₩3,483,246</u>	<u>₩1,431,668</u>	<u>₩189,658</u>	<u>₩237,720</u>

3) Adjustments in statement of cash flows due to the transition to K-IFRS

Under K-IFRS, interest received, interest paid, dividends received, and income tax paid which were not presented separately under previous GAAP, are now separately presented and the cash flows from the related income (expense) and assets (liabilities) have been adjusted. No other significant differences in the statement of cash flows under previous GAAP compared to K-IFRS have been noted.

4) 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 both K-IFRS and previous GAAP.

## 6. RESTRICTED FINANCIAL ASSETS

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

	December 31, 2011	December 31, 2010	January 1, 2010	Description
Short-term financial instruments	₩9,006	₩-	₩-	Bank transaction deposits and others
Long-term financial instruments	12	12	12	Checking account deposit
Total	<u>₩9,018</u>	<u>₩12</u>	<u>₩12</u>	

## 7. TRADE AND OTHER RECEIVABLES

(1) Trade and other receivables as of December 31, 2011 and 2010 and January 1, 2010 consist of the following (in millions of Korean Won):

	December 31, 2011			December 31, 2010			January 1, 2010		
	Gross	Allowance for doubtful accounts		Gross	Allowance for doubtful accounts		Gross	Allowance for doubtful accounts	
		Book value			Book value			Book value	
Current									
Trade receivables	₩830,243	(₩15,936)	₩814,307	₩798,829	(₩12,931)	₩785,898	₩655,077	(₩15,417)	₩643,660
Other receivables	104,652	(17,189)	87,463	155,275	(17,244)	138,031	82,692	(17,361)	65,331
Accrued income	8,892	-	8,892	9,385	-	9,385	5,629	-	5,629
Short-term loans	2,000	-	2,000	-	-	-	-	-	-
Total	945,787	(33,125)	912,662	963,489	(30,175)	933,314	747,398	(32,778)	714,620
Non-current									
Other receivables	58,593	-	58,593	-	-	-	-	-	-
Long-term loans	56,079	-	56,079	37,775	-	37,775	36,196	-	36,196
Total	₩114,672	₩-	₩114,672	₩37,775	₩-	₩37,775	₩36,196	₩-	₩36,196

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

	Year ended December 31, 2011					
	January 1, 2011	Increase	Reversal	Write-off	Transfer of operations	December 31, 2011
Trade receivables	₩12,931	₩3,912	₩-	(₩194)	(₩713)	₩15,936
Other current receivables	17,244	1,423	(1,064)	-	(414)	17,189
Total	₩30,175	₩5,335	(₩1,064)	(₩194)	(₩1,127)	₩33,125
	Year ended December 31, 2010					
	January 1, 2010	Increase	Reversal	Write-off		December 31, 2010
Trade receivables	₩15,417	₩-	(₩1,685)	(₩801)		₩12,931
Other current receivables	17,361	-	(117)	-		17,244
Total	₩32,778	₩-	(₩1,802)	(₩801)		₩30,175

## 8. SHORT-TERM INVESTMENT SECURITIES

Short-term investment securities as of December 31, 2011, December 31, 2010 and January 1, 2010 are summarized as follows (in millions of Korean Won):

	December 31, 2011	December 31, 2010	January 1, 2010
Held-to-maturity financial assets	₩1,200	₩-	₩-

## 9. INVENTORIES

Inventories as of December 31, 2011, December 31, 2010 and January 1, 2010 are summarized as follows (in millions 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
Merchandise	₩65,698	(₩4,182)	₩61,516	₩62,597	(₩10,404)	₩52,193	₩52,285	(₩7,203)	₩45,082
Finished goods	134,351	(2,614)	131,737	109,516	(3,617)	105,899	55,481	(3,838)	51,643
Semi-finished goods	37,303	-	37,303	25,851	-	25,851	-	-	-
Work-in-progress	59,304	-	59,304	11,818	(13)	11,805	51,362	(26)	51,336
Raw materials	251,865	(6,758)	245,107	216,621	(7,883)	208,738	188,275	(11,058)	177,217
Supplies	1,224	-	1,224	1,419	-	1,419	934	-	934
Materials in transit	67,384	-	67,384	50,571	-	50,571	31,255	-	31,255
<b>Total</b>	<b>₩617,129</b>	<b>(₩13,554)</b>	<b>₩603,575</b>	<b>₩478,393</b>	<b>(₩21,867)</b>	<b>₩456,526</b>	<b>₩379,592</b>	<b>(₩22,125)</b>	<b>₩357,467</b>

Cost of inventory charged to cost of sales amounted to ₩3,318,221 million and ₩2,754,747 million for the years ended December 31, 2011 and 2010, respectively. Reversal of loss on inventory valuation deducted from cost of sales amounted to ₩4,622 million and ₩1,127 million for the years ended December 31, 2011 and 2010, respectively.

## 10. LONG-TERM INVESTMENT SECURITIES

(1) Long-term investment securities as of December 31, 2011, December 31, 2010 and January 1, 2010 are summarized as follows (in millions of Korean Won):

	December 31, 2011	December 31, 2010	January 1, 2010
Available-for-sale financial assets	₩1,804	₩2,312	₩2,667
Held-to-maturity financial assets	96	28,914	28,861
<b>Total</b>	<b>₩1,900</b>	<b>₩31,226</b>	<b>₩31,528</b>

(2) Available-for-sale financial assets

1) Available-for-sale financial assets as of December 31, 2011, December 31, 2010 and January 1, 2010 are summarized as follows (in millions of Korean Won):

	December 31, 2011	December 31, 2010	January 1, 2010
Investments in non-listed company	₩820	₩1,288	₩1,295
Beneficiary certificates	519	567	923
Investments in funds	465	457	449
<b>Total</b>	<b>₩1,804</b>	<b>₩2,312</b>	<b>₩2,667</b>

2) Changes in unrealized gain(loss) on available-for-sale financial assets for the years ended December 31, 2011 and 2010 are as follows (in millions of Korean Won):

	Year ended December 31, 2011			
	January 1, 2011	Valuation	Reclassification from equity to profit or loss	December 31, 2011
Beneficiary certificates	₩285	(₩48)	₩-	₩237
tax effect	(63)	5	-	(58)
Total	<u>₩222</u>	<u>(₩43)</u>	<u>₩-</u>	<u>₩179</u>

	Year ended December 31, 2010			
	January 1, 2010	Valuation	Reclassification from equity to profit or loss	December 31, 2010
Beneficiary certificates	₩468	(₩211)	₩28	₩285
tax effect	(103)	46	(6)	(63)
Total	<u>₩365</u>	<u>(₩165)</u>	<u>₩22</u>	<u>₩222</u>

(3) Held-to-maturity financial assets as of December 31, 2011, December 31, 2010 and January 1, 2010 are summarized as follows (in millions of Korean Won):

	December 31, 2011	December 31, 2010	January 1, 2010
Government bonds and public bonds	₩96	₩64	₩11
Other debt securities	-	28,850	28,850
Total	<u>₩96</u>	<u>₩28,914</u>	<u>₩28,861</u>

## 11. DERIVATIVES

(1) Details of the Company's derivatives contracts are as follows:

Purpose	Derivative instruments	Contract description
Cash flow hedge	Foreign currency forwards	A contract to avoid cash flow risk arising from forecasted sales in foreign currencies
	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 changes in interest rates
	Long-term foreign currency borrowings	Designation of long-term foreign currency borrowings as hedging instruments to avoid cash flow risk arising from forecasted sales in foreign currencies
Other	Foreign currency forwards	Foreign currency forwards to hedge future cash flows
	Put option	Put option granted to subsidiary's preferred share

(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 millions of Korean Won):

	December 31, 2011					
	Notional amount		Assets (liabilities)	Gains (losses)	Other comprehensive income	Firm commitment
	Currency	Amount				
Foreign currency forwards	USD	989,000	(₩21,295)	₩-	(₩21,295)	₩-
	EUR	240,000	11,085	-	11,085	-
	GBP	21,000	616	-	616	-
	JPY	19,100,000	7,607	-	7,607	-
Interest rate swap		(*1)	(1,573)	-	(1,573)	-
Borrowings in foreign currency	USD	420,000	-	-	(46,158)	-
Put option			(414,351)	(88,658)	-	-
Total			(₩417,911)	(₩88,658)	(₩49,178)	₩-

December 31, 2010						
	Notional amount		Assets (liabilities)	Gains (losses)	Other comprehensive income	Firm commitment
	Currency	Amount				
Foreign currency forwards	USD	1,051,200	₩14,968	₩14,968	₩-	₩160,098
	EUR	534,000	479	829	32,597	-
Interest rate swap		(*1)	(7,367)	-	(7,367)	-
Borrowings in foreign currency	USD	560,000	-	-	(53,480)	-
Put option			(325,693)	(71,969)	-	-
Total			<u>(₩317,613)</u>	<u>(₩56,172)</u>	<u>(₩28,250)</u>	<u>₩160,098</u>
January 1, 2010						
	Notional amount		Assets (liabilities)	Gains (losses)	Other comprehensive income	Firm commitment
	Currency	Amount				
Foreign currency forwards	USD	2,228,453	₩61,028	₩186,646	₩-	₩496,220
	EUR	574,200	22,189	19,400	(17,439)	-
Interest rate swap		(*1)	(14,555)	-	(14,555)	-
Borrowings in foreign currency	USD	700,000	-	-	(86,940)	-
Put option			(253,723)	-	-	-
Total			<u>(₩185,061)</u>	<u>₩206,046</u>	<u>(₩118,934)</u>	<u>₩496,220</u>

(\*1) The Company entered into a loan agreement with lenders consisting of the Korea Development Bank and nine other financial institutions for long-term borrowings of USD 420 million with interest rate of 6M Libor + 1.6% related to the acquisition of Doosan Infracore International, Inc. and Doosan Holdings Europe Ltd. To hedge against the risk of variability of interest rates of this borrowing, the Company entered into an interest rate swap that requires the Company to pay fixed rate of interest of 3.85% for principal amounting to USD 70 million and to receive variable rate of interest. The Company also entered into a loan agreement with the Korea Development Bank for long-term borrowings of USD 50 million with interest rate of 3M Libor + 3.5%. To hedge against the risk of variability of interest rates of this borrowing, the Company entered into an interest rate swap that requires the Company to pay fixed rate of interest of 4.65% for principal amounting to USD 50 million and to receive variable rate of interest.

Derivatives that are designated as hedging instruments are classified as non-current assets (liabilities) when their maturities exceed 12 months from end of the reporting period. Otherwise they are classified as current assets (liabilities).

There is no gain or loss relating to the ineffective portion which shall be recognized in **income** or loss in applying cash flow hedge. The Company discontinued hedge accounting and eliminated firm commitment assets amounting to ₩53,040 million since the related transactions are no longer expected to occur.

## 12. FINANCIAL INSTRUMENTS

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

	December 31, 2011						
	FVTPL - assets	Loans and receivables	AFS	Held-to-maturity investments	Derivatives designated as hedging instruments	Book value	Fair value
Short-term financial instruments	₩-	₩32,247	₩-	₩-	₩-	₩32,247	₩32,247
Short-term investment securities	-	-	-	1,200	-	1,200	1,200
Trade and other receivables	-	912,662	-	-	-	912,662	912,662
Derivatives assets	-	-	-	-	19,308	19,308	19,308
Long-term financial instruments	-	12	-	-	-	12	12
Long-term investment securities	-	-	1,804	96	-	1,900	1,900
Other non-current receivables	-	114,673	-	-	-	114,673	114,673
<b>Total</b>	<b>₩-</b>	<b>₩1,059,594</b>	<b>₩1,804</b>	<b>₩1,296</b>	<b>₩19,308</b>	<b>₩1,082,002</b>	<b>₩1,082,002</b>

  

	December 31, 2011				
	FVTPL - liabilities	Financial liabilities at amortized cost	Derivatives designated as hedging instruments	Book value	Fair value
Trade and other payables	₩-	₩691,131	₩-	₩691,131	₩691,131
Borrowings and bonds	-	2,651,171	-	2,651,171	2,651,171
Derivatives liabilities	414,351	-	22,867	437,218	437,218
Financial guarantee liabilities	-	44,659	-	44,659	44,659
<b>Total</b>	<b>₩414,351</b>	<b>₩3,386,961</b>	<b>₩22,867</b>	<b>₩3,824,179</b>	<b>₩3,824,179</b>

  

	December 31, 2010						
	FVTPL - assets	Loans and receivables	AFS	Held-to-maturity investments	Derivatives designated as hedging instruments	Book value	Fair value
Short-term financial instruments	₩-	₩40,044	₩-	₩-	₩-	₩40,044	₩40,044
Trade and other receivables	-	933,314	-	-	-	933,314	933,314
Derivatives assets	5,687	-	-	-	21,318	27,005	27,005
Long-term financial instruments	-	12	-	-	-	12	12
Long-term investment securities	-	-	2,312	28,914	-	31,226	31,226
Other non-current receivables	-	37,775	-	-	-	37,775	37,775
<b>Total</b>	<b>₩5,687</b>	<b>₩1,011,145</b>	<b>₩2,312</b>	<b>₩28,914</b>	<b>₩21,318</b>	<b>₩1,069,376</b>	<b>₩1,069,376</b>

December 31, 2010					
FVTPL - liabilities	Financial liabilities at amortized cost	Derivatives designated as hedging instruments	Book value	Fair value	
Trade and other payables	₩-	₩761,346	₩-	₩761,346	₩761,346
Borrowings and bonds	-	2,112,194	-	2,112,194	2,112,194
Derivatives liabilities	332,487	-	12,131	344,618	344,618
Financial guarantee liabilities	-	29,214	-	29,214	29,214
<b>Total</b>	<b>₩332,487</b>	<b>₩2,902,754</b>	<b>₩12,131</b>	<b>₩3,247,372</b>	<b>₩3,247,372</b>

January 1, 2010							
FVTPL - assets	Loans and receivables	AFS	Held-to-maturity investments	Derivatives designated as hedging instruments	Book value	Fair value	
Short-term financial instruments	₩-	₩32,330	₩-	₩-	₩-	₩32,330	₩32,330
Trade and other receivables	-	714,621	-	-	-	714,621	714,621
Derivatives assets	6,073	-	-	-	184,435	190,508	190,508
Long-term financial instruments	-	12	-	-	-	12	12
Long-term investment securities	-	-	2,667	28,861	-	31,528	31,528
Other non-current receivables	-	36,196	-	-	-	36,196	36,196
<b>Total</b>	<b>₩6,073</b>	<b>₩783,159</b>	<b>₩2,667</b>	<b>₩28,861</b>	<b>₩184,435</b>	<b>₩1,005,195</b>	<b>₩1,005,195</b>

January 1, 2010					
FVTPL - liabilities	Financial liabilities at amortized cost	Derivatives designated as hedging instruments	Book value	Fair value	
Trade and other payables	₩-	₩500,096	₩-	₩500,096	₩500,096
Borrowings and bonds	-	2,616,740	-	2,616,740	2,616,740
Derivatives liabilities	253,723	-	121,846	375,569	375,569
Other non-current liabilities	-	2,839	-	2,839	2,839
Financial guarantee liabilities	-	35,732	-	35,732	35,732
<b>Total</b>	<b>₩253,723</b>	<b>₩3,155,407</b>	<b>₩121,846</b>	<b>₩3,530,976</b>	<b>₩3,530,976</b>

(2) Fair value measurements of financial instruments by fair-value hierarchy level as of December 31, 2011, December 31, 2010 and January 1, 2010 are as follows (in millions of Korean Won):

Type	December 31, 2011			Total
	Level 1	Level 2	Level 3	
Financial Assets:				
FVTPL	₩-	₩-	₩-	₩-
AFS	519	-	1,285	1,804
Derivatives designated as hedging instruments	-	19,308	-	19,308
Total	₩519	₩19,308	₩1,285	₩21,112
Financial Liabilities:				
FVTPL	-	(414,351)	-	(414,351)
Derivatives designated as hedging instruments	-	(22,867)	-	(22,867)
Total	₩-	(₩437,218)	₩-	(₩437,218)
Type	December 31, 2010			Total
	Level 1	Level 2	Level 3	
Financial Assets:				
FVTPL	₩-	₩5,687	₩-	₩5,687
AFS	567	-	1,745	2,312
Derivatives designated as hedging instruments	-	21,318	-	21,318
Total	₩567	₩27,005	₩1,745	₩29,317
Financial Liabilities:				
FVTPL	₩-	(₩332,487)	₩-	(₩332,487)
Derivatives designated as hedging instruments	-	(12,131)	-	(12,131)
Total	₩-	(₩344,618)	₩-	(₩344,618)
Type	January 1, 2010			Total
	Level 1	Level 2	Level 3	
Financial Assets:				
FVTPL	₩-	₩6,073	₩-	₩6,073
AFS	923	-	1,744	2,667
Derivatives designated as hedging instruments	-	184,435	-	184,435
Total	₩923	₩190,508	₩1,744	₩193,175
Financial Liabilities:				
FVTPL	₩-	(₩253,723)	₩-	(₩253,723)
Derivatives designated as hedging instruments	-	(121,846)	-	(121,846)
Total	₩-	(₩375,569)	₩-	(₩375,569)

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).

### 13. SUBSIDIARIES, JOINT VENTURES AND ASSOCIATES

(1) Subsidiaries, joint ventures and associates as of December 31, 2011, December 31, 2010 and January 1, 2010 are summarized as follows (in millions of Korean Won):

Company	Location	Percentage of ownership (%)	December 31, 2011	December 31, 2010	January 1, 2010
- Subsidiaries					
Doosan Infracore (China) Investment Co., Ltd. (*1)	China	100.00	₩95,198	₩95,198	₩68,505
Doosan Infracore China Co., Ltd. (*2)	China	80.00	258,304	279,198	279,198
Doosan Infracore Machine Tools Yantai Co., Ltd.	China	90.00	18,962	18,962	18,962
Doosan Infracore Europe S.A. (*3)	Ireland	-	-	-	108,543
Doosan Infracore America Corp.	USA	100.00	34,560	34,560	34,560
Doosan Infracore Germany GmbH.	Germany	100.00	14,127	14,127	14,127
Doosan Infracore Japan Corp.	Japan	100.00	960	960	960
Doosan Infracore International, Inc. (*4)(*5)(*6)	USA	86.78	1,167,859	428,687	428,687
Doosan Holdings Europe Ltd. (*5)(*6)	Ireland	72.31	554,302	554,302	554,302
Doosan Infracore India Private Ltd. (*1)	India	99.99	4,518	4,518	-
Doosan Infracore Belgium N.V. (*3)	Belgium	99.77	102,676	102,676	-
Bobcat Corporation (*7)	Japan	100.00	4,532	4,532	-
Doosan International India Private Limited (*8)	India	100.00	11,599	11,599	-
Doosan International Korea Limited (*8)(*9)	Korea	100.00	-	8,498	-
Doosan Bobcat Chile (*8)	Chile	100.00	3,369	3,369	-
Doosan International Mexico S.A. de C.V. (*8)	Mexico	100.00	-	-	-
Doosan International do Brasil Commercial and Market Related Consulting Ltda. (*8)	Brazil	100.00	132	132	-
Doosan Infracore U.K., Ltd. (*10)	England	74.34	14,316	14,316	-
Doosan Infracore South America Industria E Comercio De Maquinas De Construcao Ltda. (*11)	Brazil	100.00	26,072	1,358	223
Subtotal			<u>2,311,486</u>	<u>1,576,992</u>	<u>1,508,067</u>

Company	Location	Percentage of ownership (%)	December 31, 2011	December 31, 2010	January 1, 2010
-Associate					
Daewoo Machinery Co., Ltd. (*12)	Taiwan	100	-	-	-
Daewoo Maquinas E Equipamentos Ltda. (*12)	Brazil	70	-	-	-
Doosan Capital Co., Ltd. (*13)	Korea	16.65	54,418	54,418	54,418
Subtotal			54,418	54,418	54,418
-Joint venture					
Doosan Infracore Xinjiang Machinery Co., Ltd. (*14)	China	60	-	1,676	1,676
Subtotal			-	1,676	1,676
Total			₩2,365,904	₩1,633,086	₩1,564,161

- (\*1) During the year ended December 31, 2010, the Company acquired new shares of Doosan Infracore (China) Investment Co., Ltd. and Doosan Infracore India Private Ltd. for ₩26,693 million and ₩4,518 million, respectively, without changes in ownership percentage.
- (\*2) During the year ended December 31, 2011, the Company sold 10% of the equity shares of Doosan Infracore China Co., Ltd. (book value : ₩31,023 million) and acquired new shares of Doosan Infracore China Co., Ltd. for ₩10,129 million.
- (\* 3) During the year ended December 31, 2010, as a result of spin-off of Doosan Infracore Europe S.A, the Company acquired 99.77% of ownership interest in Doosan Infracore Belgium N.V. for ₩74,487 million and new shares of Doosan Infracore Belgium N.V. for ₩28,189 million. The Company sold all of the equity shares of Doosan Infracore Europe S.A.
- (\*4) During the year ended December 31, 2011, the Company acquired new shares of Doosan Infracore International, Inc. for ₩739,172 million and the Company's ownership interest changed from 73.06% to 86.78%.
- (\*5) The Company will pledge these shares as collateral for loans of Doosan Infracore International, Inc. and Doosan Holdings Europe Ltd. Refer to Notes 33 and 34.
- (\*6) The Company's ownership interest is calculated excluding preferred shares.
- (\*7) During the year ended December 31, 2010, the Company acquired 100% of ownership interest in Bobcat Corp. from Clark Equipment Co. for ₩4,532 million.
- (\*8) During the year ended December 31, 2010, the Company acquired from Doosan Holdings International Ltd. 100% of the shares of subsidiaries in India for ₩11,599 million, Korea for ₩8,498 million, Chile for ₩3,369 million, Mexico for ₩- million and Brazil for ₩132 million, respectively.

- (\*9) During the year ended December 31, 2011, the Company merged with Doosan International Korea Limited.
- (\*10) During the year ended December 31, 2010, the Company acquired 74.34% of ownership interest in Doosan Infracore U.K., Ltd. which was owned by Doosan Infracore Europe S.A. for ₩14,316 million.
- (\*11) During the years ended December 31, 2011 and 2010, the Company acquired new shares for ₩24,714 million and ₩1,135 million, respectively, without changes in ownership percentage.
- (\*12) As investees are in liquidation process as of December 31, 2011 and December 31 2010, respectively, the Company lost control over these investees and these were classified as associates.
- (\*13) The Company accounts for its investment in Doosan Capital Co., Ltd. using the equity method despite its 16.65% ownership interest, as it has significant influence through representation on the board of directors.
- (\*14) The Company's ownership interest in the investee is more than 50%. However, since the Company contractually has no control to make the financial and operating policy decisions, the investee is classified as joint venture.

#### 14. PROPERTY, PLANT AND EQUIPMENT

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

	Year ended December 31, 2011								Total
	Land	Buildings	Structures	Machinery	Vehicles	Tools	Equipment	Construction in-progress	
January 1, 2011	₩761,145	₩209,916	₩45,120	₩147,685	₩3,676	₩41,782	₩22,383	₩39,582	₩1,271,289
Acquisition	1,258	3,065	2,345	31,427	1,350	27,183	9,219	78,947	154,794
Transfer	-	11,702	1,066	13,005	-	-	-	(68,622)	(42,849)
Disposal	(224)	-	(5)	(224)	-	(39)	(5,778)	(302)	(6,572)
Depreciation	-	(7,524)	(3,435)	(19,926)	(1,223)	(15,321)	(9,005)	-	(56,434)
Transfer of operations	(40,089)	(8,527)	(1,361)	(3,353)	(66)	(4,451)	(408)	(1,583)	(59,838)
Changes by merger	-	-	-	-	6	-	5	-	11
December 31, 2011	<u>₩722,090</u>	<u>₩208,632</u>	<u>₩43,730</u>	<u>₩168,614</u>	<u>₩3,743</u>	<u>₩49,154</u>	<u>₩16,416</u>	<u>₩48,022</u>	<u>₩1,260,401</u>
Acquisition cost	₩722,203	₩290,691	₩70,063	₩439,558	₩10,183	₩133,203	₩61,771	₩51,824	₩1,779,496
Accumulated depreciation	-	(73,853)	(26,333)	(270,164)	(6,440)	(84,049)	(45,355)	-	(506,194)
Accumulated impairment losses	(113)	(3,299)	-	-	-	-	-	-	(3,412)
Government subsidy	-	(4,907)	-	(780)	-	-	-	(3,802)	(9,489)

Year ended December 31, 2010

	Land	Buildings	Structures	Machinery	Vehicles	Tools	Equipment	Construction in-progress	Total
January 1, 2010	₩765,807	₩205,332	₩36,665	₩125,253	₩2,014	₩34,854	₩22,207	₩22,204	₩1,214,136
Acquisition	444	1,109	1,050	28,239	2,673	21,555	9,805	62,423	127,298
Transfer	-	11,115	11,041	15,416	-	150	1,553	(45,045)	(5,770)
Disposal	(5,106)	(251)	(435)	(305)	(9)	(204)	(79)	-	(6,389)
Depreciation	-	(7,389)	(3,201)	(20,918)	(1,002)	(14,573)	(10,903)	-	(57,986)
December 31, 2010	₩761,145	₩209,916	₩45,120	₩147,685	₩3,676	₩41,782	₩22,383	₩39,582	₩1,271,289
Acquisition cost	₩761,258	₩289,014	₩68,628	₩415,461	₩9,884	₩129,035	₩72,092	₩43,384	₩1,788,756
Accumulated depreciation	-	(70,761)	(23,508)	(266,897)	(6,208)	(87,253)	(49,709)	-	(504,336)
Accumulated impairment losses	(113)	(3,299)	-	-	-	-	-	-	(3,412)
Government subsidy	-	(5,038)	-	(879)	-	-	-	(3,802)	(9,719)

As of December 31, 2011, the Company's land, buildings and machinery totaling ₩679,396 million are pledged as collateral for loans from KDB and others. Refer to Note 34.

## 15. INTANGIBLE ASSETS

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

	Year ended December 31, 2011				
	Goodwill	Industrial rights	Development costs	Others	Total
January 1, 2011	₩-	₩1,912	₩135,275	₩75,425	₩212,612
Acquisition	-	763	49,181	5,469	55,413
Disposal	-	-	-	(1,059)	(1,059)
Transfer	-	-	-	42,194	42,194
Amortization	-	(351)	(8,437)	(21,855)	(30,643)
Impairment	-	-	(398)	-	(398)
Changes by merger	11,981	-	-	-	11,981
Transfer of operations	₩-	(₩361)	(₩1,600)	(₩10,082)	(₩12,043)
December 31, 2011	₩11,981	₩1,963	₩174,021	₩90,092	₩278,057
Acquisition cost	₩11,981	₩4,914	₩242,182	₩147,368	₩406,445
Accumulated amortization	-	(2,951)	(68,161)	(57,276)	(128,388)

	Year ended December 31, 2010			
	Industrial rights	Development costs	Others	Total
January 1, 2010	₩1,830	₩98,463	₩76,969	₩177,262
Acquisition	481	55,461	8,574	64,516
Transfer	-	-	5,770	5,770
Amortization	(377)	(10,046)	(15,888)	(26,311)
Impairment	-	(8,603)	-	(8,603)
Others	(₩22)	₩-	₩-	(₩22)
December 31, 2010	₩1,912	₩135,275	₩75,425	₩212,612
Acquisition cost	₩4,985	₩199,868	₩114,664	₩319,517
Accumulated amortization	(3,073)	(64,593)	(39,239)	(106,905)

(2) Expenditure on research and **development recognized** as expenses amounted to ₩110,273 million and ₩84,930 million for the years ended December 31, 2011 and 2010, respectively.

## 16. INVESTMENT PROPERTIES

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

	Year ended December 31, 2011		
	Land	Buildings	Total
January 1, 2011	₩23,965	₩5,316	₩29,281
Depreciation	-	(248)	(248)
December 31, 2011	₩23,965	₩5,068	₩29,033
Acquisition cost	₩23,965	₩9,180	₩33,145
Accumulated depreciation	-	(3,036)	(3,036)
Accumulated impairment losses	-	(1,076)	(1,076)

  

	Year ended December 31, 2010		
	Land	Buildings	Total
January 1, 2010	₩23,965	₩5,565	₩29,530
Depreciation	-	(249)	(249)
December 31, 2010	₩23,965	₩5,316	₩29,281
Acquisition cost	₩23,965	₩9,180	₩33,145
Accumulated depreciation	-	(2,788)	(2,788)
Accumulated impairment losses	-	(1,076)	(1,076)

The fair values of investment properties were ₩20,504 million and ₩20,465 million as of December 31, 2011 and 2010, respectively.

## 17. TRADE AND OTHER PAYABLES

Trade and other payables as of December 31, 2011, December 31, 2010 and January 1, 2010 are as follows (in millions of Korean Won):

Description		December 31, 2011	December 31, 2010	January 1, 2010
Current	Trade payables	₩492,179	₩545,305	₩322,406
	Other payables	162,046	142,820	124,635
	Accrued expense	36,906	73,221	53,055
	Total	<u>₩691,131</u>	<u>₩761,346</u>	<u>₩500,096</u>
Non-current	Other Payables	<u>₩-</u>	<u>₩-</u>	<u>₩2,839</u>

## 18. BORROWINGS AND BONDS

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

Type	Annual interest rate(%)	December 31, 2011	December 31, 2010	January 1, 2010
Public bonds	2.93 ~ 7.70	₩1,746,584	₩898,000	₩780,000
Private bonds	4.95 ~ 7.67	90,000	240,000	350,000
Sub-total		1,836,584	1,138,000	1,130,000
Less: discount on bonds		(8,902)	(2,336)	(1,690)
Less: current portion		(232,824)	(434,932)	(461,715)
Long-term bonds		<u>₩1,594,858</u>	<u>₩700,732</u>	<u>₩666,595</u>

(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 foreign currencies and millions 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	Korea Exim Bank and others	4.07 ~ 6.60	₩-	₩-	₩15,000
Short-term borrowings in foreign currencies	Hana Bank	3M Libor + 3.70	34,599	34,167	224,305
Usance	Shinhan Bank and others	0.44 ~ 4.42	80,889	57,158	88,460
Transferred receivables	Korea Exchange Bank and others(*1)	0.95 ~ 4.57	9,306	83,695	282,162
Total			<u>₩124,794</u>	<u>₩175,020</u>	<u>₩609,927</u>

(\*1) This represents financial liabilities related to transferred trade receivables which did not meet the derecognition criteria. The trade receivables were pledged as collateral for these liabilities.

2) Long-term borrowings

Type	Lender	Annual interest rate (%)	December 31, 2011	December 31, 2010	January 1, 2010
Borrowings in Korean Won	Korea Development Bank	4.95 ~ 6.54	₩154,000	₩100,000	₩40,000
Borrowings in foreign currencies	AKA Bank	6M Eulibor+0.45	EUR 3,932	EUR 4,480	EUR 5,001
	Korea Development Bank	3M Libor+3.50	USD 50,000	USD 50,000	-
	Kookmin Bank and 9 others	6M Libor+1.60~3.05	USD 420,000	USD 560,000	USD 700,000
Korean Won equivalent			701,926	801,510	878,503
Less: discount on borrowings			(3,230)	-	-
Less: current portion			(225,324)	(165,276)	(177,146)
Long-term borrowings			<u>₩473,372</u>	<u>₩636,234</u>	<u>₩701,357</u>

## 19. 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 millions of Korean Won):

	<u>December 31, 2011</u>	<u>December 31, 2010</u>	<u>January 1, 2010</u>
Present value of defined benefit obligation	₩184,575	₩166,638	₩136,462
Fair value of plan assets	<u>(67,349)</u>	<u>(82,444)</u>	<u>(80,909)</u>
Total	<u>₩117,226</u>	<u>₩84,194</u>	<u>₩55,553</u>

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

	<u>Year ended December 31, 2011</u>	<u>Year ended December 31, 2010</u>
Current service cost	₩22,237	₩19,711
Interest cost	7,914	8,047
Expected return on plan assets	<u>(3,348)</u>	<u>(3,376)</u>
Total	<u>₩26,803</u>	<u>₩24,382</u>

- (3) Details of total expenses recognized in separate statements of income for the years ended December 31, 2011 and 2010 are as follows (in millions of Korean Won):

	<u>Year ended December 31, 2011</u>	<u>Year ended December 31, 2010</u>
Cost of sales	₩9,689	₩16,679
Selling and administrative expenses	10,994	4,800
Research and development cost	<u>6,120</u>	<u>2,903</u>
Total	<u>₩26,803</u>	<u>₩24,382</u>

- (4) Changes in defined benefit obligation for the years ended December 31, 2011 and 2010 are as follows (in millions of Korean Won):

	<u>Year ended December 31, 2011</u>	<u>Year ended December 31, 2010</u>
Beginning balance	₩166,638	₩136,462
Current service cost	22,237	19,711
Transfer in	1,049	724
Transfer out	(525)	(266)
Interest cost	7,914	8,047
Actuarial gain or loss	25,287	19,004
Benefit paid	(27,186)	(17,004)
Transfer of operations	(11,208)	-
Increase by merger	369	-
Ending balance	<u>₩184,575</u>	<u>₩166,638</u>

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

	<u>Year ended December 31, 2011</u>	<u>Year ended December 31, 2010</u>
Beginning balance	₩82,444	₩80,909
Expected return on plan assets	3,348	3,376
Transfer in	(184)	(5)
Transfer out	-	268
Contributions by employer directly to plan assets	-	5,000
Actuarial gain or loss	(1,365)	(846)
Benefit payment	(11,743)	(6,258)
Transfer of operations	(5,151)	-
Ending balance	<u>₩67,349</u>	<u>₩82,444</u>

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

	<u>December 31, 2011</u>	<u>December 31, 2010</u>
Discount rate for defined benefit obligations	5.00%	5.30%
Expected rate of return on plan assets	3.70%	4.50%
Expected rate of salary increase	Employee 5.40% Excutive 8.00%	Employee 5.40% Excutive 8.00%

Expected rates of return on plan assets are weighted average of expected return by each category of plan asset and based on historical trend of rate of return and market forecast analysis for the period for which defined benefit obligation exist.

(7) Details of plan assets as of December 31, 2011, December 31, 2010 and January 1, 2010 are as follows (in millions of Korean Won):

	December 31, 2011	December 31, 2010	January 1, 2010
Equity instruments	₩13,606	₩8,223	₩43,224
Debt instruments	34,405	55,127	26,699
Others	19,338	19,094	10,986
<b>Total</b>	<b>₩67,349</b>	<b>₩82,444</b>	<b>₩80,909</b>

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 are 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.

Actual gain recognized related to plan assets amounted to ₩1,983 million and ₩2,530 million for the years ended December 31, 2011 and 2010, respectively.

## 20. PROVISIONS

Changes in provisions for the years ended December 31, 2011 and 2010 are as follows (in millions of Korean Won):

	Year ended December 31, 2011						
	January 1, 2011	Accrual	Use	Transfer of operations	December 31, 2011	Current	Non-current
Provision for product warranties	₩23,239	₩7,858	(₩4,826)	(₩4,286)	₩21,985	(₩21,985)	₩-
Provision for returned goods	388	207	(491)	-	104	(104)	-
<b>Total</b>	<b>₩23,627</b>	<b>₩8,065</b>	<b>(₩5,317)</b>	<b>(₩4,286)</b>	<b>₩22,089</b>	<b>(₩22,089)</b>	<b>₩-</b>

  

	Year ended December 31, 2010						
	January 1, 2010	Accrual	Use	December 31, 2010	Current	Non-current	
Provision for product warranties	₩10,084	₩46,333	(₩33,178)	₩23,239	(₩23,239)	₩-	
Provision for returned goods	352	388	(352)	388	(388)	-	
<b>Total</b>	<b>₩10,436</b>	<b>₩46,721</b>	<b>(₩33,530)</b>	<b>₩23,627</b>	<b>(₩23,627)</b>	<b>₩-</b>	

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.

## 21. CAPITAL STOCK AND CAPITAL SURPLUS

Changes in capital stock and capital surplus for the year ended December 31, 2011 are as follows (in millions of Korean Won):

	<u>Number of shares</u>	<u>Capital stock</u>	<u>Share premium</u>	<u>Other capital surplus</u>
Beginning balance	168,448,484	₩842,242	₩4,552	₩747
Exercise of share options	107,400	537	2,680	-
Extinguishment of share options	-	-	-	309
Changes by merger	-	-	-	13,789
Ending balance	<u>168,555,884</u>	<u>₩842,779</u>	<u>₩7,232</u>	<u>₩14,845</u>

The Company's number of shares authorized are 400,000,000 shares with par value of ₩5,000 per share. The number of shares issued by the Company is 168,555,884 and 168,448,484 as of December 31, 2011 and 2010, respectively. There are no issued shares with restricted voting rights under commercial law.

## 22. OTHER EQUITY ITEMS

(1) Other equity items as of December 31, 2011, December 31, 2010 and January 1, 2010 are summarized as follows (in millions of Korean Won):

<u>Description</u>	<u>December 31, 2011</u>	<u>December 31, 2010</u>	<u>January 1, 2010</u>
Loss on disposal of treasury stock	(₩7,909)	(₩7,909)	(₩7,909)
Share options	16,333	13,506	11,500
Other capital adjustments	<u>(39,070)</u>	<u>-</u>	<u>-</u>
Total	<u>(₩30,646)</u>	<u>₩5,597</u>	<u>₩3,591</u>

(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 shareholders' meeting. Number of granted options as of December 31, 2011 is as follows (in millions of Korean Won, except for share data).

Date of grant	Description	Number of granted options	Exercisable period	Exercisable price	Expected fair value at the date of grant
2006.03.17	2nd grant	73,200	2009.03.17 ~ 2013.03.16	₩15,900	₩7,881
2007.03.16	3rd grant	150,500	2010.03.17 ~ 2017.03.16	20,100	8,143
2008.03.21	4th grant	366,700	2011.03.21 ~ 2018.03.20	28,700	15,709
2009.03.27	5th grant	220,300	2012.03.27 ~ 2019.03.26	15,600	7,674
2010.03.26	6th grant	426,660	2013.03.26 ~ 2020.03.25	19,400	10,543
2010.04.01	6-1st grant	49,600	2013.04.01 ~ 2020.03.31	20,500	11,164
2011.03.25	7th grant	174,900	2014.03.25 ~ 2021.03.24	30,700	16,800
Total		<u>1,461,860</u>			

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

1) Number of common shares to be issued:

	January 1, 2011	Granted	Exercised	Forfeited	December 31, 2011
2nd grant	110,800	-	(27,200)	(10,400)	73,200
3rd grant	345,000	-	(61,300)	(133,200)	150,500
4th grant	388,900	-	(18,900)	(3,300)	366,700
5th grant	227,000	-	-	(6,700)	220,300
6th grant	482,570	-	-	(55,910)	426,660
6-1st grant	49,600	-	-	-	49,600
7th grant	-	174,900	-	-	174,900
Total	<u>1,603,870</u>	<u>174,900</u>	<u>(107,400)</u>	<u>(209,510)</u>	<u>1,461,860</u>

2) Valuation amount (in millions of Korean Won):

	January 1, 2011	Exercised	Change	December 31, 2011
2nd grant	₩873	(₩214)	(₩82)	₩577
3rd grant	2,809	(499)	(175)	2,135
4th grant	6,118	(297)	(52)	5,769
5th grant	1,539	-	209	1,748
6th grant	1,956	-	2,540	4,496
6-1st grant	211	-	266	477
7th grant	-	-	1,131	1,131
Total	₩13,506	(₩1,010)	₩3,837	₩16,333

The weighted average price of share based on the respective exercised dates for the year ended December 31, 2011 is ₩29,150. The weighted average remaining contractual period of the share options is 6.20 years. Expense recognized related to the share option granted amounted to ₩4,146 million and ₩3,563 million for the years ended December 31, 2011 and 2010, respectively. Expense to be recognized in the future periods amounted to ₩2,450 million.

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

	Risk free interest rate (*1)	Expected exercisable period	Expected volatility	Expected dividend yield ratio
2nd grant	5.13%	5 years	55.97%	0.90%
3rd grant	4.81%	5 years	47.08%	1.23%
4th grant	5.19%	6.5 years	47.94%	1.47%
5th grant	4.74%	6.5 years	59.76%	1.67%
6th grant	4.53%	6.5 years	58.82%	1.34%
6-1st grant	4.65%	6.5 years	58.76%	1.34%
7th grant	4.19%	6.5 years	58.01%	1.07%

(\*1) Risk free interest rate is based on 3 year treasury bond yield rate.

### 23. ACCUMULATED OTHER COMPREHENSIVE INCOME

Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2011 and 2010 are as follows (in millions of Korean Won):

	Year ended December 31, 2011				Year ended December 31, 2010			
	Unrealized gain on available-for-sale securities	Unrealized gain on valuation of derivatives	Unrealized loss on valuation of derivatives	Total	Unrealized gain on available-for-sale securities	Unrealized gain on valuation of derivatives	Unrealized loss on valuation of derivatives	Total
Beginning balance	₩222	₩36,719	(₩58,429)	(₩21,488)	₩365	₩2,114	(₩87,513)	(₩85,034)
Increase	-	-	-	-	-	34,605	-	34,605
Decrease	(43)	(22,084)	6,109	(16,018)	(143)	-	29,084	28,941
Ending balance	₩179	₩14,635	(₩52,320)	(₩37,506)	₩222	₩36,719	(₩58,429)	(₩21,488)

Tax effects directly recognized in accumulated other comprehensive as of December 31, 2011, December 31, 2010 and January 1, 2010 are as follows (in millions of Korean Won):

Description	December 31, 2011			December 31, 2010			January 1, 2010		
	Before tax	Deferred tax assets(liabilities)	After tax	Before tax	Deferred tax assets(liabilities)	After tax	Before tax	Deferred tax assets(liabilities)	After tax
Unrealized gain(loss) on available-for-sale securities	₩237	(₩58)	₩179	₩285	(₩63)	₩222	₩468	(₩103)	₩365
Unrealized gain(loss) on valuation of derivatives	(49,718)	12,033	(37,685)	(28,250)	6,540	(21,710)	(111,015)	25,616	(85,399)
Total	(₩49,481)	₩11,975	(₩37,506)	(₩27,965)	₩6,477	(₩21,488)	(₩110,547)	₩25,513	(₩85,034)

## 24. RETAINED EARNINGS

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

	December 31, 2011	December 31, 2010	January 1, 2010
Retained earnings before appropriations	₩869,507	₩600,018	₩121,047
Earned surplus reserve	-	-	23,000
Technology development reserve	22,418	-	277,050
	<u>₩891,925</u>	<u>₩600,018</u>	<u>₩421,097</u>

(2) Changes in retained earnings for the years ended December 31, 2011 and 2010 are as follows (in millions of Korean Won):

	Year ended December 31, 2011	Year ended December 31, 2010
Beginning balance	₩600,018	₩421,097
Net income for the year	313,804	189,658
Actuarial gains (losses) recognized in retained earnings	<u>(21,897)</u>	<u>(10,737)</u>
Ending balance	<u>₩891,925</u>	<u>₩600,018</u>

(3) Retained earnings as of December 31, 2011, December 31, 2010 and January 1, 2010 are as follows (in millions of Korean Won):

	2011	2010
Unappropriated retained earnings		
Beginning of the year	₩577,600	₩421,097
Net income for the year	313,804	189,658
Actuarial gains (losses)	<u>(21,897)</u>	<u>(10,737)</u>
End of the year	<u>869,507</u>	<u>600,018</u>
Appropriations		
Reserve for research and human resource development	280,000	22,418
Reserve for facility investment	<u>100,000</u>	<u>-</u>
Sub total	<u>380,000</u>	<u>22,418</u>
Unappropriated retained earnings to be carried forward to next year	<u>₩489,507</u>	<u>₩577,600</u>

The statement of appropriations of retained earnings for the year ended December, 31, 2010, comparatively presented herein, is prepared in accordance with K-IFRS. Accordingly, this statement is different from the statement prepared in accordance with K-GAAP and approved by general stockholders' meeting on March 25, 2011.

## 25. SALES

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

	Year ended December 31, 2011	Year ended December 31, 2010
Sales of goods		
-Manufactured products	₩3,955,640	₩3,540,834
-Merchandise	450,308	319,352
Other	20,969	19,762
Total	<u>₩4,426,917</u>	<u>₩3,879,948</u>

## 26. EXPENSES BY NATURE

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

	Year ended December 31, 2011	Year ended December 31, 2010
Employee benefits	₩475,742	₩429,832
Depreciation and amortization	87,325	84,546

## 27. SELLING AND ADMINISTRATIVE EXPENSES

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

	Year ended December 31, 2011	Year ended December 31, 2010
Salaries	₩135,959	₩109,789
Provision for retirement benefits	9,401	3,881
Other employee benefits	34,972	22,506
Supplies	4,051	887
Printing	1,616	968
Freight and custody	4,950	2,107
Communications	1,543	1,375
Utilities	2,900	2,364
Rent	16,274	12,449
Maintenance	7,090	9,219
Insurance	1,369	1,399
Depreciation	9,099	9,620
Amortization	21,339	15,209
Research and development	105,413	77,380
Advertising	33,159	19,804
Sales commission	67,095	85,550
Taxes and dues	3,581	2,635
Travel	16,168	11,240
Sundry	73,582	58,508
Entertainment	2,266	2,382
Education and training	12,857	5,363
Packing	8,809	4,433
Provision for doubtful accounts	3,926	288
Others	6,510	4,136
	<u>₩583,929</u>	<u>₩463,492</u>
Total		

## 28. OTHER OPERATING INCOME AND EXPENSES

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

	Year ended December 31, 2011	Year ended December 31, 2010
Other operating income:		
Rental income	₩390	₩33
Gain on disposal of property, plant and equipment	1,750	1,837
Gain on disposal of intangible assets	98	-
Reversal of allowance for doubtful accounts	-	1,802
Gain on disposal of long-term investment securities	-	186
Other	30,460	16,411
Sub-total	<u>32,698</u>	<u>20,269</u>
Other operating expenses:		
Loss on disposal of trade receivables	(4,044)	(3,432)
Loss on disposal of property, plant and equipment	(1,098)	(910)
Loss on disposal of intangible assets	(692)	-
Impairment loss of intangible assets	(398)	(8,603)
Other bad debt expenses	(199)	-
Donations	(20,466)	(10,597)
Other	(2,771)	(35,972)
Sub-total	<u>(29,668)</u>	<u>(59,514)</u>
Total	<u>₩3,030</u>	<u>(₩39,245)</u>

## 29. FINANCE INCOME AND EXPENSES

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

	Year ended December 31, 2011	Year ended December 31, 2010
Finance income:		
Interest income		
-Cash and cash equivalents	₩8,341	₩5,303
-Long-term and short-term financial instruments	3,968	3,508
-Trade and other receivables	1,253	1,619
-Held-to-maturity investments	2,476	3,448
Sub-total	<u>16,038</u>	<u>13,878</u>
Dividend	49,194	62,842
Gain on foreign currency transaction	79,234	82,645
Gain on foreign currency translation	16,076	6,851
Gain on derivative transaction	19,287	171,374
Gain on valuation of derivatives	-	30,208
Income on financial guarantee	10,477	10,217
Sub-total	<u>190,306</u>	<u>378,015</u>
Finance expenses:		
Interest expenses		
-Long-term and short-term borrowings	(46,097)	(64,807)
-Bond	(75,385)	(80,161)
Sub-total	<u>(121,482)</u>	<u>(144,968)</u>
Loss on foreign currency transaction	(89,662)	(92,188)
Loss on foreign currency translation	(14,910)	(5,996)
Loss on derivative transaction	(14,548)	(35,509)
Loss on valuation of derivatives	(88,658)	(56,172)
Loss on valuation of firm commitments	(53,040)	(303,125)
Expense on financial guarantee	(644)	(402)
Sub-total	<u>(382,944)</u>	<u>(638,360)</u>
<b>Net finance income (expense)</b>	<u><u>(₩192,638)</u></u>	<u><u>(₩260,345)</u></u>

### 30. INCOME TAX EXPENSE

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

	Year ended December 31, 2011	Year ended December 31, 2010
Current	₩79,214	₩26,412
Deferred	2,418	(20,672)
Income tax expense	<u>₩81,632</u>	<u>₩5,740</u>

(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 millions of Korean Won):

	January 1, 2011	Change	December 31, 2011
Advances from government	₩3,313	₩324	₩3,637
Allowance for doubtful accounts	5,334	438	5,772
Provision for construction losses	5,718	(372)	5,346
Retirement benefit obligation	7,958	10,058	18,016
Goodwill from acquisition of Doosan Mecatec Co., Ltd.	2,427	(2,427)	-
Investment in associates	485	804	1,289
Provision for temporary depreciation	(6,340)	(186)	(6,526)
Reserve for research and development	(34,076)	(30,296)	(64,372)
Gain on revaluation of land	(100,362)	(3,977)	(104,339)
Derivative assets (liabilities)	57,050	24,301	81,351
Others	31,597	21,656	53,253
Total	<u>(₩26,896)</u>	<u>₩20,323</u>	<u>(₩6,573)</u>
	January 1, 2010	Change	December 31, 2010
Advances from government	₩4,564	(₩1,251)	₩3,313
Allowance for doubtful accounts	6,231	(897)	5,334
Provision for construction losses	2,526	3,192	5,718
Retirement benefit obligation	6,627	1,331	7,958
Goodwill from acquisition of Doosan Mecatec Co., Ltd.	5,340	(2,913)	2,427
Investment in associates	485	-	485
Provision for temporary depreciation	(6,340)	-	(6,340)
Reserve for research and development	(32,307)	(1,769)	(34,076)
Gain on revaluation of land	(101,029)	667	(100,362)
Derivative assets (liabilities)	49,989	7,061	57,050
Others	35,382	(3,785)	31,597
Total	<u>(₩28,532)</u>	<u>₩1,636</u>	<u>(₩26,896)</u>

For the years ended December 31, 2011 and 2010, deferred tax directly reflected in equity amounted to ₩22,741 million of asset increase and ₩19,036 million of asset decrease, respectively.

- (3) Temporary differences which have not been recognized as deferred tax assets as of December 31, 2011, December 31, 2010 and January 1, 2010 are as follows (in millions Korean Won):

	<u>December 31, 2011</u>	<u>December 31, 2010</u>	<u>January 1, 2010</u>
Others	₩23,803	₩25,299	₩-

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 investments in subsidiaries, joint ventures and associates which are not recognized as deferred tax assets are as follows (in millions of Korean Won):

	<u>December 31, 2011</u>	<u>December 31, 2010</u>	<u>January 1, 2010</u>
Subsidiaries	₩638,860	₩610,609	₩671,300
Joint ventures and associates	<u>24,704</u>	<u>24,704</u>	<u>24,704</u>
Total	<u>₩663,564</u>	<u>₩635,313</u>	<u>₩696,004</u>

- (5) A reconciliation of income tax expense and accounting income before income tax expense for the years ended December 31, 2011 and 2010 are as follows (in millions of Korean Won):

	<u>Year ended December 31, 2011</u>	<u>Year ended December 31, 2010</u>
Income from continuing operations before income tax expense	₩325,209	₩176,473
Income tax expense at statutory income tax rate	78,701	42,706
Adjustment:		
Non-temporary difference	2,541	2,945
Effect of changes in recognition of deferred tax	(7,890)	(7,627)
Tax credits	(24,414)	(30,204)
Additional income tax and tax refund for prior periods	27,989	1,728
Other	<u>4,705</u>	<u>(3,808)</u>
Income tax expense	<u>₩81,632</u>	<u>₩5,740</u>
Effective tax rate	<u>25.1%</u>	<u>3.3%</u>

### 31. EARNINGS PER SHARE

Earnings per share for the years ended December 31, 2011 and 2010 are computed as follows (in millions of Korean Won, except for share data).

#### (1) Basic earnings per share

Basic earnings per share is computed by dividing net income attributable to owners of the Company by the weighted average number of common shares outstanding during the period excluding treasury shares.

	Year ended December 31, 2011			Year ended December 31, 2010		
	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
Net income	₩243,577	₩70,227	₩313,804	₩170,733	₩18,925	₩189,658
Net income available to common share	243,577	70,227	313,804	170,733	18,925	189,658
Weighted average number of common shares outstanding	168,532,879	168,532,879	168,532,879	168,381,785	168,381,785	168,381,785
Basic earnings per share (in Korean Won)	₩1,445	₩417	₩1,862	₩1,014	₩112	₩1,126

The weighted average number of common shares outstanding used in basic earnings per share calculation is as follows:

	Year ended December 31, 2011	Year ended December 31, 2010
Beginning outstanding shares	168,448,484	168,308,684
Effect of share option exercised	84,395	73,101
Weighted average number of common shares outstanding	168,532,879	168,381,785

## (2) Diluted earnings per share

Diluted earnings per share are calculated on the basis of the weighted average number of common and diluted potential common shares outstanding. The denominator of the diluted net income per share is adjusted to include the number of share options which have a dilutive effect as if they were issued at the beginning of the year.

	Year ended December 31, 2011			Year ended December 31, 2010		
	Continuing operations	Discontinued operations	Total	Continuing operations	Discontinued operations	Total
Net income	₩243,577	₩70,227	₩313,804	₩170,733	₩18,925	₩189,658
Share-based payment, net of tax	-	-	-	-	-	-
Adjusted net income available to common share	243,577	70,227	313,804	170,733	18,925	189,658
Adjusted weighted average number of common shares outstanding	168,586,183	168,586,183	168,586,183	168,441,201	168,441,201	168,441,201
Diluted earnings per share (in Korean Won)	₩1,445	₩417	₩1,862	₩1,014	₩112	₩1,126

The adjusted weighted average number of common shares outstanding used in the diluted earnings per share calculation is as follows:

	Year ended December 31, 2011	Year ended December 31, 2010
Weighted average number of common shares outstanding	168,532,879	168,381,785
Effect of share option	53,304	59,416
Adjusted weighted average number of common shares outstanding	168,586,183	168,441,201

For the year ended December 31, 2011, share option grant 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 6-1<sup>st</sup> and 7<sup>th</sup>, were excluded from the diluted earnings per share calculation as they have an anti-dilutive effect during the period. For the year ended December 31, 2010, share option grant 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup> and 6-1<sup>st</sup> were excluded from the diluted earnings per share calculation as they have an anti-dilutive effect during the period.

## 32. DIVIDEND

The Company did not declare or pay any dividends for the years ended December 31, 2011 and 2010.

### 33. COMMITMENTS AND CONTINGENCIES

- (1) The Company is involved in 6 lawsuits as a defendant with total claims exposure of ₩242 million and USD 49,749 thousand as of December 31, 2011. Currently, the ultimate outcome of these lawsuits cannot be determined.
- (2) The Company formed a consortium with Doosan Engine Co., Ltd. and unrelated financial investors to acquire shares of Doosan Infracore International, Inc. and Doosan Holdings Europe Ltd. Significant commitments related to this transaction are as follows:

- 1) Put option

In relation to above transactions, the Company and the financial investors entered into asset and stock purchase agreement dated November 5, 2007 and according to this agreement the financial investors have the put option to require the Company to purchase their convertible preferred shares of Doosan Infracore International, Inc. and Doosan Holdings Europe Ltd. which have not converted to common shares within 5 years from the date of the remittance of original investment cost. For those which have not converted, the financial investors would be repaid the original investment amount plus interest at 9%, compounded annually.

- 2) Financial covenant

The Company entered into a loan agreement with lenders consisting of the Korea Development Bank and nine other financial institutions for long-term borrowing of USD 420 million in connection with the Company's capital contributions to Doosan Infracore International, Inc. and Doosan Holdings Europe Ltd. This agreement requires 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.

For the year ended December 31, 2011, the Company issued 18th and 19th foreign currency denominated bonds for USD 130 million and USD 350 million, respectively. When issuing the 18th foreign currency denominated bond, the Company entered into an agreement to maintain its debt ratio under 800% and to liquidate no more than KRW 5 trillion annually.

In accordance with the agreement, an early redemption clause exists for when and if the Company's guarantor Korea Development Bank becomes privatized, and the funds required for such redemption will be provided by Korea Development Bank to the Company. In turn, the Company will provide its 7.87% share of Doosan Infracore International, Inc., acquired on November 25, 2011 (acquisition cost of KRW 555,478 billion) as collateral to Korea Development Bank.

- (3) The Company transferred trade receivables amounting to ₩614,009 million to banks with guarantee for default losses. Therefore the Company continues to recognize trade receivables and newly recognized financial liabilities as secured borrowing. The financial assets and liabilities which the Company continues to recognize because the Company retains substantially all of the risks and rewards of ownership as of December 31, 2011 amounted to ₩9,306 million.

(4) As of December 31, 2011, guarantees provided by the Company for third parties are as follows (in thousands of foreign currencies and millions of Korean Won):

Provider	Provided for	Guarantee	Won equivalents
Doosan Infracore Co., Ltd.	Doosan Infracore Germany GmbH.	EUR 17,231	₩25,746
	Doosan Infracore International, Inc	USD 774,000	892,654
	Doosan Holdings Europe Ltd.	USD 970,000	1,118,701
	Doosan Trading Ltd.	USD 1,500	1,730
	Doosan Benelux S.A.	USD 500	577
	Clark Equipment Co.	USD 44,096	50,856
	Daewoo Construction	EUR 4,141	6,187
	Daewoo International	EUR 2,133	3,187
	K J Industry Co., Ltd	KRW 3,000	3,000
			<u>₩2,102,638</u>

As of December 31, 2011, the Company entered into agreements with Korea Development Bank for the guarantees of 18th and 19th foreign currency denominated bond, which amounted to USD 130 million and 350 million, respectively. The Company entered into agreements with various banks for the guarantees of letters of credit and usance bills related to the Company's exports and imports, totaling USD 16,269 thousand, and entered into contracts with Seoul Guarantee Insurance Company and Machinery Financial Cooperative for the guarantees related to contracts and warranties totaling ₩54,272 million.

### 34. PLEDGED ASSETS

The Company pledged certain assets as collateral for its long-term and short-term borrowings as of December 31, 2011 is as follows (in thousands of foreign currencies and millions of Korean Won):

Institution	Asset	Borrowings	Collateralized value
Korea Development Bank	Land, buildings, and machinery (*1)	₩154,000	₩184,413
		USD 199,231	USD 95,026
		EUR 878	DM 84,000
		JPY 517,617	

(\*1) The Company's rights to property insurance benefits are pledged as collateral to the Korea Development Bank.

For the year ended December 31, 2011 Doosan Holdings Europe Ltd. repaid all the borrowings funded for the acquisition of compact equipment of **Ingersoll Rand Company Limited** from KDB and other creditors in 2007 and entered into new loan agreement with the creditors to borrow USD 1,720 million, **respectively**, on November 30, 2011 which will be secured by the Company's shares of Doosan Infracore International, Inc. and Doosan Holdings Europe Ltd. In relation to this new loan agreement entered amongst Doosan Holdings Europe Ltd., Doosan Infracore International, Inc., KDB and other 7 banks, EBITDA should be more than or equal to 1.5 times **or higher** of net interest expense and financial liabilities should **be 2.0 times or lower** of equity in the combined financial statements of Doosan Holdings Europe Ltd. and Doosan Infracore International, Inc., as included in the Company's consolidated financial statements **in accordance with** K-IFRS. In case of breach of these debt covenants, appropriate remedies to make additional cash inflow such as capital injections or borrowings of shareholders **are** required and this may result in the Company's obligation to make additional funding.

### 35. RELATED PARTY TRANSACTIONS

Related party disclosures for the years ended December, 2011 and 2010 are as follows.

#### (1) Nature of relationship

Relationship with the Company	Company name
Shareholders with significant influence	Doosan Corp., Doosan Heavy Industries and Construction Co., Ltd. and others
Directly controlled subsidiary	Doosan Infracore America Corp., Doosan Infracore China Co., Ltd., Doosan Infracore (China) Investment Co.,Ltd., Doosan Infracore Germany GmbH., Doosan Infracore Japan Corp., Doosan Infracore Machine Tools Yantai Co., Ltd., Doosan Infracore India Private Ltd., Doosan Infracore International, Inc., Doosan Infracore U.K., Ltd., Doosan Bobcat Chile S.A., Doosan Holdings Europe Ltd. and others
Indirectly controlled subsidiary through Doosan Infracore International, Inc.	Clark Equipment Co., Bobcat Reno, Perimeter Bobcat, Inc., Clark Business Services Corporation and others
Indirectly controlled subsidiary through Doosan Holdings Europe Ltd.	Doosan Holdings International Limited, Doosan Holdings Germany GmbH, Doosan Holdings France S.A.S., Goldwave Limited, DoosanTrading Ltd., Montabert and others
Others subsidiary	Doosan Infracore Suzhou Co., Ltd., Doosan Infracore (Shandong) Co., Ltd., Doosan Moxy AS, Doosan Infracore Norway AS and others
Associates	Doosan Capital Co., Ltd.
Joint ventures	Doosan Infracore Xinjiang Machinery Co., Ltd.
Others	Doosan Mecatec Co., Ltd., Doosan Engine Co., Ltd., Doosan DST Co., Ltd., Doosan Construction & Engineering Co., Ltd., Doosan Tower, Oricom, Doosan Bears Inc., Doosan Cuvex Co., Ltd., Doosan Donga, Neoplux Co., Ltd., Doosan Industrial Vehicle Co.,Ltd. and others

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

Description	Year ended December 31, 2011		Year ended December 31, 2010	
	Sales and others	Purchases and others	Sales and others	Purchases and others
Shareholder with significant influence	₩12,576	₩342,022	₩4,226	₩161,271
Subsidiaries	1,903,709	166,439	1,870,527	115,648
Associates	20	-	20	-
Other related parties	74,456	89,734	8,636	145,227
Total	<u>₩1,990,761</u>	<u>₩598,195</u>	<u>₩1,883,409</u>	<u>₩422,146</u>

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

Description	December 31, 2011		December 31, 2010		January 1, 2010	
	Receivables	Payables	Receivables	Payables	Receivables	Payables
Shareholder with significant influence	₩46	₩93,421	₩1,545	₩84,095	₩1,856	₩20,059
Subsidiaries	592,829	142,398	525,656	65,247	384,631	36,535
Associates	-	2	-	74	-	74
Other related parties	45,105	36,531	12,540	8,841	10,232	69,336
Total	<u>₩637,980</u>	<u>₩272,352</u>	<u>₩539,741</u>	<u>₩158,257</u>	<u>₩396,719</u>	<u>₩126,004</u>

- (4) The Company defines key management personnel as registered officer and non-registered officer (including outside director) 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 are as follows (in millions of Korean Won):

Description	Year ended December 31,	
	2011	2010
Short-term employee benefits	₩24,568	₩22,409
Retirement benefits	1,744	1,562
Share-based payment	4,146	3,563
Total	<u>₩30,458</u>	<u>₩27,534</u>

### 36. SEPARATE STATEMENTS OF CASH FLOWS

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

	Year ended December 31	
	2011	2010
Adjustments:		
Income tax expense	₩103,703	₩5,022
Finance income	(91,927)	(117,440)
Finance expense	225,302	518,260
Retirement benefits	26,803	24,382
Depreciation	56,682	58,235
Amortization	30,643	26,311
Provision for doubtful accounts	4,156	-
Gain on disposal of property, plant and equipment	(1,799)	(1,994)
Gain on disposal of intangible assets	(98)	-
Reversal of allowance for doubtful accounts	-	(1,802)
Gain on disposal of long-term financial investments	-	(186)
Gain on disposal of investment in subsidiaries	(158,978)	-
Gain on disposal of operation	(65,332)	-
Loss on disposal of property, plant and equipment	1,113	1,098
Loss on disposal of intangible assets	692	-
Impairment of intangible assets	398	8,603
Loss on disposal of investment assets	-	53,186
Other	56,412	3,563
Total	₩187,770	₩577,238

	Year ended December 31	
	2011	2010
Changes in operating assets and liabilities:		
Increase in trade receivables	(₩137,968)	(₩123,688)
Increase(decrease) in other receivables	19,665	(71,477)
Decrease in derivative assets	92,529	212,654
Increase in inventories	(203,663)	(99,059)
Decrease(increase) in other current assets	(1,585)	8,416
Decrease(increase) in other non-current assets	(27,330)	194
Increase(decrease) in trade payables	(30,704)	222,967
Increase in other liabilities	8,533	72,878
Increase(decrease) in derivative liabilities	7,546	(57,686)
Increase in provisions	2,747	13,190
Increase in other current liabilities	23,974	3,764
Payment of severance benefits	(27,712)	(16,822)
Decrease(increase) in plan assets	12,074	(1,933)
Increase(decrease) in other non-current liabilities	814	(2,906)
Decrease in other non-current liabilities	1,230	4,495
Total	(₩259,850)	₩164,987

(2) Significant non-cash transactions for the years ended December 31, 2011 and 2010 are nil.

### 37. DISCONTINUED OPERATION

#### (1) Transfer of industrial vehicle segment

On June 30, 2011, the Company sold its industrial vehicle segment for ₩194,588 million to Doosan Industrial Vehicles Co., Ltd. which is jointly established by DIP Holdings Co., Ltd, a wholly owned subsidiary of Doosan Corp., and other investors.

(2) Income from discontinued operations

Details of income from discontinued operations for the years ended December 31, 2011 and 2010, respectively, are as follows (in millions of Korean Won):

	Year ended December 31, 2011	Year ended December 31, 2010
Sales	₩277,364	₩440,792
Cost of sales	(235,633)	(358,431)
Gross profit	41,731	82,361
Selling and administrative expenses	(26,713)	(54,764)
Other operating income	65,547	1,386
Other operating expense	(669)	(1,911)
Operating income	79,896	27,072
Finance income	1,946	4,595
Finance expense	(2,620)	(13,460)
Equity in income of associates	13,076	-
Income before income tax expense	92,298	18,027
Income tax expense	(22,071)	718
Income from discontinued operations	<u>₩70,227</u>	<u>₩18,925</u>

(3) Cash flows from discontinued operations

Cash flows from discontinued operations for the years ended December 31, 2011 and 2010 are as follows (in millions of Korean Won):

	Year ended December 31,	
	2011	2010
Cash flows from operating activities	(₩32,441)	₩11,600
Cash flows from investing activities	(12,331)	18,285
Cash flows from financing activities	1,597	(15,313)
Total	<u>(₩43,175)</u>	<u>₩14,572</u>

### 38. APPROVAL OF FINANCIAL STATEMENTS

The separate financial statements for the year ended December 31, 2011 were approved by the board of directors on February 16, 2012.

**Report on the Assessment of Internal Accounting Control System ("IACS")**

**To the Board of Directors and Auditor (Audit Committee) of  
Doozan InfraCore Co., Ltd.**

I, as the Internal Accounting Control Officer ("IACO") of Doozan InfraCore Co., Ltd. (the "Company"), assessed the status of the design and operation of the Company's IACS for the year ended December 31, 2011.

The Company's management including IACO is responsible for designing and operating IACS. I, as the IACO, assessed whether the IACS has been appropriately designed and is effectively operating to prevent and detect any error or fraud which may cause any misstatement of the financial statements, for the purpose of preparing and disclosing reliable financial statements.  
I, as the IACO, applied the IACS framework established by the Korea Listed Companies Association for the assessment of design and operation of the IACS.

Based on the assessment of the IACS, the Company's IACS has been appropriately designed and is operating effectively as of December 31, 2011, in all material respects, in accordance with the IACS framework.

February 16, 2012

Internal Accounting Control Officer: **Hosuh Lee**



Chief Executive Officer or President: **Yongjung Kim**

