DOOSAN CORPORATION
NOTES TO SEPARATE FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2013 AND 2012

1. GENERAL:

Doosan Corporation (the "Company") was incorporated on December 18, 1933, under the name of Sohwa-Kirin Beer, Ltd., to manufacture and sell beer. The Company has changed its name to Dongyang Beer, Ltd., in February 1948, to OB Beer, Ltd., in February 1996 and to Doosan Corporation on September 1, 1998. The Company is a business-type holding company and operates in the Republic of Korea.

Since June 1973, the Company's shares have been listed in the Korea Exchange (formerly Korea Stock Exchange). After several capital issues, the Company's share capital as of December 31, 2013, is ₩132,894 million, including ₩26,984 million of preferred shares.

The Company's shares as of December 31, 2013, are owned as follows:

	Number of shares owned	Ownership percentage (%)
Related parties	9,362,805	44.84
Treasury stock	4,670,211	22.36
Others	6,849,055	32.80
Total	20,882,071	100.00

Meanwhile, 48.3% of preferred shares are owned by the largest shareholder and other and 51.7% of preferred shares are owned by others.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

The Company maintains its official accounting records in Korean won and prepares separate financial statements in conformity with Korean 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. The accompanying separate financial statements have been condensed, restructured and translated into English with certain expanded descriptions from the Korean language financial statements. Certain information included in the Korean language financial statements, but not required for a fair presentation of the Company's financial position, comprehensive income, changes in shareholders' equity or cash flows, is not presented in the accompanying separate financial statements.

(1) Basis of preparation

The Company has prepared its separate financial statements in accordance with the Korean International Financial Reporting Standards ("K-IFRS") for the annual period beginning on January 1, 2011.

The Company's financial statements are separate financial statements prepared in accordance with the requirements of K-IFRS 1027, Separate Financial Statements, in which a parent, or an investor with joint control of, or significant influence over, an investee accounts for the investments on the basis of the direct equity interest rather than on the basis of the underlying results and net assets of the investees.

The significant accounting policies under K-IFRSs followed by the Company in the preparation of its separate financial statements are summarized below, and these accounting policies, except for the effects of the changes of accounting policies that are described below and alteration of subsequent measurement method for land (property, plant and equipment) and investment in real properties from cost model to revaluation model, have been applied consistently to the separate financial statements for the current period and the accompanying comparative period.(see Note 2-(2))

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

1) New and revised K-IFRSs affecting amounts reported and/or disclosures in the financial statements

Amendments to K-IFRS 1001 – *Presentation of Financial Statements*

The amendments to K-IFRS 1001 require items of other comprehensive income to be grouped into two categories in the other comprehensive income section: (a) items that will not be reclassified subsequently to profit or loss and (b) items that may be reclassified subsequently to profit or loss when specific conditions are met. Other than this presentation change, the application of the amendments to K-IFRS 1001 does not result in any impact on the Company's financial position and financial performance. The amendments have been applied retrospectively for the comparative period, and hence the presentation of items of other comprehensive income has been modified to reflect the changes

Amendments to K-IFRS 1019 – *Employee Benefits*

The amendments to K-IFRS 1019 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. All actuarial gains and losses are recognized immediately through other comprehensive income (the option to recognize actuarial gains and losses in profit or loss has also been removed). Furthermore, the interest cost and expected return on plan assets used in the previous version of K-IFRS 1019 are replaced with a 'net interest' amount under K-IFRS 1019 (as revised in 2011), which is calculated by applying the discount rate to the net defined benefit liability or asset. The amendments to K-IFRS 1019 also require the recognition of past service cost as an expense at the earlier date of (a) when the plan amendment or curtailment occurs and (b) when the Company recognizes related restructuring costs or termination benefits.
The retroactive application of the amendments has had no material financial impact on the amounts recognized in the separate financial statements.

Amendments to K-IFRS 1107 – *Financial Instruments: Disclosures*

The amendments to K-IFRS 1107 are mainly focusing on presentation of the offset between financial assets and financial liabilities and require entities to disclose information about rights of offset and related arrangements (such as collateral agreements) for financial instruments under an enforceable master netting agreement or similar arrangement, irrespective of whether they would meet the offsetting criteria under K-IFRS 1032. The amendments have been applied for the period ended December 31, 2013, and hence the information about the offset between financial assets and financial liabilities have been disclosed to reflect the changes. (see Note 11-(4))

K-IFRS 1110 – *Consolidated Financial Statements*

K-IFRS 1110 replaces the parts of K-IFRS 1027, Consolidated and Separate Financial Statements, that deal with consolidated financial statements and K-IFRS 2012, Consolidation – Special Purpose Entities.

The initial application of K-IFRS 1110 and hence the Company has reclassified investment equity on Doosan Heavy Industries & Construction Co., Ltd. (DHC), from investments in associates to investments in subsidiaries from the beginning of January 1, 2013. (see Note 12-(1))

K-IFRS 1113– *Fair Value Measurement*

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

The list above does not include some other amendments, such as the tax effect of distribution to holders of equity instruments (the amendments to K-IFRS 1032), which has not resulted in material effects on the Company's separate financial statements.

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

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

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

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

Amendments to K-IFRS 1039 – *Financial Instruments: Recognition and Measurement*

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

K-IFRS 2121, *Levies*

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

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

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

(2) Changes in accounting policies

Changes in accounting policies applied by the Company and impacts on the separate financial statements are as follows.

1) Changed contents

a) K-IFRS 1110 – *Consolidated Financial Statements*
Equities on DHC (book value: ₩1,220,122 million), are reclassified from investments in associates to investments in subsidiaries and hence deferred tax on temporary differences from investment equity has been modified retrospectively.

b) K-IFRS 1016 – *Revaluation model on land* (*Property, Plant and Equipment)*
For more relevant financial information, subsequent measurement method is altered from cost model to revaluation mode only for land, which is classified as property, plant and equipment. Revalued amount of land is recognized on separate financial statements.

c) K-IFRS 1040 – *Fair value model on investment property* (*Investment property)*
Subsequent measurement method of investment property is altered from cost model to fair value model in which economic reality is reflected.

2) Impacts on the separate financial statements

a) Adjustments of financial position as of January 1, 2012, are as follows (in millions of Korean won):

	Asset	Liability	Capital
Before adjustments	₩3,177,644	₩1,209,518	₩1,968,126
Adjustments			
K-IFRS 1110	-	(19,917)	19,917
K-IFRS 1040	35,119	8,499	26,620
Total	35,119	(11,418)	46,537
After adjustments	₩3,212,763	₩1,198,100	₩2,014,663

b) Adjustments of the financial position and financial performance as of December 31, 2012, are as follows (in millions of Korean won):

	Asset	Liability	Capital	Sales	Profit or loss	TOTAL COMPREHENSIVE INCOME
Before adjustments	₩3,090,083	₩1,171,728	₩1,918,355	₩1,487,631	₩80,923	₩77,029
Adjustments						
K-IFRS 1110	-	(20,489)	20,489	-	572	572
K-IFRS 1040	59,056	14,292	44,764	-	3,912	18,144
Total	59,056	(6,197)	65,253	-	4,484	18,716
After adjustments	₩3,149,139	₩1,165,531	₩1,983,608	₩1,487,631	₩85,407	₩95,745

c) Adjustments of the financial position and financial performance as of December 31, 2013, are as follows (in millions of Korean won):

	Asset	Liability	Capital	Sales	Profit or loss	TOTAL COMPREHENSIVE INCOME
Before adjustments	₩3,186,853	₩1,318,876	₩1,867,977	₩1,652,025	₩139,384	₩149,005
Adjustments						
K-IFRS 1110	-	(20,489)	20,489	-	-	-
K-IFRS 1016	31,838	7,705	24,133	-	(220)	24,133
K-IFRS 1040	72,940	17,652	55,288	-	10,524	10,524
Total	104,778	4,868	99,910	-	10,304	34,657
After adjustments	₩3,291,631	₩1,323,744	₩1,967,887	₩1,652,025	₩149,688	₩183,662

(3) Investments in subsidiaries, joint ventures and associates

The deemed costs of investments in subsidiaries, joint ventures and associates were recognized as carrying amounts in conformity with previous GAAP (K-GAAP) at the transition date to K-IFRSs. Meanwhile, the investments in subsidiaries, joint ventures and associates have been measured by cost method after the transition date to K-IFRSs.

(4) Foreign currency translation

3) Functional currency and presentation currency

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

4) Foreign currency transactions and translation of balance

In preparing the separate financial statements of the Company, transactions in foreign currencies are translated by using the functional currency when transactions occur or are revaluated if transactions need revaluation. Settlement of transactions in foreign currencies and gain (loss) on translation of monetary items are recognized in profit or loss. Risk-hedged amounts of cash flow hedges that satisfy requirements and net investments to foreign business are postponed in shareholders’ equity.

(5) Cash and cash equivalents

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

(6) Financial assets

1) Classification of financial assets

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

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

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 that have maturities of more than 12 months from the end of the reporting period are classified as non-current assets; otherwise, they are classified as current assets.

c) AFS financial assets
AFS financial assets are non-derivative financial assets that are designated as AFS or are not classified as loans and receivables, held-to-maturity investments or financial assets at FVTPL. AFS financial assets are classified as non-current assets, unless management has intention to sell them within 12 months as of the end of the reporting period.

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 that have maturities of more than 12 months from the end of the reporting period are classified as non-current assets; otherwise, they are classified as current assets.

2) Recognition and measurement of financial assets

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

Financial assets at FVTPL and AFS financial assets are subsequently measured at fair value. Loans and receivables and held-to-maturity investments are measured at amortized cost using the effective interest method.

Gains or losses arising from changes in fair value of financial assets at FVTPL are recognized in other non-operating income (expenses) line item in the separate statements of income. Dividends on financial assets at FVTPL are recognized in the finance income line item when the Company's right to receive the dividends is established.

The changes in fair value of monetary or non-monetary securities, which were classified as AFS financial assets, are recognized as other comprehensive income. When AFS financial assets are disposed of or are determined to be impaired, the cumulative gain or loss previously accumulated in the AFS revaluation reserve is reclassified to profit or loss.

Interest calculated using the effective interest method is recognized in the finance income line item. Dividends on AFS financial assets are recognized in the finance income line item when the Company's right to receive the dividends is established.

3) Impairment of financial assets

- 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 more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

  The amount of the impairment loss recognized is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate. The carrying amount of the financial asset is reduced by the impairment loss and the amount of the loss is recognized in profit 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 profit or loss.

- AFS financial assets

  The Company assesses at the end of each reporting period whether there is any objective evidence that a financial asset or a group of financial assets is impaired. For equity investments classified as AFS, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment. If there is objective evidence of impairment on AFS financial assets, the cumulative loss that has been recognized in other comprehensive income, less any impairment loss previously recognized in profit or loss, is reclassified from equity to profit or loss. Impairment losses recognized in profit or loss for an investment in an equity instrument classified as AFS are not reversed through profit 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 profit or loss, the impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

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 separate statements of financial position, only 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.

(7) Accounts receivable

Accounts receivable is the amount owed by customer for products and services provided in the ordinary course of business. Accounts receivable expected to be collected within one year is classified as current assets; otherwise, it is classified as non-current assets. The Company recognizes accounts receivable as fair value when it occurs and presents net value offsetting the allowance for bad debts calculated by using the bad debt experienced and analysis about each receivable.

(8) Inventories

Inventories are stated at the lower of cost and net realizable value. Costs of inventories include 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 using the average method except for materials in transit (the specific identification method) and the merchandise of Glonet business unit (the moving average method). During the year, perpetual inventory systems are used to value inventories, which are adjusted to physical inventory counts performed at the end of the year.

The Company periodically reviews changes in net realizable value of inventories due to damage, obsolescence, decline in selling prices and others and recognizes loss on inventory valuation. Net realizable value for merchandise, finished goods and work in progress represents the estimated selling price for inventories, less all estimated costs of completion and the costs necessary to make the sale and current replacement cost for raw materials.

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

(9) Property, plant and equipment

Property, plant and equipment are stated at cost, less subsequent accumulated depreciation and accumulated impairment losses, other than land, for which revaluation model is applied after initial recognition. The cost of an item of property, plant and equipment is directly attributable to its purchase or construction, including the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

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

Depreciation expense for property, plant and equipment, other than land, is computed using the straight-line method with the acquiring costs, except for residual value of assets based on the estimated useful lives of the assets as mentioned below. For the leased assets, the Company depreciates during the minimum of lease contract period and useful lives of the leased assets if it is not certain to acquire the ownership of the leased assets till the end of the lease contract.

	Estimated useful lives (in years)
Buildings	5–50
Structures	2–30
Machinery	2–15
Tools, furniture, fixtures and other	2–10

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

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

The Company eliminates the carrying amount of an asset when it is hard to expect inflow of future economic benefits incurred by disposal or using it. The gain or loss on derecognition of an item of property, plant and equipment is determined as the difference between the net disposal amounts and the carrying amount of the item and is recognized in the other non-operating income (expense) line item in the period in which the item of property, plant and equipment is eliminated..

(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 acquiring cost, except for residual value, with the amortization beginning when the asset is available for use. The estimated useful lives of the assets are as follows:

	Estimated useful lives (in years)
Development costs	5–10
Industrial rights	5
Other intangible assets	4–10

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

The expenditure on development is capitalized if, and only if, all of the following can be demonstrated:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- the intention to complete the intangible asset and use or sell it;
- the ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- the ability to measure reliably the expenditure attributable to the intangible asset during its development.

Capitalized development costs include expenditure on materials, salaries, wages and other employment-related costs of personnel directly engaged in generating assets and related overhead costs, which are systematically allocated. 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 or amortization in selling, general and administrative expenses. The expenditure on research and development that does not meet the conditions noted above is recognized as an expense when it is incurred.

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

(11) Investment properties

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, investment properties are stated at fair value, with any gains or losses arising on fair value fluctuation recognized in profit or loss.

(12) Borrowing costs

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

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

(13) Impairment of non-financial assets

1) Impairment of non-financial assets, except for goodwill

At the end of each reporting period, the Company reviews the carrying amounts of its non-financial assets, except for goodwill, to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs.

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

If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or the cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

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

2) Impairment of goodwill

Goodwill arising on a business combination is carried at cost as established at the date of acquisition of the business, less accumulated impairment losses, if any. For the purpose of a test for impairment, goodwill is allocated to a cash-generating unit that is predicted synergy effect from an acquisition of a business.

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

(14) Financial liabilities and equity instruments

1) Classification as debt or equity

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

2) Equity instruments

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

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

3) Compound instruments

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

4) Financial liabilities

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

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

5) Financial liabilities at FVTPL

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

6) Other financial liabilities

Other financial liabilities are subsequently measured at amortized cost using the effective interest method, with interest expense recognized on an effective yield basis. The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments, including all fees and points paid or received and transaction costs and other premiums or discounts through the expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

(15) Financial guarantee contract liabilities

The Company has financial guarantee contract liabilities, which are obligations to pay specific amounts for indemnity about creditors' loss on insolvency of specific debtors according to initial and revised contract condition of liabilities on the payment date. Financial guarantee contract liabilities are initially measured at their fair value, except for direct costs related to the issuance. Subsequently, financial guarantee contract liabilities are 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 is less cumulative amortization recognized in accordance with the K-IFRS 1018, *Revenue.*

(16) Retirement benefit costs and termination benefits

The Company operates a defined benefit pension plan. For defined benefit retirement benefit plans, the cost of providing benefits is determined using the Projected Unit Credit Method, with actuarial valuations being carried out at the end of each reporting period. Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling and the return on plan assets (excluding interest), is reflected immediately in the statement of financial position with a charge or credit recognized in other comprehensive income in the period in which they occur. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss. Past service cost is recognized in profit or loss in the period of a plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset. Defined benefit costs are composed of service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements), net interest expense (income), and remeasurement.

The Company presents the service cost and net interest expense (income) components in profit or loss, and the remeasurement component in other comprehensive income. Curtailment gains and losses are accounted for as past service costs.

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

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

(17) Provisions

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that the Company will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material). The discount rate used is a pretax rate that reflects current market assessments of the time value of money and the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage is recognized in profit or loss as borrowing cost.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

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

(18) Leases

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

1) The Company as lessor

Amounts due from lessees under finance leases are recognized as receivables at the amount of the Company’s net investment in the leases. Interest income is recognized using the effective interest method on the part of the Company’s net investment in the leases, which is not collected yet.

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

2) The Company as lessee

Assets held under finance leases are initially recognized as assets of the Company at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the statement of financial position as a finance lease obligation. Lease payments are apportioned between finance expenses and reduction of the lease obligation, so as to achieve a constant rate of interest on the remaining balance of the liability. Finance expenses are recognized immediately in profit or loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance with the Company's general policy on borrowing costs. Adjusted lease payments are recognized as expenses in the periods in which they are incurred.

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

(19) Derivative financial instruments

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

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

1) Hedge accounting

The Company operates fair value hedges to avoid the risk of fair value change, which is incurred from specific risk on assets, liabilities and firm contracts, and cash flow hedges to avoid the risk of future cash flow change, which is incurred from specific risk on expecting contracts.

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

2) Fair value hedges

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

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

3) Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gain or loss related to the ineffective portion is recognized immediately in profit or loss.

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

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

4) Other derivative financial instruments

Derivative financial instruments other than the effective portion of derivative financial instruments that are designated as the hedging instruments are measured at fair value. Gain or loss on valuation incurred from change of fair value is recognized in profit or loss.

(20) Dividend

Dividend payable is recognized as liability when declaration of the dividend is approved at the shareholders’ meeting.

(21) 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 options using the Black-Scholes model.

(22) 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.

1) Sales of goods

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

2) Rendering of services

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

3) Other revenue

Royalty revenue is recognized on an accrual basis in accordance with the substance of the relevant agreement. Dividend income from investments is recognized when the right to receive payment has been established. Interest income is accrued on a timely basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition. Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease.

(23) Government grants

Government grants related to asset acquisitions are recognized as deduction of received assets or temporary assets for investing received assets before the related assets are acquired. When the related assets are acquired, they are recorded as a deduction from the acquired assets.

Meanwhile, government grants that have no specific condition to use are recognized in operating income when it is directly related to main operation. If not, government grants are recognized in other non-operating income. If there is a specific expense dealing with government grants, the Company offset them and recognizes in profit or loss.

(24) Income tax and deferred tax

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

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

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

(25) Non-current assets held for sale

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

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their previous carrying amount and fair value, less costs to sell.

(26) Distribution of non-cash assets to owners

Liability related to distribution of non-cash assets to owners is recognized as fair value of asset that will be divided from the initial recognition. Meanwhile, the difference between the carrying amount of the asset that will be divided and the carrying amount of dividends payable is recognized in profit or loss.

(27) Fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Company takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of K-IFRS 1102, *Share-Based Payment*, leasing transactions that are within the scope of K-IFRS 1017, *Leases*, and measurements that have some similarities to fair value but are not fair value, such as net realizable value in K-IFRS 1002, *Inventories*, or value in use in K-IFRS 1036, *Impairment of Assets*.

(28) Approval of financial statements

The separate financial statements as of and for the year ended December 31, 2013, were approved by the board of directors on March 4, 2014.

3. SIGNIFICANT ACCOUNTING JUDGMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTIES:

In the application of the Company's accounting policies, which are described in Note 2, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and underlying assumptions are reviewed on an ongoing basis. Actual results may differ from these estimates.

Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

(1) Revenue recognition

Revenue from a contract to provide services is recognized by reference to the stage of completion of the contract. The stage of completion of the contract is determined as reasonable estimation and is subject to change as related factors change.

(2) Impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the value in use of the cash-generating units to which goodwill has been allocated. The value in use calculation requires the directors to estimate the future cash flows expected to arise from the cash-generating unit and a suitable discount rate in order to calculate the present value.

(3) Defined benefit obligation

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

(4) Warranty provision

Provisions for the expected cost of warranty obligations are recognized at the best estimate of the expenditure required to settle the Company's current and future obligations. Provisions are determined by the estimate based on past experience.

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

As stated in Note 13 and Note 15, the Company uses evaluation technique including inputs that are not based on observable market data to approximate revalued amount of land classified as property, plant and equipment and fair value of investment property. The Company's management believes that the evaluation technique and assumptions that are used for revaluation model on land and fair value model on investment in real properties are fair.

(6) Deferred tax

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

4. FINANCIAL RISK MANAGEMENT:

The Company is exposed to various financial risks such as market risk (foreign currency risk and interest rate risk), credit risk and liquidity risk related to the operations of the Company. The purpose of risk management policy is to minimize potential risks, which could have an adverse effect on financial performance.

Financial risk management activities 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 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 exposure.

The book value of the Company's monetary assets and liabilities denominated in foreign currencies, which represents the maximum exposure to foreign currency risk, as of December 31, 2013 and 2012, is as follows (in millions of Korean won):

	December 31, 2013						December 31, 2012					
	USD	EUR	JPY	GBP	Others (*)	Total	USD	EUR	JPY	GBP	Others (*)	Total
Assets	₩108,302	₩20,158	₩536	₩17,906	₩13,349	₩160,251	₩90,475	₩5,325	₩1,480	₩22	₩10,305	₩107,607
Liabilities	(30,188)	(2,917)	(3,753)	(148)	(2,237)	(39,243)	(71,474)	(2,754)	(2,776)	(514)	(7,094)	(84,612)
Net assets (liabilities)	₩78,114	₩17,241	₩(3,217)	₩17,758	₩11,112	₩121,008	₩19,001	₩2,571	₩(1,296)	₩(492)	₩3,211	₩22,995

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

Net foreign currency translation gain/loss for the years ended December 31, 2013 and 2012, is ₩(632) million and ₩(550) million, respectively.

A sensitivity analysis on the Company's income before tax for the period, assuming a 10% increase and decrease in currency exchange rates, for the years ended December 31, 2013 and 2012, is as follows (in millions of Korean won):

	Year ended December 31, 2013		Year ended December 31, 2012	
	10% decrease in KRW against foreign currency	10% increase in KRW against foreign currency	10% decrease in KRW against foreign currency	10% increase in KRW against foreign currency
Income before tax impact	₩12,101	₩(12,101)	₩2,300	₩(2,300)

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

2) Interest rate risk

The Company's interest rate risk is related to borrowings and bank deposits with floating interest rates, and related interest income and expense are exposed to interest rate risk. The Company is exposed to interest rate risk mainly due to its borrowing with floating interest rates. The purpose of interest rate risk management is to minimize uncertainty and financial expense arising from interest rate fluctuation.

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

The book value of the Company's financial assets and liabilities with floating interest rates exposed to interest rate risk as of December 31, 2013 and 2012, is as follows (in millions of Korean won):

	Year ended December 31, 2013	Year ended December 31, 2012
Financial assets	₩79,523	₩118,143
Financial liabilities	(215,000)	(40,000)
Net assets (liabilities)	₩(135,477)	₩78,143

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

	December 31, 2013		December 31, 2012	
	1% increase	1% decrease	1% increase	1% decrease
Income before tax impact	₩(1,355)	₩1,355	₩781	₩(781)

3) Price risk

The Company is exposed to equity price risks arising from its listed equity investments among AFS equity investments. The Company periodically measures the risk as 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 Board of Directors.

(2) Credit risk

The credit risk refers to risk of financial losses to the Company when the counterparty defaults on the obligations of the contract. The credit risk arises from AFS financial assets which are not equity securities, deposits in financial institution, financial derivatives and guarantee limit as well as from the Company's normal transaction and investing activity. To manage credit risk, the Company evaluates the creditworthiness of each customer or counterparty considering the financial status, past experience and other factors. The Company establishes credit limit for each customer and counterparty. The Company evaluates the creditworthiness using open financial information and information provided by credit-rating institution when the Company contracts with new customers. The Company decides credit transaction limit and is provided with collateral and guarantee based on evaluation.

Also, the Company revaluates customers' creditworthiness periodically, reassesses credit transaction limit and readjusts level of collateral. The Company reports the present condition of delayed collection and collection measures periodically to financial assets which has delayed collection and takes measures by causes of delay.

1) The maximum credit risk exposure

The maximum credit risk exposure for financial assets maintained by the Company and the book value for the financial assets as of December 31, 2013 and 2012, are as follows (in millions of Korean won):

		December 31, 2013	December 31, 2012
Loans and receivables	Cash and cash equivalents (Note 1)	₩100,704	₩139,212
	Current and non-current financial instruments	2,513	9,218
	Accounts and other receivables	286,898	291,424
	Deposits	18,695	19,100
AFS financial assets	Asset-backed securities (ABS) (short-term investment)	1,497	6,597
	Debt securities (long-term investment)	7,000	7,000
Derivative assets		1,448	900
	Total	₩418,755	₩473,451

(Note 1) Cash on hand is excluded.

Apart from the above-mentioned financial assets, financial guarantee liabilities of the Company are explained in Note 31.

2) The Company's receivables' aging analysis as of December 31, 2013 and 2012, is as follows (in millions of Korean won):

	December 31, 2013						
	Receivables assessed for impairment on a collective basis	Receivables assessed for impairment on a collective basis					
		Within due	0–3 months	3–6 months	6–12 months	More than 12 months	Total
Accounts receivable	₩26,060	₩188,620	₩54,436	₩16,823	₩3,596	₩1,653	₩291,188
Other receivables	983	2,778	7,724	801	1,080	355	13,721
Accrued income	-	93	-	-	-	-	93
Loans	5	4,331	-	-	-	-	4,336
Total	₩27,048	₩195,822	₩62,160	₩17,624	₩4,676	₩2,008	₩309,338

	December 31, 2012						
	Receivables assessed for impairment on a collective basis	Receivables assessed for impairment on a collective basis					
		Within due	0–3 months	3–6 months	6–12 months	More than 12 months	Total
Accounts receivable	₩23,954	₩221,185	₩42,859	₩3,732	₩1,542	₩2,639	₩295,911
Other receivables	2,314	9,544	2,821	455	28	51	15,213
Accrued income	-	247	-	-	-	-	247
Loans	5	3,537	-	-	-	-	3,542
Total	₩26,273	₩234,513	₩45,680	₩4,187	₩1,570	₩2,690	₩314,913

An allowance for the above-mentioned individually impaired receivables for the years ended December 31, 2013 and 2012, is ₩21,573 million and ₩23,135 million, respectively.

Among Receivables assessed for impairment on a collective basis, receivables not impaired are as follows (in millions of Korean won):

	December 31, 2013					
	Within due	0–3 months	3–6 months	6–12 months	More than 12 months	Total
Accounts receivable	₩614	₩3,786	₩262	₩482	₩331	₩5,475

	December 31, 2012					
	Within due	0–3 months	3–6 months	6–12 months	More than 12 months	Total
Accounts receivable	₩-	₩1,274	₩241	₩63	₩697	₩2,275
Other receivables	-	8	855	-	-	863
Total	₩-	₩1,282	₩1,096	₩63	₩697	₩3,139

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

AFS financial assets, held-to-maturity financial assets, deposits in financial institutions and derivative instruments are individually assessed to be impaired.

(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.

A summary of the Company's non-derivative liabilities' maturity as of December 31, 2013 and 2012, is as follows (in millions of Korean won):

		December 31, 2013				
		Nominal cash flows according to contract				
	Book value	Total	Less than 1 year	1–2 years	2–5 years	More than 5 years
Financial liabilities	₩1,086,366	₩1,089,539	₩367,524	₩233,676	₩406,645	₩81,694
Interest on financial liabilities	-	100,477	36,877	28,186	32,423	2,991
Total	₩1,086,366	₩1,190,016	₩404,401	₩261,862	₩439,068	₩84,685

		December 31, 2012				
		Nominal cash flows according to contract				
	Book value	Total	Less than 1 year	1–2 years	2–5 years	More than 5 years
Financial liabilities	₩985,115	₩989,013	₩367,582	₩128,712	₩411,025	₩81,694
Interest on financial liabilities	-	99,925	33,328	27,580	32,610	6,407
Total	₩985,115	₩1,088,938	₩400,910	₩156,292	₩443,635	₩88,101

The above-mentioned maturity analysis is based on undiscounted cash flow according to the contract, which is different from non-derivative liabilities in the separate statements of financial position.

Apart from the above-mentioned non-derivative liabilities, as of December 31, 2013, financial guarantee contract liabilities of the Company are explained in Note 31.

(4) Capital risk

The Company performs capital risk management to maintain its ability to continuously provide profits 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, returns capital to shareholders and issues new shares and sells 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, 2013 and 2012, are as follows (in millions of Korean won):

	December 31, 2013	December 31, 2012
Total liabilities	₩1,323,744	₩1,165,531
Total equity	1,967,887	1,983,608
Debt-to-equity ratio	67.27%	58.76%

5. RESTRICTED FINANCIAL ASSETS:

Details of restricted financial assets as of December 31, 2013 and 2012, are as follows (in millions of Korean won):

	December 31, 2013	December 31, 2012	Description
Long-term financial instruments	₩17	₩17	Bank transaction deposits
Deposits	15	15	Establish the right of pledge
Total	₩32	₩32	

6. SHORT-TERM INVESTMENT SECURITIES:

Short-term investment securities as of December 31, 2013 and 2012, are summarized as follows (in millions of Korean won):

	December 31, 2013	December 31, 2012
AFS financial assets:		
ABS	₩1,497	₩6,597

ABS is carried at cost, because there is no quoted market price and its fair value cannot be measured reliably.

7. ACCOUNTS AND OTHER RECEIVABLES:

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

	December 31, 2013			December 31, 2012		
	Gross	Allowance for doubtful accounts	Carrying value	Gross	Allowance for doubtful accounts	Carrying value
Current						
Accounts receivable	₩291,007	₩(21,147)	₩269,860	₩295,730	₩(21,770)	₩273,960
Other receivables	13,686	(1,072)	12,614	14,821	(1,142)	13,679
Accrued income	93	-	93	247	-	247
Loans	755	(5)	750	633	(5)	628
Total	₩305,541	₩(22,224)	₩283,317	₩311,431	₩(22,917)	₩288,514
Non-Current						
Accounts receivable	₩181	₩(181)	₩-	₩181	₩(181)	₩-
Other receivables	35	(35)	-	391	(391)	-
Loans	3,581	-	3,581	2,910	-	2,910
Total	₩3,797	₩(216)	₩3,581	₩3,482	₩(572)	₩2,910

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

	December 31, 2013				
	January 1, 2013	Increase	Written off	Merger	December 31, 2013
Accounts receivable	₩(21,770)	₩649	₩431	₩(457)	₩(21,147)
Other receivables	(1,142)	104	20	(54)	(1,072)
Short-term loans	(5)	-	-	-	(5)
Long-term accounts receivable	(181)	-	-	-	(181)
Long-term other receivables	(391)	60	296	-	(35)
Total	₩(23,489)	₩813	₩747	₩(511)	₩(22,440)

Bad debt expense to impaired accounts receivable is included in selling, general and administrative expenses and bad debt expense to impaired other receivables is included in other non-operating expenses in the separate statements of income.

8. INVENTORIES:

Inventories as of December 31, 2013 and 2012, are summarized as follows (in millions of Korean won):

	December 31, 2013			December 31, 2012		
	Acquisition cost	Valuation allowance	Book value	Acquisition cost	Valuation allowance	Book value
Merchandise	₩16,876	₩(2,969)	₩13,907	₩3,444	₩(340)	₩3,104
Finished goods	33,658	(3,158)	30,500	31,948	(3,740)	28,208
Work in progress	25,589	(186)	25,403	19,473	(192)	19,281
Raw materials	72,307	(2,612)	69,695	39,279	(1,626)	37,653
Materials in transit	16,104	-	16,104	8,704	-	8,704
Others	2,511	-	2,511	3,693	-	3,693
Total	₩167,045	₩(8,925)	₩158,120	₩106,541	₩(5,898)	₩100,643

Losses on inventory valuation charged to (reversals of loss on inventory valuation deducted from the cost of sales) amounted to ₩1,359 million and ₩2,536 million for the years ended December 31, 2013 and 2012, respectively. Accumulated losses on inventory increased through merger are ₩4,387 million as of December 31, 2013.

9. LONG-TERM INVESTMENT SECURITIES:

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

	December 31, 2013	December 31, 2012
AFS financial assets		
Equity securities in listed company		
Pharma Foods International	₩-	₩1,142
Equity securities in non-listed company		
Doosan Capital Co., Ltd.	-	1,037
The Korea Economic Daily	56	56
Parnas Hotel	50	50
Korea Housing Guarantee Co., Ltd.	464	464
Kang Won Ilbo	57	57
KMA Consultants Inc.	20	20
Prestolite Asia	468	-
Subtotal	1,115	1,684
Beneficiary certificate		
Korea Development Bank	4	4
Monetary Bond Trust		
Subordinated beneficiary certificate	7,000	7,000
Subtotal	7,004	7,004
Investments in funds		
Software Mutual Benefit Association	50	50
Engineering Mutual Benefit Association	14	14
Korea Defense Industry Association	324	324
Korea Marine Equipment Association	1	1
Machinery Financial Cooperative	271	250
Construction Guarantee	139	139
Subtotal	799	778
Total	₩8,918	₩10,608

Equity securities in non-listed company, beneficiary certificate, investments in funds and debt securities are carried at cost, because there is no quoted market price and their fair value cannot be measured.

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

	Year ended December 31, 2013			
	January 1, 2013	Valuation	Reclassification from equity to profit or loss	December 31, 2013
Investments in listed company	₩1,113	₩1,067	₩ (2,180)	₩-
Investments in non-listed company	437	-	(437)	-
Tax effect	(375)	(258)	633	-
Total	₩1,175	₩ 809	₩ (1,984)	₩-

	Year ended December 31, 2012			
	January 1, 2012	Valuation	Reclassification from equity to profit or loss	December 31, 2012
Investments in listed company	₩1,027	₩86	₩-	₩1,113
Investments in non-listed company	437	-	-	437
Tax effect	(354)	(21)	-	(375)
Total	₩1,110	₩65	₩-	₩1,175

10. DERIVATIVES:

(1) Details of these derivative contracts are as follows:

Derivative contracts	Purpose	Description
Foreign currency forwards	Cash flow hedge	Adjustment from foreign currency sales to Korean won to avoid cash flow risk arising from foreign currency forecast sales
	Trading purpose	Recognized in profit or loss of fair value changes in foreign currency forward
Interest rate swap	Trading purpose	Recognized in profit or loss of gap between floating interest rate and fixed interest rate

Details of gain and loss on valuation of derivatives as of December 31, 2013 and 2012, are as follows (in millions of Korean won, in thousands of foreign currency):

	December 31, 2013						
	Buy		Sell				
	Currency	Amount	Currency	Amount	Assets (liabilities)	Gains (losses)	Other comprehensive income (Note 1)
Foreign currency forwards	KRW	158,428	USD	147,600	₩1,311	₩-	₩1,311
	KRW	5,797	EUR	4,000	(84)	-	(84)
	KRW	10,419	GBP	6,000	(107)	-	(107)
					₩1,120	₩-	₩1,120

	December 31, 2012						
	Buy		Sell				
	Currency	Amount	Currency	Amount	Assets (liabilities)	Gains (losses)	Other comprehensive income (Note 1)
Foreign currency forwards	KRW	96,343	USD	88,535	₩736	₩-	₩736
	KRW	17,513	CNY	101,700	112	-	112
	USD	6,035	KRW	6,468	(1)	(1)	-
Interest rate swap	KRW 40,000, 4.93%		KRW 40,000, CD 3M+1.55%		(226)	(160)	-
					₩621	₩(161)	₩848

(Note 1) Other comprehensive income does not reflect corporate tax effect.

Derivative instruments classified as financial assets at FVTPL and derivatives that are designated as hedging instruments are classified as non-current assets (liabilities) when their maturities are more than 12 months from the end of the reporting period; otherwise, they are classified as current assets (liabilities). Meanwhile, by applying cash flow hedge, there is no gain or loss related to the ineffective portion, which is recognized in profit or loss for the year ended December 31, 2013.

11. FINANCIAL INSTRUMENTS:

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

	December 31, 2013					
	Financial assets at FVTPL	Loans and receivables	AFS financial assets	Derivatives designated as hedging instruments	Book value	Fair value
Cash and cash equivalents	₩-	₩100,704	₩-	₩-	₩100,704	₩100,704
Financial instruments	-	2,513	-	-	2,513	2,513
Investment securities	-	-	10,415	-	10,415	10,415
Trade and other receivables	-	286,898	-	-	286,898	286,898
Derivative assets	-	-	-	1,448	1,448	1,448
Deposits	-	18,695	-	-	18,695	18,695
Total	₩-	₩408,810	₩10,415	₩1,448	₩420,673	₩420,673

	December 31, 2013					
	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivatives designated as hedging instruments	Financial guarantee contract	Book value	Fair value
Trade and other payables	₩-	₩242,008	₩-	₩-	₩242,008	₩242,008
Borrowings and bonds	-	844,358	-	-	844,358	844,358
Derivative liabilities	-	-	329	-	329	329
Financial guarantee liabilities	-	-	-	581	581	581
Total	₩-	₩1,086,366	₩329	₩581	₩1,087,276	₩1,087,276

	December 31, 2012					
	Financial assets at FVTPL	Loans and receivables	AFS financial assets	Derivatives designated as hedging instruments	Book value	Fair value
Cash and cash equivalents	₩-	₩139,212	₩-	₩-	₩139,212	₩139,212
Financial instruments	-	9,218	-	-	9,218	9,218
Investment securities	-	-	17,205	-	17,205	17,205
Trade and other receivables	-	291,424	-	-	291,424	291,424
Derivative assets	6	-	-	894	900	900
Deposits	-	19,100	-	-	19,100	19,100
Total	₩6	₩458,954	₩17,205	₩894	₩477,059	₩477,059

	December 31, 2012					
	Financial liabilities at FVTPL	Financial liabilities at amortized cost	Derivatives designated as hedging instruments	Financial guarantee contract	Book value	Fair value
Trade and other payables	₩-	₩272,142	₩-	₩-	₩272,142	₩272,142
Borrowings and bonds	-	712,973	-	-	712,973	712,973
Derivative liabilities	232	-	47	-	279	279
Financial guarantee liabilities	-	-	-	605	605	605
Total	₩232	₩985,115	₩47	₩605	₩985,999	₩985,999

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

	December 31, 2013			
	Level 1	Level 2	Level 3	Total
Financial assets:				
Derivatives designated as hedging instruments	₩-	₩1,448	₩-	₩1,448
Financial liabilities:				
Derivatives designated as hedging instruments	₩-	₩(329)	₩-	₩(329)

	December 31, 2012			
	Level 1	Level 2	Level 3	Total
Financial assets:				
Financial assets at FVTPL	₩-	₩6	₩-	₩6
AFS financial assets	1,142	-	-	1,142
Derivatives designated as hedging instruments	-	894	-	894
Total	₩1,142	₩900	₩-	₩2,042
Financial liabilities:				
Financial liabilities at FVTPL	₩-	₩(232)	₩-	₩(232)
Derivatives designated as hedging instruments	-	(47)	-	(47)
Total	₩-	₩(279)	₩-	₩(279)

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities.
Level 2: Inputs other than quoted prices that are observable for the asset or liability, either directly or indirectly.
Level 3: Inputs that are not based on observable market data (unobservable inputs).

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

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity-specific estimates. If all significant inputs required for fair value of an instrument are observable, the instrument is included in Level 2.

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

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

(3) Comprehensive income (loss) by categories of financial instruments for the years ended December 31, 2013 and 2012, is as follows (in millions of Korean won):

	Year ended December 31, 2013						
	Profit or loss						Other comprehensive income (Note 1)
	Interest	Dividends	Income on financial guarantee	Impairment	Disposal	Exchange rate fluctuations	
Financial assets:							
Loans and receivables	₩2,826	₩-	₩-	₩ 813	₩(737)	₩(3,689)	₩-
AFS financial assets	582	36	-	-	2,082	-	(1,550)
Total	₩3,408	₩36	₩-	₩813	₩1,345	₩(3,689)	₩(1,550)
Financial liabilities:							
Financial liabilities at amortized cost	₩(37,451)	₩-	₩-	₩-	₩-	₩1,002	₩-
Financial guarantee contract	-	-	408	-	-	-	-
Total	₩(37,451)	₩-	₩408	₩-	₩-	₩1,002	₩-

	Year ended December 31, 2012						
	Profit or loss						Other comprehensive income (Note 1)
	Interest	Dividends	Income on financial guarantee	Impairment	Disposal	Exchange rate fluctuations	
Financial assets:							
Loans and receivables	₩4,983	₩-	₩-	₩ 867	₩ -	₩(7,745)	₩-
AFS financial assets	439	4	-	-	(282)	-	86
Total	₩5,422	₩4	₩-	₩867	₩(282)	₩(7,745)	₩86
Financial liabilities:							
Financial liabilities at amortized cost	₩(36,395)	₩-	₩-	₩-	₩(80)	₩4,393	₩-
Financial guarantee contract	-	-	227	-	-	-	-
Total	₩(36,395)	₩-	₩227	₩-	₩(80)	₩4,393	₩-

Apart from the financial instruments mentioned above, comprehensive income (loss) by derivatives for the years ended December 31, 2013 and 2012, is as follows:

	December 31, 2013			December 31, 2012		
	Profit or loss		Other comprehensive income (Note 1)	Profit or loss		Other comprehensive income (Note 1)
	Valuation	Disposal		Valuation	Disposal	
Derivative instrument not designated as a hedge	₩-	₩(19)	₩-	₩(161)	₩446	₩-
Derivatives designated as hedging instruments	-	(331)	272	-	487	4,282
Total	₩-	₩(350)	₩272	₩(161)	₩933	₩4,282

(Note 1) Other comprehensive income does not reflect corporate tax effect.

(4) Financial assets and liabilities subject to an enforceable master netting arrangement or similar agreement as of December 31, 2013, are as follows:

	Subject of appliance in enforceable master netting arrangement		
	Before enforceable master netting	Enforceable master netting	After enforceable master netting
Financial assets and liabilities:			
Accounts receivable	₩19,633	₩(6,089)	₩13,544
Other receivables	75	(56)	19
Accounts payable	₩ (27,730)	₩6,145	₩(21,585)

12. SUBSIDIARIES AND ASSOCIATES:

(1) Subsidiaries and associates as of December 31, 2013 and 2012, consist of the following (in millions of Korean won):

Companies	Location of incorporation	Percentage of ownership (%)	December 31, 2013	December 31, 2012
Subsidiaries:				
DHC (Note 1)	South Korea	44.46	₩1,232,946	₩1,220,122
Oricom Inc. ("Oricom")	South Korea	69.98	23,168	23,168
Neovalue Co., Ltd.("Neovalue") (Note 2)	South Korea	-	-	1,005
Doosan Tower Co., Ltd. ("Doosan tower") (Note 3)	South Korea	100	231,550	197,170
Doosan Feed & Livestock Co., Ltd. ("DFL")	South Korea	100	15,757	15,757
Doosan Electro-Materials Hong Kong Ltd. ("DSEH") (Note 4)	Hong Kong	100	-	-
Doosan Hong Kong Ltd. ("DSH") (Note 4)	Hong Kong	100	-	-
Doosan Electro-Materials Singapore Pte Ltd. ("DSES") (Note 4)	Singapore	100	-	-
Doosan (Shanghai) Chemical Materials Co., Ltd. (Note 4)	China	100	-	-
Doosan Bears Inc.	South Korea	100	1,138	1,138
N Shaper Corp. (Note 3)	South Korea	-	-	34,660
Doosan Donga Co.	South Korea	100	29,477	29,477
DIP Holdings Company	South Korea	100	164,169	164,169
Doosan Information and Communications America LLC	USA	100	4,889	4,889
Doosan Information and Communications China LLC	China	100	3,230	3,230
Doosan Mottrol (Jiangyin) Co., Ltd.	China	100	33,587	33,587
Doosan Electro-Materials (Changshu) Co., Ltd.	China	100	45,964	45,964
Doosan Equipment Rental Vietnam Company Limited(Note 5)	Vietnam	-	-	10,676
Doosan Electro-Materials America, LLC	U.S.A.	100	282	282
Doosan Industrial Vehicle Europe N.A.(Note 6)	Belgium	100	16,934	-
Doosan Industrial Vehicle U.K. Ltd.(Note 6)	UK	100	1,909	-
Doosan Logistics Europe GmbH(Note 6)	German	100	1,909	-
Doosan Industrial Vehicle America Corp.(Note 6)	USA	100	27,016	-
Doosan Industrial Vehicle Yantai Co., Ltd.(Note 6)	China	100	10,617	-
Subtotal			1,844,542	1,785,294
Associates:				
Doosan Eco Biznet	South Korea	29.79	53	53
Guang Dong Xingpu Steel Center	China	21.05	3,854	3,854
MVP Capital Co.	South Korea	29.13	-	279
Subtotal			3,907	4,186
Joint venture:				
Sichuan Kelun-Doosan Biotechnology Company Limited	China	50.00	2,526	2,526
Total			₩1,850,975	₩1,792,006

(Note 1) In 2013, the rental business part was invested in kind, DHC, and the Company received 300,689 shares of DHC

(Note 2) Liquidation is finished as of December 31, 2013.

(Note 3) N Shaper Corp. spun off into insurance part and business agent part. Insurance part is merged with Doosan Tower Co., Ltd., and business agent part is merged with the Company (see Note 36). The Company received 829,353 shares of Doosan Tower Co. as merger consideration.

(Note 4) When the recoverable amount is lower than the carrying amount of capital encroachment subsidiaries, the Company recognized total amount for the prior periods.

(Note 5) The rental business part was invested in kind, DHC.

(Note 6) The Company took over investments in subsidiaries due to merger with Doosan Corporation Industrial Vehicle that was a subsidiary for the year ended December 31, 2013. (see Note 36)

Equities on DHC were reclassified from investments in associates to investments in subsidiaries due to application of K-IFRS 1110 'Consolidated Financial Statements,' and the related reasons are as follows (see Note 2).

① The Company has a 49.02% ownership interest in DHC, but the remaining 50.98% of the shares of DHC are owned by thousands of shareholders and dispersed widely.

② A ratio of the Company's ownership interest in DHC to shareholders who attended shareholders' meeting for past years continuously keeps effective control.

③ The Company synthetically considers relative size of holding in DHC, dispersion of the shareholding owned by the other shareholders and voting patterns at previous shareholder's meetings.

(2) Announced market prices of investments in subsidiaries and associates as of December 31, 2013 and 2012, are as follows (in millions of Korean won):

	December 31, 2013		December 31, 2012	
Description	Book value	Fair value	Book value	Fair value
Subsidiary:				
Doosan Heavy Industries Construction Co., Ltd	₩1,232,946	₩1,555,685	₩1,220,122	₩1,972,763
Oricom	23,168	19,322	23,168	19,905

13. PROPERTY, PLANT AND EQUIPMENT:

(1) Changes in property, plant and equipment for the years ended December 31, 2013 and 2012, consist of the following (in millions of Korean won):

	Year ended December 31, 2013					
	Land	Buildings and structures	Machinery	Tools, furniture, fixtures and others	Construction in progress	Total
Balance at January 1, 2013	₩102,652	₩64,786	₩156,756	₩42,713	₩13,510	₩380,417
Acquisition (Note 1)	-	261	7,556	19,059	22,150	49,026
Business combinations (Note 2)	49,205	7,644	4,190	6,805	52	67,896
Contribution in kind (Note 3)	-	(758)	(40,177)	(4,055)	-	(44,990)
Government subsidy	-	-	-	(52)	-	(52)
Reclassifications (Note 4)	(1,738)	4,039	19,232	(2,517)	(29,020)	(10,004)
Disposal	-	(14)	(1,853)	(119)	-	(1,986)
Depreciation	(43)	(4,538)	(24,042)	(16,206)	-	(44,829)
Increase (decrease) in revaluation	31,838	-	-	-	-	31,838
Impairments	-	-	(395)	(12)	(2,548)	(2,955)
Balance at December 31, 2013	₩181,914	₩71,420	₩121,267	₩45,616	₩4,144	₩424,361
Acquisition cost	₩181,914	₩111,217	₩347,527	₩116,957	₩4,144	₩761,759
Accumulated depreciation and impairment	-	(39,797)	(224,916)	(71,260)	-	(335,973)
Government subsidy	-	-	(1,344)	(81)	-	(1,425)

(Note 1) The acquisition includes ₩6,505 million increase in financial leased asset not involving cash payments.

(Note 2) The Company merged with Doosan Industrial Vehicle Co., Ltd., and N Shaper Corp. for the year ended December 31, 2013 (see Note 36).

(Note 3) In 2013, the rental business part was invested in kind to DHC (see Note 37).

(Note 4) Construction in progress was reclassified as other intangible asset due to completion of building inventory management system.

	Year ended December 31, 2012					
	Land	Buildings and structures	Machinery	Tools, furniture, fixtures and others	Construction in progress	Total
Balance at January 1, 2012	₩169,524	₩66,811	₩135,025	₩44,685	₩12,844	₩428,889
Acquisition (Note 5)	-	726	9,743	26,022	39,428	75,919
Business combinations (Note 6)	1,628	369	-	98	-	2,095
Government subsidy	-	-	(81)	(44)	-	(125)
Reclassifications (Note 7)	(86,999)	1,115	38,138	(12,227)	(38,762)	(98,735)
Disposal	-	(56)	(1,294)	(1,302)	-	(2,652)
Depreciation	(43)	(4,413)	(24,775)	(14,519)	-	(43,750)
Increase (decrease) in revaluation (Note 8)	18,542	234	-	-	-	18,776
Balance at December 31, 2012	₩102,652	₩64,786	₩156,756	₩42,713	₩13,510	₩380,417
Acquisition cost	₩102,652	₩100,011	₩376,884	₩96,586	₩13,510	₩689,643
Accumulated depreciation and impairment	-	(35,225)	(218,644)	(53,775)	-	(307,644)
Government subsidy	-	-	(1,484)	(98)	-	(1,582)

(Note 5) The acquisition includes ₩19,015 million increases in financial leased asset not involving cash payments.

(Note 6) The Company merged with DFMS for the year ended December 31, 2012 (see Note 36).

(Note 7) Land and buildings were reclassified as investment property due to changes in in purpose of use. Construction in progress was reclassified as other intangible asset due to completion of building ERP.

(Note 8) Difference between fair value and book value as of reclassification arose from changes in purpose of use reflected in revaluation surplus.

As of December 31, 2013, the Company's land and buildings are pledged as collateral for loans from Korea Development Bank and others. The Company has no right to pledge that asset as collateral or to sell (see Note 32).

(2) The details of revaluation model, which the Company applies to measurement of the land, are as follows:

For the year ended December 31, 2013, the Company initially measured all land assets using fair value at the date of the revaluation. As of December 31, 2013 the fair value of land assets is determined from appraisal that is undertaken by independently qualified valuators, the First Appraisal & Consulting Co., Ltd (FACC) and others, on October 31, 2013. FACC and others are members of Korea Association of Property Appraisers and comprise of certified professionals that have a significant amount of industry experience.

Fair value of the land is measured by considering officially assessed land price and the latest trading price of similar land within the adjacent area.

(3) Classification of land that is measured at fair value by fair value hierarchy levels as of December 31, 2013, is as follows:

	December 31, 2013			
	Level 1	Level 2	Level 3	Total
Property:				
Land	₩-	₩-	₩181,914	₩181,914

(4) Details of the valuation method used for fair value of land and the unobservable inputs which are significant for fair value measurement are as follows:

Valuation method	Significant inputs which are unobservable	Correlation between unobservable inputs and fair value
Official Assessed Reference Land Price("OARLP")	Fluctuation rate of land price and others	Fair value increases (decrease) if rate of land price increases (decreases)
OARLP of similar parcels nearby the subject land, reflating corrections necessary for differences between the subject and the comparable		
Fair value is determined based on officially assessed reference land price of object and adjacencies, and additionally, changing point, individual factors, and other factors are considered.	Parcel conditions and others	Fair value increases (decrease) if correction of parcel condition and others increase (decrease)
	Land conditions affecting the sales price and others	Fair value increases (decrease) if correction of land conditions affecting the sales price increases (decreases)

(5) Change in land due to application of revaluation model for the year ended December 31, 2013, are as follows:

			Increase in revaluation			
Balance at January 1, 2013	Merger	Investment property	Revaluation surplus	Deferred tax liabilities	Decrease in revaluation	Balance at December 31, 2013
₩102,652	₩49,205	₩ (1,781)	₩24,354	₩7,775	₩(291)	₩181,914

(6) Property and equipment acquired through capital lease agreements as of December 31, 2013 and 2012, are as follows (in millions of Korean won):

Details	December 31, 2013	December 31, 2012
Acquisition cost	₩43,720	₩37,215
Accumulated depreciation	(22,366)	(12,560)
Balance, net	₩21,354	₩24,655

Total minimum lease payments of finance leases liabilities and present value as of December 31, 2013 and 2012, are as follows (in millions of Korean won):

	December 31, 2013		December 31, 2012	
	Minimum lease payments	Present value	Minimum lease payments	Present value
Less than 1 year	₩9,833	₩8,955	₩9,571	₩8,528
1–5 years	14,194	13,676	17,758	16,733
Total	24,027	₩22,631	27,329	₩25,261
Present value adjustment	(1,396)		(2,068)	
Finance lease payables	₩22,631		₩25,261	

As of December 31, 2013, the Company's leased assets under finance lease are pledged as collateral for obligations under finance leases (see Note 32).

(7) Depreciation of each account for the years ended December 31, 2013 and 2012, is as follows (in millions of Korean won):

	December 31, 2013	December 31, 2012
Cost of sales	₩39,293	₩38,510
Selling, general, and administrative expenses	5,313	5,105
Ordinary development expense	152	72
Profit (loss) from discontinued operations	71	63
Total	₩44,829	₩43,750

14. INTANGIBLE ASSETS:

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

	Year ended December 31, 2013				
	Goodwill	Industrial rights	Development costs	Other intangible assets	Total
January 1, 2013	₩92,997	₩1,009	₩3,664	₩27,710	₩125,380
Acquisition	-	213	154	3,587	3,954
Business combinations (Note 1)	15,076	256	582	10,249	26,163
Contribution in kind	-	-	-	(117)	(117)
Government subsidy	-	-	(17)	-	(17)
Reclassifications (Note 2)	-	-	-	7,584	7,584
Disposal	-	-	-	(1,187)	(1,187)
Amortization	-	(325)	(246)	(6,593)	(7,164)
Impairment	-	-	(3,257)	(721)	(3,978)
December 31, 2013	₩108,073	₩1,153	₩880	₩40,512	₩150,618
Acquisition cost	₩108,073	₩2,357	₩11,398	₩59,874	₩181,702
Accumulated depreciation and impairment	-	(1,204)	(10,518)	(19,362)	(31,084)

(Note 1) The Company merged with Doosan Industrial Vehicle Co., Ltd., and N Shaper Corp. for the year ended December 31, 2013 (see Note 36).

(Note 2) Construction in progress was reclassified as other intangible asset due to completion of building inventory management system.

	Year ended December 31, 2012				
	Goodwill	Industrial rights	Development costs	Other intangible assets	Total
January 1, 2012	₩86,577	₩808	₩3,330	₩17,933	₩108,648
Acquisition	-	473	641	2,767	3,881
Business combinations (Note 3)	6,420	-	-	1,964	8,384
Government subsidy	-	-	(104)	-	(104)
Reclassifications (Note 4)	-	-	-	10,759	10,759
Disposal	-	(4)	-	(428)	(432)
Amortization	-	(268)	(203)	(3,692)	(4,163)
Others	-	-	-	(1,593)	(1,593)
December 31, 2012	₩92,997	₩1,009	₩3,664	₩27,710	₩125,380
Acquisition cost	₩92,997	₩1,889	₩11,145	₩39,757	₩145,788
Accumulated depreciation and impairment	-	(880)	(6,938)	(12,047)	(19,865)
Government subsidy	-	-	(543)	-	(543)

(Note 3) The Company merged with DFMS for the year ended December 31, 2012 (see Note 36).

(Note 4) Construction in progress was reclassified as other intangible asset due to completion of building ERP.

The carrying amount of membership with indefinite useful lives in other intangible assets item is ₩14,294 million and ₩13,012 million as of December 31, 2013 and 2012, respectively. Meanwhile, expenditure on research and development, which was recognized as expenses, amounted to ₩27,745 million and ₩19,793 million for the years ended December 31, 2013 and 2012, respectively.

(2) Impairment test of goodwill

1) Goodwill has been allocated for impairment testing purposes to the following cash-generating units and is tested for impairment annually.

Cash-generating units	Description
Mottrol BG	Manufacturing and sale of hydraulic components
Information and communications BU	Operation and development of software
FM BU	Building maintenance service
Industrial vehicles BG	Manufacturing and sale of forklifts

2) Before recognition of impairment losses, the carrying amount of goodwill was allocated to cash-generating units as follows (in millions of Korean won):

Cash-generating units	December 31, 2013	December 31, 2012
Mottrol BG	₩84,562	₩84,562
Information and communications BU	2,015	2,015
FM BU	6,420	6,420
Industrial vehicles BG	15,076	-
Total	₩108,073	₩92,997

3) The recoverable amount of cash-generating unit is determined based on a value-in-use calculation, and discount rate used is as follows:

Description	Mottrol BG	Information and communications BU	FM BU	Industrial vehicles BG
Discount rate	10.8%	11%	11%	10.5%

The Company uses cash flow projections based on financial budgets approved by the directors covering five-year periods for a value-in-use calculation. The financial budgets are determined based on historical result and expectation of market growth. Cash flows beyond that five-year periods have been extrapolated using a '3%' growth rate, continuing the 5th year cash flow. The growth rate does not exceed long-term average growth rate of market, and the discount rates used reflect relevant risks specific to the cash-generating units.

The result of recoverable amount the Company calculated based on value-in-use calculation was not to cause the aggregate carrying amount to exceed the aggregate recoverable amount of the cash-generating unit. Therefore, no impairment loss is recognized based on the impairment test for the year ended December 31, 2013.

A reasonably possible change in a key assumption would cause the change of recoverable amount. So, management has observed related sales and industrial trend subsequently.
Meanwhile, if discount rate changes by 50bp, no additional impairment losses will be incurred.

(8) Amortization expense of each account for the years ended December 31, 2013 and 2012, is as follows (in millions of Korean won):

	December 31, 2013	December 31, 2012
Cost of sales	₩1,396	₩700
Selling, general, and administrative expenses	5,765	3,462
Ordinary development expense	3	1
Total	₩7,164	₩4,163

15. INVESTMENT PROPERTIES:

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

	Year ended December 31, 2013		
	Land	Buildings	Total
January 1, 2013	₩246,476	₩4,693	₩251,169
Disposal	(4,326)	(174)	(4,500)
Revaluation	14,044	(548)	13,496
Reclassifications	1,576	702	2,278
December 31, 2013	₩257,770	₩4,673	₩262,443

	Year ended December 31, 2012		
	Land	Buildings	Total
January 1, 2012	₩154,158	₩4,088	₩158,246
Revaluation	5,320	(374)	4,946
Reclassifications (Note 1)	86,998	979	87,977
December 31, 2012	₩246,476	₩4,693	₩251,169

(Note 1) Land and buildings were reclassified as investment property due to changes in purpose of use.

The Company's land and buildings (Gun-po plant) included in the above investment property are pledged as collateral for loans from Hana Bank and others. The Company has no right of assets to sell or pledge as collateral for another loan (see Note 32).

(2) Details of fair value model which the Company applies for measurement of investment properties are as follows:

For the year ended December 31, 2013, the Company initially measured investment properties using fair value at the date of the revaluation. As of December 31, 2013 and 2012 the fair value of investment properties is determined from appraisal that is undertaken by independently qualified valuators, the First Appraisal & Consulting Co., Ltd (FACC) and Mirae & saehan, on October 31, 2013 and December 31, 2012. FACC and Mirae & saehan are members of Korea Association of Property Appraisers and comprise of certified professionals that have a significant amount of industry experience.

Fair value of the land is measured by considering officially assessed land price and the latest trading price of similar land within the adjacent area.

Fair value of building is based on the estimated price of cost model, considering structure, building materials, actual condition of construction, building equipment, purpose of use, and condition-based maintenance.

Fair value of partitioned building is based on comparative method analyzing sales comparable, which is similar to the object in all pricing factors: site, environmental condition, actual condition for use, usefulness of each site or floor. The estimated value of each object is divided into each land and building by price allocation ratio of each.

(3) Classification of land that is measured at fair value by fair value hierarchy levels as of December 31, 2013, is as follows:

	December 31, 2013			
	Level 1	Level 2	Level 3	Total
Property:				
Land	₩-	₩-	₩257,770	₩257,770
Buildings	₩-	₩-	₩4,673	₩4,673

(4) Details of the valuation method used for fair value of land and unobservable inputs significant for fair value measurement are as follows:

Valuation method	Significant but not observable input factors	Correlation between not observable input factors and measurement of fair value
OARLP OARLP of similar parcels nearby the subject land, reflating corrections necessary for differences between the subject and the comparable	Fluctuation rate of land price and others	Fair value increases (decrease) if rate of land price increases (decreases)
	Parcel conditions and others	Fair value increases (decrease) if correction of parcel condition and others increase (decrease)
	Land conditions affecting the sales price and others	Fair value increases (decrease) if correction of land conditions affecting the sales price increases (decreases)
Sales comparison approach Fair value is based on sales comparison of similar object based on marketability with target object while measuring fair value is compared with circumstance correction, time correction and individual factors	Circumstance correction	Fair value increases (decrease) if circumstance correction increase (decrease)
	Regional factors	Fair value increases (decrease) if regional factors increase (decrease)
	Comparative value of individual factors	The comparative value of individual factors increase (decrease), the fair value increases (decreases)
Estimated cost price approach Fair value is based on depreciation and replacement cost considered with structure, building materials, construction condition, building equipment, end use, present condition and management condition,	Replacement cost	Fair value decreases (increase) if replacement cost increase (decrease)

16. BONDS AND BORROWINGS:

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

Type	Annual interest rate (%)	December 31, 2013	December 31, 2012
The 280-1st	4.44	₩-	₩40,000
The 280-2nd	5.64	50,000	50,000
The 281-1st	4.95	70,000	70,000
The 281-2nd	5.21	80,000	80,000
The 282-1st	4.40	50,000	50,000
The 282-2nd	4.99	80,000	80,000
The 283-1st	3.84	20,000	20,000
The 283-2nd	4.27	80,000	80,000
The 284	4.33	100,000	-
Subtotal		530,000	470,000
Less: Current portion of long-term bonds		(49,934)	(39,948)
Discount on current portion of long-term bonds		(66)	(52)
Discount on non-current portion of long-term bonds		(1,684)	(1,765)
Long-term bonds		₩478,316	₩428,235

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

1) Short-term borrowings

Type	Lender	Annual interest rate (%)	December 31, 2013	December 31, 2012
Usance (document against acceptance and payment)	Woori Bank	0.50–1.57	₩7,894	₩11,375
Short-term borrowings in Korean won	Shinhan Bank	3.95	40,000	-
Total			₩47,894	₩11,375

Financial liabilities related to transferred trade receivables which did not meet the derecognition criteria amounted to ₩3,747 million and ₩10,885 million as of December 31, 2013 and 2012, respectively. The trade receivables were pledged as collateral for these liabilities (see Note 31-(3))

2) Long-term borrowings

Type	Lender	Annual interest rate (%)	December 31, 2013	December 31, 2012
Borrowings in	Korea Development Bank	1.00–4.56	₩60,152	₩40,326
Korean won	Shinhan Bank	3.8, 3.95	40,000	40,000
	Korea Exim Bank	5.13	20,000	20,000
	Kookmin Bank	2.70	185	194
	National Agricultural Cooperative Federation	4.14	30,000	30,006
	Korea Housing Guarantee	1.00	2,904	2,904
	Woori Bank	-	-	50,000
	La-union	4.80	50,000	50,000
	Hana Bank	3.78	50,000	-
	Korea Exchange Bank	4.16	15,000	-
	Total		268,241	233,430
Less: Current portion of long-term borrowings			(40,415)	(60,457)
Discount on current portion of long-term borrowings			(4)	-
Discount on non-current portion of long-term borrowings			(23)	(14)
	Net		₩227,799	₩172,959

17. RETIREMENT BENEFIT OBLIGATION:

The Company operates a defined benefit plan for employees, and the actuarial valuation of plan assets and the defined benefit liability is performed by a reputable actuary using the projected unit credit method.

(1) Details of retirement benefit obligation as of December 31, 2013 and 2012, are as follows (in millions of Korean won):

	December 31, 2013	December 31, 2012
Present value of defined benefit obligation	₩118,824	₩93,793
Fair value of plan assets	(51,769)	(22,898)
Total	₩67,055	₩70,895

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

	Year ended December 31, 2013	Year ended December 31, 2012
Current service cost	₩20,322	₩15,560
Net interest cost	2,673	3,115
Total	₩22,995	₩18,675

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

	Year ended December 31, 2013	Year ended December 31, 2012
Cost of sales	₩13,328	₩9,822
Selling and administrative expenses	8,627	8,135
Research and development cost	527	240
Profit (loss) from discontinued operations	513	478
Total	₩22,995	₩18,675

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

	Year ended December 31, 2013	Year ended December 31, 2012
Beginning balance	₩93,793	₩83,271
Current service cost	20,322	15,560
Interest cost	3,515	4,019
Transfer in	3,683	1,775
Transfer out	(4,182)	(3,998)
Payment	(6,563)	(18,920)
Remeasurements of defined benefit liabilities	(13,935)	9,306
- Actuarial gains (loss) arising from changes in demographic assumptions	390	9
- Actuarial gains (loss) arising from changes in financial assumptions	(12,887)	6,968
- Actuarial gains (loss) arising from others	(1,438)	2,329
Business combinations	22,192	2,780
Ending balance	₩118,825	₩93,793

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

	Year ended December 31, 2013	Year ended December 31, 2012
Beginning balance	₩22,898	₩25,002
Expected return on plan assets	842	904
Remeasurements of plan assets	34	(198)
Transfer in	1,905	48
Transfer out	(1,866)	(493)
Contributions by employer directly to plan assets	22,261	-
Payment	(1,288)	(3,685)
Business combinations	6,983	1,320
Ending balance	₩51,769	₩22,898

Realized return on plan assets amounted to ₩876 million and ₩706 million for the years ended December 31, 2013 and 2012, respectively.

(5) Assumptions used for actuarial valuation as of December 31, 2013 and 2012, are as follows:

	December 31, 2013	December 31, 2012
Discount rate	4.40%	3.70%
Expected rate of salary increase (Note 1)	Employee 5.0%–7.0% Director 5.3%	Employee 5.0%–7.0% Director 5.3%

(Note 1) Assumptions of expected rate of salary increase differ by business segment.

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

(6) Details of plan assets as of December 31, 2013 and 2012, are as follows (in millions of Korean won):

	December 31, 2013	December 31, 2012
Equity instruments	₩319	₩11
Debt instruments	2,439	1,192
Others	49,011	21,695
Total	₩51,769	₩22,898

Plan assets are mostly invested in assets that have a quoted market price in an active market.

(7) The sensitivity analysis for the significant actuarial assumptions as of December 31, 2013, is as follows (in millions of Korean won):

	Amount	Rate
Discount rate:		
1% Increase	₩(7,116)	(5.99%)
1% Decrease	9,789	8.24%
Salary increase rate:		
1% Increase	9,620	8.10%
1% Decrease	(7,127)	(6.00)%

(8) Information about the maturity profile of the defined benefit obligation as of December 31, 2013, is as follows (in millions of Korean won):

	0–1 year	1–2 years	2–5 years	5–10 years	Total
Payment	₩11,743	₩27,164	₩37,530	₩77,811	₩154,248

18. PROVISIONS:

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

	Year ended December 31, 2013						
	January 1, 2013	Accrual	Use	Merger	December 31, 2013	Current	Non-Current
Provision for product warranties	₩2,345	₩3,152	₩(3,361)	₩3,219	₩5,355	₩5,355	₩-
Asset retirement obligations	1,014	47	(100)	-	961	-	961
Other provisions	-	2,270	-	-	2,270	2,270	-
Total	₩3,359	₩5,469	₩(3,461)	₩3,219	₩8,586	₩7,625	₩961

The Company estimates expenditure required to settle the Company's obligations from product warranty, refund, related after-service and others based on warranty period, historical claim rate and recognition of provision.

19. SHARE CAPITAL AND SHARE PREMIUM:

Changes in share capital and share premium for the years ended December 31, 2013 and 2012, are as follows (in millions of Korean won and number of shares):

	Number of shares		Share capital			
	Common shares	Preferred shares	Common shares	Preferred shares	Total	Share premium
Balance at January 1, 2012	25,089,211	5,769,814	₩125,446	₩28,849	₩154,295	₩316,631
Exercising share options	10,800	-	55	-	55	1,455
Retirement of shares through retained earnings	(300,000)	-	-	-	-	-
Capital reduction	(4,072,978)	(373,055)	(20,365)	(1,865)	(22,230)	-
Issuance due to merger	131,788	-	658	-	658	15,550
Balance at December 31, 2012	20,858,821	5,396,759	₩105,794	₩26,984	₩132,778	₩333,636
Balance at January 1, 2013	20,858,821	5,396,759	₩105,794	₩26,984	₩132,778	₩333,636
Exercising share options	23,250	-	116	-	116	3,638
Balance at December 31, 2013	20,882,071	5,396,759	₩105,910	₩26,984	₩132,894	₩337,274

The Company's number of shares authorized amounted to 400,000,000 shares with a par value of ₩5,000 per share. The number of shares issued by the Company amounted to 20,882,071 of common stock and 5,396,759 of preferred stock as of December 31, 2013. There is a difference arising from retirement of shares through retained earnings, and capital stock amounting to ₩132,894 million is not the same as total par value of shares issued that amount to ₩131,394 million.

The number of shares that are having limitation on voting right under commercial law amounted to 4,670,211 and 4,403,614 as of December 31, 2013 and 2012, respectively.

20. OTHER CAPITAL SURPLUS:

Other capital surplus as of December 31, 2013 and 2012, is summarized as follows (in millions of Korean won):

	December 31, 2013	December 31, 2012
Share premium	₩337,274	₩333,636
Gain from merger	1,390	1,390
Other capital surplus	22,476	116,955
Asset revaluation reserve	277,542	277,542
Total	₩638,682	₩729,523

21. OTHER CAPITAL ITEMS:

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

	December 31, 2013	December 31, 2012
Treasury stock	₩(238,810)	₩(202,676)
Loss on disposal of treasury stock	(16,738)	(16,738)
Share options	14,834	13,058
Loss on capital reduction	(127,319)	(127,319)
Total	₩(368,033)	₩(333,675)

(2) Treasury stock

The Company acquired registered common stock and non-voting preferred stock and recognized them as other capital item for the stabilization of stock price. Treasury stock will be retired or issued. Changes in treasury stock for the year ended December 31, 2013, are as follows (in millions of Korean won):

	Number of treasury stock			Carrying amount		
Description	Common stock	Preferred stock	Total	Common stock	Preferred stock	Total
January 1, 2013	₩4,403,614	₩673,054	₩5,076,668	₩187,624	₩15,052	₩202,676
Acquisition	266,597	-	266,597	36,134	-	36,134
December 31, 2013	₩4,670,211	₩673,054	₩5,343,265	₩223,758	₩15,052	₩238,810

(3) Share-based payment

The Company granted share options to its directors several times. Share options are settled based on the board of directors' decision by issuance of new stock, treasury stock or cash settlement. Vesting condition offers two-year service after the resolution at the shareholders' meeting. The number of granted options as of December 31, 2013, is as follows (in millions of Korean won, except for share data).

Details	Date of grant	Number of granted options	Exercisable period	Exercisable price	Expected fair value at the date of grant
8th	2007.3.16	3,500	2010.3.16–2017.3.15	₩59,600	₩28,930
9th	2008.3.21	24,300	2011.3.21–2018.3.20	165,100	68,846
10th	2009.3.27	4,300	2012.3.27–2019.3.26	106,500	53,382
12th	2010.3.26	71,860	2013.3.26–2020.3.26	116,500	56,460
13th	2011.3.25	55,100	2014.3.25–2021.3.25	137,500	68,045
14th	2012.3.30	60,200	2015.3.30–2022.3.30	156,200	63,647
15th	2013.3.29	100,100	2016.3.29–2023.3.28	128,100	43,353
	Total	319,360			

Changes in share options for the year ended December 31, 2013, are as follows:

1) Number of common shares to be issued:

Details	January 1, 2013	Granted	Exercised	Forfeited	December 31, 2013
6th	1,400	-	(1,400)	-	-
8th	4,400	-	(900)	-	3,500
9th	27,000	-	-	(2,700)	24,300
10th	4,950	-	(650)	-	4,300
12th	101,260	-	(20,300)	(9,100)	71,860
13th	58,600	-	-	(3,500)	55,100
14th	63,600	-	-	(3,400)	60,200
15th	-	100,100	-	-	100,100
Total	261,210	100,100	(23,250)	(18,700)	319,360

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

Details	January 1, 2013	Granted	Exercised	Forfeited	December 31, 2013
6th	₩19	₩-	₩(19)	₩-	₩-
8th	127	-	(26)	-	101
9th	1,860	-	-	(186)	1,674
10th	265	-	(35)	-	230
12th	5,722	-	(1,146)	(514)	4,062
13th	3,529	453	-	(238)	3,744
14th	1,536	1,942	-	(108)	3,370
15th	-	1,653	-	-	1,653
Total	₩13,058	₩4,048	₩(1,226)	₩(1,046)	₩14,834

The weighted-average price of shares on their respective exercise dates for the year ended December 31, 2013, amounted to ₩124,499. The weighted-average remaining contractual period of share options is 7.87 years. Expense recognized related to the grant of share options amounted to ₩3,701 million and ₩4,233 million for the years ended December 31, 2013 and 2012, respectively. Expense to be recognized in the future period amounted to ₩3,160 million.

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

Details	Date of grant	Risk-free interest rate	Expected exercisable period	Expected volatility	Expected dividend yield ratio
6th	2006.2.27	4.87%	3.00	48.21%	0.00%
8th	2007.3.16	4.79%	3.00	46.73%	0.00%
9th	2008.3.21	5.18%	3.00	58.89%	0.00%
10th	2009.3.27	3.71%	3.53	69.82%	22.00%
12th	2010.3.26	3.82%	3.27	71.67%	35.00%
13th	2011.3.25	3.66%	3.29	73.42%	40.00%
14th	2012.3.30	3.57%	3.41	62.76%	43.00%
15th	2013.3.29	2.45%	3.42	49.22%	46.00%

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

22. ACCUMULATED OTHER COMPREHENSIVE INCOME:

Accumulated other comprehensive income as of December 31, 2013 and 2012, is summarized as follows (in millions of Korean won):

	December 31, 2013	December 31, 2012
Unrealized gain on AFS securities	₩-	₩1,175
Unrealized gain (loss) on valuation of derivatives	849	643
Revaluation surplus	38,585	14,232
Total	₩39,434	₩16,050

23. RETAINED EARNINGS:

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

	December 31, 2013	December 31, 2012
Legal reserve	₩28,108	₩20,652
Voluntary reserve	79,716	68,000
Unappropriated retained earnings	1,417,085	1,350,280
Total	₩1,524,909	₩1,438,932

The Commercial Code of the Republic of Korea requires the Company to appropriate an amount equal to a minimum of 10% of annual cash dividends declared as a legal reserve, until the reserve equals 50% of its issued share capital.

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

	Year ended December 31, 2013	Year ended December 31, 2012
Beginning balance	₩1,438,932	₩1,493,296
Profit for the year	149,688	85,407
Actuarial profit (loss) recognized in retained earnings	10,589	(7,204)
Payment of dividends	(74,300)	(65,303)
Retirement of treasury stock through retained earnings	-	(43,236)
Dividends to owners incurred by equity spin-off	-	(24,028)
Ending balance	₩1,524,909	₩1,438,932

(3) Separate statements of appropriation of retained earnings for the years ended December 31, 2013 and 2012, are as follows (in Korean won):

	2013		2012	
UNAPPROPRIATED RETAINED EARNINGS		₩1,417,085,400,953		₩1,350,280,846,187
Unappropriated retained earnings carried over from the prior year	1,267,372,949,177		1,303,636,144,839	
Cumulative effects of change in accounting policy	-		46,536,913,520	
Interim dividend	(10,564,472,500)		(10,831,230,000)	
Net income	149,688,055,705		85,407,214,141	
Actuarial loss on defined benefit obligations	10,588,868,571		(7,203,844,853)	
Retirement of treasury stock through retained earning	-		(43,235,732,410)	
Dividends to owners incurred by equity spin-off	-		(24,028,619,050)	
TRANSFER FROM VOLUNTARY RESERVES		12,050,000,000		8,284,000,000
Reserve for research and human resource	12,050,000,000		8,284,000,000	
APPROPRIATIONS:		100,352,276,160		91,191,897,010
Legal reserve	7,356,068,060		7,456,647,910	
Cash dividends	62,996,208,100		63,735,249,100	
Reserve for research and human resource	30,000,000,000		20,000,000,000	
UNAPPROPRIATED RETAINED EARNINGS TO BE CARRIED FORWARD TO SUBSEQUENT YEAR		₩1,328,783,124,793		₩1,267,372,949,177

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

Description	2013			2012		
Shares eligible for dividends	Preferred shares (old)	Preferred shares (new)	Common shares	Preferred shares (old)	Preferred shares (new)	Common shares
Face value per share (in Korean won)	₩5,000	₩5,000	₩5,000	₩5,000	₩5,000	₩5,000
Interim dividends:						
Dividend rate	10%	10%	10%	10%	10%	10%
Dividend amount	₩1,895	₩467	₩8,203	₩2,045	₩467	₩8,319
Year-end dividends:						
Dividend rate	61%	60%	60%	61%	60%	60%
Dividend amount	₩11,560	₩2,800	₩48,636	₩11,560	₩2,800	₩49,375
Dividend payout ratio	8.99%	2.18%	37.97%	15.93%	3.83%	67.55%
Dividend yield ratio	6.35%	6.24%	2.51%	9.44%	9.41%	2.71%

24. REVENUES:

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

	Year ended December 31, 2013	Year ended December 31, 2012
1. Sales of goods	₩1,269,705	₩1,158,860
-Manufactured products	1,187,214	1,048,647
-Merchandise	82,491	110,213
2. Others	382,320	328,771
-Dividend	102,196	47,669
-Others (Note 1)	280,124	281,102
Total	₩1,652,025	₩1,487,631

(Note 1) Service revenues generated from system maintenance services, transport forwarding services and real estate rental services.

25. EXPENSES CLASSIFIED BY NATURE:

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

	Year ended December 31, 2013	Year ended December 31, 2012
Changes in inventories	₩(43,859)	₩(27,171)
Purchases of raw materials and goods	710,450	692,929
Employee benefits	215,570	256,341
Depreciation and amortization	51,993	47,913
Total	₩934,154	₩970,012

26. SELLING AND ADMINISTRATIVE EXPENSES:

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

	Year ended December 31, 2013	Year ended December 31, 2012
Salaries	₩78,860	₩66,012
Bonuses	22,299	19,796
Provision for retirement and severance benefits	8,627	8,135
Share-based payment	3,690	4,179
Employee welfare	18,372	16,204
Travel	6,714	6,832
Communications	873	1,060
Utilities	1,539	895
Sales commission	7,622	1,825
Office expense	696	1,396
Taxes and dues	3,266	3,350
Rent	13,339	12,938
Depreciation	5,314	4,889
Repairs and maintenance	858	1,120
Entertainment	3,436	3,839
Advertising	3,136	3,155
Automobile maintenance	1,213	1,055
Packaging	2,225	954
Research and development	25,380	17,577
Education and training	11,791	18,832
Freight and custody	7,189	10,251
Royalty	959	734
Service fees	23,022	31,785
Maintenance of office	3,699	4,714
Outsourcing fee	7,465	9,896
Sample	1,137	1,443
Bad debt expense	(646)	(820)
Amortization	5,765	3,461
Maintenance of overseas branch	-	306
Others	1,490	1,510
Total	₩269,330	₩257,323

27. FINANCE INCOME AND EXPENSES:

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

	Year ended December 31, 2013	Year ended December 31, 2012
Finance income:		
Interest income	₩3,283	₩5,335
Dividend income	36	4
Gain on foreign currency transaction	11,153	9,075
Gain on foreign currency translation	1,020	1,841
Gain on derivative transaction	14	980
Gain on valuation of derivatives	-	6
Income on financial guarantee	408	227
Total	15,914	17,468
Finance expenses:		
Interest expenses	₩37,451	₩35,702
Loss on foreign currency transaction	12,930	11,186
Loss on foreign currency translation	1,777	2,395
Loss on derivative transactions	325	47
Loss on valuation of derivatives	-	167
Loss on retirement of bonds	-	80
Total	52,483	49,577
Net financial expense	₩(36,569)	₩(32,109)

28. OTHER NON-OPERATING INCOME AND EXPENSES:

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

	Year ended December 31, 2013	Year ended December 31, 2012
Other non-operating income:		
Gain on disposal of long-term investment securities	₩2,195	₩-
Gain on disposal of investments in associates	-	1,397
Gain on disposal of property, plant and equipment	285	481
Gain on disposal of intangible assets	161	101
Gain on disposal of investment properties	600	-
Gain on valuation of investment properties	14,044	5,320
Gain on business transfer	-	3,686
Others	4,432	4,963
Subtotal	21,717	15,948
Other non-operating expenses:		
Loss on disposal of trade receivables	₩737	₩-
Other bad debt expense	(164)	(47)
Loss on disposal of long-term investment securities	113	282
Impairment loss of investments in subsidiaries	897	-
Loss on disposal of property, plant and equipment	324	1,626
Loss on disposal of intangible assets	92	14
Impairment loss of property, plant and equipment	407	-
Impairment loss of intangible assets	3,978	1,593
Loss on revaluation of property, plant and equipment	291	-
Loss on valuation of investment properties	548	374
Donations	7,640	7,195
Others	7,311	2,000
Subtotal	22,174	13,037
Total	₩(457)	₩2,911

29. INCOME TAX EXPENSE:

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

	Year ended December 31, 2013	Year ended December 31, 2012
Current income tax expense	₩19,518	₩21,062
Deferred income tax	11,754	9,574
Transferred deferred income tax due to merger	2,083	563
Deferred income tax directly charged to equity	(10,846)	(3,300)
Income tax expense directly charged to profit or loss of discontinued operations	(3,336)	(3,926)
Income tax expense	₩19,173	₩23,973

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

	January 1, 2013	Changes: Income (expense)	Changes: Equity	Merger	December 31, 2013
Accrued revenues	₩(60)	₩38	₩-	₩-	₩(22)
Allowance for inventories	1,428	(233)	-	965	2,160
Investment securities	6,303	-	375	-	6,678
Property, plant and equipment	(39,097)	2,175	(7,775)	60	(44,637)
Investment properties	(14,291)	(3,267)	-	-	(17,558)
Accrued expenses	10,384	2,385	-	770	13,539
Retirement benefit obligation	15,105	63	(3,380)	1,234	13,021
Reserve for research and human resource	(20,949)	(3,329)	-	(902)	(25,180)
Others	7,282	(823)	(66)	(44)	6,349
Total	₩(33,895)	₩(2,991)	₩(10,846)	2,083	₩(45,650)

	January 1, 2012	Changes: Income (expense)	Changes: Equity	Merger	December 31, 2012
Accrued revenues	₩(177)	₩117	₩-	₩-	₩(60)
Allowance for inventories	2,643	(1,215)	-	-	1,428
Investment securities	5,554	71	(21)	699	6,303
Property, plant and equipment	(38,570)	(121)	-	(406)	(39,097)
Investment properties	(8,499)	(1,249)	(4,543)	-	(14,291)
Accrued expenses	12,137	(1,858)	-	105	10,384
Retirement benefit obligation	12,063	478	2,300	264	15,105
Reserve for research and human resource	(18,114)	(2,835)	-	-	(20,949)
Others	8,642	(1,261)	(1,036)	(99)	7,282
Total	₩(24,321)	₩(6,837)	₩(3,300)	563	₩(33,895)

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 against deferred tax liabilities relating to income taxes levied by the same taxation authority.

(3) Temporary differences, net loss and tax credit carryforwards, which have not been recognized as deferred income tax assets and expired, unused as of December 31, 2013 and 2012, are nil.

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

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

	December 31, 2013	December 31, 2012
Investment in subsidiaries	₩(760,842)	₩(758,625)

Deferred income tax liabilities are not recognized, because the Company is able to control the timing of the reversal of taxable temporary differences relating to subsidiaries.

(5) Tax effects directly recognized in equity as of December 31, 2013 and 2012, are as follows (in millions of Korean won):

	December 31, 2013			December 31, 2012		
Description	Before tax	Deferred income tax assets (liabilities)	After tax	Before tax	Deferred income tax assets(liabilities)	After tax
Unrealized gain on AFS financial assets	₩-	₩-	₩-	₩1,550	₩(375)	₩1,175
Unrealized gain (loss) on valuation of derivatives	1,120	(271)	849	848	(205)	643
Revaluation surplus	50,904	(12,319)	38,585	18,777	(4,544)	14,233
Land revaluation reserve	22,139	(4,870)	17,269	22,139	(4,870)	17,269
Actuarial gain or loss	(19,157)	4,636	(14,521)	(33,125)	8,016	(25,109)
Total	₩55,058	₩(12,824)	₩42,222	₩9,954	₩(1,978)	₩8,033

(6) A reconciliation of income tax expense and accounting income before income tax expense for the years ended December 31, 2013 and 2012, is as follows (in millions of Korean won):

	Year ended December 31, 2013	Year ended December 31, 2012
Profit before income tax	₩158,415	₩97,088
Income tax expense at statutory income tax rate	37,874	23,033
Adjustment:		
Non-temporary difference	(18,672)	(8,681)
Temporary difference not recognized as deferred income tax	112	1,055
Tax credits	(4,988)	(4,233)
Effect of tax rate change	(208)	-
Additional income tax and tax refund for prior periods	4,936	11,554
Others	119	1,245
Income tax expense	₩19,173	₩23,973
Effective tax rate	12.10%	24.69%

30. EARNINGS (LOSS) PER SHARE:

Earnings per share for the years ended December 31, 2013 and 2012, are computed as follows (in millions of Korean won, except for share data).

(1) Basic earnings (loss) per share

Basic earnings (loss) per share are computed by dividing profit or dividing net income attributable to owners of the parent company by the weighted-average number of common shares outstanding during the period excluding treasury shares.

	Year ended December 31, 2013		
	Continued	Discontinued	Total
Net income	₩139,241,599,371	₩10,446,456,334	₩149,688,055,705
(-) Dividends for preferred share	31,322,852,202	2,349,964,445	33,672,816,647
Net income (loss) available to common share	107,918,747,169	8,096,491,889	116,015,239,058
Weighted-average number of common shares outstanding (Note 1)	16,367,016	16,367,016	16,367,016
Basic net income (loss) per share	₩6,594	₩495	₩7,088

	Year ended December 31, 2012		
	Continued	Discontinued	Total
Net income	₩73,115,408,481	₩12,291,805,660	₩85,407,214,141
(-) Dividends for preferred share	16,972,009,310	2,853,251,379	19,825,260,689
Net income (loss) available to common share	56,143,399,171	9,438,554,281	65,581,953,452
Weighted-average number of common shares outstanding (Note 1)	16,625,166	16,625,166	16,625,166
Basic net income (loss) per share	₩3,377	₩568	₩3,945

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

	2013	2012
Beginning outstanding shares	16,455,207	16,683,003
Effect of share option exercised	14,437	4,277
Issuance of share capital	-	21,965
Acquired treasury stock (Note 2)	(102,628)	(84,079)
Weighted-average number of common shares outstanding	16,367,016	16,625,166

(Note 2) Acquired treasury stock was calculated by weighted average of change of treasury stock incurred by acquisition, retirement of shares through retained earnings, capital reduction without refund, etc., for the years ended December 31, 2013 and 2012.

(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 that have a dilutive effect as if they were issued at the beginning of the year.

	Year ended December 31, 2013		
	Continued	Discontinued	Total
Controlling interest in net income	₩107,918,747,169	₩8,096,491,889	₩116,015,239,058
Share-based compensation cost	-	-	-
Adjusted net income available to common shares	107,918,747,169	8,096,491,889	116,015,239,058
Adjusted weighted-average number of common shares outstanding	16,380,712	16,380,712	16,380,712
Diluted net income per share	₩6,588	₩494	₩7,082

	Year ended December 31, 2012		
	Continued	Discontinued	Total
Controlling interest in net income	₩56,143,399,171	₩9,438,554,281	₩65,581,953,452
Share-based compensation cost	-	-	-
Adjusted net income available to common shares	56,143,399,171	9,438,554,281	65,581,953,452
Adjusted weighted-average number of common shares outstanding	16,632,299	16,632,299	16,632,299
Diluted net income per share	₩3,376	₩567	₩3,943

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

	2013	2012
Weighted-average number of common shares outstanding	16,367,016	16,625,166
Effect of share option exercise	13,696	7,133
Adjusted weighted-average number of common shares outstanding	16,380,712	16,632,299

For the year ended December 31, 2013, share option grants 6th 8th, 10th and 12th were included from the diluted earnings per share as they have dilutive effect during the period, and share option grants 9th, 13th, 14th and 15th were excluded from the diluted earnings per share calculation as they have an antidilutive effect during the period.

Share options that excluded from the diluted earnings per share calculation as they have an antidilutive effect during 2013 and 2012, are as follows:

	2013	2012
Share options	239,700	250,460

31. COMMITMENTS AND CONTINGENCIES:

(1) Notes ,bills and checks offered in security

The Company pledged two blank notes to Korea Housing Guarantee Co., Ltd. and Korea Defense Industry Association as collateral for long-term borrowings and performance guarantee agreements.

(2) Loan ceiling

As of December 31, 2013, Loan ceilings of the Company are as follows (in millions of Korean won):

Description	Financial institution	Limitation	Borrowing amounts
Over Draft	Woori Bank etc.	₩15,000	₩-
General Loans	Korea Exchange Bank etc.	243,000	15,000
Other loans	The Bank of Kwangju	20,000	-
	Total	₩278,000	₩15,000

(3) Accounts receivable discounted

Outstanding trade receivables sold with recourse by the Company are in the amount of ₩3,747 million and ₩10,885 million as of December 31, 2013 and 2012, respectively. Because the Company retains some level of risks and rewards relating to trade receivables, the Company has recognized carrying amount of it and cash receipt from transfer as borrowings in statement of financial position (see Note 16-(2)-1)).

(4) Litigation in progress

The Company is involved in lawsuits as a defendant with claims exposure of ₩7,309 million as of December 31, 2013. The ultimate outcome of the lawsuit cannot presently be determined.

(5) Technology introduction

The Company has technical license agreements for the purpose of manufacturing specific products with Nabtesco, Horstman and other and for the year ended December 31, 2013, the Company paid ₩959 million as license fee.

(6) Certification of payment

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

Provided to	Related party	Guarantees	Description
Doosan Shanghai Chemical Limited	Subsidiary	USD 1,000	An on-site certification of payment
Doosan Hong Kong Limited	Subsidiary	USD 3,000	An on-site certification of payment
Doosan Electro-Materials (Changshu) Co., Ltd	Subsidiary	USD 68,000	An on-site certification of payment
Doosan Mottrol (Jiangyin) Co., Ltd	Subsidiary	USD 10,000	An on-site certification of payment
Doosan Industrial Vehicle Yantai Co., Ltd	Subsidiary	USD 10,000	An on-site certification of payment
	Subsidiary	CNY 23,400	An on-site certification of payment
Doosan Industrial Vehicle America Corp.	Subsidiary	USD 10,000	An on-site certification of payment
Doosan Logistics Europe GmbH	Subsidiary	EUR 385	An on-site certification of payment
SRS Korea	Subsidiary	KRW 941	Performance guarantee
Total		USD 102,000 CNY 23,400 EUR 385 KRW 941	

As of December 31, 2013, received from third parties are as follows (in thousands of foreign currency and millions of Korean won):

Provider	Amount of certification of payment.	Description
Seoul Guarantee Insurance	KRW 28,243	Performance guarantee
Korea Defense Industry Association and others	KRW 63,250	Performance guarantee
Shinhan Bank	USD 180	Performance guarantee
Korea development bank and others	USD 20,969	Performance guarantee in foreign currency L/C
Total	KRW 91,763 USD 21,149	

Meanwhile, the Company has responsibility of joint liability guarantee with Neoholdings Co., Ltd., which is a spin-off company for existing liabilities prior to spin off.

(7) Ordinary wages

The Company may have to pay additional wages if regular bonuses and other salaries, which had paid are relevant to ordinary wages. But the Company sees the possibility of the likeliness of having to pay related amounts to be low based on the Supreme Court decision.

32. PLEDGED ASSETS:

The Company pledged certain assets as collateral for its long-term and short-term borrowings as of December 31, 2013, which are as follows (in thousands of foreign currency and millions of Korean won):

Institution	Asset	Related Account	Financial debt	Collateralized value
Kookmin Bank	Chang-won employee apartment	Property, plant and equipment	₩188	₩605
Korea Development Bank	Jeung-pyeong, Ik-san plant and Chang-won plant	Property, plant and equipment	60,152	217,490 USD 31,489
Woori Bank	Shin-gal plant	Property, plant and equipment	USD 844 EUR 818 JPY 146,765	5,000
Shinhan Bank	Incheon plant	Property, plant and equipment	40,000	40,000
Hana Bank	Gun-po plant	Investment property	-	26,000
Korea Housing Guarantee Co., Ltd..	Equity securities	AFS financial asset	2,904	464
HP Financial Service and others	Machinery and equipment	Financial lease asset	₩22,631	₩21,354

33. RELATED-PARTY TRANSACTIONS:

Related-party disclosures for 2013 and 2012 are as follows.

(1) Related party

Relationship with the Company	Company name
Subsidiaries	Doosan heavy ind. & constr,. Doosan infracore, Co., Ltd. Doosan Engineering & Construction Co., Ltd,. Doosan Engine Co., Ltd. And their Subsidiaries, respectively. Oricom Inc., Doosan Advertisement (China) Co., Ltd., SRS Korea Co., Ltd., Doosan Bears Inc., Doosan Feed & Livestock Co., Ltd., Doosan Tower Co., Ltd., Doosan Dong-A Co., Ltd., DIP Holdings Co., Ltd., Doosan DST Co., Ltd., Doosan Electro-Materials Singapore Pte Ltd., Doosan Hongkong Ltd., Doosan Electro-Materials(SHEN ZHEN) Limited, Doosan Shanghai Chemical Limited, Doosan Electro-Materials (Changshu) Co., Ltd., Doosan Real Estate ABS (1st), Doosan Real Estate ABS (2nd), Doosan Real Estate ABS (3rd), Doosan Information and Communications America, LLC, Doosan Information and Communications China, LLC, Doosan Mottrol (Jiangyin) Co., Ltd.,Doosan Construction Site Solution Vietnam Company Limited, Doosan Industrial Vehicle Europe N.A., Doosan Industrial Vehicle U.K., Doosan Logistics Europe, Doosan Industrial Vehicle America Corp., Doosan Industrial Vehicle Yantai Co., Ltd. Doosan Equipment Rental Vietnam Company Limited., Doosan Electro-Materials America, LLC and so on.
Associates	Guang Dong Xingpu Steel Center, Doosan Eco Biznet, MVP Capital Co.
Other related parties	Doosan Capital Co., Neoplux and the 1st Neoplux's Private Equity Fund , Doosan Credit Union, Yeongang Foundation, Trance Route Doosan Co., Ltd., Neo Trans, HANJUNG POWER Limited, Doosan Infracore Xinjiang Machinery Co., Ltd., Sichuan Kelun-Doosan Biotechnology Company Limited and so on.

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

	Year ended December 31, 2013				Year ended December 31, 2012			
Descriptions.	Sales	Sales- other	Purchase	Purchases - others	Sales	Sales- other	Purchase	Purchases - others
Subsidiaries:	₩775,372	₩690	₩40,299	₩-	₩866,769	₩227	₩32,521	₩21
Doosan heavy ind. & constr.	167,674	-	1,112	-	228,696	-	2,501	16
Doosan Infracore Co., Ltd	272,026	-	10,525	-	336,357	-	826	1
Doosan Engineering & Construction Co., Ltd	33,763	278	1,217	-	35,671	-	73	-
Others	301,909	412	27,445	-	266,045	227	29,121	4
Associates	2,991	-	142	-	87	-	100	-
Other related parties	8,933	-	14,604	-	3,242	-	9,918	-
Total.	₩787,296	₩690	₩55,045	₩-	₩870,098	₩227	₩42,539	₩21

(3) As of December 31, 2013 and 2012, significant balances related to the transactions between the Company and related parties are as follows (in millions of Korean won):

	Year ended December 31, 2013				Year ended December 31, 2012			
Descriptions.	Trade receivables	Other receivables	Trade payables	Other payables	Trade receivables	Other receivables	Trade payables	Other payables
Subsidiaries:	₩258,919	₩17,104	₩20,869	₩7,568	₩194,505	₩15,155	₩14,831	₩5,935
Doosan heavy ind. & constr.	72,503	1,199	299	131	44,744	2,004	328	67
Doosan Infracore Co., Ltd	59,741	1,352	9,096	995	73,435	1,662	427	112
Doosan Engineering & Construction Co., Ltd	20,092	2,656	9	134	17,286	1,377	6	-
Others.	106,583	11,897	11,465	6,308	59,040	10,112	14,070	5,756
Associates	48	-	-	8	28	-	-	14
Other related parties	822	3,114	-	1,135	1,533	-	-	480
Total.	₩259,789	₩20,218	₩20,869	₩8,711	₩196,066	₩15,155	₩14,831	₩6,429

(4) Fund and equity transaction for the years ended December 31, 2013 and 2012, between the Company and related parties are as follows (in millions of Korean won):

Description	Trade opponent	Transaction	FY2013	FY2012
Associates	MVP venture capital 13'th association of investment(Note 1)	Operation Payback	₩279	₩108
Subsidiaries	DIP Holdings(Note 2)	Acquiring share	112,510	-
Other related parties	Sichuan Kelun-Doosan Biotechnology Company Limited	Capital expansion and investment in capital	-	891
Subsidiaries	Doosan Heavy Industries & Construction Co., Ltd(Note 3)		₩13,601	₩-

(Note 1) The Company operated payback from the Company's associates, MVP venture capital firm 13 association of investment.

(Note 2) The Company acquired share of Doosan Corporation Industrial Vehicle from the Company's Subsidiaries, DIP Holdings. (see Note 36).

(Note 3) The Company invests rental part in kind and owns equities on Doosan Heavy Industries & Construction Co., Ltd. (see Note 35).

(5) The Company provided guarantee to related parties as of December 31, 2013 (see Note 31-(6)).

(6) 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, 2013 and 2012, is as follows (in millions of Korean won):

Description	Year ended December 31, 2013	Year ended December 31, 2012
Short-term employee benefits	₩40,873	₩39,027
Severance benefits	2,810	2,544
Share-based payments	3,701	4,233
Total	₩47,384	₩45,804

34. SEPARATE STATEMENTS OF CASH FLOWS:

(1) The adjustments and changes in operating assets and liabilities in the separate statements of cash flows for the years ended December 31, 2013 and 2012, are as follows (in millions of Korean won):

	Year ended December 31, 2013	Year ended December 31, 2012
Adjustments:		
Expenses not involving cash payments and others:	₩155,662	₩146,458
Interest expense	37,451	36,395
Income tax expense	22,509	27,899
Foreign currency translation loss	1,795	2,562
Loss on valuation of derivatives	-	167
Loss on retirement of bonds	-	80
Loss on disposal of trade receivables	737	-
Loss on disposal of long-term investment securities	113	282
Loss on impairment of investment in subsidiary	897	-
Depreciation	44,829	43,750
Amortization	7,164	4,163
Loss on disposal of property, plant and equipment	344	1,676
Loss on impairment of property, plant and equipment	2,955	-
Loss on disposal of intangible assets	92	14
Impairment of intangible assets	3,978	1,593
Loss from revaluation of property, plant and equipments	291	-
Losses on valuation of investment properties	548	374
Severance indemnities	22,995	18,675
Bad debt expense	(649)	(821)
Other bad debt expense	(164)	(46)
Loss on disposal of inventories	-	4,076
Contribution to provision for product warranties	5,422	1,054
Share-based payment	3,701	4,233
Others	654	332
Income not involving cash receipts and others:	(132,649)	(68,863)
Interest income	3,408	5,422
Dividend income	102,232	47,672
Foreign currency translation gain	1,163	2,012
Gain on valuation of derivatives	-	6
Gain on disposal of long-term investment securities	2,195	-
Gain on disposal of investments in associates	-	1,397
Gain on disposal of property, plant and equipment	292	484
Gain on disposal of intangible asset	161	101
Gain on disposal of investment property	600	-
Gain on valuation of investment property	14,044	5,320
Recovery of impairment of inventory	1,359	2,536
Guarantee profit on Financial Instruments	408	227
Gain on business transfer	6,787	3,686
Total	₩23,013	₩77,595

	Year ended December 31, 2013	Year ended December 31, 2012
Changes in operating assets and liabilities:		
Decrease in trade notes and accounts receivable	₩98,736	₩84,478
Decrease in other receivables	5,834	14,386
Decrease in inventories	5,305	21,803
Decrease (increase) in financial derivatives	(228)	697
Decrease (increase) in other current assets	(811)	3,109
Decrease in long – term other receivables	60	12
Decrease (increase) in other non-current assets	820	(2,017)
Decrease in trade notes and accounts payable	(94,666)	(35,764)
Decrease in other payables	(2,565)	(10,321)
Decrease in provisions	(3,461)	(1,779)
Increase in other current liabilities	18,391	1,576
Increase (decrease) in long – term other payables	2,796	(2,647)
Payment of severance benefits	(6,563)	(18,920)
Accrued severance benefits transferred from affiliated companies	(6,676)	(2,063)
Decrease (increase) in plan assets	(13,990)	4,109
Total	₩2,982	₩56,659

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

	Year ended December 31, 2013	Year ended December 31, 2012
Reclassification of property, plant and equipment to investment property	₩2,278	₩87,977
Reclassification of construction in progress to buildings, machinery and others	29,047	38,762
Reclassification of bonds	50,000	40,000
Reclassification of long-term debts	40,415	60,457
Investment in subsidiaries by investment in kind	12,824	-
Retirement of shares through retained earnings	-	43,236
Capital reduction	-	22,230
Dividends to owners incurred by equity spin off	-	24,028

(3) The Company reported on a net-basis cash receipts and payments arising from transactions occurring frequently and short-term financial instruments, loans and borrowings.

35. DISCONTINUED OPERATION

(1) The Company discontinued an operation. Details of the discontinued operation are summarized as follows:

Description	Distribution part	Rental part
Object	Concentration on core competencies	Sharing synergy with subsidiaries
Principal activity	Distribution agent	Rental of construction machinery
The first disclosure day	2013.6.10	2013.7.5
The day of discontinued operation	2013.6.10	2013.8.30
The method of discontinued operation	A related labor forces are reassigned to affiliates and there is no asset or liabilities transferred.	Disposal of business by means of investment in kind
Transferee corporation	(Each affiliate fulfilled discontinued operation directly)	Doosan Heavy Industries & Construction Co., Ltd (subsidiary)

(2) Details of the discontinued operating profit are summarized as follows (in millions of Korean won):

	Year ended December 31, 2013	Year ended December 31, 2012
Ⅰ. OPERATING REVENUES	₩189,769	₩353,450
Ⅱ. OPERATING EXPENSES	179,489	335,870
1. Cost of sales – other	171,891	324,801
2. Selling and administrative expenses	7,598	11,069
Ⅲ. OPERATING INCOME	10,280	17,580
Finance income	2,211	2,568
Finance expenses	2,276	3,862
Other non-operating income	6,831	167
Other non-operating expenses	3,264	237
Ⅳ. INCOME BEFORE INCOME TAX EXPENSE	13,782	16,216
Income tax expense	3,335	3,924
Ⅴ. PROFIT FROM DISCONTINUING OPERATIONS	₩10,447	₩12,292

(3) Details of cash inflow occurred by discontinued operating are as follows (in millions of Korean won):

Description	Year ended December 31, 2013	Year ended December 31, 2012
Cash flows from operating activities	₩1,698	₩12,537
Cash flows from investing activities	(1,698)	(12,587)
Cash flows from financing activities	-	-

36. BUSINESS COMBINATION

(1) The business combinations for the years ended December 31, 2013 and 2012, are as follows(in millions of Korean won):

Description	Year ended December 31, 2013		Year ended December 31, 2012
Corporation amalgamated	Doosan Corporation Industrial Vehicle	N shaper Co , Ltd	DFMS
Object	Business diversification for strategy of growth	The rationalization of management	To enhance the competitiveness and the corporate value follows
Principal activity	Manufacturing and sales of forklift	Agency business	Facility management and maintenance service
Date of acquisition	2013.9.1	2013.9.1	2012.11.1
Shares acquired	Mergers after 100% shares acquisition	Mergers after 100% shares acquisition	Mergers as new issue of stock
Purchase price	₩220,018	₩280	₩16,210
Accounting method	Pooling of interest method	Pooling of interest method	Acquisition

(2) Fair value of merger consideration

Year ended December 31, 2013		Year ended December 31, 2012
Doosan Corporation Industrial Vehicle	N shaper Co , Ltd	DFMS
Acquisition value of whole equity of Doosan Corporation Industrial Vehicle and N shaper Co , Ltd before amalgamation		Fair value of issue of the 131,788 new shares of the transferee corporation (closing price of ₩123,000 on merger day).

(3) Fair values of assets and liabilities at acquisition date from business combinations are as follows (in millions of Korean won):

Description	Year ended December 31, 2013 Doosan Corporation Industrial Vehicle	N shaper Co , Ltd	Total	Year ended December 31, 2012 DFMS
Fair value of assets acquired:	₩346,697	₩2,841	₩349,538	₩23,417
Current assets	190,726	1,890	192,616	8,145
Cash and cash equivalents	21,186	385	21,571	196
Trade receivables and other receivables	106,967	708	107,675	5,901
Inventories	62,244	715	62,959	-
Others	329	82	411	2,048
Non-current assets	155,971	951	156,922	15,272
Subsidiary investment	58,385	-	58,385	-
Property, plant and equipment	67,838	57	67,896	2,095
Intangible assets	25,631	532	26,163	-
Others	4,117	362	4,478	13,177
Fair value of liabilities acquired:	221,670	2,749	224,419	15,208
Current liabilities	207,637	1,323	208,960	12,865
Trade payables and other payables	74,570	1,175	75,745	-
Borrowings	118,272	-	118,272	9,000
Others	14,795	149	14,944	3,865
Non-current liabilities	14,033	1,426	15,459	2,343
Allowance for severance liability	13,783	1,426	15,209	1,460
Other liabilities	250	-	250	883
Fair value of net assets acquired	₩125,027	₩92	₩125,119	₩8,209

(4) Goodwill in business combinations is as follows (in millions of Korean won):

	Year ended December 31, 2013			Year ended December 31, 2012
Description	Doosan Corporation Industrial Vehicle	N shaper Co , Ltd	Total	DFMS
Purchase price	₩220,018	₩280	₩220,298	₩16,210
Less: fair value of the identifiable net assets acquired	125,027	92	125,119	8,209
Less: Other intangible assets	-	-	-	1,581
Goodwill (capital surpluses)	₩94,991	₩188	₩95,179	₩6,420

Business combination in FY 2013 is adjusted for business combination accounting methods between dominant firm and subsidiary, so the Company applied book value of consolidated financial statements group accounts.
And the Company adjusted ₩95,179 (in millions of Korean won) that differences between succeeded net assets value and purchase price at the capital surplus.

(5) Net cash flows in business combinations for the year ended December 31, 2013, are as follows (in millions of Korean won):

	Year ended December 31, 2013			Year ended December 31, 2012
Description	Doosan Corporation Industrial Vehicle	Nshaper Co , Ltd	Total	DFMS
(-)Consideration paid in cash	₩-	₩-	₩-	₩-
(+)Acquisition of Cash and Cash Equivalents	21,186	385	21,571	196
Total	₩21,186	₩385	₩21,571	₩196

(6) Details of income in business combinations after acquisition date, are as follows (in millions of Korean won):

	Year ended December 31, 2013			Year ended December 31, 2012
Description	Doosan Corporation Industrial Vehicle	N shaper Co , Ltd	Total	DFMS
Sales	₩220,832	₩4,366	₩225,198	₩6,650
Net income	(23)	10,781	10,758	247

37. BUSINESS TRANSFER:

(1) Details of income in business transfer for the years ended December 31, 2013 and 2012, are as follows (in millions of Korean won):

Description	Year ended December 31, 2013	Year ended December 31, 2012
Principal activity	Lease of construction equipment	Imports and sales of food materials
Transfer of business date	August 30,2013	February 10, 2012
Transfer method	Investment in kind	Divisional business transfer
Purchased company	Doosan heavy ind. & constr Co., Ltd (Subsidiary of the Company)	SRS Korea Co., Ltd.(Subsidiary of the Company)
Price of net assets transferred	Stock: 12,824 Cash: ₩777	Cash: ₩6,166

(2) Details of gain on transfer of business are as follows (in millions of Korean won):

Description	(+)Price of net asset transferred	Transfer of business			Gain on transfer of business
		Value of assets transferred	Value of liabilities transferred	(-)Value of net assets transferred	
Year ended December 31, 2013	₩13,601	₩65,345	₩58,531	₩6,814	₩6,787
Year ended December 31, 2012	₩6,166	₩4,690	₩2,210	₩2,480	₩3,686

In addition, gain on transfer of business for the years ended December 31, 2013, is classified as discontinued operating profit. But, for the years ended December 31, 2012, that is not classified as discontinued operations due to the proportion it accounted for in operating income of the Company is not material.

(3) Details of net cash inflow occurred by business transfer are as follows (in millions of Korean won):

Description	Year ended December 31, 2013	Year ended December 31, 2012
(+)Price of net asset transferred as cash	₩777	₩6,166
(-)Cash Equivalents transferred	-	-
Total	₩777	₩6,166

38. SPIN OFF:

(1) The Company spun off investment division of Neoplux Co., Ltd., to Neo Holdings Co., Ltd., on December 28, 2012. Details of the spin off are summarized as follows:

Details	Contents
Spin-off method	Capital reduction without refund
Remaining spin-off company	Doosan corporation(parent company)
New spin-off company	Neo Holdings Co., Ltd.
Spin-off date	December 28, 2012
Accounting method	K-IFRS Interpretations 2117 *Distributions of Non-cash Assets to Owners*

(2) The assets and liabilities transferred to the new spin-off company are summarized as follows (in millions of Korean won):

Details	Amount
Assets:	
Cash and cash equivalents	₩3,000
Investments in subsidiaries	26,810
Total	29,810
Liabilities:	
Short-term borrowings	1,000
Total (net assets)	₩28,810

In addition, net cash outflow of ₩3,000 million incurred by spin off.

(3) Accounting method of spin off is as follows (in millions of Korean won):

Debit		Credit	
Retained earnings (Note 1)	₩24,028	Net assets of spin-off	₩28,810
Investments in associates	6,179	Gain on disposal of investments in associates	1,397

(Note 1) Retained earnings measured fair value of non-cash assets transferred.

In addition, income from the investment division of Neoplux Co., Ltd., is not classified as discontinued operations due to the proportion it accounted for in operating income of the Company is not material.

Internal Accounting Control System ("IACS") Review Report

English Translation of a Report Originally Issued in Korean

To the Representative Director of
Doosan Corporation:

We have reviewed the accompanying Report on the Management's Assessment of IACS (the "Management's Report") of Doosan Corporation (the "Company") as of December 31, 2013. The Management's Report and the design and operation of IACS are the responsibility of the Company's management. Our responsibility is to review the Management's Report and issue a review report based on our procedures. The Company's management stated in the accompanying Management's Report that "based on the assessment of the IACS as of December 31, 2013, the Company's IACS has been appropriately designed and is operating effectively as of December 31, 2013, in all material respects, in accordance with the IACS framework established by the Korea Listed Companies Association."

We conducted our review in accordance with the IACS Review Standards established by the Korean Institute of Certified Public Accountants. Those standards require that we plan and perform a review, objective of which is to obtain a lower level of assurance than an audit, of the Management's Report in all material respects. A review includes obtaining an understanding of a company's IACS and making inquiries regarding the Management's Report and, when deemed necessary, performing a limited inspection of underlying documents and other limited procedures.

The Company's IACS represents internal accounting policies and a system to manage and operate such policies to provide reasonable assurance regarding the reliability of financial statements prepared, in accordance with Korean International Financial Reporting Standards, for the purpose of preparing and disclosing reliable accounting information. Because of its inherent limitations, IACS may not prevent or detect a material misstatement of the financial statements. Also, projections of any evaluation of effectiveness of IACS to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Based on our review, nothing has come to our attention that causes us to believe that the Management's Report referred to above is not fairly stated, in all material respects, in accordance with the IACS Framework established by the Korea Listed Companies Association.

Our review is based on the Company's IACS as of December 31, 2013, and we did not review its IACS subsequent to December 31, 2013. This report has been prepared pursuant to the Acts on External Audit for Stock Companies in the Republic of Korea and may not be appropriate for other purposes or for other users.

Deloitte Anjin LLC.

March 20, 2014

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

To the Board of Directors and auditor (Audit Committee) of Doosan Corporation

Ⅰ. As the Internal Accounting Control Officer("IACO") of Doosan Corporation ("the Company"), assessed the status of the design and operation of the Company's IACS for the year ended December 31, 2013.

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 statement.

Ⅰ. As the IACO, applied the IACS Framework established by KOREA Listed Companies Association for the assessment of design and operation of the IACS.

Based on assessment of the IACS, the Company's IACS has been appropriately designed and is operating effectively as of December 31, 2013, in all material respect, in accordance with the IACS Framework.

March , 04, 2014

Internal Accounting control officer **Park Wan-seok**

Chief Executive Officer **Lee Jae-kyoung**