LG Life Sciences Ltd. and its subsidiaries

Consolidated Financial Statements for the years ended December 31, 2014 and 2013 with independent auditors' report

Table of contents

Ernst & Young Han Young
Taeyoung Building, 111, Yeouigongwon-ro,
Yeongdeungpo-gu, Seoul 150-777 Korea

Tel: +82 2 3787 6600
Fax: +82 2 783 5890
ey.com/kr

Independent auditors' report

To the shareholders and board of directors of
LG Life Sciences Ltd.

We have audited the accompanying consolidated financial statements of LG Life Sciences Ltd. (the Company) and its subsidiaries (collectively, the Group), which comprise the consolidated statements of financial position as at December 31, 2014 and 2013, and the consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the Republic of Korea. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

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

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

Opinion

In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of LG Life Sciences Ltd. and its subsidiaries as at December 31, 2014 and 2013, and its financial performance and cash flows for the years then ended in accordance with KIFRS.

Other Matter

The consolidated financial statements of the Group for the year ended December 31, 2013, presented for comparative purposes, were audited in accordance with previous auditing standards generally accepted in the Republic of Korea.

Ernst & Young Han Young

February 26, 2015

This audit report is effective as of February 26, 2015, the independent auditors' report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the auditors' report date to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

Consolidated financial statements
for the years ended December 31, 2014 and 2013

LG Life Sciences Ltd. and its subsidiaries

The accompanying consolidated financial statements, including all footnotes and disclosures, have been prepared by, and are the responsibility of, the Company.

Il Jae Jeong
Chief Executive Officer
LG Life Science Ltd.

LG Life Sciences, Ltd. and its subsidiaries
Consolidated statements of financial position
as at December 31, 2014 and 2013
(Korean won in thousands)

	Notes		2014		2013
Assets					
Current assets					
Cash and cash equivalents	3, 28, 29	₩	50,335,667	₩	24,350,324
Trade and other receivables	4, 25, 28, 29		103,130,674		103,303,567
Other receivables	4, 5, 28, 29		3,105,617		2,583,225
Other current financial assets	9, 28, 29		342,423		992,308
Derivative assets			22,452		-
Other current assets	6		1,864,656		1,647,309
Current income tax assets			111,568		135,232
Inventories	5		102,907,918		99,844,633
			261,820,975		232,856,598
Non-current assets					
Financial assets at fair value through profit or loss	7, 28, 29		19,159		28,665
Other receivables	4, 28, 29		2,485,985		1,459,298
Available-for-sale financial assets	8, 28, 29		1,264,299		1,264,299
Other non-current financial assets	7, 9, 26, 28, 29		5,426,982		5,211,768
Other non-current assets			59,303		41,213
Deferred tax assets	23		29,649,980		32,189,772
Property, plant and equipment	10		304,501,853		303,957,909
Intangible assets	11		47,909,327		34,976,850
			391,316,888		379,129,774
Total assets		₩	**653,137,863**	₩	**611,986,372**
Liabilities and equity					
Current liabilities					
Trade payables	12, 25, 28, 29	₩	28,230,948	₩	37,490,682
Other payables	12, 25, 28, 29		22,206,604		28,705,023
Short-term borrowings	4, 13, 28, 29		28,691,145		81,670,286
Other current financial liabilities	14, 28, 29		11,978,298		11,424,969
Current income tax payable			29,345		105,288
Provisions	17		1,178,991		1,115,893
Other current liabilities	15		5,152,562		5,796,573
			97,467,893		166,308,714
Non-current liabilities					
Long-term borrowings	13, 28, 29		279,311,329		165,719,761
Other non-current financial liabilities	14, 15, 28, 29		5,325,359		5,760,639
Defined benefit liabilities	16		20,307,470		19,353,270
Provisions	17, 26		1,267,501		1,175,363
			306,211,659		192,009,033
Total liabilities			**403,679,552**		**358,317,747**
Equity	1, 18				
Issued capital			84,066,030		84,066,030
Share premium			147,045,545		147,045,545
Retained earnings			19,217,633		23,692,043
Other components of equity			(1,214,300)		(1,358,231)
Equity attributable to equity holders of the parent			249,114,908		253,445,387
Non-controlling interests			343,403		223,238
Total equity			**249,458,311**		**253,668,625**
Total liabilities and equity		₩	**653,137,863**	₩	**611,986,372**

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

LG Life Sciences, Ltd. and its subsidiaries
Consolidated statements of comprehensive income
for the years ended December 31, 2014 and 2013
(Korean won in thousands, except per share amounts)

	Notes		2014		2013
Sales	19, 25, 27	₩	425,598,107	₩	417,344,598
Cost of sales	20, 25		225,003,073		216,974,478
Gross profit			**200,595,034**		**200,370,120**
Selling and administrative expenses	20, 21		184,399,453		185,975,229
Operating profit			**16,195,581**		**14,394,891**
Finance income	22		1,997,655		2,303,220
Finance costs	20, 22		(12,443,379)		(10,355,924)
Other income	22		6,223,405		5,839,149
Other expense	20, 22		(9,827,177)		(7,129,691)
Profit before income tax			**2,146,085**		**5,051,645**
Income tax expense	23		(4,138,967)		(1,763,894)
Profit (loss) for the year		₩	**(1,992,882)**	₩	**3,287,751**
Other comprehensive loss for the year					
Other comprehensive income not to be reclassified to profit or loss in subsequent periods					
Re-measurement of the net defined benefit pension plans	16		(2,373,748)		(2,037,100)
Other comprehensive income to be reclassified to profit or loss in subsequent periods					
Exchange differences on translation of foreign operations	18, 23		156,317		(460,013)
Total comprehensive income (loss) for the year		₩	**(4,210,313)**	₩	**790,638**
Profit (loss) for the year attributable to:					
Equity holders of the parent			(2,100,661)		3,261,126
Non-controlling interests			107,779		26,625
		₩	**(1,992,882)**	₩	**3,287,751**
Total comprehensive income (loss) for the year attributable to:					
Equity holders of the parent			(4,330,479)		784,524
Non-controlling interests			120,166		6,114
		₩	**(4,210,313)**	₩	**790,638**
Earnings (loss) per share:	24				
- Basic, profit (loss) for the year attributable to equity holders of the parent		₩	(125)	₩	194
- Diluted, profit (loss) for the year attributable to equity holders of the parent		₩	(125)	₩	194

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

LG Life Sciences, Ltd. and its subsidiaries
Consolidated statements of changes in equity
for the years ended December 31, 2014 and 2013

(Korean won in thousands)

	Attributable to the equity holders of the parent						
	Issued capital	**Share premium**	**Retained earnings**	**Other components of equity**	**Total**	**Non-controlling interest**	**Total equity**
As at January 1, 2013	₩ 84,066,030	₩ 147,045,545	₩ 22,468,017	₩ (918,711)	₩ 252,660,881	₩ -	₩ 252,660,881
Profit for the year	-	-	3,261,126	-	3,261,126	26,625	3,287,751
Re-measurement of the net defined benefit pension plans	-	-	(2,037,100)	-	(2,037,100)	-	(2,037,100)
Exchange differences on translation of foreign operations	-	-	-	(439,502)	(439,502)	(20,511)	(460,013)
Total comprehensive income for the year	-	-	1,224,026	(439,502)	784,524	6,114	790,638
Acquisition of treasury stock	-	-	-	(18)	(18)	-	(18)
Changes in scope of consolidation	-	-	-	-	-	217,124	217,124
At December 31, 2013	**₩ 84,066,030**	**₩ 147,045,545**	**₩ 23,692,043**	**₩ (1,358,231)**	**₩ 253,445,387**	**₩ 223,238**	**₩ 253,668,625**
As at January 1, 2014	₩ 84,066,030	₩ 147,045,545	₩ 23,692,043	₩ (1,358,231)	₩ 253,445,387	₩ 223,238	₩ 253,668,625
Loss for the year	-	-	(2,100,662)	-	(2,100,662)	107,780	(1,992,882)
Re-measurement defined benefit plans	-	-	(2,373,748)	-	(2,373,748)	-	(2,373,748)
Exchange differences on translation of foreign operations	-	-	-	143,931	143,931	12,386	156,317
Total comprehensive loss for the year	-	-	(4,474,410)	143,931	(4,330,479)	120,166	(4,210,313)
At December 31, 2014	₩ 84,066,030	₩ 147,045,545	₩ 19,217,633	₩ (1,214,300)	₩ 249,114,908	₩ 343,403	₩ 249,458,311

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

LG Life Sciences, Ltd. and its subsidiaries
Consolidated statements of cash flows
for the years ended December 31, 2014 and 2013

(Korean won in thousands)

	Notes		2014		2013
Cash flows from operating activities:					
Cash flow generated from operating activities	30	₩	30,588,038	₩	25,119,972
Interest received			791,051		823,253
Interest paid			(11,488,949)		(9,341,098)
Income tax paid			(1,401,906)		(1,535,449)
Net cash flows from operating activities			**18,488,234**		**15,066,678**
Cash flows from investing activities:					
Decrease in other non-current financial assets		₩	170,689	₩	705,384
Proceeds from disposal of property, plant and equipment			175,029		1,453,859
Proceeds from disposal of intangible assets			3,000		-
Acquisition of subsidiaries, net of cash acquired			-		217,124
Increase in other non-current financial assets			(312,421)		(1,006,265)
Acquisition of property, plant and equipment			(32,113,701)		(71,586,953)
Acquisition of intangible assets			(20,493,239)		(8,753,747)
Net cash flows used in investing activities			**(52,570,643)**		**(78,970,598)**
Cash flows from financing activities:					
Proceeds from borrowings		₩	16,525,785	₩	53,341,836
Proceeds from issuance of bonds			149,447,100		29,954,400
Repayment of borrowings			(56,000,000)		(36,062,500)
Repayment of bonds			(50,000,000)		-
Acquisition of treasury stock			-		(18)
Net cash flows from financing activities			**59,972,885**		**47,233,718**
Net increase (decrease) in cash and cash equivalents			25,890,476		(16,670,202)
Cash and cash equivalents at January 1, 2014			24,350,324		41,493,148
Net foreign exchange difference			94,867		(472,622)
Cash and cash equivalents at December 31, 2014		₩	**50,335,667**	₩	**24,350,324**

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

1. Corporate information

LG Life Sciences, Ltd. (the “Company”) was incorporated on August 1, 2002 through spin-off from the Life Sciences division of LG Corp. The Company was listed on the Korea Exchange on August 16, 2002.

The Company’s head office is located in Seoul, and its three manufacturing plants are located in Iksan, Onsan and Osong in Korea. The Company is engaged in the research and development, manufacture and sale of pharmaceutical and agrochemical products.

As at December 31, 2014, the Company’s issued capital amounts to ₩84,066 million (including preference shares amounting to ₩1,181 million), and LG Corp., the major shareholder, holds a 30.43% equity interest in the Company.

As at December 31, 2014, the Company is authorized to issue 38,000,000 shares of ordinary shares at ₩5,000 par value per share with 16,576,990 ordinary shares (including 13 treasury shares) and 236,216 preference shares (including 13 treasury shares) issued.

Consolidated subsidiaries

Consolidated subsidiaries as at December 31, 2014 are as follows:

Subsidiary	Equity interest	Domicile	Reporting period	Principal activities
LG Life Sciences India Pvt. Ltd.(*1)	100%	India	Mar. 31	Pharmaceutical sales
LG Life Sciences (Beijing) Co., Ltd.	100%	China	Dec. 31	Pharmaceutical sales
LG Life Sciences Thailand Ltd.	80%	Thailand	Dec. 31	Pharmaceutical sales
LG Life Sciences America Inc.(*2)	100%	America	Dec. 31	Pharmaceutical sales

(*1) The financial year end of LG Life Science India Pvt. Ltd. is March 31 and its financial statements have been prepared for consolidation based on the Company's financial year end.
(*2) LG Life Sciences America Inc. wad included in consolidated subsidiarity in 2014 as the company acquired a 100% equity interest which was newly established in 2014 as.

Summarized financial information of consolidated subsidiaries as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014			
	LG Life Sciences India Pvt. Ltd.	LG Life Sciences (Beijing) Co., Ltd.	LG Life Sciences Thailand Ltd.	LG Life Sciences America Inc.
Assets	₩ 6,395	₩ 1,222	₩ 5,914	₩ 1,989
Liabilities	4,005	17	4,197	1,437
Equity	2,390	1,205	1,717	552
Sales	12,944	713	10,968	2878
Profit(loss) for the year	67	-	539	3
Total comprehensive income	103	19	601	43

	2013		
	LG Life Sciences India Pvt. Ltd.	LG Life Sciences (Beijing) Co., Ltd.	LG Life Sciences Thailand Ltd.
Assets	₩ 6,843	₩ 1,199	₩ 6,843
Liabilities	4,556	12	4,556
Equity	2,287	1,187	2,287
Sales	12,581	651	12,581
Profit for the year	(181)	1	(181)
Total comprehensive income	(553)	16	(553)

2. Basis of preparation and summary of significant accounting policies

2.1 Basis of preparation

The consolidated financial statements have been prepared on a historical cost basis, except for financial assets at fair value through profit or loss and derivative financial instruments that have been measured at fair value.

Statement of compliance

The Company and its subsidiaries (collectively referred to as the "Group") maintain its official accounting records in Korean won and prepare statutory financial statements in the Korean language in accordance with KIFRS enacted by the *Corporate External Audit Law*. The accompanying consolidated financial statements have been translated into English from the Korean language consolidated financial statements. In the event of any differences in interpreting the consolidated financial statements or the independent auditors' report thereon, the Korean version, which is used for a regulatory purpose, shall prevail.

Basis of consolidation

The consolidated financial statements comprise the financial statements of the Group and its subsidiaries as at December 31, 2014. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the Group has:

- Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee)
- Exposure, or rights, to variable returns from its involvement with the investee, and
- The ability to use its power over the investee to affect its returns

Profit or loss and each component of other comprehensive income (OCI) are attributed to the equity holders of the parent of the Group and to the non-controlling interests, even if this results in the non-controlling interests having a deficit balance. When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies. All intra-group assets and liabilities, equity, profit or loss, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Non-controlling interest represents equity interest in a subsidiary not attributable, directly and indirectly, to a parent.

The Company has four subsidiaries; LG Life Sciences India Pvt. Ltd., LG Life Sciences (Beijing) Co., Ltd., LG Life Sciences Thailand Ltd., LG Life Sciences America Inc. and LG Life Sciences Poland Ltd. LG Life Sciences Poland Ltd. was excluded from consolidation as its total assets, and financial performance was deemed immaterial to the consolidated financial statements.

2.2 Significant accounting judgments, estimates and assumptions

The preparation of the Company's consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenues, expenses, assets and liabilities, and the disclosure of contingent liabilities, at the end of the reporting period. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of the asset or liability affected in future periods.

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are as follows:

Impairment of non-financial assets
Impairment exists when the carrying value of an asset or cash generating unit exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The fair value less costs of disposal calculation is based on available data from binding sales transactions, conducted at arm's length, for similar assets or observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a DCF model. The cash flows are derived from the budget for the next five years and do not include restructuring activities that the Group is not yet committed to or significant future investments that will enhance the asset's performance of the CGU being tested. The recoverable amount is sensitive to the discount rate used for the DCF model as well as the expected future cash-inflows and the growth rate used for extrapolation purposes.

Impairment of available-for-sale financial assets
Available-for-sale financial assets are measured at fair value with unrealized gains or losses recognized in other comprehensive income. When the fair value of available-for-sale financial assets decreases, the Group determines whether it should be treated as impairment. Based on this assessment, the Company identified an impairment of nil in 2014 (2013: nil) and recognized 1,264 thousand as available-for-sale financial assets as at December 31, 2014.

Pension benefits
The cost of the defined benefit pension plan and the present value of the pension obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases, mortality rates and future pension increases. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date.

In determining the appropriate discount rate, management considers the market interest rates of corporate bonds with at least an 'AA' rating or above. Future pension increase rates and salary increase rates are based on expected future inflation rates for the respective countries.

Further details about pension obligations are given in Note 16.

Taxes
Uncertainties exist with respect to the interpretation of complex tax regulations, changes in tax laws, and the amount and timing of future taxable income. Given the wide range of international business relationships and the long-term nature and complexity of existing contractual agreements, differences arising between the actual results and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax income and expense already recorded. The Group establishes provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities of the respective counties in which it operates. The amount of such provisions is based on various factors, such as experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority.

The Group does not recognize deferred tax liabilities, as at December 31, 2014 and 2013, on the undistributed earnings of LG Life Sciences India Pvt. Ltd., LG Life Sciences Thailand Ltd., LG Life Sciences (Beijing) Co., Ltd. and LG Sciences America Inc. because there is neither a plan to receive dividends from these subsidiaries in the foreseeable future nor a plan to dispose of these subsidiaries.

2.2 Significant accounting judgments, estimates and assumptions (cont'd)

Development costs

Development costs are capitalized in accordance with the accounting policy as mentioned in Note 2.3. Initial capitalization of costs is based on management's judgment that technological and economic feasibility is confirmed, usually when a product development project has reached a defined milestone according to an established project management model. In determining the amounts to be capitalized, management makes assumptions regarding the expected future cash generation of the project, discount rates to be applied and the expected period of benefits. At December 31, 2014, the carrying amount of capitalized development costs was ₩25,260 million (December 31, 2013: ₩10,166 million). This amount includes development cost in the Bioequivalence test for generic products. Prior to being marketed, it will need to obtain the approval of the relevant authorities. The innovative nature of the product gives rise to some uncertainty as to whether the certificate will be obtained.

2.3 Summary of significant accounting policies

Foreign currency translation

The Group's consolidated financial statements are presented in Korean won, which is also the Company's functional currency. Each entity in the Group determines its own functional currency, and items included in the financial statements of each entity are measured using that functional currency.

Transactions in foreign currencies are initially recorded by the Group entities at their respective functional currency rates prevailing at the date of the transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at the functional currency spot rate of exchange ruling at the reporting date. All differences are taken to profit or loss. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates as at the dates of the initial transactions. Non-monetary items measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value is determined.

The assets and liabilities of foreign operations are translated into Korean won at the rate of exchange prevailing at the reporting date and their statement of comprehensive income are translated at average exchange rates prevailing for the reporting period. The exchange differences arising on the translation are recognized in other comprehensive income. On disposal of a foreign operation, the component of other comprehensive income relating to that particular foreign operation is reclassified form equity to profit or loss. However, in accordance with the *KIFRS 1101*, the cumulative translation differences for all foreign operations are deemed to be nil as at January 1, 2009.

Cash and cash equivalents

Cash and cash equivalents in the statement of financial position comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less.

Derivative financial instruments

Initial recognition and subsequent measurement

The Group uses derivative financial instruments such as forward currency contracts to hedge its foreign currency risks. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently remeasured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative

Any gains or losses arising from changes in fair value on derivatives are taken directly to the income statement

2.3 Summary of significant accounting policies(cont'd)

Inventories

Inventories are valued at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale. The cost of inventories comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition.
The costs of inventories are assigned by the moving-average method, except for raw materials in-transit which are stated at cost by the specific identification method.

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

Financial instruments

Initial recognition

Financial assets within the scope of KIFRS 1039 are classified as financial assets at fair value through profit or loss, loans and receivables, held-to-maturity investments and available-for-sale financial assets. The Group determines the classification of its financial assets at initial recognition. All financial assets are recognized initially at fair value plus, in the case of investments not at fair value through profit or loss, directly attributable transaction costs.

The Group decides, at each reporting date, reclassification of financial assets, if required. Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace (regular way trades) are recognized on the trade date, i.e. the date that the Group commits to purchase or sell the asset.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. This category includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by *KIFRS 1039*. Derivatives, including separately embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments. Gains or losses on liabilities held for trading are recognized in the statement of profit or loss.

Derivatives embedded in host contracts are accounted for as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contracts and the host contracts are not held for trading or designated at fair value through profit or loss. These embedded derivatives are measured at fair value with changes in fair value recognized in profit or loss. Reassessment only occurs if there is a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required.

Held-to-maturity investments

Non-derivative financial assets with fixed or determinable payments and fixed maturities are classified as held-to-maturity when the Group has the positive intention and ability to hold it to maturity. After initial measurement, held-to-maturity investments are measured at amortized cost using the effective interest rate method, less impairment. The effective interest rate method amortization is included in finance income in the statement of comprehensive income.

2.3 Summary of significant accounting policies (cont'd)

Financial instruments(cont'd)

Loans and receivables
Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. After initial measurement, such financial assets are subsequently measured at amortized cost using the effective interest rate method, less impairment. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the EIR. The EIR amortization is included as finance costs in the statement of profit or loss. This category generally applies to interest-bearing loans and borrowings.

Available-for-sale financial assets
Equity investments classified as available-for sale are those, which are neither classified as held for trading nor designated at fair value through profit or loss. After initial measurement, available-for-sale financial assets are subsequently measured at fair value with unrealized gains or losses recognized as other comprehensive income in the available-for-sale reserve until the asset is derecognized, at which time the cumulative gain or loss is recognized in other operating income, or determined to be impaired, at which time the cumulative loss is recognized as finance costs in the statement of comprehensive income and removed from the available-for-sale reserve.

Fair value of financial instruments
The fair value of financial instruments that are traded in active markets at each reporting date is determined by reference to quoted market prices or dealer price quotations (bid price for long positions and ask price for short positions), without any deduction for transaction costs. For financial instruments not traded in an active market, the fair value is determined using appropriate valuation techniques. Such techniques may include using recent arm's length market transactions; reference to the current fair value of another instrument that is substantially the same; discounted cash flow analysis or other valuation models.

Amortized cost of a financial asset or financial liability
The Group carries held-to-maturity investments and loans and receivables at amortized cost. Held to maturity investments, loans and receivables are measured at amortized cost using the EIR, less impairment. The calculation includes all fees and points paid or received between parties to the contract that are an integral part of the effective interest rate, transaction costs, and all other premiums or discounts.

Impairment of financial assets
The Group assesses at each reporting date whether there is any objective evidence that a financial asset or a group of financial assets is impaired.

Financial assets carried at amortized cost
If there is objective evidence that an impairment loss on loans and receivables or held-to-maturity investments carried at amortized cost has been incurred, the amount of the loss is measured as the difference between the carrying amount and the present value of estimated future cash flows (excluding future expected credit losses that have not yet been incurred). The present value of the estimated future cash flows is discounted at the original effective interest rate. The carrying amount of the asset is reduced through the use of an allowance account and the amount of the loss is recognized in profit or loss.

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 shall be reversed either directly or by adjusting an allowance account. The reversal shall not result in a carrying amount of the financial asset that exceeds what the amortized cost would have been had the impairment not been recognized at the date the impairment is reversed. The amount of the reversal shall be recognized in profit or loss.

2.3 Summary of significant accounting policies (cont'd)

Furthermore, in the case of receivables related to operating activities, if there is clear evidence of potential insolvency of the debtor or of financial difficulties, and the company may be unable to collect the full amount, an impairment loss may be recognized and be reduced through the use of an allowance account. Loans together with the associated allowance are written off when there is no realistic prospect of future recovery and all collateral has been realized or has been transferred to the Group.

Available-for-sale financial assets
For available-for-sale financial assets, the Group assesses at each reporting date whether there is objective evidence that an investment or a group of investments is impaired. Where there is evidence of impairment on equity investments, the cumulative loss – measured as the difference between the acquisition cost and the current fair value, less any impairment loss on that investment previously recognized in profit or loss – is removed from other comprehensive income and recognized in profit or loss.

However, the amount recorded for impairment is the cumulative loss measured as the difference between the amortized cost and the current fair value, less any impairment loss on that investment previously recognized in the statement of profit or loss.

Impairment losses on equity investments are not reversed through profit or loss; increases in their fair value after impairment are recognized directly in other comprehensive income. In the case of debt instruments, the amount recorded for impairment is the cumulative loss measured as the difference between the amortized cost and the current fair value, less any impairment loss on that investment previously recognized in profit or loss. If, in a subsequent year, the fair value of a debt instrument 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 in profit or loss.

Property, plant and equipment

Property, plant and equipment is stated at cost, net of accumulated depreciation and/or accumulated impairment losses, if any. Such cost includes the cost of replacing part of the property, plant and equipment and borrowing costs for long-term construction projects if the recognition criteria are met. When significant parts of property, plant and equipment are required to be replaced in intervals, the Group recognizes such parts as individual assets with definite useful lives and depreciation, respectively. All other repair and maintenance costs are recognized as expenses when they are incurred.

Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets as follows:

- Building and structure 25 to 50 years
- Plant and equipment 6 to 10 years
- Others 3 to 6 years

An item of property, plant and equipment and any significant part initially recognized is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss. The assets' residual values, useful lives and methods of depreciation are reviewed at each financial year end, and adjusted prospectively, if appropriate.

2.3 Summary of significant accounting policies (cont'd)

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the respective assets. To the extent that the Group borrows funds specifically for the purpose of obtaining a qualifying asset, the Group determines the amount of borrowing costs eligible for capitalization as the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings. Other borrowing costs are recognized as an expense.

The Group capitalizes borrowing costs for all qualifying assets where its construction commenced on or after January 1, 2009.

Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is its fair value as at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses, if any. Internally generated intangible assets, excluding capitalized development costs, are not capitalized and expenditure is reflected in profit or loss in the year in which the expenditure is incurred.

The useful lives of intangible assets are assessed as either finite or indefinite. Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at each financial year end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset is accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimates. The amortization expense on intangible assets with finite lives is recognized in profit or loss in the expense category consistent with the function of the intangible asset.

Amortization is calculated on a straight-line basis over the estimated useful life of the asset as follows:

• Patent and trademark rights	10 years
• Design rights	5 years
• Development costs	10 years
• Software	6 years
• Research and development assets in progress through license-in arrangements ("license-in")	5 to 10 years

Facility usage rights are regarded as intangible assets having indefinite useful lives as there is no constraint on the duration of such rights. Facility usage rights are not amortized but tested for impairment annually, either individually or at the cash-generating-unit (CGU) level.

The assessment of indefinite life is reviewed annually to determine whether the indefinite life continues to be supportable. If not, the change in useful life from indefinite to finite is made on a prospective basis.

Gains or losses arising from derecognition of an intangible assets are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognized in profit or loss when the asset is derecognized.

2.3 Summary of significant accounting policies (cont'd)

Research and development costs
Research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset when the Group can demonstrate:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale
- Its intention to complete and its ability to use or sell the asset
- How the asset will generate future economic benefits
- The availability of resources to complete the asset
- The ability to measure reliably the expenditure during development

Following initial recognition of the development expenditure as an asset, the cost model is applied requiring the asset to be carried at cost less any accumulated amortization and accumulated impairment losses. Amortization of the asset begins when development is complete and the asset is available for use. It is amortized over the period of expected future benefit (10 years). During the period of development, the asset is tested for impairment annually

Impairment of non-financial assets
The Group assesses at each reporting date whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or CGU's fair value less costs to sell and its value in use and is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets.

Where the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs to sell, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded subsidiaries or other available fair value indicators. Impairment losses are recognized in profit or loss in those expense categories consistent with the function of the impaired asset.

The Group assesses at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. If such indication exists, the Group estimates the asset's or CGU's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years.

Financial liabilities

Loans and borrowings
All loans and borrowings are recognized initially at fair value plus directly attributable transaction costs, and no loans and borrowing are designated as a financial liability at fair value through profit or loss. After initial recognition, interest bearing loans and borrowings are subsequently measured at amortized cost using the effective interest rate method. Gains and losses are recognized in profit and loss when the liabilities are derecognized as well as through the effective interest rate method amortization process.

2.3 Summary of significant accounting policies (cont'd)

Financial guarantee contracts
Financial guarantee contracts issued by the Group are those contracts that require a payment to be made to reimburse the holder for a loss it incurs because the specified debtor fails to make a payment when due in accordance with the terms of a debt instrument. Financial guarantee contracts are recognized initially as a liability at fair value, adjusted for transaction costs that are directly attributable to the issuance of the guarantee. Subsequently, the liability is measured at the higher of the best estimate of the expenditure required to settle the present obligation at the reporting date and the amount recognized less cumulative amortization.

Other financial liabilities
The Group recognizes other financial liabilities initially at fair value plus directly attributable transaction costs. After initial recognition, interest bearing other financial liabilities are subsequently measured at amortized cost using the effective interest rate method. A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires.

Derecognition

Financial asset
A financial asset (or, where applicable a part of a financial asset or part of a group of similar financial assets) is derecognized when:

- The rights to receive cash flows from the asset have expired.
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, and has neither transferred nor retained substantially all of the risks and rewards of the asset nor transferred control of the asset, the asset is recognized to the extent of the Group's continuing involvement in the asset. Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Financial liability
A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in profit or loss.

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

Where the Group expects some or all of a provision to be reimbursed, for example under an insurance contract, the reimbursement is recognized as a separate asset but only when the reimbursement is virtually certain.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, where appropriate, the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

2.3 Summary of significant accounting policies (cont'd)

Revenue recognition
Revenue is recognized to the extent that it is probable that the economic benefits will flow to the Group and the revenue can be reliably measured. Revenue is measured at the fair value of the consideration received or receivable, excluding discounts, incentives, and sales taxes or duty. The following specific recognition criteria must also be met before revenue is recognized:

Sale of goods
Revenue from the sale of goods is recognized when the significant risks and rewards of ownership of the goods have passed to the buyer, usually on delivery of the goods.

Rendering of services
When the outcome of a transaction involving the rendering of services can be estimated reliably, the Group recognizes revenue by reference to the stage of completion of the transaction at the end of the reporting period.

Interest income
Revenue is recognized using the effective interest ratio method.

Dividends
Revenue is recognized when the Group's right to receive the payment is established.

License-out
Revenue is recognized in accordance with the terms of the relevant agreements. When the Group has no additional significant obligations to provide under the contracts, upfront fees received in connection with agreements are recognized as revenue all at once. When the Group has additional significant obligations to provide under the contracts, upfront fees received in connection with agreements are deferred and recognized over the period that the additional obligation are performed. Milestone fees to be received when specific performances are achieved are recognized as revenue when each of the milestone events are achieved.

Government grants
Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as a reduction in the amount of related costs. When the grant relates to the acquisition of an asset, it is recognized as a reduction in the amount of related asset.

Pension benefits
The Group maintains a defined benefit pension plan and a defined contribution pension plan, both of which require contributions to be made to separately administered funds. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method. Actuarial gains and losses are recognized as other comprehensive income. Such actuarial gains and losses are immediately recognized in retained earnings and are not reclassified to profit or loss in subsequent periods.

Past service costs are recognized in profit or loss on the earlier of:
- The date of the plan amendment or curtailment, and
- The date that the Group recognizes restructuring-related costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Group recognizes the following changes in the net defined benefit obligation under 'cost of sales' and 'selling and administration expenses' in consolidated statement of profit or loss.

The Group recognized accumulated actuarial gain and loss under the defined benefit plan directly into retained earnings with in equity at the transition date to KIFRS.

2.3 Summary of significant accounting policies (cont'd)

Taxes

Current income tax
Current income tax assets and liabilities for the current and prior periods are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date, in the countries where the Group operates and generates taxable income.

Deferred tax
Deferred tax is provided using the liability method on temporary differences at the reporting date between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax liabilities are recognized for all taxable temporary differences, except:

- Where the deferred tax liability arises from the initial recognition of goodwill or of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, where the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

Deferred tax assets are recognized for all deductible temporary differences, carry forward of unused tax credits and unused tax losses, to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilized, except:

- Where the deferred tax asset relating to the deductible temporary difference arises from the initial recognition of an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss.
- In respect of deductible temporary differences associated with investments in subsidiaries, associates and interests in joint ventures, deferred tax assets are recognized only to the extent that it is probable that the temporary differences will reverse in the foreseeable future and taxable profit will be available against which the temporary differences can be utilized.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilized. Unrecognized deferred tax assets are reassessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

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

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss. Deferred tax items are recognized in correlation to the underlying transaction either in other comprehensive income or directly in equity.

Deferred tax assets and deferred tax liabilities are offset, if a legally enforceable right exists to set off current tax assets against current income tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

2.4 New and amended standards and interpretations

The Group applied for the first time certain standards and amendments, which are effective for annual periods beginning on or after January 1, 2014. The nature and the impact of each new standard and amendment is described below:

Investment Entities (Amendments to KIFRS 1110, KIFRS 1112 and KIFRS 1027)
These amendments provide an exception to the consolidation requirement for entities that meet the definition of an investment entity under *KIFRS 1110 Consolidated Financial Statements* and must be applied retrospectively, subject to certain transition relief. The exception to consolidation requires investment entities to account for subsidiaries at fair value through profit or loss. These amendments have no impact on the Group, since none of the entities in the Group qualifies to be an investment entity under *KIFRS 1110*.

Offsetting Financial Assets and Financial Liabilities - Amendments to KIFRS 1032
These amendments clarify the meaning of 'currently has a legally enforceable right to set-off' and the criteria for non-simultaneous settlement mechanisms of clearing houses to qualify for offsetting and is applied retrospectively. These amendments have no impact on the Group.

Recoverable Amount Disclosures for Non-Financial Assets – Amendments to KIFRS 1036 Impairment of Assets
These amendments remove the unintended consequences of *KIFRS 1113* on the disclosures required under *KIFRS 1036*. In addition, these amendments require disclosure of the recoverable amounts for the assets or CGUs for which impairment loss has been recognized or reversed during the period. These amendments have no impact on the Group.

Novation of Derivatives and Continuation of Hedge Accounting – Amendments to KIFRS 1039
These amendments provide relief from discontinuing hedge accounting when novation of a derivative designated as a hedging instrument meets certain criteria and retrospective application is required. These amendments have no impact on the Group as the Group has not novated its derivatives during the current or prior periods.

KIFRS 2021 Levies
KIFRS 2021 clarifies that an entity recognizes a liability for a levy when the activity that triggers payment, as identified by the relevant legislation, occurs. For a levy that is triggered upon reaching a minimum threshold, the interpretation clarifies that no liability should be anticipated before the specified minimum threshold is reached.

2.5. Standards issued but not yet effective

The standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group's financial statements are disclosed below.

Amendments to KIFRS 1019 Defined Benefit Plans: Employee Contributions
KIFRS 1019 requires an entity to consider contributions from employees or third parties when accounting for defined benefit plans. Where the contributions are linked to service, they should be attributed to periods of service as a negative benefit. These amendments clarify that, if the amount of the contributions is independent of the number of years of service, an entity is permitted to recognize such contributions as a reduction in the service cost in the period in which the service is rendered, instead of allocating the contributions to the periods of service. This amendment is effective for annual periods beginning on or after July 1, 2014. It is not expected that this amendment would be relevant to the Group, since none of the entities within the Group has defined benefit plans with contributions from employees or third parties.

2.5. Standards issued but not yet effective(cont'd)

Amendments to KIFRS 1111 Joint Arrangements: Accounting for Acquisitions of Interests
The amendments to *KIFRS 1111* require that a joint operator accounting for the acquisition of an interest in a joint operation, in which the activity of the joint operation constitutes a business must apply the relevant *KIFRS 1103* principles for business combinations accounting. The amendments also clarify that a previously held interest in a joint operation is not remeasured on the acquisition of an additional interest in the same joint operation while joint control is retained. In addition, a scope exclusion has been added to *KIFRS 1111* to specify that the amendments do not apply when the parties sharing joint control, including the reporting entity, are under common control of the same ultimate controlling party. The amendments apply to both the acquisition of the initial interest in a joint operation and the acquisition of any additional interests in the same joint operation and are prospectively effective for annual periods beginning on or after January 1, 2016, with early adoption permitted. These amendments are not expected to have any impact to the Group.

Amendments to KIFRS 1016 and KIFRS 1038: Clarification of Acceptable Methods of Depreciation and Amortization
The amendments clarify the principle in *KIFRS 1016 and KIFRS 1038* that revenue reflects a pattern of economic benefits that are generated from operating a business (of which the asset is part) rather than the economic benefits that are consumed through use of the asset. As a result, a revenue-based method cannot be used to depreciate property, plant and equipment and may only be used in very limited circumstances to amortize intangible assets. The amendments are effective prospectively for annual periods beginning on or after January 1, 2016, with early adoption permitted. These amendments are not expected to have any impact to the Group given that the Group has not used a revenue-based method to depreciate its non-current assets.

Amendments to KIFRS 1027: Equity Method in Separate Financial Statements
The amendments will allow entities to use the equity method to account for investments in subsidiaries, joint ventures and associates in their separate financial statements. Entities already applying KIFRS and electing to change to the equity method in its separate financial statements will have to apply that change retrospectively. For first-time adopters of KIFRS electing to use the equity method in its separate financial statements, they will be required to apply this method from the date of transition to KIFRS. The amendments are effective for annual periods beginning on or after January 1, 2016, with early adoption permitted. These amendments will not have any impact on the Group's consolidated financial statements.

3. Cash and cash equivalents

As at December 31, 2014 and 2013, cash and cash equivalents consist of the following (Korean won in millions):

	2014	2013
Cash at banks and on hand	₩ 10	₩ 10
Short-term deposits	50,326	24,340
	₩ 50,336	₩ 24,350

4. Trade and other receivables

Trade and other accounts receivable as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014		2013	
	Current	Non-current	Current	Non-current
Trade accounts receivable	₩ 103,131	₩ -	₩ 103,304	₩ -
Other accounts receivable	3,106	2,486	2,583	1,459
Total	₩ 106,237	₩ 2,486	₩ 105,887	₩ 1,459

Trade and other accounts receivable are presented at net book value less allowance for doubtful accounts. Details are as follows (Korean won in millions):

	2014	2013
Trade and other accounts receivable	₩ 109,784	₩ 108,539
Allowance for doubtful accounts	(1,061)	(1,193)
	₩ 108,723	₩ 107,346

The changes in allowance for doubtful accounts for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

	Individually impaired	Collectively impaired	Total
As at January 1, 2013	₩ 382	₩ 294	₩ 676
Charge for the year	569	58	627
Utilized	(110)	-	(110)
As at December 31, 2013	841	352	1,193
Charge for the year	122	-	122
Utilized	(230)	(24)	(254)
As at December 31, 2014	₩ 733	₩ 328	₩ 1,061

The aging analysis of trade accounts receivable as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	Less than 5 months		Over 5 months			
	Pharma-ceuticals	Specialty chemicals	Pharma-ceuticals	Specialty chemicals	Others (*)	Total
2014	₩ 50,789	₩ 3,071	₩ 5,059	₩ 51	₩ 45,222	₩ 104,192
2013	50,747	3,952	5,708	-	44,090	104,497

(*) There has been no previous experience in recording impairment losses for trade accounts receivable of overseas customers. Accordingly, aging analyses have been only conducted on domestic customers.

4. Trade and other receivables (cont'd)

The Group disposed or factored certain of its trade accounts receivable, which does not result in derecognition as the Group retained substantially all the risks and rewards of ownership of the transferred asset. As such, the Group continues to recognize the transferred assets in its entirety and recognizes borrowings for the consideration received. The details as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014	2013	Conditions
Trade accounts receivable	₩ 20,256	₩ 11,276	With recourse obligation

(*) The Group recognized current borrowings at the nominal amount of transferred receivables with recourse (see Note 13).

Other non-current accounts receivables measured at amortized cost using the effective interest rate method as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	Effective interest rate (%)	Par value	Present value discount	Book value
2014	3.10~7.26	₩ 2,540	₩ (54)	₩ 2,486
2013	3.10	1,583	(124)	1,459

5. Inventories

Inventories as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014			2013		
	Acquisition cost	Loss from valuation	Book value	Acquisition cost	Loss from valuation	Book value
Merchandise	₩ 6,109	₩ (85)	₩ 6,024	₩ 6,657	₩ (384)	₩ 6,273
Finished goods	26,828	(2,064)	24,764	28,148	(1,892)	26,256
Work in progress	36,975	-	36,975	39,211	-	39,211
Raw materials	23,858	(396)	23,462	19,371	(142)	19,229
Supplies	10,035	-	10,035	7,000	-	7,000
Raw materials in-transit	1,648		1,648	1,876	-	1,876
	₩ 105,453	₩ (2,545)	₩ 102,908	₩ 102,263	₩ (2,418)	₩ 99,845

The net of valuation loss of inventories recognized in cost of sales amounting to ₩127 million and ₩1,045 million for the years ended December 31, 2014 and 2013, respectively.

6. Other current assets

Other current assets as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014	2013
Advance payments	₩ 196	₩ 105
Prepaid expenses	1,569	545
Value-added tax receivable	1	952
Others	99	45
	₩ 1,865	₩ 1,647

7. Financial assets at fair value through profit or loss

The Group acquired 28,570 redeemable convertible preference shares of GL Pharmtech Inc. in 2007 for the purchase consideration of ₩1,000 million. At acquisition, the Group bifurcated the redeemable convertible preference shares into convertible options and redeemable preference shares, recognizing the options at fair value, and redeemable preference shares as long-term loans and receivables at amortized cost. At each reporting date after initial measurement, the options are carried at fair value, and redeemable preference shares are carried at amortized cost. The Group has no other financial assets at fair value through profit or loss. Each preference shares is convertible at the option of the Group into a common share by June 8, 2017. The Group may exercise its redeemable options of up to 50% of its acquired preference shares during the 2010 fiscal year. The Group exercised the redeemable options for 14,284 shares during the year ended December 31, 2010, and retains 14,286 redeemable preference shares as at December 31, 2014.

Details of the redeemable convertible preference shares as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	Classification		2014		2013
Convertible options (*)	Financial assets at fair value through profit or loss	₩	19	₩	29
Redeemable preference share	Other non-current financial assets (see Note 9)		500		500
		₩	519	₩	529

(*) The Group recognized gain (loss) on valuation of derivative instruments on the convertible options amounting to ₩(10) million and ₩1 million for the years ended December 31, 2014 and 2013, in finance income and finance costs, respectively.

8. Available-for-sale financial assets

Details of available-for-sale financial assets are as follows (Korean won in millions):

	2014			2013		
	Acquisition cost	Impairment	Book value	Acquisition cost	Impairment	Book value
Non-marketable securities (*1):						
Daeduck Bio Corp.	₩ 500	₩ (466)	₩ 34	₩ 500	₩ (466)	₩ 34
Dream Biogen Co., Ltd.	7	(7)	-	7	(7)	-
LG Life Sciences Poland Ltd. (*2)	17	-	17	17	-	17
SDTF(*3)	801	-	801	801	-	801
ORETF (*3)	412	-	412	412	-	412
	₩ 1,737	₩ (473)	₩ 1,264	₩ 1,737	₩ (473)	₩ 1,264

(*1) Non-marketable securities are carried at cost as they do not have a quoted market price in an active market and whose fair value cannot be reliably measured, or the difference between acquisition cost and fair value is immaterial.

(*2) LG Life Sciences Poland Ltd. was excluded from consolidation and presented as an available-for-sale financial asset as its total assets and financial performance was not considered significant.

(*3) Acquisition costs are stated at their carrying values as the Group retains its right to receive cash flows from the asset. The Group acquired equity interests in the investee and the associated right to access certain market research results for commercial purposes in the US.

* SDTF: Spray Drift Task Force
* ORETF: Outdoor Residential Exposure Task Force

The Group has no plan to dispose of the above available-for-sale financial assets in the foreseeable future.

9. Other financial assets

Details of other financial assets are as follows (Korean won in millions):

	2014		2013	
	Current	Non-current	Current	Non-current
Financial instruments (*1)	₩ -	₩ 14	₩ -	₩ 14
Loans to employees	-	7	-	33
Loans to related parties	-	-	50	-
Redeemable preference shares (*2)	-	500	-	500
Guarantee deposits (*3)	275	4,906	296	4,665
Accrued income	67	-	646	-
	₩ 342	₩ 5,427	₩ 992	₩ 5,212

(*1) Financial instruments, such as time deposits and installment savings, which are traded by financial institutions and are held for short-term cash management purposes or which will mature within one year, are accounted for as current financial instruments. Key money deposits amounting to ₩14 million as at December 31, 2014 are restricted for the maintenance of checking accounts.

(*2) The Group bifurcated the redeemable convertible preference shares of GL Pharmtech Inc. into convertible options and redeemable preference shares. (See Note 7)

(*3) Guarantee deposits represent mainly lease deposits for Group-owned residences and offices. The lease terms are generally extended annually or biennially. The guarantee deposits are not measured at amortized costs but stated at costs as the difference between the carrying amount and fair value is immaterial.

10. Property, plant and equipment

The movements in property, plant and equipment for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014									
	Land	Buildings	Structures	Machinery	Vehicles	Tools	Furniture and fixture	Construction in progress	Machinery in-transit	Total
Cost:										
Acquisition At January 1, 2014	₩ 33,892	₩ 82,871	₩ 11,421	₩ 241,085	₩ 484	₩ 54,482	₩ 16,314	₩ 80,515	₩ 26,572	₩ 547,636
Additions	-	1,307	429	7,617	6	4,933	985	6,858	7,614	29,749
Disposals	-	-	-	(3,461)	-	(4,742)	(178)	-	-	(8,381)
Transfer	-	5,483	2,271	19,341	-	394	154	(21,031)	(6,612)	-
Exchange differences	-	9	-	2	1	3	8	-	-	23
At December 31, 2014	₩ 33,892	₩ 89,670	₩ 14,121	₩ 264,584	₩ 491	₩ 55,070	₩ 17,283	₩ 66,342	₩ 27,574	₩ 569,027
Depreciation and impairment:										
At January 1,2014	₩ -	₩ 15,298	₩ 5,146	₩ 172,195	₩ 266	₩ 39,048	₩ 11,725	₩ -	₩ -	₩ 243,678
Depreciation	-	1,884	489	19,495	57	4,709	1,903	-	-	28,537
Disposals	-	-	-	(2,941)	-	(4,657)	(105)	-	-	(7,703)
Exchange differences	-	6	-	1	-	1	5	-	-	13
At December 31, 2014	₩ -	₩ 17,188	₩ 5,635	₩ 188,750	₩ 323	₩ 39,101	₩ 13,528	₩ -	₩ -	₩ 264,525
Net book value:										
At January 1, 2014	₩ 33,892	₩ 67,573	₩ 6,275	₩ 68,890	₩ 218	₩ 15,434	₩ 4,589	₩ 80,515	₩ 26,572	₩ 303,958
At December 31, 2014	33,892	72,482	8,486	75,834	168	15,969	3,755	66,342	27,574	304,502

10. Property, plant and equipment (cont'd)

	2013									
	Land	Buildings	Structures	Machinery	Vehicles	Tools	Furniture and fixture	Construction in progress	Machinery in-transit	Total
Cost:										
Acquisition At January 1, 2013	₩ 33,892	₩ 65,676	₩ 10,614	₩ 202,912	₩ 452	₩ 50,103	₩ 14,459	₩ 65,466	₩ 33,017	₩ 476,591
Additions	-	2,690	494	13,363	51	4,928	1,768	47,304	4,732	75,330
Disposals	-	(590)	(51)	(2,135)	(15)	(771)	(582)	-	-	(4,144)
Transfer	-	15,159	364	26,962	-	233	713	(32,255)	(11,176)	-
Exchange differences	-	(63)	-	(18)	(5)	(13)	(42)	-	-	(141)
At December 31, 2013	₩ 33,892	₩ 82,872	₩ 11,421	₩ 241,084	₩ 483	₩ 54,480	₩ 16,316	₩ 80,515	₩ 26,573	₩ 547,636
Depreciation and impairment:										
At January 1,2013	₩ -	₩ 13,685	₩ 4,802	₩ 159,018	₩ 222	₩ 35,598	₩ 10,318	₩ -	₩ -	₩ 223,643
Depreciation	-	1,697	379	14,776	59	4,117	1,934	-	-	22,962
Disposals	-	(41)	(34)	(1,590)	(15)	(665)	(498)	-	-	(2,843)
Exchange differences	-	(43)	-	(9)	(1)	(4)	(27)	-	-	(84)
At December 31, 2013	₩ -	₩ 15,298	₩ 5,147	₩ 172,195	₩ 265	₩ 39,046	₩ 11,727	₩ -	₩ -	₩ 243,678
Net book value:										
At January 1, 2013	₩ 33,892	₩ 51,991	₩ 5,812	₩ 43,894	₩ 230	₩ 14,505	₩ 4,141	₩ 65,466	₩ 33,017	₩ 252,948
At December 31, 2013	33,892	67,574	6,274	68,889	218	15,434	4,589	80,515	26,573	303,958

Details of insurance on inventories and property, plant and equipment as at December 31, 2014 and 2013 are as follows (Korean won in millions):

Insured services	Insured assets	Insurance provider	Insured amount 2014	Insured amount 2013
Casualty	Inventories and property, plant and equipment	LIG Insurance Co., Ltd. and others	₩ 799,621	₩ 724,404

11. Intangible assets

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

	2014					
	Intellectual property right	Development costs	Other intangible assets	Membership	Intangible assets in construction	Total
Cost:						
At January 1, 2014	₩ 11,035	₩ 10,368	₩ 30,537	₩ 4,765	₩ 5,441	₩ 62,146
At December 31, 2014	11,177	25,646	32,239	4,765	3,348	77,175
Amortization and impairment:						
At January 1, 2014	8,181	201	18,787	-	-	27,169
At December 31, 2014	7,806	384	21,076	-	-	29,266
Changes in net book value:						
At January 1, 2014	2,854	10,167	11,750	4,765	5,441	34,977
Acquisitions	292	18,709	944	-	548	20,493
Disposals	-	-	-	-	-	-
Impairment	(680)	(3,236)	(160)	-	(195)	(4,271)
Amortization	(597)	(378)	(2,318)	-	-	(3,293)
Exchange differences	-	-	2	-	-	2
Transfer	1,501	-	945	-	(2,446)	-
At December 31, 2014	₩ 3,371	₩ 25,262	₩ 11,163	₩ 4,765	₩ 3,348	₩ 47,909

	2013					
	Intellectual property right	Development costs	Other intangible assets	Membership	Intangible assets in construction	Total
Cost:						
At January 1, 2013	₩ 11,475	₩ 3,984	₩ 29,054	₩ 4,765	₩ 4,657	₩ 53,935
At December 31, 2013	11,035	10,368	30,537	4,765	5,441	62,146
Amortization and impairment:						
At January 1, 2013	7,977	63	16,452	-	-	24,492
At December 31, 2013	8,181	201	18,787	-	-	27,169
Changes in net book value:						
At January 1, 2013	3,499	3,921	12,602	4,765	4,657	29,444
Acquisitions	22	6,407	427	-	1,898	8,754
Disposals	-	-	(10)	-	-	(10)
Impairment	(199)	(23)	-	-	-	(222)
Amortization	(520)	(139)	(2,301)	-	-	(2,960)
Exchange differences	-	-	(29)	-	-	(29)
Transfer	54	-	1,060	-	(1,114)	-
At December 31, 2013	₩ 2,854	₩ 10,167	₩ 11,750	₩ 4,765	₩ 5,441	₩ 34,977

Amortization for the years ended December 31, 2014 and 2013 has been charged to the following accounts (Korean won in millions):

	2014	2013
Cost of sales	₩ 219	₩ 319
Selling and administrative expenses	2,732	2,343
Ordinary development costs	342	298
	₩ 3,293	₩ 2,960

11. Intangible assets (cont'd)

Details of intangible assets as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	Net book value				Remaining amortization period (years)	Details
	2014		2013			
Industrial property rights	₩	3,371	₩	2,854	1 to 10	Patent
Development costs		25,262		10,167	1 to 10	Bioequivalence test
Other intangible assets		11,163		11,750	1 to 10	ERP cost, License-in
Facility usage right		4,765		4,765	Indefinite	Golf club
Intangible assets in construction		3,348		5,441	-	Intellectual property rights under acquisition
	₩	47,909	₩	34,977		

Details of the expenditures for research and development activities are as follows:

Category	Details	2014		2013	
Selling and administrative expenses	Ordinary development costs	₩	17,097	₩	17,141
	Research		42,500		49,253
Acquisition of intangible assets	Industrial property rights (*)		1,793		76
	Development costs		18,709		6,407
	License-in		141		110
		₩	80,240	₩	72,987

(*)During the years ended December 31, 2014 and 2013, intangible assets in construction amounting to ₩1,501 million and ₩54 million were transferred to industrial property rights.

12. Trade and other payables

Details of trade and other accounts payable as at December 31, 2014 and 2013 are as follows (Korean won in millions);

	2014		2013	
Trade payable	₩	28,231	₩	37,491
Other payable		22,207		28,705
	₩	50,438	₩	66,196

13. Borrowings

Details of borrowings as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014		2013	
Current:				
Short-term borrowings	₩	28,691	₩	31,692
Current portion of bonds		-		50,000
Current portion of discount on bonds		-		(22)
Current portion of long-term borrowings		-		-
Subtotal	₩	28,691	₩	81,670
Non-current				
Bonds	₩	280,000	₩	130,000
Discount on bonds		(689)		(280)
Long-term borrowings		-		36,000
Subtotal	₩	279,311	₩	165,720

Short-term borrowings

Details of Short-term borrowings as at December 31, 2014 and 2013 are as follows (Korean won in millions):

		Rate (%)	2014		2013	
Borrowings from the factoring of trade accounts receivable (*)	Shinhan Bank and others	1.70 ~ 2.90	₩	20,256	₩	11,276
Foreign currency borrowings	Woori Bank and others	1.03 ~ 2.02		8,435		20,416
Total			₩	28,691	₩	31,692

(*) During the current reporting period the Group has entered into factoring agreements with recourse with Shinhan Bank and other financial institutions and recognized the related financial liabilities as current borrowings for the discounted trade accounts receivable (See Note 4).

Bonds

Details of the bonds issued as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	Maturity date	Rate (%)	2014		2013	
Unguaranteed bond (4^{th})	2016. 1. 6	5.35	₩	50,000	₩	50,000
Unguaranteed bond (5^{th})	2014. 4. 7	4.50		-		50,000
Unguaranteed bond (6^{th})	2017. 1.17	4.53		50,000		50,000
Unguaranteed bond (7^{th})	2018. 4.30	3.20		30,000		30,000
Unguaranteed bond (8^{th})	2019. 2.21	3.77		50,000		-
Unguaranteed bond (9^{th})	2018. 12.12	2.82		100,000		-
Less: discount on bonds				(689)		(302)
Less: current portion of bonds				-		(50,000)
Less: current portion of discount on bonds				-		22
Total			₩	279,311	₩	129,720

13. Borrowings (cont'd)

Long-term borrowings

Details of the long-term borrowings as at December 31, 2013 are as follows (Korean won in millions):

	Lender	Rate (%)	2013	Term for repayment
Facility loan	Korea Finance Corporation	3.39 ~ 3.46	36,000	Repayment upon 2 years maturity
Total			₩ 36,000	

The Group has no long-term borrowings as at December 31, 2014

14. Other financial liabilities

Details of other financial liabilities as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014		2013	
	Current	Non-current	Current	Non-current
Accrued expenses	₩ 11,237	₩ -	₩ 10,738	₩ -
Guarantee deposits payable	741	23	687	10
Other accounts payable (*)	-	5,302	-	5,751
	₩ 11,978	₩ 5,325	₩ 11,425	₩ 5,761

(*) The Group recognized government grants with repayment obligations as non-current other accounts payable upon receipt (See Note 15).

15. Government grants and other current liabilities

Changes in government grants for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014	2013
As at January 1,	₩ 4,336	₩ 6,347
Received during the year	2,277	4,217
Used for projects	-	(95)
Released to income	(2,283)	(4,869)
Refund or unused	(157)	-
Returned or repaid	(34)	(1,304)
As at December 31,	₩ 4,189	₩ 4,386
Current	₩ 456	₩ 302
Non-current	3,733	4,084
	₩ 4,189	₩ 4,386

The Group classified non-refundable and refundable grants as unearned revenue and non-current other accounts payable, respectively.

15. Government grants and other current liabilities (cont'd)

Details of other current liabilities as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014		2013	
Advances received	₩	456	₩	907
Unearned revenue (*)		2,873		3,020
Withholdings		1,752		1,788
Others		72		82
Subtotal	₩	5,153	₩	5,797

(*) As at December 31, 2014, unearned revenue amounting to ₩2,267 million (2013 : 2,568 million) was recognized as the Group had not completed its performance obligation with regards to its technical trade license agreement.

16. Pension benefits

The Group maintains a defined benefit pension plan for employees. In accordance with the defined benefit pension plan of the Group, employees terminating their employment with at least one year of service are entitled to pension benefits based on the average of the final three months' pay in effect at the time of termination, and certain other factors. An independent actuary firm performed actuarial valuations using the projected unit credit method.

Details of the net pension liabilities as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014		2013	
Defined benefit obligation	₩	56,091	₩	45,051
Fair value of plan assets		(35,784)		(25,698)
Net pension liability	₩	20,037	₩	19,353

Details of the defined benefit obligation recognized in profit or loss for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014		2013	
Current service cost	₩	8,619	₩	7,705
Past service cost		1,208		–
Net interest cost		898		701
	₩	10,725	₩	8,406

16. Pension benefits (cont'd)

The changes in the present value of the defined benefit obligation for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions)

		2014		2013
As at January 1,	₩	45,051	₩	36,459
Pension cost charged to profit or loss				
-Current service cost		8,619		7,705
-Interest cost		1,776		1,310
-Past service cost		1,208		-
Sub-total included in profit or loss		11,603		9,015
Benefits paid		(3,409)		(3,008)
Re-measurement gains in OCI				
-Actuarial changes arising from changes in demographic assumptions		(447)		134
-Actuarial changes arising from changes in financial assumptions		4,754		257
-Experience adjustments		(1,436)		2,194
-Actuarial changes due to transfer in/out adjustment		7		-
Sub-total included in OCI		2,878		2,585
Transferred to affiliates		(32)		-
As at December 31,	₩	56,091	₩	45,051

The changes in the fair value of plan assets for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

		2014		2013
As at January 1,	₩	25,698	₩	19,866
Expected return		878		609
Contributions		12,495		8,216
Re-measurement gains in OCI		(165)		(26)
Benefits paid		(3,122)		(2,967)
As at December 31,	₩	35,784	₩	25,698

Details of actuarial gain (loss) on obligation and plan assets recognized in other comprehensive income for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

		2014		2013
Actuarial loss before income tax	₩	(3,043)	₩	(2,611)
Income tax effect		669		574
Actuarial loss net of income tax	₩	(2,374)	₩	(2,037)

16. Pension benefits (cont'd)

The principal assumptions used in actuarial valuation as at December 31, 2014 and 2013 are follows:

	2014	2013
Future salary increases	5.54%	5.52%
Discount rate	3.14%	4.06%

As at December 31, 2014, sensitivity analyses concerning significant actuarial assumption is as follows (Korean won in millions):

	Effect on defined benefit liability		
	Change of assumption	Increase	Decrease
Discount rate	1%	₩ (5,167)	₩ 5,931
Wage increase rate	1%	5,737	(5,112)

17. Provisions

Details of provisions as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014		2013	
	Current	Non-current	Current	Non-current
Provision for sales return	₩ 1,179	₩ 77	₩ 1,116	₩ 67
Provision for long-term employee benefits (*1)	-	1,191	-	1,078
Other provisions	-	-	-	30
	₩ 1,179	₩ 1,268	₩ 1,116	₩ 1,175

(*1) Employees having long-term employment are provided with benefits which are recognized at present value.

Changes in the provision for sales return for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014			2013		
	Current	Non-current	Total	Current	Non-current	Total
As at January 1,	₩ 1,116	₩ 67	₩ 1,183	₩ 1,149	₩ 88	₩ 1,237
Accrued	1,086	186	1,272	650	267	917
Transfer to current portion	176	(176)	-	288	(288)	-
Utilized	(1,199)	-	(1,199)	(971)	-	(971)
As at December 31,	₩ 1,179	₩ 77	₩ 1,256	₩ 1,116	₩ 67	₩ 1,183

Provisions for sales return are based on past experience and historical return ratios and gross margin ratios. Sale amounts are recorded as a liability for goods in which re-sale is not expected. If re-sale is expected, the gross margin is recorded as a liability. The provision is classified as current within one year of the expected sales return.

18. Issued capital and reserves

Details of issued capital as at December 31, 2014 and 2013 are as follows:

	2014	2013
Number of shares authorized	38,000,000	38,000,000
Par value per share	₩5,000	₩5,000
Number of ordinary shares issued	16,576,990	16,576,990
Number of preference shares issued	236,216	236,216
Ordinary stock	₩82,885 million	₩82,885 million
Preference stock	1,181 million	1,181 million
	₩84,066 million	₩84,066 million

Details of share premium as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014		2013	
Paid-in capital in excess of par value	₩	146,857	₩	146,857
Gain on disposal of treasury stock		188		188
	₩	147,045	₩	147,045

Details of other components of equity as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014		2013	
Treasury stock (*1)	₩	-	₩	-
Loss on foreign currency translation adjustments (*2)		(1,214)		(1,358)
	₩	(1,214)	₩	(1,358)

(*1) Treasury stock consists of 13 ordinary shares and 4 preference shares as at December 31, 2014.

(*2) The Group recognizes gain and loss on translation of foreign operations as foreign currency translation adjustments.

18. Issued capital and reserves (cont'd)

Details of retained earnings as at December 31, 2014 and 2013 are as follows:

	2014		2013	
Research and human resources development reserve	₩	22,900	₩	20,700
Unappropriated retained earnings		(3,682)		2,992
	₩	19,218	₩	23,692

Pursuant to the Tax Incentives Limitation Law, the research and human development reserve is provided in order to obtain tax benefits with respect to the year for which the appropriations are proposed. This reserve may be utilized for cash dividends after the expiration of specified grace period.

19. Sales

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

	2014		2013	
Sales of finished goods	₩	342,916	₩	340,095
Sales of merchandise		55,958		53,807
Other		26,724		23,443
	₩	425,598	₩	417,345

20. Expense classified by nature of expense

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

	2014		2013	
Changes in finished goods and working in-progress	₩	3,728	₩	(8,181)
Merchandise sold		39,977		43,023
Raw materials and supplies used		95,841		106,811
Employee benefit expense		112,430		100,037
Depreciation and amortization		30,375		24,221
Advertisement and promotion		14,028		12,814
Distribution costs		7,814		9,135
Impairment of non-current assets		4,741		232
Finance costs		12,195		10,356
Others		110,544		116,823
	₩	431,673	₩	415,271

20. Information on the nature of expenses (cont'd)

Employee benefits for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014	2013
Salaries and wages	₩ 90,998	₩ 77,396
Pension benefits	8,370	7,465
Employee welfare benefits	13,062	15,175
	₩ 112,430	₩ 100,037

21. Selling and administrative expenses

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

	2014	2013
Salaries	₩ 35,505	₩ 34,720
Pension benefits	4,292	2,717
Employee welfare benefits	6,194	6,233
Travel expenses	4,662	4,793
Utilities	1,505	1,488
Taxes and dues	401	423
Communications	674	699
Rent	3,590	3,484
User fees	1,354	1,560
Commission	31,600	29,229
Vehicle maintenance	479	472
Depreciation	1,456	1,582
Insurance	374	324
Entertainment	2,510	2,069
Promotional events	3,291	2,890
Ordinary selling expenses	470	544
Advertisement	7,686	7,220
Freighting expenses	7,400	8,800
Education and training	6,707	5,542
Publishing	89	157
Impairment loss on trade and other receivables	92	627
Amortization	2,732	2,343
Ordinary development cost	17,097	17,141
Research	42,500	49,253
Development of overseas markets	598	574
Others	1,141	1,091
	₩ 184,399	₩ 185,975

22. Non-operating income and expenses

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

	2014	2013
Interest income	₩ 830	₩ 805
Gain on foreign currency transactions	1,124	882
Gain on foreign currency translation	22	615
Fair value gain on financial assets at fair value through profit or loss	22	1
	₩ 1,998	₩ 2,303

Finance costs for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014	2013
Interest	₩ 10,048	₩ 8,922
Loss on foreign currency transactions	2,164	1,343
Loss on foreign currency translation	221	91
Fair value loss on financial assets at fair value through profit or loss	10	-
	₩ 12,433	₩ 10,356

Other income for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014	2013
Gain on foreign currency transactions	₩ 4,386	₩ 3,636
Gain on foreign currency translation	736	170
Gain on disposal of property, plant and equipment	27	229
Gain on disposal of intangible assets	3	-
Gain on derivative transactions	-	178
Others	1,071	1,626
	₩ 6,223	₩ 5,839

Other expenses for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014	2013
Loss on foreign currency transactions	₩ 3,159	₩ 4,061
Loss on foreign currency translation	403	369
Loss on disposal of property, plant and equipment	59	67
Loss on property, plant and equipment abandoned	471	10
Impairment loss on intangible assets	4,271	222
Loss on derivative transactions	17	-
Miscellaneous expenses	889	2,062
Donations	558	339
	₩ 9,827	₩ 7,130

23. Income tax expense

The major components of income tax benefit for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014	2013
Current income taxes	₩ 930	₩ 2,607
Deferred income taxes arising from tax effect of temporary differences	4,470	276
Deferred income taxes arising from tax credits carry-forwards	(1,930)	(1,694)
Deferred income taxes recognized directly to equity	669	575
Income tax benefit	₩ 4,139	₩ 1,764

Reconciliation between income tax benefit and the product of accounting profit multiplied by statutory tax rates for the years ended December 31, 2014 and 2013 is as follows (Korean won in millions):

	2014	2013
Profit before income tax	₩ 2,146	₩ 5,052
Tax at the statutory income tax rate	465	1,375
Adjustments:		
Non-deductible expenses	3,137	1,005
Tax credits	(1,740)	(4,292)
Foreign tax paid	937	1,755
Others	1,340	1,843
Income tax benefits	₩ 4,139	₩ 1,764
Effective income tax rate (*)	192.9%	34.9%

23. Income tax expense (cont'd)

Significant changes in cumulative temporary differences and deferred income tax assets and liabilities for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014				
				Deferred income taxes	
	January 1, 2014	Net Changes	December 31, 2014	January 1, 2014	December 31, 2014
Deductible temporary differences:					
Defined benefit liability	₩ 38,295	₩ 11,359	₩ 49,654	₩ 8,425	₩ 10,924
Government subsidy	5,252	744	5,996	1,156	1,319
Accrued expenses	3,704	(1,076)	2,628	815	578
Development costs	61,552	(28,885)	32,667	13,541	7,187
Other intangible assets	528	(465)	64	116	14
Provisions	1,079	112	1,191	237	262
Others	15,521	(2,539)	12,982	3,337	2,760
	₩ 125,931	₩ (20,750)	₩ 105,182	₩ 27,627	₩ 23,044
Taxable temporary differences:					
Research and human resources development reserve	₩ (3,000)	₩ 3,000	₩ -	₩ (660)	₩ -
Defined benefit assets	(26,482)	(9,304)	(35,786)	(5,826)	(7,873)
Research and development costs	(7,537)	(6,835)	(702)	(1,658)	(154)
Investments in subsidiaries	(37)	(68)	(31)	489	470
Convertible options	(28)	9	(19)	(6)	(4)
Others	(10)	5	(12)	(4)	(3)
	₩ (37,020)	₩ 477	₩ (36,550)	₩ (7,665)	₩ (7,564)
Deferred income taxes recognized:					
Deferred income tax assets for temporary differences	₩ 27,614		₩ 23,044		
Deferred income tax liabilities for temporary differences	(7,664)		(7,564)		
Deferred income tax assets for loss carried forwards	-		3,280		
Deferred income tax assets for tax credits carry-forwards	12,240		10,890		
	₩ 32,190		₩ 29,650		

Deferred tax assets and liabilities are measured at the tax rate that are expected to apply in the year when the asset is realized or the liability is settled, based upon the tax rate that have been enacted or substantively enacted as at December 31, 2014.

23. Income taxes (cont'd)

	2013									
							Deferred income taxes			
	January 1, 2013		Net changes		December 31, 2013		January 1, 2013		December 31, 2013	
Deductible temporary differences:										
Defined benefit liability	₩	29,736	₩	8,559	₩	38,295	₩	6,542	₩	8,425
Government subsidy		6,148		(896)		5,252		1,353		1,156
Accrued expenses		8,280		(4,576)		3,704		1,822		815
Development costs		67,838		(6,286)		61,552		14,924		13,541
Other intangible assets		1,471		(943)		528		324		116
Provisions		999		80		1,079		220		237
Others		10,304		5,217		15,521		2,193		3,337
	₩	124,776	₩	1,155	₩	125,931	₩	27,378	₩	27,627
Taxable temporary differences:										
Research and human resources development reserve	₩	(6,000)	₩	3,000	₩	(3,000)	₩	(1,320)	₩	(660)
Defined benefit assets		(19,866)		(6,616)		(26,482)		(4,370)		(5,826)
Research and development costs		(7,537)		-		(7,537)		(1,658)		(1,658)
Investments in subsidiaries		(1,534)		1,571		37		224		489
Convertible options		(28)		-		(28)		(6)		(6)
Others		(52)		42		(10)		(9)		(3)
	₩	(35,017)	₩	(2,003)	₩	(37,020)	₩	(7,139)	₩	(7,664)
Deferred income taxes recognized:										
Deferred income tax assets for temporary differences	₩	27,378			₩	27,627				
Deferred income tax liabilities for temporary differences		(7,139)				(7,664)				
Deferred income tax assets for tax credits carry-forwards		10,534				12,227				
	₩	30,773			₩	32,190				

Details of total temporary differences for which the Group did not recognize deferred income taxes as at December 31, 2014 and 2013 are as follows (Korean won in millions)

	2014		2013	
Land (*1)	₩	488	₩	488
Investments in subsidiaries (*2)		(3,725)		(3,116)
Foreign currency translation adjustments (*2)		1,214		1,358
	₩	(2,023)	₩	(1,270)

(*1) The Group did not recognize deferred income tax assets arising from the temporary differences related to land as the reversal of the temporary differences through the disposal of land is unlikely for the foreseeable future.

(*2) The Group did not recognize deferred income tax liabilities for taxable temporary differences associated with investments in subsidiaries as it is not probable that those temporary differences will be reversible through the disposal of investments in subsidiaries or receipts of dividends in the foreseeable future.

23. Income tax expense (cont'd)

Details of deferred income taxes charged directly to equity as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014		2013	
	Before tax	Deferred tax recognized	Before tax	Deferred tax Recognized
Re-measurement of the net defined benefit plans	₩ (18,182)	₩ 4,000	₩ (15,139)	₩ 3,331

24. Earnings (loss) per share

Per share amounts for the years ended December 31, 2014 and 2013 are computed as follows (Korean won), except for per share amount:

	2014	2013
Net profit (loss) attributable equity holders to the parent	₩ (2,100,661,150)	₩ 3,261,126,171
Net profit (loss) attributable to preference equity holders of the parent	(29,512,627)	45,816,242
Net profit (loss) attributable to ordinary equity holders of the parent	₩ (2,071,148,523)	₩ 3,215,309,929
Number of ordinary shares outstanding	16,576,990	16,576,990
Weighted-average number of treasury shares	(13)	(13)
Weighted-average number of ordinary shares outstanding	16,576,977	16,576,977
Basic earnings (loss) per share	₩ (125)	₩ 194

Basic earnings (loss) per share are computed by dividing the net profit (loss) attributable to ordinary equity holders of the parent by the weighted-average number of ordinary shares outstanding. As there are no potential dilutive stock as at December 31, 2014 and 2013, the Group carries no diluted earnings per share.

25. Related party disclosures

Transactions that have been entered into with related parties for the years ended December 31, 2014 and 2013 are as follows (Korea won in millions):

	2014			
		Purchases		
Related party	Sales and other income	Raw materials/ Merchandise	Tangible and intangible assets	Others
The largest shareholder:				
LG Corp.	₩ -	₩ -	₩ -	₩ 5,313
Subsidiary:				
LG Life Sciences Poland Ltd.	-	-	-	115
Affiliated companies:				
LG Chem, Ltd.	3,292	1,678	-	5,118
LG Household & Health Care Ltd.	3.080	-	-	167
LG Hausys, Ltd.	18	-	-	3,364
LG International Corp.	3,236	177	-	-
LG International (America), Inc.	7,751	-	-	2,211
Serveone Ltd.	50	3,768	2,405	7,687
LG CNS Co., Ltd.	393	-	1,456	3,188
G II R Inc.	-	-	-	55
LG Economic Research Institute	-	-	-	875
LG-Hitachi Water Solutions Co., Ltd	-	-	488	-
Others	200	27	34	1,204
Sub-total	₩ 18,020	₩ 5,650	₩ 4,383	₩ 23,869
Total	₩ 18,020	₩ 5,650	₩ 4,383	₩ 29,297

	2013			
		Purchases		
	Sales and other income	Raw materials/ Merchandise	Tangible and intangible assets	Others
The largest shareholder:				
LG Corp.	₩ -	₩ -	₩ -	₩ 5,160
Subsidiary:				
LG Life Sciences Poland Ltd.	-	-	-	105
Affiliated companies:				
LG Chem, Ltd.	2,296	2,321	-	5,723
LG Household & Health Care Ltd.	6,029	-	-	98
LG Hausys, Ltd.	20	-	-	3,464
LG International Corp.	15,574	208	-	-
LG International (America), Inc.	12,778	-	-	3,800
Serveone Ltd.	25	4,983	14,818	7,876
LG CNS Co., Ltd.	-	-	659	3,010
G II R Inc.	-	-	-	46
LG Economic Research Institute	11	-	-	795
LG-Hitachi Water Solutions Co., Ltd.	-	-	3,576	-
Others	39	46	493	814
Sub-total	₩ 36,772	₩ 7,558	₩ 19,546	₩ 25,626
Total	₩ 36,772	₩ 7,558	₩ 19,546	₩ 30,891

25. Related party disclosures(cont'd)

Outstanding balances with related parties as at December 31 2014 and 2013 are as follows (Korea won in millions):

	2014			
	Receivables			
Related party	Trade receivables and others	Loans	Allowance for Doubtful Accounts	Trade payables and others
The largest shareholder:				
LG Corp.	₩ 2,737	₩ -	₩ -	₩ 18
Subsidiary:				
LG Life Sciences Poland Ltd.	-	-	-	-
Affiliated companies:				
LG Chem, Ltd.	867	-	1	977
LG Household & Health Care Ltd.	392	-	1	22
LG Hausys, Ltd.	-	-	-	315
LG International Corp.	60	-	-	63
LG International (America), Inc.	-	-	-	30
Serveone Ltd.	1,756	-	-	1,849
LG CNS Co., Ltd.	144	-	-	1,789
LG Economic Research Institute	638	-	-	52
LG Toyo Engineering Co. Ltd.	-	-	-	-
Others	10	-	-	473
Sub-total	₩ 3,867	₩ -	₩ 2	₩ 5,570
Total	₩ 6,604	₩ -	₩ 2	₩ 5,588

	2013			
	Receivables			
Related party	Trade receivables and others	Loans	Allowance for Doubtful Accounts	Trade payables and others
The largest shareholder:				
LG Corp.	₩ 2,661	₩ -	₩ -	₩ 12
Subsidiary:				
LG Life Sciences Poland Ltd.	-	-	-	49
Affiliated companies:				
LG Chem, Ltd.	1,069	-	3	1,146
LG Household & Health Care Ltd.	851	-	2	13
LG Hausys, Ltd.	2	-	-	393
LG International Corp.	1,575	-	-	66
LG International (America), Inc.	1,998	-	-	52
Serveone Ltd.	2,130	-	-	5,865
LG CNS Co., Ltd.	-	-	-	264
LG Economic Research Institute	638	-	-	43
LG Toyo Engineering Co. Ltd.	-	-	-	151
Others	495	-	-	174
Sub-total	₩ 8,758	₩ -	₩ 5	₩ 8,167
Total	₩ 11,419	₩ -	₩ 5	₩ 8,228

25. Related party disclosures (cont'd)

Compensation for key management personnel for the years ended December 31, 2014 and 2013 is as follows (Korean won in millions):

	2014		2013	
Salaries	₩	4,548	₩	5,558
Pension benefits		328		348
	₩	4,876	₩	5,906

26. Commitments and contingencies

(i) As at December 31, 2014 and 2013, the Group has guarantees provided by financial institutions as follows (Korean won in millions):

		2014				2013			
	Description	Limit		Guaranteed amounts		Limit		Guaranteed amounts	
Woori Bank	Obligations on	₩	3,149	₩	158	₩	3,083	₩	280
Shinhan Bank	international		6,595		862		10,553		-
Industrial Bank of Korea	trade		6,397		53		6,221		1,915
		₩	16,141	₩	1,073	₩	19,857	₩	2,195

In addition, the Group is provided with performance guarantees of up to ₩3,121 million from Seoul Guarantee Insurance Co., Ltd. as at December 31, 2014.

(ii) Details of the Group's commitments as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	Description	2014		2013	
Shinhan Bank and others	Trade account receivables factoring	₩	27,480	₩	22,161
Woori Bank and others	Overdraft		22,000		22,000
Woori Bank and others	Credit card agreement		39,000		39,000
Hana Bank	Loan agreement of Comprehensive limit		30,000		28,553

(iii) The Group entered into license-in agreements with Nisshin Kyorin Pharmaceutical and other pharmaceutical companies.

(iv) As at December 31, 2014, the Group's head office is leased under operating lease agreements with LG Corp. Lease deposits amounting to ₩2,737 million have been placed in connection with these agreements.

27. Segment information

The Group has two reportable segments – pharmaceuticals and specialty chemicals – with each segment representing a strategic business unit that offers different products and serves different markets.

Management monitors the operating results of its business units separately for the purpose of making decisions regarding resource allocation and performance assessment. Segment performance is evaluated based on operating profit or loss and is measured consistently with operating profit or loss in the consolidated financial statements. However, group financing (including finance costs and finance income) and income taxes are managed on a group basis and are not allocated to operating segments.

27. Segment information (cont'd)

The following table presents the financial information of the Group by reportable segments for the years ended December 31, 2014 and 2013 (Korean won in millions):

		Pharmaceuticals	Specialty chemicals	Adjustments and eliminations	Consolidated
Sales:					
Customers	2014	₩ 356,474	₩ 69,124	₩ -	₩ 425,598
	2013	338,853	78,492	-	417,345
Inter-segment sales	2014	657	8,250	(8,907)	-
	2013	984	5,482	(6,466)	-
Total	2014	₩ 357,131	₩ 77,374	₩ (8,907)	₩ 425,598
	2013	₩ 339,837	₩ 83,974	₩ (6,466)	₩ 417,345
Results:					
Operating income	2014	₩ 17,097	₩ (901)	₩ -	₩ 16,196
	2013	9,217	5,178	-	14,395
Profit before tax	2014	5,599	(3,453)	-	2,146
	2013	2,195	2,857	-	5.052
Assets:					
Depreciation and amortization	2014	₩ 28,725	₩ 3,105	₩ -	₩ 31,830
	2013	22,824	2,889	-	25,713
Total assets	Dec. 31, 2014	₩ 452,830	₩ 62,189	₩ 138,119	₩ 653,138
	Dec. 31, 2013	₩ 413,393	₩ 65,750	₩ 132,843	₩ 611,986

The following table presents the sales of the Group by geographical segments for the years ended December 31, 2014 and 2013 (Korean won in millions):

	Korea	China	North America	South America	South East Asia	Europe	Others	Total
Sales:								
2014	₩ 246,503	7,852	11,067	29,645	62,399	17,543	50,589	₩ 425,598
2013	₩ 220,416	9,128	16,195	32,976	70,167	20,193	48,270	₩ 417,345
Non-current assets:								
2014	₩ 351,911	9	1	-	179	-	311	₩ 352,411
2013	₩ 338,331	12	-	-	148	-	444	₩ 338,935

Sales are classified on the basis of the customer's location. Non-current assets for the purpose of the above table represent property, plant and equipment and intangible assets.

There is no single customer having sales that accounts for 10% or more of the Group's total sales for the years ended December 31, 2014 and 2013.

28. Financial risk management objectives and policies

The Group's principal financial liabilities comprise borrowings from financial institutions, bonds, trade and other payables. The main purpose of these financial liabilities is to raise finances for the Group's operations. The Group has various financial assets such as trade and other receivables, loans, cash and short-term deposits that arrive directly from its operations, and available-for-sale investments.

The Group is exposed to foreign currency risk, credit risk and liquidity risk. The Group's senior management oversees these risks and monitors whether the financial risk-taking activities are governed by appropriate policies and procedures.

28. Financial risk management objectives and policies (cont'd)

Foreign currency risk

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Group's exposure to the risk of changes in foreign exchange rates relates primarily to the Group's operating activities (when revenue or expense is denominated in a different currency from the Group's functional currency). Approximately, 48% and 46% in 2014 and 2013, respectively, of the Group's total sales are denominated in foreign currencies. In order to reduce the risk in foreign currency fluctuations, the Group factors trade accounts receivable denominated in foreign currencies and recognizes current borrowings at the same amounts and the same currencies. The Group assessed the risk in foreign currency fluctuations are hedged by approximately 69%, under its factoring approach.

Monetary assets and liabilities denominated in foreign currencies as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014		2013	
	Assets	Liabilities	Assets	Liabilities
USD	₩ 49,072	₩ 32,477	₩ 44,445	₩ 18,460
EUR	872	859	1,159	333
JPY	45,799	2,576	-	129
GBP	298	-	-	25
PLN	-	-	-	39
THB	3,644	3,437	3,039	2,438
RMB	1,206	7	1,177	5
INR	3,917	3,883	3,473	4,453
Total	₩ 104,808	₩ 43,239	₩ 53,293	₩ 25,882

The Group measures foreign currency risks periodically. The following table demonstrates currency fluctuations brought on by a reasonable change in foreign currency exchange rates, with all other variables held constant, for the Group's gross profit and equity as at December 31, 2014 and 2013 (Korean won in millions).

	2014		2013	
	10% Increase	10% Decrease	10% Increase	10% Decrease
USD	₩ 1,659	₩ (1,659)	₩ 2,599	₩ (2,599)
EUR	1	(1)	83	(83)
JPY	4,322	(4,322)	(13)	13
GBP	29	(29)	(3)	3
PLN	-	-	(4)	4
THB	21	(21)	60	(60)
RMB	120	(120)	117	(117)
INR	3	(3)	(98)	98
Total	₩ 6,155	₩ (6,155)	₩ 2,741	₩ (2,741)

The sensitivity analysis is related to assets and liabilities denominated in foreign currencies other than the functional currencies as at December 31, 2014 and 2013.

28. Financial risk management objectives and policies (cont'd)

Credit risk

Customer credit risk is managed subject to the Group's established policy, procedures and control relating to customer credit risk management. Credit limits are established for all customers based on internal rating criteria. In addition, the Group monitors the balance of the trade accounts receivable in order to manage default risk. The exposure to default risk is disclosed in Note 4. Sales on credit to countries in which no business segment exist are available after the approval of the Group's credit risk management team.

Trade and other receivables from overseas customers as at December 31, 2014 and 2013 amount to ₩47,436 million and ₩44,394 million, respectively, and account for 44% and 41% of total trade and other receivables as at December 31, 2014 and 2013, respectively. Trade and other receivables from overseas customers are insured for payment guarantees by Korea Trade Insurance Corporation. Except for the trade and other receivables from overseas customers, the Group is not exposed to significant concentration of credit risk, and the receivables from domestic customers are diversified.

With respect to credit risk arising from other financial assets such as cash and cash equivalents, deposits to financial institutions, available-for-sale investments, loans and guarantee deposits, the Group's exposure to credit risk arises from default of the counterparty, with a maximum exposure equal to the carrying amount of these instruments. Overdraft protection have been placed with reputable banks: accordingly, credit risk from financial institutions is regarded as immaterial.

Liquidity risk

The Group monitors its risk to a shortage of funds using its own liquidity strategy and assessments tools, in which the Group monitors the maturities of financial assets and liabilities and expected operating cash flows. The Group's senior management believes that financial liabilities can be sufficiently repaid by operating cash flows and cash inflows from financial assets.

For unexpected liquidity risks, the Group has entered into bank overdraft and factoring arrangements with commercial institution. Current interest-bearing borrowings of which maturity is within one year are 9% and 33% of total interest-bearing borrowings as at December 31, 2014 and 2013, respectively.

The table below summarizes the maturity profile of the Group's financial liabilities based on contractual undiscounted payments (Korean won in millions):

	2014			
	Less than 3 months	3 to 12 months	1 to 5 years	Total
Interest-bearing borrowings	₩ 10,256	₩ 18,435	₩ 280,000	₩ 308,691
Trade and other payables	50,438	-	-	50,438
Other financial liabilities	10,377	1,603	5,325	17,305
	₩ 71,071	₩ 20,038	₩ 285,325	₩ 376,434

	2013			
	Less than 3 months	3 to 12 months	1 to 5 years	Total
Interest-bearing borrowings	₩ 10,754	₩ 70,916	₩ 166,000	₩ 247,670
Trade and other payables	66,196	-	-	66,196
Other financial liabilities	9,601	1,824	5,761	17,186
	₩ 86,551	₩ 72,740	₩ 171,761	₩ 331,052

28. Financial risk management objectives and policies (cont'd)

Capital management

The primary objective of the Group's capital management is to ensure that it maintains a strong credit rating and healthy capital ratios in order to support its business and maximize shareholder value.

The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions. To maintain or adjust the capital structure, the Group may adjust the dividend payment to shareholders, return capital to shareholders or issue new shares. No changes were made in the objectives, policies or processes during the years ending December 31, 2014 and 2013.

The Group monitors capital using a gearing ratio, which is net debt divided by total capital plus net debt. The Group includes within net debt, trade and other payables, interest-bearing borrowings and other financial liabilities less cash and cash equivalents. Details of net debt and equity as at December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014		2013	
Trade and other payables	₩	50,438	₩	66,196
Interest-bearing borrowings		308,002		247,390
Other financial liabilities		17,330		17,186
Less cash and cash equivalents		(50,336)		(24,350)
Net debt	₩	325,434	₩	306,422
Capital		249,458		253,669
Capital and net debt	₩	574,892	₩	560,091
Gearing ratio		43.40%		54.70%

29. Fair values of financial assets and liabilities

Financial instruments by category

Financial assets are categorized into loans and receivables, financial assets at fair value through profit or loss, available-for-sale financial assets and held-to-maturity. As at December 31, 2014 and 2013, financial assets by category are as follows (Korean won in millions):

	2014					
	Financial assets at fair value through profit or loss		Loans and Receivables		Available-for-sale financial assets	
Current:						
Cash and cash equivalents	₩	-	₩	50,336	₩	-
Derivatives assets		22		-		-
Trade account receivables		-		103,131		-
Other account receivables		-		3,106		-
Other financial assets		-		342		-
Sub-total	₩	22	₩	156,915	₩	-
Non-current:						
Financial assets at fair value through profit or loss	₩	19	₩	-	₩	-
Other account receivables		-		2,486		-
Available-for-sale financial assets		-		-		1,264
Other financial assets		-		5,427		-
Sub-total	₩	19	₩	7,913	₩	1,264
Total	₩	41	₩	164,828	₩	1,264

29. Fair values of financial assets and liabilities (cont'd)

29-1 Financial instruments by category (cont'd)

	2013					
	Financial assets at fair value through profit or loss		Loans and receivables		Available-for-sale financial assets	
Current:						
Cash and cash equivalents	₩	-	₩	24,350	₩	-
Trade account receivables		-		103,304		-
Other account receivables		-		2,583		-
Other financial assets		-		992		-
Sub-total	₩	-	₩	131,229	₩	-
Non-current:						
Financial assets at fair value through profit or loss	₩	29	₩	-	₩	-
Other account receivables		-		1,459		-
Available-for-sale financial assets		-		-		1,264
Other financial assets		-		5,212		-
Sub-total	₩	29	₩	6,671	₩	1,264
Total	₩	29	₩	137,900	₩	1,264

Financial liabilities are categorized into, financial liabilities at fair value through profit or loss and financial liabilities carried at amortized cost (other financial liabilities). As at December 31, 2014 and 2013, financial liabilities by category are as follows (Korean won in millions):

	2014		2013	
Current:				
Trade account payables	₩	28,231	₩	37,491
Other account payables		22,207		28,705
Borrowings		28,691		81,670
Other financial liabilities		11,978		11,425
Sub-total	₩	91,107	₩	159,291
Non-current:				
Borrowings	₩	279,311	₩	165,720
Other financial liabilities		5,325		5,761
Sub-total	₩	284,636	₩	171,481
Total	₩	375,743	₩	330,772

29. Fair values of financial assets and liabilities (cont'd)

Financial instruments by category (cont'd)

For the years ended December 31, 2014 and 2013, revenue and cost related financial instruments by category are as follows (Korean won in millions):

	2014				
	Financial assets at fair value through profit or loss	Loans and receivables	Available-for-sale financial assets	Other liabilities	Total
Revenue:					
Gain on foreign currency transactions	₩ -	₩ 4,386	₩ -	₩ 1,124	₩ 5,510
Gain on foreign currency translation	-	736	-	22	785
Gain derivative valuation	22	-	-	-	22
Gain on derivative transactions	-	-	-	-	-
Interest income	-	830	-	-	830
Sub-total	₩ 22	₩ 5,952	₩ -	₩ 1,146	₩ 7,120
Cost:					
Loss on foreign currency transactions	₩ -	₩ 3,159	₩ -	₩ 2,164	₩ 5,323
Loss on foreign currency translation	-	403	-	221	624
Interest	-	-	-	10,048	10,048
Loss on derivative valuation	10	-	-	-	10
Loss on derivative transaction	17	-	-	-	17
Sub-total	₩ 27	₩ 3,562	₩ -	₩ 12,433	₩ 16,022
Net income (loss)	₩ (4)	₩ 1,560	₩ -	₩ (10,457)	₩ (8,902)

	2013				
	Financial assets at fair value through profit or loss	Loans and receivables	Available-for-sale financial assets	Other liabilities	Total
Revenue:					
Gain on foreign currency transactions	₩ -	₩ 3,636	₩ -	₩ 882	₩ 4,518
Gain on foreign currency translation	-	170	-	615	785
Gain derivative valuation	1	-	-	-	1
Gain on derivative transactions	178	-	-	-	178
Interest income	-	805	-	-	805
Sub-total	₩ 179	₩ 4,611	₩ -	₩ 1,497	₩ 6,287
Cost:					
Loss on foreign currency transactions	₩ -	₩ 4,061	₩ -	₩ 1,343	₩ 5,404
Loss on foreign currency translation	-	369	-	91	460
Loss on derivative transactions	-	-	-	-	-
Interest	-	-	-	8,922	8,922
Loss on derivative valuation	-	-	-	-	-
Sub-total	₩ -	₩ 4,430	₩ -	₩ 10,356	₩ 14,786
Net income (loss)	₩ 179	₩ 181	₩ -	₩ (8,859)	₩ (8,499)

29. Fair values of financial assets and liabilities (cont'd)

Fair value of financial instruments

Below is a comparison by class of the carrying amounts and fair value of the Group's financial instruments that are carried in the consolidated financial statements (Korean won in millions).

	2014		2013	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets:				
Cash and cash equivalents	₩ 50,336	₩ 50,336	₩ 24,350	₩ 24,350
Derivative assets	22	22	-	-
Trade and other receivables	106,237	106,237	105,887	105,887
Non-current trade and other receivables	2,486	2,486	1,459	1,459
Financial assets at fair value through profit or loss	19	19	29	29
Available-for-sale financial assets	1,264	1,264	1,264	1,264
Other current financial assets	342	342	992	992
Other non-current financial assets	5,427	5,427	5,212	5,212
Total	₩ 166,133	₩ 166,133	₩ 139,193	₩ 139,193
Financial liabilities:				
Trade and other payables	₩ 50,438	₩ 50,438	₩ 66,196	₩ 66,196
Current interest-bearing borrowings	28,691	28,691	81,670	81,670
Non-current interest-bearing borrowings	279,311	279,311	165,720	165,720
Other current financial liabilities	11,978	11,978	11,425	11,425
Other non-current financial liabilities	5,325	5,325	5,761	5,761
Total	₩ 375,743	₩ 375,743	₩ 330,772	₩ 330,772

29. Fair values of financial assets and liabilities (cont'd)

Fair value hierarchy

The Group uses the following hierarchy for determining and disclosing the fair value of financial instruments by valuation technique:

Level 1: quoted (unadjusted) prices in active markets for identical assets or liabilities
Level 2: other techniques for which all inputs which have a significant effect on the recorded fair value are observable, either directly or indirectly
Level 3: techniques which use inputs which have a significant effect on the recorded fair value that are not based on observable market data.

29. Fair values of financial assets and liabilities (cont'd)

Fair value hierarchy(cont'd)

	2014			
	Level1	Level 2	Level 3	Total
Financial assets measured at fair value				
Derivative assets	₩ -	₩ 22	₩ −	₩ 22
Financial assets at fair value through profit or loss	-	-	19	19
Disclosure of fair value of financial assets				
Cash and cash equivalents	₩ 10	₩ 50,326	₩ -	₩ 50,336
Trade and other receivables	-	-	106,237	106,237
Non-current trade and other receivables	-	-	2,486	2,486
Available-for-sale financial assets	-	-	1,264	1,264
Other current financial assets	-	-	342	342
Other non-current financial assets	-	14	5,413	5,427
Total	₩ 10	₩ 50,362	₩ 115,761	₩ 166,133
Disclosure of fair value of financial liabilities				
Trade and other payables	₩ -	₩ -	₩ 50,438	₩ 50,438
Current interest-bearing borrowings	-	28,691	-	28,691
Non-current interest-bearing borrowings	-	279,311	-	279,311
Other current financial liabilities	-	-	11,978	11,978
Other non-current financial liabilities	-	-	5,325	5,325
Total	₩ -	₩308,002	₩ 67,741	₩ 375,743

	2013			
	Level1	Level 2	Level 3	Total
Financial assets measured at fair value				
Financial assets at fair value through profit or loss	₩ -	₩ -	₩ 29	₩ 29
Disclosure of fair value of financial assets				
Cash and cash equivalents	₩ 10	₩ 24,340	₩ -	₩ 24,350
Trade and other receivables	-	-	105,887	105,887
Non-current trade and other receivables	-	-	1,459	1,459
Available-for-sale financial assets	-	-	1,264	1,264
Other current financial assets	-	-	992	992
Other non-current financial assets	-	14	5,198	5,192
Total	₩ 10	₩ 24,354	₩ 114,829	₩ 139,193
Disclosure of fair value of financial liabilities				
Trade and other payables	₩ -	₩ -	₩ 66,196	₩ 66,196
Current interest-bearing borrowings	-	81,670	-	81,670
Non-current interest-bearing borrowings	-	165,720	-	165,720
Other current financial liabilities	-	-	11,425	11,425
Other non-current financial liabilities	-	-	5,761	5,761
	₩ -	₩247,390	₩ 83,382	₩ 330,772

30. Supplementary cash flow information

For the years ended December 31, 2014 and 2013, cash flows generated from operating activities are as follows (Korean won):

	2014	2013
Profit before tax	₩ 2,146,085,314	₩ 5,051,644,539
Pension benefits	10,725,102,411	8,181,688,059
Employee welfare benefits	112,602,725	80,144,718
Depreciation	28,537,460,544	22,962,210,535
Amortization of intangible assets	3,292,850,347	2,959,685,058
Bad debt expense	92,326,898	627,182,967
Loss on foreign currency translation	624,299,367	460,528,814
Loss on derivative valuation	9,505,663	-
Loss on disposal of property, plant and equipment	58,915,623	67,353,428
Loss on property, plant and equipment abandoned	470,622,485	9,511,550
Impairment of intangible assets	4,270,784,564	222,346,241
Miscellaneous expenses	-	92,402,510
Interest expense	10,047,816,648	8,922,072,783
Gain on foreign currency translation	(757,578,439)	(784,922,083)
Gain on derivative valuation	(22,452,000)	(570,811)
Gain on disposal of property, plant and equipment	(26,830,634)	(229,054,143)
Gain on disposal of intangible assets	(2,930,352)	-
Interest income	(830,434,157)	(805,121,497)
Decrease in trade account receivables	627,777,326	4,760,684,952
Increase in other account receivables	(1,270,143,417)	(213,190,848)
Decrease (increase) in other financial assets	610,327,630	(375,841,008)
Decrease (increase) in other current assets	(225,365,339)	1,209,123,410
Increase in inventories	(2,936,458,904)	(9,506,467,983)
Decrease in trade account payables	(9,431,846,636)	(6,950,587,442)
Decrease in other account payables	(4,193,940,394)	(3,058,093,400)
Increase (decrease) in other current liabilities	(243,664,208)	1,498,348,976
Increase (decrease) in other current financial liabilities	1,871,319,637	(1,904,515,320)
Decrease in other	(196,574,143)	-
Increase(decrease) in provisions	72,720,639	(54,149,048)
Increase(decrease) in other provisions	(30,087,585)	4,785,015
Pension benefits paid	(12,814,173,546)	(8,107,227,623)
Net cash flow from operating activities	₩ 30,588,038,067	₩ 25,119,972,349

30. Supplementary cash flow information (cont'd)

Significant transactions not involving cash flows for the years ended December 31, 2014 and 2013 are as follows (Korean won in millions):

	2014	2013
Reclassification of construction in-progress to other property, plant and equipment accounts	₩ 21,031	₩ 32,255
Reclassification of machinery in-transit to machinery and equipment	6,612	11,176
Reclassification of intangible assets in construction to other intangible assets	7,911	1,114
Other accounts payable related to property, plant and equipment acquired	2,365	5,626
Transfer to reserve for research and human resource development	2,200	5,000
Transfer to current portion of bones	-	50,000
Transfer to current portion of long-term borrowings	36,000	-

31. Approval of financial statements

The consolidated financial statements of the Group for the year ended December 31, 2014 was approved by the Group's Board of Directors at their meeting held on January 28, 2015.