

# **LG Chem, Ltd.**

**Separate Financial Statements  
December 31, 2013 and 2012**

**LG Chem, Ltd.**  
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**December 31, 2013 and 2012**

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## Report of Independent Auditors

To the Board of Directors and Shareholders of  
LG Chem, Ltd.

We have audited the accompanying separate statements of financial position of LG Chem, Ltd. (the "Company") as of December 31, 2013 and 2012, and the related separate statements of income, comprehensive income, changes in equity and cash flows for the years then ended, expressed in Korean won. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the separate financial statements referred to above present fairly, in all material respects, the financial position of LG Chem, Ltd. as of December 31, 2013 and 2012, and its financial performance and cash flows for the years then ended, in conformity with international financial reporting standards as adopted by the Republic of Korea ("Korean IFRS").

Auditing standards and their application in practice vary among countries. The procedures and practices used in the Republic of Korea to audit such financial statements may differ from those generally accepted and applied in other countries. Accordingly, this report is for use by those who are informed about Korean auditing standards and their application in practice.

A handwritten signature in black ink that reads "Samil PricewaterhouseCoopers". The signature is written in a cursive, flowing style.

Seoul, Korea  
March 6, 2014

This report is effective as of March 6, 2014, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying separate financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

**LG Chem, Ltd.**  
**Separate Statements of Financial Position**  
**December 31, 2013 and 2012**

<i>(in millions of Korean won)</i>	<b>Notes</b>	<b>2013</b>	<b>2012</b>
<b>Assets</b>			
<b>Current assets</b>			
Cash and cash equivalents	3, 5, 6	1,076,468	448,967
Trade receivables	3, 5, 7, 33	2,776,773	2,703,963
Other receivables	3, 5, 7, 33	699,520	846,853
Other financial assets	3, 5, 8, 10	-	2,352
Other current assets	15	139,604	117,498
Inventories	11	1,997,556	2,169,601
Total current assets		6,689,921	6,289,234
<b>Non-current assets</b>			
Other receivables	3, 5, 7	19,784	16,033
Other financial assets	3, 5, 8, 9	5,846	21,696
Investments in subsidiaries	12	762,738	788,285
Investments in associates and joint ventures	12	367,145	325,875
Property, plant and equipment	13	7,273,111	7,100,621
Intangible assets	14	252,561	223,360
Other non-current assets	15	16,070	19,683
Total non-current assets		8,697,255	8,495,553
<b>Total assets</b>		<b>15,387,176</b>	<b>14,784,787</b>
<b>Liabilities and equity</b>			
<b>Liabilities</b>			
<b>Current liabilities</b>			
Trade payables	3, 5, 33	924,340	1,193,446
Other payables	3, 5, 33	989,400	940,086
Borrowings	3, 5, 16	1,132,555	1,012,874
Other financial liabilities	3, 5, 8, 10	-	154
Provisions	17	2,239	1,840
Current income tax liabilities	30	113,934	120,682
Other current liabilities	5, 19	124,307	125,368
Total current liabilities		3,286,775	3,394,450
<b>Non-current liabilities</b>			
Other payables	3, 5	75,577	14,463
Borrowings	3, 5, 16	706,008	909,675
Provisions	17	17,402	11,240
Net defined benefit liability	18	50,022	104,213
Deferred income tax liabilities	30	173,491	150,112
Total non-current liabilities		1,022,500	1,189,703
<b>Total liabilities</b>		<b>4,309,275</b>	<b>4,584,153</b>

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**Separate Statements of Financial Position**  
**December 31, 2013 and 2012**

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<i>(in millions of Korean won)</i>	<b>Notes</b>	<b>2013</b>	<b>2012</b>
<b>Equity</b>			
Share capital	1, 21	369,500	369,500
Capital surplus	21	1,166,764	1,166,764
Other components of equity	23	(15,484)	(15,484)
Accumulated other comprehensive income		-	(117)
Retained earnings	22	9,557,121	8,679,971
<b>Total equity</b>		<u>11,077,901</u>	<u>10,200,634</u>
<b>Total liabilities and equity</b>		<u>15,387,176</u>	<u>14,784,787</u>

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

**LG Chem, Ltd.**  
**Separate Statements of Income**  
**Years Ended December 31, 2013 and 2012**

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<i>(in millions of Korean won, except per share amounts)</i>	<b>Notes</b>	<b>2013</b>	<b>2012</b>
<b>Revenue</b>	33	20,255,935	20,442,790
<b>Cost of sales</b>	25, 33	<u>(17,291,982)</u>	<u>(17,482,874)</u>
<b>Gross profit</b>		2,963,953	2,959,916
<b>Selling, general and administrative expenses</b>	24, 25, 33	<u>(1,384,684)</u>	<u>(1,232,956)</u>
<b>Operating profit</b>		1,579,269	1,726,960
<b>Non-operating income(expenses)</b>			
Finance income	5, 27	209,675	151,675
Finance expenses	5, 27	(189,772)	(98,191)
Other non-operating income	5, 28	332,554	341,160
Other non-operating expenses	5, 29	<u>(460,377)</u>	<u>(335,423)</u>
<b>Profit before income tax</b>		1,471,349	1,786,181
<b>Income tax expense</b>	30	<u>(296,957)</u>	<u>(345,864)</u>
<b>Profit for the year</b>		<u>1,174,392</u>	<u>1,440,317</u>
<b>Earnings per share for profit for the year</b>			
<b>(in won)</b>	31		
Basic and diluted earnings per ordinary share			
for profit for the year		15,965	19,582
Basic and diluted earnings per preferred share			
for profit for the year		16,015	19,632

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

**LG Chem, Ltd.**  
**Separate Statements of Comprehensive Income**  
**Years Ended December 31, 2013 and 2012**

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<i>(in millions of Korean won)</i>	<b>Notes</b>	<b>2013</b>	<b>2012</b>
<b>Profit for the year</b>		<u>1,174,392</u>	<u>1,440,317</u>
<b>Other comprehensive income</b>			
Items that will not be reclassified to profit or loss:			
Remeasurement of net defined benefit liability	18	(3,590)	(62,237)
Income tax effect relating to components of other comprehensive income	30	868	15,062
Items that will be reclassified subsequently to profit or loss:			
Cash flow hedges		154	527
Income tax effect relating to components of other comprehensive income	30	<u>(37)</u>	<u>(128)</u>
<b>Other comprehensive income for the year, net of tax</b>		<u>(2,605)</u>	<u>(46,776)</u>
<b>Total comprehensive income for the year</b>		<u>1,171,787</u>	<u>1,393,541</u>

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



**LG Chem, Ltd.**  
**Separate Statements of Changes in Equity**  
**Years Ended December 31, 2013 and 2012**

					Accumulated other comprehensive income	Retained earnings	Total equity
		Share capital	Capital surplus	Other components of equity			
<i>(in millions of Korean won)</i>							
	Notes						
<b>Balance at January 1, 2012</b>		369,500	1,166,764	(15,484)	(516)	7,581,349	9,101,613
<b>Comprehensive income:</b>							
Profit for the year		-	-	-	-	1,440,317	1,440,317
Remeasurement of net defined benefit liability	18	-	-	-	-	(47,175)	(47,175)
Cash flow hedges		-	-	-	399	-	399
<b>Total comprehensive income</b>		-	-	-	399	1,393,142	1,393,541
<b>Transactions with owners:</b>							
Dividends	32	-	-	-	-	(294,520)	(294,520)
<b>Total transactions with owners</b>		-	-	-	-	(294,520)	(294,520)
<b>Balance at December 31, 2012</b>		369,500	1,166,764	(15,484)	(117)	8,679,971	10,200,634
<b>Balance at January 1, 2013</b>		369,500	1,166,764	(15,484)	(117)	8,679,971	10,200,634
<b>Comprehensive income:</b>							
Profit for the year		-	-	-	-	1,174,392	1,174,392
Remeasurement of net defined benefit liability	18	-	-	-	-	(2,722)	(2,722)
Cash flow hedges		-	-	-	117	-	117
<b>Total comprehensive income</b>		-	-	-	117	1,171,670	1,171,787
<b>Transactions with owners:</b>							
Dividends	32	-	-	-	-	(294,520)	(294,520)
<b>Total transactions with owners</b>		-	-	-	-	(294,520)	(294,520)
<b>Balance at December 31, 2013</b>		369,500	1,166,764	(15,484)	-	9,557,121	11,077,901

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

**LG Chem, Ltd.**  
**Separate Statements of Cash Flows**  
**Years Ended December 31, 2013 and 2012**

<i>(in millions of Korean won)</i>	<b>Notes</b>	<b>2013</b>	<b>2012</b>
<b>Cash flows from operating activities</b>			
Cash generated from operations	34	2,321,356	1,931,685
Interest received		35,323	21,218
Interest paid		(50,184)	(53,550)
Dividends		40,670	65,103
Income taxes paid		(279,036)	(391,688)
<b>Net cash generated from operating activities</b>		<u>2,068,129</u>	<u>1,572,768</u>
<b>Cash flows from investing activities</b>			
Decrease in other receivables		839,014	2
Decrease in non-current other receivables		14,190	11,241
Proceeds from disposal of property, plant and equipment		5,965	5,034
Proceeds from disposal of intangible assets		316	1,942
Increase in other receivables		(734,600)	(620,000)
Increase in non-current other receivables		(17,959)	(13,327)
Increase in non-current other financial assets		-	(15,849)
Acquisition of investments in subsidiaries		(30,149)	(54,800)
Acquisition of investments in associates and joint ventures		(25,420)	(75,565)
Purchases of property, plant and equipment		(1,091,207)	(1,661,049)
Purchases of intangible assets		(41,877)	(32,695)
<b>Net cash used in investing activities</b>		<u>(1,081,727)</u>	<u>(2,455,066)</u>
<b>Cash flows from financing activities</b>			
Proceeds from borrowings		-	757,451
Repayments of borrowings		(64,199)	(235,039)
Dividends		(294,518)	(294,525)
Payment of settlement of derivatives		-	-
<b>Net cash provided by (used in) financing activities</b>		<u>(358,717)</u>	<u>227,887</u>
<b>Net increase(decrease) in cash and cash equivalents</b>		627,685	(654,411)
Cash and cash equivalents at beginning of year		448,967	1,105,301
Exchange losses on cash and cash equivalents		(184)	(1,923)
<b>Cash and cash equivalents at the end of year</b>		<u>1,076,468</u>	<u>448,967</u>

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

# **LG Chem, Ltd.**

## **Notes to the Separate Financial Statements**

### **December 31, 2013 and 2012**

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#### **1. General information**

The Company was spun off on April 1, 2001, from LG Chem Investment Ltd. (formerly LG Chemical Ltd.), to engage in the petrochemicals, industrial materials, and information and electronic materials business. It completed its registration process on April 3, 2001. The Company's shares have been listed on the Korea Stock Exchange since April 25, 2001.

The Company merged with LG Daesan Petrochemical Ltd. on January 1, 2006, and with LG Petrochemical Co., Ltd. on November 1, 2007. The Company also spun off its Industrial Materials segment to LG Hausys, Ltd. on April 1, 2009, and merged with LG Polycarbonate Ltd. on April 1, 2011.

As of December 31, 2013, the Company has its manufacturing facilities in Yeosu, Cheongju, Ulsan, Naju, Iksan, Daesan, Ochang, Paju and Gimcheon.

The Company is authorized to issue 292 million shares of ordinary shares with par value of ₩5,000 per share. As of December 31, 2013, the Company has issued 66,271,100 ordinary shares (₩331,356 million) and 7,628,921 preferred shares (₩38,144 million). The largest shareholder of the Company is LG Corp., which owns 33.53% of the Company's ordinary shares. Preferred shareholders have no voting rights but are entitled to receive dividends at a rate 1% more than those paid to ordinary shareholders.

#### **2. Summary of significant accounting policies**

The principal accounting policies applied in the preparation of these financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

##### **2.1 Basis of preparation**

The Company maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language (Hangul) in accordance with the International Financial Reporting Standards as adopted by the Republic of Korea ("Korean IFRS"). The accompanying separate financial statements have been condensed, restructured and translated into English from the Korean language financial statements.

Certain information attached to the Korean language financial statements, but not required for a fair presentation of the Company's financial position, financial performance or cash flows, is not presented in the accompanying separate financial statements.

The Company's financial statements for the annual period beginning on January 1, 2010, have been prepared in accordance with Korean IFRS. These are the standards, subsequent amendments and related interpretations issued by the International Accounting Standards Board ("IASB") that have been adopted by the Republic of Korea.

The preparation of the separate financial statements requires the use of certain critical accounting

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estimates. It also requires management to exercise judgment in the process of applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the separate financial statements are disclosed in Note 4.

**2.2 Changes in accounting policy and disclosures**

*(a) New and amended standards adopted by the Company*

The Company newly applied the following amended and enacted standards for the annual period beginning on January 1, 2013:

- Amendment to Korean IFRS 1001, *Presentation of Financial Statements: Presentation of Items of Other Comprehensive Income*

The amendment requires entities to group items presented in other comprehensive income based on whether they are potentially reclassifiable to profit or loss subsequently. The Company applies the amendment retroactively and there is no impact of the application of this amendment on its total comprehensive income or loss.

- Amendment to Korean IFRS 1019, *Employee Benefits*

The amendment requires entities to immediately recognize all actuarial gains and losses incurred in other comprehensive income or loss. All past service costs incurred are immediately recognized in accordance with the change of the plan, and the previous separate calculation of the interest cost and the expected returns on plan assets has been revised to calculate net interest expense (income) by applying the discount rate used in the defined benefit obligation measurement in the net defined benefit liabilities (assets). There is no material impact of the application of this amendment on the consolidated financial statements.

- Korean IFRS 1110, *Consolidated Financial Statements*

Korean IFRS 1110, *Consolidated Financial Statements*, introduces a single control concept and provides a specific guidance for the control. The adoption of this standard does not have an impact on consolidation scope in the consolidated financial statements.

- Korean IFRS 1111, *Joint Arrangements*

Korean IFRS 1111, *Joint Arrangements*, reflects the substance of joint arrangements and focuses on the rights and obligations of the parties to the joint arrangements rather than on the legal forms of the arrangements. Joint arrangements are classified into joint operations or joint ventures. The adoption of this standard does not have an impact on the consolidated financial statements.

- Korean IFRS 1112, *Disclosures of Interests in Other Entities*

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Korean IFRS 1112, *Disclosure of Interests in Other Entities*, provides disclosure requirements for all types of equity investments in other entities including subsidiaries, associates, joint ventures and unconsolidated structured entities.

- Korean IFRS 1027, *Separate Financial Statements*

Korean IFRS 1027, *Separate Financial Statements*, contains accounting treatments and requirements for investments in subsidiaries, associates and joint ventures relating only to separate financial statements of the Controlling Company.

- Korean IFRS 1113, *Fair Value Measurement*

Korean IFRS 1113, *Fair Value Measurement*, provides a precise definition of fair value, and a single source of fair value measurement and disclosure requirements for use across K-IFRS. The Company has applied this standard prospectively according to the transitional provisions of K-IFRS 1113 and there is no material impact of the application of this standard on the consolidated financial statements.

*(b) New standards and interpretations not yet adopted*

New standards, amendments and interpretations issued but not effective for the financial year beginning January 1, 2013, and not early adopted by the Company are as follows:

- Amendment to Korean IFRS 1110, *Consolidated Financial Statements*

Amendment to Korean IFRS 1110, *Consolidated Financial Statements*, provides that, if a parent company qualifies as an investment entity, it is required to measure its investments in subsidiaries at fair value through profit and loss instead of consolidating these subsidiaries in its consolidated financial statements. The amendment does not apply for a parent of an investment entity if the parent itself is not an investment entity. This amendment is effective for annual periods beginning on or after January 1, 2014, with early adoption permitted. The Company expects that the application of this amendment would not have a material impact on its consolidated financial statements.

- Amendment to Korean IFRS 1032, *Financial Instruments: Presentation*

Amendment to Korean IFRS 1032, *Financial Instruments: Presentation*, provides that the right to offset must not be contingent on a future event and must be legally enforceable in all of circumstances; and if an entity can settle amounts in a manner such that outcome is, in effect, equivalent to net settlement, the entity will meet the net settlement criterion. This amendment is effective for annual periods beginning on or after January 1, 2014, and the Company is assessing the impact of application of this amendment on its consolidated financial statements.

- Amendment to Korean IFRS 1039, *Financial Instruments: Recognition and Measurement*

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## Notes to the Separate Financial Statements

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Amendment to Korean IFRS 1039, Financial Instruments: Recognition and Measurement, allows the continuation of hedge accounting for a derivative that has been designated as a hedging instrument in a circumstance in which that derivative is novated to a central counterparty (CCP) as a consequence of laws or regulations. This amendment is effective for annual periods beginning on or after January 1, 2014, with early adoption permitted. The Company is assessing the impact of application of this amendment on its consolidated financial statements.

- Enactment of Korean IFRS 2121, *Levies*

Korean IFRS 2121, *Levies*, are applied to a liability to pay a levy imposed by a government in accordance with the legislation. The interpretation requires that the liability to pay a levy is recognized when the activity that triggers the payment of the levy occurs, as identified by the legislation (the obligating event). This interpretation is effective for annual periods beginning on or after January 1, 2014, with early adoption permitted. The Company expects that the application of this interpretation would not have a material impact on its consolidated financial statements.

### 2.3 Investments in subsidiaries, associates and joint ventures

The accompanying financial statements are the separate financial statements of the Company prepared in accordance with Korean IFRS 1027, '*Separate Financial Statements*'. Investments in subsidiaries, associates and jointly controlled entities are recorded at acquisition cost based on its direct equity investments. At the date of transition from K-GAAP to Korean IFRS, the Company has used the K-GAAP carrying amount at the transition date as deemed cost. The Company recognizes a dividend from a subsidiary, associate or jointly controlled entity in profit or loss when its right to receive the dividend is established.

### 2.4 Foreign currency translation

#### (1) Functional and presentation currency

Items included in the financial statements of the Company are measured using the currency of the primary economic environment in which the entity operates ('the functional currency'). The financial statements are presented in 'Korean won', which is the Company's functional and presentation currency.

#### (2) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in profit or loss.

Exchange differences arising on non-monetary financial assets and liabilities such as equity instruments at fair value through profit or loss and available-for-sale equity instruments are recognized in profit or loss and included in other comprehensive income, respectively, as part of the

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fair value gain or loss.

**2.5 Cash and cash equivalents**

Cash and cash equivalents includes cash in hand, deposits held at call with banks, other short-term highly liquid investments with original maturities of three months or less.

**2.6 Financial instruments**

*(a) Classification and measurement*

The Company classifies its financial assets in the following categories: financial assets at fair value through profit or loss, available-for-sale financial assets, loans and receivables, and held-to-maturity financial assets. Regular purchases and sales of financial assets are recognized on trade date.

At initial recognition, financial assets are measured at fair value plus, in the case of financial assets not carried at fair value through profit or loss, transaction costs. Transaction costs of financial assets carried at fair value through profit or loss are expensed in the statement of income. After the initial recognition, available-for-sale financial assets and financial assets at fair value through profit or loss are subsequently carried at fair value. Loans and receivables, and held-to-maturity investments are subsequently carried at amortized cost using the effective interest rate method.

Changes in fair value of financial assets at fair value through profit or loss are recognized in profit or loss and changes in fair value of available-for-sale financial assets are recognized in other comprehensive income. When the available-for-sale financial assets are sold or impaired, the fair value adjustments recorded in equity are reclassified into profit or loss.

*(b) Impairment*

The Company assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. A financial asset or a group of financial assets is impaired and impairment losses are incurred only if there is objective evidence of impairment as a result of one or more events that occurred after the initial recognition of the asset (a 'loss event') and that loss event (or events) has an impact on the estimated future cash flows of the financial asset or a group of financial assets that can be reliably estimated.

Impairment of loans and receivables is presented as a deduction in an allowance account. Impairment of other financial assets is directly deducted from their carrying amount. The Company writes off financial assets when the assets are determined to be no longer recoverable.

The objective evidence that a financial asset is impaired includes significant financial difficulty of the issuer or obligor; a delinquency in interest or principal payments over three months; or the disappearance of an active market for that financial asset because of financial difficulties. a significant or prolonged decline in the fair value of an available-for-sale equity instrument its cost is also evidence that the asset is impaired.

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*(c) Derecognition*

If the Company transfers a financial asset and the transfer does not result in derecognition because the Company has retained substantially of all risks and rewards of ownership of the transferred asset due to a recourse in the event the debtor defaults, the Company continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received. The related financial liability is classified as 'borrowings' in the statement of financial position (Note 16).

**2.7 Derivative financial instruments**

Derivatives are initially recognized at fair value on the date when a derivative contract is entered into and are subsequently re-measured at their fair value. Changes in the fair value of the derivatives that are not qualified for hedge accounting are recognized in the statement of income within 'other non-operating income (expenses)' or 'finance income (expenses)' according to the nature of transactions.

**2.8 Inventories**

Inventories are stated at the lower of cost and net realizable value. Cost is determined using weighted average cost method except goods in transit which is determined using the specific identification method.

**2.9 Property, plant and equipment**

Property, plant and equipment is stated at its cost less accumulated depreciation and accumulated impairment losses. Historical cost includes expenditures that is directly attributable to the acquisition of the items.

Land is not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate the difference between their cost and their residual values over their estimated useful lives, as follows:

Buildings	25 - 50 years
Structures	15 - 50 years
Machinery	6 - 15 years
Others	1 - 6 years

The depreciation method, residual values and useful lives of property, plant and equipment are reviewed at the end of each reporting period and, if appropriate, accounted for as changes in accounting estimates.

**2.10 Borrowing costs**

Borrowing costs incurred in the acquisition or construction of a qualifying asset are capitalized in the period when it is prepared for its intended use, and investment income earned on the temporary investment of borrowings made specifically for the purpose obtaining a qualifying asset is deducted



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from the borrowing costs eligible for capitalization during the period. Other borrowing costs are recognized as expenses for the period in which they are incurred.

**2.11 Government grants**

Government grants are recognized at their fair values when there is reasonable assurance that the grant will be received and the Company will comply with the conditions attaching to it. Government grants related to assets are presented by deducting the grants in arriving at the carrying amount of the assets, and grants related to income are deferred and presented by deducting the related expenses for the purpose of the government grants.

**2.12 Intangible assets**

Goodwill arising on the acquisition of business is included in intangible assets and goodwill arising on the acquisition of associates is included in investments in associates. Goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the CGUs, or group of CGUs, that is expected to benefit from the synergies of the combination. Goodwill is monitored at the operating segment level.

Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. The carrying value of goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs to sell. Any impairment is recognized immediately as an expense and is not subsequently reversed.

Intangible assets, except for goodwill, are initially recognized at its historical cost and carried at its cost less accumulated amortization and accumulated impairment losses.

Internally generated software development costs are the aggregate costs recognized after meeting the asset recognition criteria, including technical feasibility, and determined to have future economic benefits. Membership rights are regarded as intangible assets with indefinite useful life and not amortized because there is no foreseeable limit to the period over which the assets are expected to be utilized. Intangible assets with definite useful life that are amortized using the straight-line method over their estimated useful lives, are as follows:

	<b>Useful lives</b>
Development costs	3 - 6 years
Industrial property rights	5 - 15 years
Other intangible assets	6 - 20 years

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**2.13 Research and development**

Costs associated with research are recognized as an expense as incurred. Costs that are identifiable, controllable and directly attributable to development projects are recognized as intangible assets when the following criteria are met:

- It is technically feasible to complete the development project so that it will be available for use;
- Management intends to complete the development project and use or sell it;
- There is an ability to use or sell the development project;
- It can be demonstrated how the development project will generate probable future economic benefits;
- Adequate technical, financial and other resources to complete the development and to use or sell the development project are available; and
- The expenditure attributable to the development project during its development can be reliably measured.

Other development expenditures that do not meet these criteria are recognized as an expense as incurred. Development costs previously recognized as an expense are not recognized as an asset in a subsequent period. Capitalized development costs that are recognized as intangible assets are amortized using the straight-line method over their estimated useful lives of three to six years when the assets are available for use and are tested for impairment.

**2.14 Impairment of non-financial assets**

Goodwill or intangible assets with indefinite useful lives are not subject to amortization and are tested annually for impairment. Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. Non-financial assets, other than goodwill, that suffered impairment are reviewed for possible reversal of the impairment at each reporting date.

**2.15 Financial Liabilities**

*(a) Classification and measurement*

Financial liabilities at fair value through profit or loss are financial instruments held for trading. Financial liabilities are classified in this category if incurred principally for the purpose of repurchasing them in the near term. Derivatives that are not designated as hedges or bifurcated from financial instruments containing embedded derivatives are also categorized as held-for-trading.

The Company classifies non-derivative financial liabilities, except for financial liabilities at fair value through profit or loss, financial guarantee contracts and financial liabilities that arise when a transfer of financial assets does not qualify for derecognition, as financial liabilities carried at amortized cost

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and presented as 'trade payables', 'borrowings', and 'other financial liabilities' in the statement of financial position.

*(b) Derecognition*

Financial liabilities are removed from the statement of financial position when it is extinguished, for example, when the obligation specified in the contract is discharged, cancelled or expired or when the terms of an existing financial liability are substantially modified.

**2.16 Current and deferred income tax**

The tax expense for the period consists of current and deferred tax. Tax is recognized on the profit for the period in the statement of income, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively. The tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period.

Deferred tax is recognized for temporary differences arising between the tax bases of assets and liabilities and their carrying amounts as expected tax consequences at the recovery or settlement of the carrying amounts of the assets and liabilities. However, deferred tax assets and liabilities are not recognized if they arise from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences can be utilized.

Deferred tax liability is recognized for taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint ventures, except to the extent that the Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. In addition, deferred tax asset is recognized for deductible temporary differences arising from such investments to the extent that it is probable the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

**2.17 Provisions**

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation and the increase in the provision due to passage of time is recognized as interest expense.

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**2.18 Employee benefits**

The Company has both defined benefit and defined contribution plans. A defined contribution plan is a pension plan under which the Company pays fixed contributions into a separate entity. The contributions are recognized as employee benefit expenses when an employee has rendered service.

A defined benefit plan is a pension plan that is not a defined contribution plan. Typically defined benefit plans define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation. The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds and that have terms to maturity approximating to the terms of the related pension obligation. The remeasurements of the net defined benefit liability are recognized in other comprehensive income.

If any plan amendments, curtailments, or settlements occur, past service costs or any gains or losses on settlement are recognized as profit or loss for the year.

**2.19 Revenue recognition**

Revenue comprises the fair value of the consideration received or receivable for the sale of goods in the ordinary course of the Company's activities. Revenue is shown net of value-added tax, returns, rebates and discounts and after eliminating sales within the Company.

The Company recognizes revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the Company and when specific criteria have been met for each of the Company's activities as described below. The Company bases its estimates on historical results, taking into consideration the type of customer, the type of transaction and the terms of each arrangement.

(a) Sales of goods

Sales of goods are recognized upon delivery of products to customers. The Company recognizes provisions for product warranties and sales returns based on reasonable expectation reflecting warranty obligation and sales return rates incurred historically.

(b) Interest income

Interest income is recognized using the effective interest method. When a loan and receivable is impaired, the Company reduces the carrying amount to its recoverable amount, and continues unwinding the discount as interest income. Interest income on impaired receivables is recognized using the original effective interest rate.

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(c) Dividend income

Dividend income is recognized when the right to receive payment is established.

**2.20 Leases**

A lease is an agreement, whereby the lessor conveys to the lessee, in return for a payment or series of payments, the right to use an asset for an agreed period of time. Leases where all the risks and rewards of ownership are not transferred to the Company are classified as operating leases. Lease payments under operating leases are recognized as expenses on a straight-line basis over the lease term.

Leases where the Company has substantially all the risks and rewards of ownership are classified as finance leases and recognized as lease assets and liabilities at the lower of the fair value of the leased property and the present value of the minimum lease payments on the opening date of the lease period.

A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to ownership at the inception of the lease. A lease other than a finance lease is classified as an operating lease. Lease income from operating leases is recognized in income on a straight-line basis over the lease term. Initial direct costs incurred by the lessor in negotiating and arranging an operating lease is added to the carrying amount of the leased asset and recognized as an expense over the lease term on the same basis as the lease income.

**3. Financial risk management**

**3.1 Financial risk factors**

The Company's activities expose it to a variety of financial risks: market risk, credit risk and liquidity risk. The Company's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Company's financial performance. The Company uses derivative financial instruments to hedge certain exposures.

Risk management is carried out by the Company's finance team under policies approved by the Corporate Management Committee. The finance team identifies, evaluates and hedges financial risks in close co-operation with the Company's operating units. The Corporate Management Committee provides written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk, and credit risk, use of derivative financial instruments and non-derivative financial instruments, and investment of surplus liquidity.

(1) Market risk

1) Foreign exchange risk

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The Company operates internationally and is exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the US dollar. Foreign exchange risk arises from future commercial transactions and recognized assets and liabilities.

Management has set up a policy to require companies to manage their foreign exchange risk against their functional currency. The Company manages maximum loss for currency risk exposures within acceptable range by using currency risk management model and hires employees who are exclusively responsible for currency risk management. Currency exposure arising from the net assets of the Company's foreign operations is managed primarily through borrowings denominated in the relevant foreign currencies.

As of December 31, 2013 and 2012, the Company's monetary assets and liabilities denominated in currencies other than its functional currency, are as follows:

<i>(in millions of Korean won)</i>	2013		2012	
	Assets	Liabilities	Assets	Liabilities
USD	2,190,311	1,723,107	2,107,939	1,769,248
EUR	112,234	88,071	86,245	67,796
JPY	21,895	82,906	25,630	141,390
GBP and others	2,716	4,522	1,530	6,266

As of December 31, 2013 and 2012, if the Company's functional currency had weakened / strengthened by 10% against the US dollar with all other variables held constant, profit for the year would have been affected as follows:

<i>(in millions of Korean won)</i>	2013		2012	
	10% Increase	10% Decrease	10% Increase	10% Decrease
USD	46,720	(46,720)	33,869	(33,869)

The above sensitivity analysis has been performed for monetary assets and liabilities denominated in foreign currencies other than the Company's functional currency at the reporting date.

2) Interest rate risk

Interest rate risk is defined as the risk that the interest income or expenses arising from deposits and borrowings will fluctuate because of changes in future market interest rate. The interest rate risk mainly arises through floating rate deposits and borrowings. The objective of interest rate risk management lies in maximizing corporate value by minimizing uncertainty caused by fluctuations in interest rates and minimizing net interest expense.

The Company adequately minimizes risks from interest rate fluctuations through various policies, such as sharing excess cash within the Company (internal cash sharing) to minimize external borrowings, avoiding high rate borrowings, reforming capital structure, managing an appropriate ratio of fixed rate borrowings and floating rate borrowings, monitoring a fluctuation of domestic and foreign interest rates daily, weekly and monthly, establishing alternatives, and balancing floating

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rate short-term borrowings with floating rate deposits.

The impact of 0.1% (10 basis points) higher/lower of interest rate with all other variables held constant on the Company's post-tax profit for the year and on equity as of December 31, 2013, is as follows:

<i>(in millions of Korean won)</i>	<b>Impact on post-tax profit</b>		<b>Impact on equity</b>	
	<b>2013</b>	<b>2012</b>	<b>2013</b>	<b>2012</b>
Increase	(785)	(847)	(785)	(847)
Decrease	785	847	785	847

(2) Credit risk

Credit risk arises from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables and committed transactions. As of December 31, 2013 and 2012, the maximum degrees of credit exposures are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>			<b>2012</b>		
	<b>Before impairment</b>	<b>Accumulated impairment loss</b>	<b>After impairment (maximum exposure)</b>	<b>Before impairment</b>	<b>Accumulated impairment loss</b>	<b>After impairment (maximum exposure)</b>
Loans and receivables (excluding cash on hand)	4,579,697	(7,185)	4,572,512	4,021,535	(5,769)	4,015,766
Financial assets at fair value through profit or loss	-	-	-	2,352	-	2,352
<b>Total</b>	<b>4,579,697</b>	<b>(7,185)</b>	<b>4,572,512</b>	<b>4,023,887</b>	<b>(5,769)</b>	<b>4,018,118</b>

In addition, details of financial guarantees provided by the Company are disclosed in Notes 3.1.(3) and 20.

The Company has established the following policies and procedures to manage credit risks.

To manage credit risks relating to trade receivables, the Company evaluates the credit rating of customers and determines credit limit for each customer based on the information provided by credit rating agencies and other available financial information before commencing business with customers. The credit risks relating to trade receivables are also mitigated by insurance contracts, collaterals as well as payment guarantees.

The Company has entered into export insurance contracts with Korea Trade Insurance Corporation to mitigate credit risks relating to export trade receivables to overseas customers. The Company is also provided with collaterals by customers depending on their credit rating or payment guarantees from the customers' financial institutions as necessary.

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The Company has deposited its cash and cash equivalents and other long-term deposits in several financial institutions such as Woori Bank and Shinhan Bank. The Company has also entered into derivative contracts with several financial institutions. The Company maintains business relationship with those financial institutions with high credit ratings evaluated by independent credit rating agencies and accordingly, credit risks associated with these financial institutions are limited.

(3) Liquidity risk

The Company monitors rolling forecasts of the Company's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times so that the Company does not breach borrowing limits or covenants (where applicable) on any of its borrowing facilities. Such forecasting takes into consideration the Company's debt financing plans, covenant compliance, compliance with internal financial ratio targets and, if applicable external regulatory or legal requirements – for example, currency restrictions.

- 1) The table below analyzes the Company's non-derivative financial liabilities into relevant maturity groupings based on the remaining period at the reporting date to the contractual maturity date.

(in millions of Korean won)

	<b>December 31, 2013</b>			
	<b>Less than 1 year</b>	<b>1 to 2 years</b>	<b>2 to 5 years</b>	<b>Over 5 years</b>
Borrowings (excluding finance lease liabilities)	1,162,646	425,660	315,220	278
Finance lease liabilities	3,195	-	-	-
Trade and other payables	1,913,906	50,384	25,192	-
<b>Total</b>	<b>3,079,747</b>	<b>476,044</b>	<b>340,412</b>	<b>278</b>

(in millions of Korean won)

	<b>December 31, 2012</b>			
	<b>Less than 1 year</b>	<b>1 to 2 years</b>	<b>2 to 5 years</b>	<b>Over 5 years</b>
Borrowings (excluding finance lease liabilities)	1,043,909	233,183	742,322	284
Finance lease liabilities	2,481	3,195	-	-
Trade and other payables	2,133,689	15,045	-	-
<b>Total</b>	<b>3,180,079</b>	<b>251,423</b>	<b>742,322</b>	<b>284</b>



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- 2) As of December 31, 2013, the Company has no outstanding derivative financial liabilities. The table below analyzes the Company's derivative financial liabilities into relevant maturity groupings based on the remaining period from December 31, 2012, to the contractual maturity date:

(in millions of Korean won)

		<b>December 31, 2012</b>			
		<b>Less than 1 year</b>	<b>1 to 2 years</b>	<b>2 to 5 years</b>	<b>Over 5 years</b>
Net-settled derivative financial liabilities	<b>Hedging</b>				
	Net-cash flow	(154)	-	-	-
	<b>Subtotal</b>	(154)	-	-	-
Gross-settled derivative financial liabilities	<b>Trading</b>				
	Inflow	173,728	-	-	-
	Outflow	(171,376)	-	-	-
	<b>Subtotal</b>	2,352	-	-	-
<b>Total</b>		2,198	-	-	-

- 3) The table below analyzes the Company's financial guarantee contracts into relevant maturity groupings based on the remaining period at the reporting date to the contractual maturity date.

(in millions of Korean won)

		<b>December 31, 2013</b>			
		<b>Less than 1 year</b>	<b>1 to 2 years</b>	<b>2 to 5 years</b>	<b>Over 5 years</b>
Financial guarantee contracts <sup>1</sup>		250,198	144	509	389

(in millions of Korean won)

		<b>December 31, 2012</b>			
		<b>Less than 1 year</b>	<b>1 to 2 years</b>	<b>2 to 5 years</b>	<b>Over 5 years</b>
Financial guarantee contracts <sup>1</sup>		335,019	132	470	571

<sup>1</sup> The Company and LG Hausys Ltd. have provided the joint guarantee for obligations outstanding as of April 1, 2009, the spin-off date. Also the Company has provided financial guarantee for subsidiaries. The amounts represent the maximum amount of the guarantee allocated to the earliest period in which the guarantee could be called (Note 20).

### **3.2 Capital risk management**

The Company's capital objectives are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

Consistent with others in the industry, the Company monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings less cash and cash equivalents. Total capital is calculated as 'equity' as shown in the statement of financial position plus net debt.

The gearing ratio and debt-to-equity ratio as of December 31, 2013 and 2012, are as follows:

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*(in millions of Korean won, except for ratios)*

	<b>2013</b>	<b>2012</b>
Total borrowings (Note 16) (A)	1,838,563	1,922,549
Less: cash and cash equivalents (B)	<u>(1,076,468)</u>	<u>(448,967)</u>
Net debt (C=A+B)	<u>762,095</u>	<u>1,473,582</u>
Total liabilities (D)	4,309,275	4,584,153
Total equity (E)	11,077,901	10,200,634
Total capital (F=C+E)	11,839,996	11,674,216
Gearing ratio (C/F)	6.4%	12.6%
Debt-to-equity ratio (D/E)	38.9%	44.9%

**3.3 Fair value estimation**

The table below analyzes financial instruments carried at fair value, by valuation method. The different levels have been defined as follows:

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

(1) As of December 31, 2013, there are no financial instruments measured at fair value. The following tables present the Company's financial assets and liabilities that are measured at fair value as of December 31, 2012:

*(in millions of Korean won)*

	<b>2012</b>			
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
<b>Financial assets</b>				
Other current financial assets	-	2,352	-	2,352
<b>Total financial assets</b>	<u>-</u>	<u>2,352</u>	<u>-</u>	<u>2,352</u>
<b>Financial liabilities</b>				
Other current financial liabilities	-	154	-	154
<b>Total financial liabilities</b>	<u>-</u>	<u>154</u>	<u>-</u>	<u>154</u>

All other non-current financial assets of the Company consist of available-for-sale equity securities and are measured at cost (December 31, 2013: ₩ 5,846 million; December 31, 2012: ₩ 21,696 million) as the range of reasonable fair value estimates is significant and the probabilities of the various estimates cannot be reasonably assessed. These are not included in the analysis above (Note 9). The Company does not have any plans to dispose of these available-for-sale equity securities in the near future.

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The fair value of financial instruments traded in active markets is based on quoted market prices at the reporting date. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, an entity in the same industry, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Company is the current bid price. These instruments are included in level 1.

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Company uses various techniques and makes judgments based on current market conditions. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2. The financial instruments included in Level 2 are derivative financial instruments. The fair value of derivative financial instruments is determined using forward exchange rates at the end of the reporting period with the resulting value discounted back to present value.

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

Specific valuation techniques used to value financial instruments include:

- Quoted market prices or dealer quotes for similar instruments.
- The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows based on observable yield curves.
- Other techniques, such as discounted cash flow analysis, are used to determine fair value for the remaining financial instruments.

The carrying amount of the trade and other receivables classified as current is reasonable approximated at fair value. Information related to the fair value of the borrowings for which the carrying amount of borrowings is not a reasonable approximation of the fair value, is presented in Note 16.

#### **4. Critical accounting estimates and assumptions**

The Company makes estimates and assumptions concerning the future. The estimates and assumptions are continuously evaluated with consideration to factors such as events reasonably predictable in the foreseeable future within the present circumstance according to historical experience. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

(1) Estimated impairment of goodwill

The Company tests annually whether goodwill has suffered any impairment. The recoverable amounts of cash-generating units have been determined based on value-in-use calculations (Note

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14).

(2) Income taxes

The Company recognizes liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the current and deferred income tax assets and liabilities in the period in which such determination is made (Note 30).

(3) Provisions

The Company recognizes provisions for product warranties and sales return as of the reporting date as described in Note 17. The amounts are estimated based on historical data.

(4) Net defined benefit liability

The present value of net defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions including the discount rate (Note 18).

**5. Financial instruments by category**

(1) Categorizations of financial instruments are as follows:

*(in millions of Korean won)*

	<b>December 31, 2013</b>		
	<b>Loans and receivables</b>	<b>Assets classified as available-for-sale</b>	<b>Total</b>
<b>Financial assets</b>			
Cash and cash equivalents	1,076,468	-	1,076,468
Trade receivables	2,776,773	-	2,776,773
Other receivables	699,520	-	699,520
Other non-current receivables	19,784	-	19,784
Other non-current financial assets	-	5,846	5,846
<b>Total</b>	<b>4,572,545</b>	<b>5,846</b>	<b>4,578,391</b>

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Financial liabilities	December 31, 2013		
	Hedging derivatives	Liabilities at amortized cost	Total
Trade payables	-	924,340	924,340
Other payables	-	989,400	989,400
Borrowings (current)	-	1,132,555	1,132,555
Other current liabilities (dividends payable)	-	46	46
Other non-current payables	-	75,577	75,577
Borrowings (non-current)	-	706,008	706,008
<b>Total</b>	<b>-</b>	<b>3,827,926</b>	<b>3,827,926</b>

(in millions of Korean won)

Financial assets	December 31, 2012			Total
	Loans and receivables	Assets at fair value through profit or loss	Assets classified as available-for-sale	
Cash and cash equivalents	448,967	-	-	448,967
Trade receivables	2,703,963	-	-	2,703,963
Other receivables	846,853	-	-	846,853
Other current financial assets	-	2,352	-	2,352
Other non-current receivables	16,033	-	-	16,033
Other non-current financial assets	-	-	21,696	21,696
<b>Total</b>	<b>4,015,816</b>	<b>2,352</b>	<b>21,696</b>	<b>4,039,864</b>

(in millions of Korean won)

Financial liabilities	December 31, 2012		
	Hedging derivatives	Liabilities at amortized cost	Total
Trade payables	-	1,193,446	1,193,446
Other payables	-	940,086	940,086
Borrowings (current)	-	1,012,874	1,012,874
Other financial liabilities	154	-	154
Other current liabilities (dividends payable)	-	44	44
Other non-current payables	-	14,463	14,463
Borrowings (non-current)	-	909,675	909,675
<b>Total</b>	<b>154</b>	<b>4,070,588</b>	<b>4,070,742</b>

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(2) Net gains (losses) on financial instruments by category are as follows:

<i>(in millions of Korean won)</i>	<u>2013</u>	<u>2012</u>
<b>Assets at fair value through profit or loss</b>		
Gain(loss) on valuation/ disposal	(1,841)	7,470
<b>Hedging derivatives</b>		
Gain on valuation recognized in other comprehensive expenses	154	527
Interest expense	(179)	(740)
<b>Assets classified as available-for-sale</b>		
Dividend income	190	157
<b>Loans and receivables</b>		
Interest income	32,709	26,561
Gain(loss) on foreign currency translation	(13,079)	(30,797)
Gain(loss) on foreign exchange	(55,068)	(124,632)
<b>Liabilities at amortized cost</b>		
Interest expense	(51,044)	(54,544)
Gain(loss) foreign currency translation	13,564	38,446
Gain(loss) on foreign exchange	29,854	112,575

**6. Cash and cash equivalents**

Details of cash and cash equivalents are as follows:

<i>(in millions of Korean won)</i>	<b>December 31, 2013</b>	<b>December 31, 2012</b>
Bank deposits and cash on hand	59,344	32,572
Financial deposits, others	1,017,124	416,395
<b>Total</b>	<u>1,076,468</u>	<u>448,967</u>

As of December 31, 2013, non-current receivables amounting to ₩24 million are restricted from withdrawal in connection with maintaining checking accounts (2012: ₩38 million).

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**7. Trade and other receivables**

Trade and other receivables, net of allowance for doubtful accounts, are as follows:

<i>(in millions of Korean won)</i>	<b>December 31, 2013</b>			<b>December 31, 2012</b>		
	<b>Original amount</b>	<b>Less : allowance for doubtful accounts</b>	<b>Carrying amount</b>	<b>Original amount</b>	<b>Less : allowance for doubtful accounts</b>	<b>Carrying amount</b>
Trade receivables <sup>1</sup>	2,783,958	(7,185)	2,776,773	2,709,732	(5,769)	2,703,963
Other current receivables	699,520	-	699,520	846,853	-	846,853
Other non-current receivables	19,784	-	19,784	16,033	-	16,033
<b>Total</b>	<b>3,503,262</b>	<b>(7,185)</b>	<b>3,496,077</b>	<b>3,572,618</b>	<b>(5,769)</b>	<b>3,566,849</b>

<sup>1</sup> As of December 31, 2012, trade receivables transferred to financial institutions but not fully derecognized are as follows: (Note 16)

<i>(in millions of Korean won)</i>	<b>Loans and receivables (trade receivables collateralized borrowings)</b>	
	<b>December 31, 2013</b>	<b>December 31, 2012</b>
Carrying amount of transferred assets	929,635	992,617
Carrying amount of related liabilities	(929,635)	(992,617)

Details of other receivables are as follows:

<i>(in millions of Korean won)</i>	<b>December 31, 2013</b>	<b>December 31, 2012</b>
<b>Current</b>		
Non-trade receivables	144,272	184,591
Financial deposits	527,600	632,000
Accrued income	4,578	7,192
Deposits	23,070	23,070
	<u>699,520</u>	<u>846,853</u>
<b>Non-current</b>		
Financial deposits	24	38
Loans	2	25
Deposits	19,758	15,970
	<u>19,784</u>	<u>16,033</u>
<b>Total</b>	<u>719,304</u>	<u>862,886</u>

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The aging analysis of these trade and other receivables is as follows:

<i>(in millions of Korean won)</i>	December 31, 2013		December 31, 2012	
	Trade receivables	Other receivables	Trade receivables	Other receivables
<b>Receivables not past due</b>	2,705,067	716,308	2,654,521	860,610
<b>Past due but not impaired</b>	73,320	2,996	49,883	2,276
Up to 3 months	69,524	2,995	44,315	2,082
3 to 6 months	3,116	1	3,928	-
Over 6 months	680	-	1,640	194
<b>Impaired receivables</b>	5,571	-	5,328	-
<b>Total</b>	<b>2,783,958</b>	<b>719,304</b>	<b>2,709,732</b>	<b>862,886</b>

The movements in bad debt allowance for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	2013				2012			
	Trade receivables		Other receivables		Trade receivables		Other receivables	
	Current	Non-current	Current	Non-current	Current	Non-current	Current	Non-current
Beginning balance	5,769	-	-	-	4,641	-	-	-
Additions	2,283	-	-	-	1,874	-	-	-
Write-off	(867)	-	-	-	(746)	-	-	-
Ending balance	<u>7,185</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>5,769</u>	<u>-</u>	<u>-</u>	<u>-</u>

The carrying amounts of trade and other receivables approximate their fair values.

**8. Other financial assets and liabilities**

Details of other financial assets and liabilities are as follows:

<i>(in millions of Korean won)</i>	December 31, 2013	December 31, 2012
<b>Other financial assets</b>		
Derivatives (Note 10)	-	2,352
Available-for-sale (Note 9)	5,846	21,696
Less: current portions	-	(2,352)
<b>Total</b>	<b>5,846</b>	<b>21,696</b>
<b>Other financial liabilities</b>		
Derivatives (Note 10)	-	154
Less: current portions	-	(154)
<b>Total</b>	<b>-</b>	<b>-</b>



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**9. Financial assets classified as available-for-sale**

The movement in financial assets classified as available-for-sale for the years ended December 31, 2013 and 2012, is as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Beginning balance	21,696	5,846
Additions	-	15,850
Transfer <sup>1</sup>	(15,850)	-
Ending balance	5,846	21,696

<sup>1</sup> In 2013, the investments in LG Fuel Cell Systems Inc. was reclassified from available-for-sale financial assets to investment in associates as the Company can exercise significant influence as the executive of the Company is a member of the board of directors of LG Fuel Cell Systems Inc. (Note 12).

Financial assets classified as available-for-sale consist of unlisted equity securities. The unlisted equity securities are measured at cost as the range of reasonable fair value estimates is significant and the probabilities of the various estimates cannot be reasonably assessed.

No impairment losses were recognized for financial assets classified as available-for-sale during the years ended December 31, 2013 and 2012.

**10. Derivative financial instruments**

Details of derivative financial assets and liabilities are as follows:

<i>(in millions of Korean won)</i>	<b>December 31, 2013</b>		<b>December 31, 2012</b>	
	<b>Assets</b>	<b>Liabilities</b>	<b>Assets</b>	<b>Liabilities</b>
<b>Current</b>				
Cash flow hedges	-	-	-	154
Held-for-trading	-	-	2,352	-
	-	-	2,352	154

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Details of derivative financial contracts are as follows:

December 31, 2012					
Classification	Contractor	Contract date	Contract amount (in thousands)	Contract period	Contract terms
Forward exchange	BOA and 13 other banks	2012.10.10, various	US\$ 10,000, various	2013.01.03 ~ 2013.02.22, various	₩1119.32 / US\$, various
Interest rate swap	HSBC	2006.10.11	₩ 3,000,000	2006.10.11 ~ 2013.09.05	Received: 3 month CD, Paid: 4.61%
	HSBC	2007.06.15	US\$ 4,500	2007.06.15 ~ 2013.09.05	Received: 3 month Libor Paid: 5.59%

Trading derivative financial instrument is classified as a current asset or liability. Hedging derivative financial instrument is classified as a non-current asset or liability if the remaining maturity of the hedged item is more than 12 months and, as a current asset or liability, if the remaining maturity of the hedged item is less than 12 months.

There was no ineffective portion of cash flow hedges.

**11. Inventories**

Details of inventories are as follows:

<i>(in millions of Korean won)</i>	December 31, 2013			December 31, 2012		
	Original amount	Valuation allowance	Carrying amount	Original amount	Valuation allowance	Carrying amount
Merchandise	46,656	(675)	45,981	73,820	(700)	73,120
Finished products	974,595	(38,034)	936,561	963,884	(15,916)	947,968
Semi-finished products	313,093	-	313,093	280,019	-	280,019
Work-in-process	1,152	-	1,152	363	-	363
Raw materials	533,560	(1,325)	532,235	594,500	(959)	593,541
Supplies	66,076	-	66,076	57,281	-	57,281
Materials-in-transit	102,458	-	102,458	217,309	-	217,309
<b>Total</b>	<b>2,037,590</b>	<b>(40,034)</b>	<b>1,997,556</b>	<b>2,187,176</b>	<b>(17,575)</b>	<b>2,169,601</b>

The cost of inventories recognized as expense and included in 'Cost of Sales' amounted to ₩ 14,532,084million (2012: ₩ 14,685,493 million).

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**12. Investments in subsidiaries, associates and joint ventures**

Changes in the carrying amount of investments in subsidiaries, associates and joint venture for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Beginning balance	1,114,160	983,795
Additions	71,419	130,365
Merger <sup>1</sup>	(55,696)	-
Ending balance	1,129,883	1,114,160

<sup>1</sup> Impairment loss is recognized in relation to LG Michigan Inc., which is a subsidiary of the Company. The LG Chem Michigan Inc. in the United States, managed as a separate cash-generating unit (hereafter 'CGU') in battery business segments, has been tested for impairment due to delayed factory operations resulting from unexpected late orders from customers. The Company recognized impairment loss of ₩55,696 million as other non-operating expenses in relation to the corresponding CGU for the year ended December 31, 2013. The recoverable amount of the CGU is calculated on a basis of the value in use and key assumptions used for calculation of value in use are as follows:

<b>Key assumptions</b>	<b>2013</b>
Pre-tax discount rate	13.8%
Growth rate for subsequent years after five years	0%

Details of investments in subsidiaries and associates as of December 31, 2013 and 2012, are as follows:

<b>Subsidiaries</b>	<b>Location</b>	<b>Ownership (%)</b>		<b>Carrying amount</b>	
		<b>2013</b>	<b>2012</b>	<b>2013</b>	<b>2012</b>
Tianjin LG Dagu Chemical Co.,Ltd.	China	75	75	24,265	24,265
Ningbo LG Yongxing Chemical Co.,Ltd. <sup>1</sup>	China	75	75	135,908	135,908
Ningbo Zhenhai LG Yongxing Trade Co., Ltd. <sup>1</sup>	China	-	-	-	-
LG Chemical Hong Kong Ltd.	Hong Kong	100	100	11,159	11,159
LG Chem America, Inc.	USA	100	100	3,620	3,620
LG Chemical India Pvt. Ltd. <sup>2</sup>	India	100	100	54,929	54,929
LG Polymer India Pvt. Ltd. <sup>2</sup>	India	-	-	-	-
LG Chemical (Guangzhou) Engineering Plastics Co.,Ltd.	China	100	100	21,911	21,911
LG Chem (Nanjing) Information & Electronics Materials Co.,Ltd. <sup>3</sup>	China	81	83	252,738	223,662
LG Chem (Taiwan), Ltd.	Taiwan	100	100	18	18
LG Chem Display Materials (Beijing) Co.,Ltd.	China	90	90	13,444	13,444

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Tianjin LG Bohai Chemical Co.,Ltd. <sup>4</sup>	China	65	65	105,847	105,847
Tianjin LG BOTIAN Chemical Co.,Ltd. <sup>4</sup>	China	41	41	9,550	9,550
LG Chem (China) Investment Co.,Ltd.	China	100	100	67,777	67,777
LG Chem (Tianjin) Engineering Plastics Co., Ltd.	China	90	90	14,733	14,733
LG Chem Europe GmbH	Germany	100	100	3,085	3,085
LG Chem Poland Sp. z o.o.	Poland	100	100	15,402	15,402
LG Chem Michigan Inc.	USA	100	100	7,726	63,422
LG Chem Power Inc.	USA	100	100	19,553	19,553
LGC Petrochemical India Private Limited. <sup>5</sup>	India	100	-	299	-
Haengboknuri <sup>6</sup>	Korea	100	-	600	-
LG CHEM TK KIMYA SANAYI VE TICARET LIMITED SIRKETI <sup>7</sup>	Turkey	100	-	174	-
<b>Total</b>				<b>762,738</b>	<b>788,285</b>

Associates and joint ventures	Location	Ownership (%)		Carrying amount	
		2013	2012	2013	2012
LG Vina chemical Co.,Ltd.	Vietnam	40	40	1,313	1,313
HL Greenpower Co.,Ltd.	Korea	49	49	14,210	14,210
LG Holdings (HK) Ltd.	Hong Kong	26	26	77,535	77,535
TECWIN Co.,Ltd.	Korea	20	20	2,861	2,861
SEETEC Co.,Ltd.	Korea	50	50	58,416	58,416
LG Chem Brasil INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA. <sup>8</sup>	Brazil	100	100	579	258
CNOOC & LG Petrochemicals Co.,Ltd.	China	50	50	40,230	40,230
KLPE Limited Liability Partnership <sup>9</sup>	Kazakhstan	50	50	149,732	131,052
LG Fuel Cell Systems Inc. <sup>10</sup>	USA	18	-	22,269	-
<b>Total</b>				<b>367,145</b>	<b>325,875</b>

<sup>1</sup> As of December 31, 2012, Ningbo LG Yongxing Chemical Co.,Ltd. owns 100% of Ningbo Zhenhai LG Yongxing Trade Co.,Ltd. shares.

<sup>2</sup> LG Chemical India Pvt. Ltd. owns 100% of LG Polymer India Pvt. Ltd. shares.

<sup>3</sup> In 2013, the Company acquired additional shares of LG Chem (Nanjing) Information & Electronics Materials Co.,Ltd. for ₩29,076 million.

<sup>4</sup> As of December 31, 2013, Tianjin LG Bohai Chemical Co., Ltd. owns 20.30% of Tianjin LG Botian Chemical Co.,Ltd. shares.

<sup>5</sup> LGC Petrochemical India Private Limited was established during 2013 and the Company newly acquired 100% of its shares for ₩299 million.

<sup>6</sup> Haengboknuri was established during the year ended December 31, 2013, and the Company newly acquired 100% of its shares for ₩600 million.

<sup>7</sup> LG CHEM TK KIMYA SANAYI VE TICARET LIMITED SIRKETI was established during the year ended December 31, 2013, and the Company newly acquired 100% of its shares for ₩174 million.

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<sup>8</sup> Classified as investment in associates and joint ventures due to its small scale. In 2013, the Company acquired additional shares of LG Chem BRASIL INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA. for ₩321 million.

<sup>9</sup> In 2013, the Company acquired additional shares of KLPE Limited Liability Partnership amounting to ₩18,680 million.

<sup>10</sup> In 2013, investment into LG Fuel Cell Systems Inc. was reclassified from available-for-sale financial assets to investment in associates as the Company can exercise significant influence as the executive of the Company is a member of the board of directors of LG Fuel Cell Systems Inc. Also, during the year, the Company's percentage of ownership increased to 18%, as LG Fuel Cell Systems Inc. issued new shares with disproportionate rights, and the Company additionally acquired its shares for ₩6,419 million (Note 9).

**13. Property, plant and equipment**

Changes in the carrying amount of property, plant and equipment for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	2013										
	Land	Buildings	Structures	Machinery	Vehicles	Tools	Equipment	Others	Construction-in-progress	Machinery-in-transit	Total
<b>Beginning balance</b>	707,492	1,399,511	412,644	2,916,747	9,499	221,315	72,216	88,294	1,052,658	220,245	7,100,621
Cost	707,492	1,660,018	705,265	7,295,250	33,988	513,579	190,176	197,705	1,087,454	220,245	12,611,172
Accumulated depreciation	-	(260,502)	(292,614)	(4,377,919)	(24,489)	(288,286)	(117,943)	(109,411)	-	-	(5,471,164)
Accumulated impairment	-	(5)	(7)	(584)	-	(3,978)	(17)	-	(34,796)	-	(39,387)
Acquisitions/ Transfer	98,321	152,251	124,232	1,118,581	3,010	89,580	20,937	35,185	896,285	141,012	2,679,394
Disposals/ Transfer	-	(322)	(2,014)	(9,651)	(816)	(6,375)	(78)	-	(1,413,748)	(206,712)	(1,639,716)
Depreciation	-	(36,459)	(31,265)	(617,340)	(2,676)	(63,120)	(19,569)	(50,396)	-	-	(820,825)
Impairment	(68)	(1,891)	(1,612)	(32,436)	(95)	(2,817)	(725)	-	(6,719)	-	(46,363)
<b>Ending balance</b>	<b>805,745</b>	<b>1,513,090</b>	<b>501,985</b>	<b>3,375,901</b>	<b>8,922</b>	<b>238,583</b>	<b>72,781</b>	<b>73,083</b>	<b>528,476</b>	<b>154,545</b>	<b>7,273,111</b>
Cost	806,284	1,811,743	824,525	8,342,904	32,174	573,424	206,319	210,205	569,193	154,545	13,531,316
Accumulated depreciation	-	(296,504)	(320,906)	(4,933,956)	(23,162)	(328,041)	(132,788)	(137,122)	-	-	(6,172,479)
Accumulated impairment	(539)	(2,149)	(1,634)	(33,047)	(90)	(6,800)	(750)	-	(40,717)	-	(85,726)

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<i>(in millions of Korean won)</i>	2012										
	Land	Buildings	Structures	Machinery	Vehicles	Tools	Equipment	Others	Construction-in-progress	Machinery-in-transit	Total
<b>Beginning balance</b>	599,951	1,218,985	287,131	2,103,100	11,817	178,027	51,981	115,291	1,238,810	305,756	6,110,849
Cost	599,951	1,446,876	554,608	6,026,114	35,946	427,530	164,857	186,155	1,273,606	305,756	11,021,399
Accumulated depreciation	-	(227,886)	(267,470)	(3,922,430)	(24,129)	(245,525)	(112,859)	(70,864)	-	-	(4,871,163)
Accumulated impairment	-	(5)	(7)	(584)	-	(3,978)	(17)	-	(34,796)	-	(39,387)
Acquisitions/ Transfer	107,541	213,887	151,256	1,307,605	1,954	98,908	37,536	20,619	1,360,675	281,623	3,581,604
Disposals/ Transfer	-	(382)	(130)	(4,371)	(1,342)	(745)	(338)	(250)	(1,546,827)	(367,134)	(1,921,519)
Depreciation	-	(32,979)	(25,613)	(489,587)	(2,930)	(54,875)	(16,963)	(47,366)	-	-	(670,313)
<b>Ending balance</b>	<b>707,492</b>	<b>1,399,511</b>	<b>412,644</b>	<b>2,916,747</b>	<b>9,499</b>	<b>221,315</b>	<b>72,216</b>	<b>88,294</b>	<b>1,052,658</b>	<b>220,245</b>	<b>7,100,621</b>
Cost	707,492	1,660,018	705,265	7,295,250	33,988	513,579	190,176	197,705	1,087,454	220,245	12,611,172
Accumulated depreciation	-	(260,502)	(292,614)	(4,377,919)	(24,489)	(288,286)	(117,943)	(109,411)	-	-	(5,471,164)
Accumulated impairment	-	(5)	(7)	(584)	-	(3,978)	(17)	-	(34,796)	-	(39,387)

During the year ended December 31, 2013, the Company capitalized ₩26,698 million of borrowing costs (2012: ₩28,236 million) to property, plant and equipment.

The details of property, plant and equipment that have been pledged as collaterals for certain bank loans as of December 31, 2013, are as follows:

<i>(in millions of Korean won)</i>	2013				
	Carrying amount	Secured amount	Related line item	Related amount	Secured party
Land	3,294	3,844	Borrowings	1,620	Kookmin Bank
Buildings	9,539	4,943	(Note 16)		

<i>(in millions of Korean won)</i>	2012				
	Carrying amount	Secured amount	Related line item	Related amount	Secured party
Land	3,294	3,844	Borrowings	1,669	Kookmin Bank
Buildings	9,813	4,943	(Note 16)		

Depreciation of property, plant and equipment was classified as follows:

<i>(in millions of Korean won)</i>	2013	2012
Cost of sales	765,968	619,278
Selling, general and administrative expenses	54,681	49,316
Others <sup>1</sup>	176	1,719
<b>Total</b>	<b>820,825</b>	<b>670,313</b>

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<sup>1</sup> Amounts capitalized as development costs are included.

The Company performs impairment test for property, plant and equipment annually. The separator division, managed as a separate cash-generating unit (hereafter 'CGU') in Information & Electronic Materials business segments, has been tested for impairment resulting from unexpected decrease in sales. The Company recognized impairment loss of ₩49,454 million as other non-operating expenses in relation to the corresponding CGU for this period. The amount of the impairment loss recognized for property, plant and equipment, and intangible assets amounted to ₩46,363 million and ₩3,091 million, respectively, and mainly relate to machinery and equipment used in manufacturing. The recoverable amount of the CGU is calculated on a basis of the value in use and key assumptions used for calculation of value in use are as follows:

Key assumptions	2013
Pre-tax discount rate	14.4%
Growth rate for subsequent years after five years	0%

**14. Intangible assets**

Changes in the carrying amount of intangible assets for the years ended December 31, 2013 and 2012, are as follows:

(in millions of Korean won)

	2013					
	Develop- ment costs	Industrial property rights	Goodwill	Memberships	Others	Total
<b>Beginning balance</b>	41,063	78,610	33,415	51,091	19,181	223,360
Acquisitions/ Transfer	21,315	30,638	-	367	10,661	62,981
Disposals/ Transfer	(8,869)	(21)	-	(296)	(1)	(9,187)
Amortization	(10,568)	(5,785)	-	-	(5,149)	(21,502)
Impairment	(112)	(2,672)	-	(134)	(173)	(3,091)
<b>Ending balance</b>	<u>42,829</u>	<u>100,770</u>	<u>33,415</u>	<u>51,028</u>	<u>24,519</u>	<u>252,561</u>

(in millions of Korean won)

	2012					
	Develop- ment costs	Industrial property rights	Goodwill	Memberships	Others	Total
<b>Beginning balance</b>	32,826	61,856	33,415	50,488	15,090	193,675
Acquisitions/ Transfer	23,869	21,040	-	2,571	8,347	55,827
Disposals/ Transfer	(6,825)	(854)	-	(1,968)	(6)	(9,653)
Amortization	(8,807)	(3,432)	-	-	(4,250)	(16,489)
<b>Ending balance</b>	<u>41,063</u>	<u>78,610</u>	<u>33,415</u>	<u>51,091</u>	<u>19,181</u>	<u>223,360</u>

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Amortization of intangible assets was classified as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Cost of sales	7,510	5,949
Selling, general and administrative expenses	13,992	10,540
<b>Total</b>	<u>21,502</u>	<u>16,489</u>

Impairment tests for goodwill

Goodwill is allocated to the Company's cash-generating units (CGUs) identified according to operating segment. The carrying amount of allocated goodwill by CGUs are as follows:

*(in millions of Korean won)*

<b>CGUs</b>	<u><b>Carrying amount</b></u>
<b>Goodwill arising on the acquisition of LG Petrochemical Co., Ltd.</b>	
NCC	2,468
ABS	927
PO	900
PVC	755
Acrylic	682
Plasticizer	587
BPA	518
Other	1,356
	<u>8,193</u>
<b>Goodwill arising on the acquisition of SAP business</b>	
Acrylic business	25,222
	<u>25,222</u>
<b>Total</b>	<u>33,415</u>

The recoverable amounts of CGUs have been determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on financial budgets approved by management covering a four-year period. Cash flows beyond the four-year period are estimated using 0% of expected growth rate.

Management determined pre-tax cash flow based on past performance and its expectations of market development. The discount rate used is pre-tax and reflect specific risks relating to the relevant operating segments. Discount rate used for value-in-use calculations for the current year is 11.7%. The recoverable amounts based on value-in-use calculations exceeded carrying amounts and accordingly, no impairment was recognized for the year ended December 31, 2013.



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**15. Other current and non-current assets**

Details of other current and non-current assets are as follows:

<i>(in millions of Korean won)</i>	<b>December 31, 2013</b>	<b>December 31, 2012</b>
<b>Current</b>		
Advance payments	3,383	1,000
Prepaid expenses	18,804	17,347
Prepaid value added tax	53,838	48,378
Others	63,579	50,773
<b>Total</b>	<u>139,604</u>	<u>117,498</u>
<b>Non-current</b>		
Long-term prepaid expenses	16,070	19,683
<b>Total</b>	<u>16,070</u>	<u>19,683</u>

**16. Borrowings**

The carrying amount of borrowings are as follows:

<i>(in millions of Korean won)</i>	<b>December 31, 2013</b>	<b>December 31, 2012</b>
<b>Current</b>		
Short-term borrowings	929,635	992,617
Current maturities of bank loans	122	18,097
Current maturities of debentures	199,724	-
Current maturities of finance lease liabilities	3,074	2,160
	<u>1,132,555</u>	<u>1,012,874</u>
<b>Non-current</b>		
Bank loans	307,028	308,567
Debentures	398,980	598,034
Finance lease liabilities	-	3,074
	<u>706,008</u>	<u>909,675</u>
<b>Total</b>	<u>1,838,563</u>	<u>1,922,549</u>

Details of borrowings are as follows:

**Current borrowings**

<i>(in millions of Korean won)</i>	<b>Bank</b>	<b>Latest maturity date</b>	<b>Annual interest rate (%) at December 31, 2013</b>	<b>Carrying Amount</b>	
				<b>December 31, 2013</b>	<b>December 31, 2012</b>
Notes discounted <sup>1</sup>	Woori Bank, others	2014.06.27	3Libor+1.00,	929,635	992,617

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<sup>1</sup> As of December 31, 2013, trade receivables transferred to financial institutions but not derecognized are accounted for as collateralized borrowing transaction (Note 7).

**Non-current borrowings**

(in millions of Korean won)

		<b>December 31, 2013</b>				
	<b>Bank</b>	<b>Annual interest rate (%)</b>	<b>Latest maturity date</b>	<b>Total amount</b>	<b>Current maturities</b>	<b>Long-term debts</b>
<b>Won currency borrowings</b>	Kookmin Bank	2.70	2018.07.14	786	75	711
	Kookmin Bank	2.70	2020.03.21	834	47	787
	Korea Development Bank	3.53	2015.07.19	200,000	-	200,000
<b>Foreign currency borrowings</b>	Nova Scotia Bank	3Libor + 1.54	2015.07.20	52,765	-	52,765
	BTMU	3Libor + 1.54	2015.07.20	52,765	-	52,765
<b>Total</b>				<b>307,150</b>	<b>122</b>	<b>307,028</b>

(in millions of Korean won)

		<b>December 31, 2012</b>				
	<b>Bank</b>	<b>Annual interest rate (%)</b>	<b>Latest maturity date</b>	<b>Total amount</b>	<b>Current maturities</b>	<b>Long-term debts</b>
<b>Won currency borrowings</b>	Kookmin Bank	3.00	2020.03.21	850	90	760
	Kookmin Bank	3.00	2018.07.14	819	122	697
	Korea Development Bank	3.53	2015.07.19	200,000	-	200,000
	BTMU	3CD+0.60	2013.09.05	7,500	7,500	-
<b>Foreign currency borrowings</b>	Sumitomo Mitsui Banking Corporation	3Libor + 0.60	2013.09.05	4,820	4,820	-
	Mizuho	3Libor + 0.60	2013.09.05	3,213	3,213	-
	HSBC	3Libor + 0.60	2013.09.05	2,410	2,410	-
	Nova Scotia Bank	3Libor + 1.54	2015.07.20	53,555	-	53,555
	BTMU	3Libor + 1.54	2015.07.20	53,555	-	53,555
	Less: discount on borrowings			(58)	(58)	-
<b>Total</b>				<b>326,664</b>	<b>18,097</b>	<b>308,567</b>

Certain property, plant and equipment have been pledged as collaterals for the above non-current borrowings (Note 13).

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**Debentures**

(in millions of Korean won)

		December 31, 2013				
	Financial institution	Annual interest rate (%)	Latest maturity date	Total amount	Current maturities	Long-term debts
Won currency debentures	Woori Security	3.83	2014.12.05	200,000	200,000	-
	Woori Security	4.03	2016.12.05	100,000	-	100,000
	Woori Security	3.96	2015.03.29	100,000	-	100,000
	Woori Security	4.11	2017.03.29	200,000	-	200,000
	Less: discount on debentures			(1,296)	(276)	(1,020)
<b>Total</b>				<b>598,704</b>	<b>199,724</b>	<b>398,980</b>

(in millions of Korean won)

		December 31, 2012				
	Financial institution	Annual interest rate (%)	Latest maturity date	Total amount	Current maturities	Long-term debts
Won currency debentures	Woori Security,	3.83	2014.12.05	200,000	-	200,000
	Woori Security	4.03	2016.12.05	100,000	-	100,000
	Woori Security	3.96	2015.03.29	100,000	-	100,000
	Woori Security	4.11	2017.03.29	200,000	-	200,000
	Less: discount on debentures			(1,966)	-	(1,966)
<b>Total</b>				<b>598,034</b>	<b>-</b>	<b>598,034</b>

**Finance lease liabilities**

December 31, 2013					
Bank	Annual interest rate (%)	Latest maturity date	Total amount	Current maturities	Long-term debts
Hyundai Oil Bank	9.00	2014.10.29	3,074	3,074	-

  

December 31, 2012					
Bank	Annual interest rate (%)	Latest maturity date	Total amount	Current maturities	Long-term debts
Hyundai Oil Bank	9.00	2014.10.29	5,234	2,160	3,074

The finance lease liabilities are liabilities associated with sales and leaseback arrangements of property, plant and equipment of the MTBE factory.

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Lease liabilities are effectively secured as the rights to the leased assets revert to the lessor in the event of default.

Carrying amounts and fair values of non-current borrowings are as follows:

<i>(in millions of Korean won)</i>	<b>December 31, 2013</b>		<b>December 31, 2012</b>	
	<b>Carrying amount</b>	<b>Fair value<sup>1</sup></b>	<b>Carrying amount</b>	<b>Fair value<sup>1</sup></b>
Bank loans	307,028	303,249	308,567	305,203
Debentures	398,980	392,854	598,034	616,213
Finance lease liabilities	-	-	3,074	3,031
<b>Total</b>	<b>706,008</b>	<b>696,103</b>	<b>909,675</b>	<b>924,447</b>

<sup>1</sup> Fair values are based on cash flows discounted using Korean won currency note yield in the same credit grade with the Company (AA+).

The present value of finance lease liabilities is as follows:

<i>(in millions of Korean won)</i>	<b>December 31, 2013</b>			<b>December 31, 2012</b>		
	<b>Minimum lease payments</b>	<b>Future finance costs</b>	<b>Present value</b>	<b>Minimum lease payments</b>	<b>Future finance costs</b>	<b>Present value</b>
Within 1 year	3,195	121	3,074	2,481	321	2,160
1 to 5 years	-	-	-	3,195	121	3,074

**17. Provisions**

Changes in the carrying amount of provisions for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>		
	<b>Sales returns <sup>1</sup></b>	<b>Warranty <sup>2</sup></b>	<b>Total</b>
<b>Beginning balance</b>	1,630	11,450	13,080
Additions	24,219	6,940	31,159
Used amount	(23,956)	(642)	(24,598)
<b>Ending balance</b>	1,893	17,748	19,641
Less : current portion	(1,893)	(346)	(2,239)
<b>Total</b>	<b>-</b>	<b>17,402</b>	<b>17,402</b>

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<i>(in millions of Korean won)</i>	<b>2012</b>		
	<b>Sales returns <sup>1</sup></b>	<b>Warranty <sup>2</sup></b>	<b>Total</b>
<b>Beginning balance</b>	2,851	6,686	9,537
Additions	6,604	9,318	15,922
Used amount	(7,825)	(507)	(8,332)
Reversals	-	(4,047)	(4,047)
<b>Ending balance</b>	1,630	11,450	13,080
Less : current portion	(1,630)	(210)	(1,840)
<b>Total</b>	<u>-</u>	<u>11,240</u>	<u>11,240</u>

<sup>1</sup> Sales return provisions have been accrued for the estimated sales return determined based on historical experience.

<sup>2</sup> Warranty provisions have been accrued for the estimated warranty service costs to be incurred based on the terms of warranty and historical experience.

**18. Net defined benefit liabilities**

The amounts recognized in the statements of financial position are determined as follows:

<i>(in millions of Korean won)</i>	<b>December 31, 2013</b>	<b>December 31, 2012</b>
Present value of obligations <sup>1</sup>	436,233	365,879
Fair value of plan assets	(386,211)	(261,666)
<b>Liability in the statement of financial position</b>	<u>50,022</u>	<u>104,213</u>

<sup>1</sup> The present value of retirement benefit obligations is net of existing contributions to the National Pension Plan of ₩883 million as of December 31, 2013 (2012: ₩945 million).

The amounts recognized in the statements of income for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Current service cost <sup>1</sup>	74,744	51,736
Interest cost	13,307	12,093
Expected return on plan assets	(9,441)	(7,475)
<b>Total, included in employee benefit expenses</b>	<u>78,610</u>	<u>56,354</u>

<sup>1</sup> The above amounts excluded ₩535 million (2012: ₩1,224 million) of expenses capitalized to construction in progress and development costs.

Severance costs recognized for defined contribution plan for the year ended December 31, 2013, amounted to ₩1,263 million (2012: ₩951 million).

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The amounts recognized in the statement of income for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Cost of sales	55,418	38,603
Selling, general and administrative expenses	24,455	18,702
<b>Total</b>	<u>79,873</u>	<u>57,305</u>

Changes in the carrying amount of defined benefit obligations for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
<b>Beginning balance</b>	365,879	252,050
Transfer in(out)	(679)	2,019
Current service cost	75,279	52,960
Interest expense	13,307	12,093
Remeasurements:		
Actuarial gains and losses arising from changes in demographic assumptions	(3,562)	13,616
Actuarial gains and losses arising from changes in financial assumptions	(16,595)	2,071
Actuarial gains and losses arising from experience adjustments	22,588	46,370
Others	21	247
Payments from plans	(20,005)	(15,547)
<b>Ending balance</b>	<u>436,233</u>	<u>365,879</u>

Changes in the fair value of plan assets for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
<b>Beginning balance</b>	261,666	192,619
Transfer in	26	-
Interest income	9,441	7,475
Remeasurements:		
Return on plan assets (excluding amounts included in interest income)	(1,138)	67
Contributions:		
Employers	130,000	70,000
Payments from plans	(13,176)	(8,495)
Administrative expenses of plan assets	(608)	-
<b>Ending balance</b>	<u>386,211</u>	<u>261,666</u>

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The actual return on plan assets for the year ended December 31, 2013, was ₩8,303 million (2012: ₩7,542 million).

The principal actuarial assumptions used are as follows:

	December 31, 2013	December 31, 2012
Discount rate	4.1%	3.7%
Future salary increase	5.1%	5.1%

The sensitivity analysis for changes in key actuarial assumptions is as follows:

<i>(in millions of Korean won)</i>	Increase by 1%	Decrease by 1%
Discount rate:		
Increase(decrease) in defined benefit obligations	(40,704)	48,045
Salary growth rate:		
Increase(decrease) in defined benefit obligations	47,118	(40,743)

A decrease in corporate bond yields will increase plan liabilities.

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. The sensitivity of the defined benefit obligation to changes in principal actuarial assumptions is calculated using the projected unit credit method, the same method applied when calculating the defined benefit obligations recognized on the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous period.

Plan assets consist of:

*(in millions of Korean won)*

	2013				2012			
	Quoted price	Unquoted price	Total	Compo-sit ion	Quoted price	Unquoted price	Total	Compo-sit ion
Insurance contracts								
with guaranteed yield	386,211	-	386,211	100 %	261,666	-	261,666	100 %
	386,211	-	386,211	100 %	261,666	-	261,666	100 %

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**19. Other current liabilities**

Other current liabilities consist of as follows:

<i>(in millions of Korean won)</i>	<b>December 31, 2013</b>	<b>December 31, 2012</b>
Advances from customers	9,215	18,185
Dividends payable	46	44
Withholding	38,482	41,906
Unearned revenues	15,664	8,415
Others	60,900	56,818
<b>Total</b>	<b>124,307</b>	<b>125,368</b>

**20. Commitments and contingencies**

- (1) The Company and the newly established company, LG Hausys Ltd., are jointly liable for the obligations outstanding as of April 1, 2009, the spin-off date.
- (2) As of December 31, 2013 and 2012, the Company has been provided with guarantees from the Seoul Guarantee Insurance for the execution of supply contracts.
- (3) As of December 31, 2013, the Company has provided one blank promissory note to the Korea National Oil Corporation as collateral in relation to petroleum import surcharges.
- (4) As of December 31, 2013, the Company has bank overdraft agreements with several banks for up to ₩64,000 million and US\$50 million, and has entered into contracts with several financial institutions, for discounting notes from export for up to US\$ 1,459 million, and for letters of credit for up to ₩64,000 million and US\$207 million, and for the guaranteed payments in foreign currency for up to US\$ 85 million. The Company also has comprehensive line of credit agreements with several financial institutions for up to ₩220,000 million and US\$525 million.
- (5) As of December 31, 2013, the Company has B2B purchase arrangements with several financial institutions amount to ₩300,000 million.
- (6) As of December 31, 2013, the Company has been named as a plaintiff for six legal actions involving ₩1,161 million in claims and defendant for seven legal actions with ₩2,439 million in claims. The ultimate outcome of these cases cannot be determined at this time.
- (7) As of December 31, 2013, the consumers in U.S and Canada have filed a class actions against the Company in relation to price fixing of small secondary batteries. However, the ultimate outcome of these cases cannot be determined at the reporting date.
- (8) As of December 31, 2013, the Company has technology license agreements with STYRON EUROPE GmbH and other companies for the production of Polycarbonate products. Further, the Company has entered into manufacture and production technical contracts with Exxon Mobile and others.



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(9) The Company has entered into license agreement with LG Corp. to use trademarks on the products that the Company manufactures and sells, and on the services the Company provides in relation to its business.

(10) As of December 31, 2013, the Company has long-term purchase contracts for certain raw materials from a supplier, who has credit guarantee agreements amounting to US\$ 126 million and US\$ 60 million with financial institutions. Further, as of December 31, 2013, the Company has a contract of US\$ 10 million guarantees with financial institutions in regard to a delivery commitment for certain products and the Company has a contract of US\$ 90 million guarantees for advances received from customers with financial institutions

(11) As of December 31, 2013, the Company has guaranteed the repayment of various obligations of its subsidiaries and associates. The outstanding balance of such guarantees as of December 31, 2013, amounts to US\$ 215 million, EUR 3 million and PLN 52 million (total equivalent to ₩ 250,066 million) (2012: US\$ 235 million, EUR 3 million and PLN 52 million, total equivalent to ₩ 274,898 million). Details of guarantees provided as of December 31, 2013 and 2012, are as follows:

(in millions of Korean won)

Guarantee beneficiary	Period	Financial institution	December 31, 2013	
			Amount of guarantee	Outstanding loan amount
LG Chem (Nanjing) Information & Electronics Materials Co., Ltd.	2011.08.29 ~ 2015.06.17	HSBC	63,684	63,684
"	2011.10.24 ~ 2014.10.31	Bank of America	31,842	31,842
LG Chem Poland Sp. z o.o.	2009.08.26 ~ 2014.06.30	Nordea Bank	18,258	8,206
LG Chem Europe GmbH	2013.01.02 ~ 2014.01.02	Shinhan Bank	4,369	-
LG Chem Michigan, Inc.	2010.11.19 ~ 2013.11.18	Bank of America	-	-
"	2011.04.07 ~ 2014.05.31	Mizuho Bank	63,318	63,318
"	2011.04.07 ~ 2014.04.07	SMBC	21,106	21,106
"	2013.06.29 ~ 2016.11.16	JP Morgan	47,489	47,489
			250,066	235,645

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Guarantee beneficiary	Period	Financial institution	December 31, 2012	
			Amount of guarantee	Outstanding loan amount
LG Chem (Nanjing) Information & Electronics Materials Co., Ltd.	2011.08.29 ~ 2015.06.17	HSBC Bank of America	64,821	64,821
"	2011.10.24 ~ 2014.10.31	Nordea Bank	32,411	32,411
LG Chem Poland Sp. z o.o.	2009.08.26 ~ 2014.06.30	Shinhan Bank	18,107	9,325
LG Chem Europe GmbH	2013.01.03 ~ 2014.01.02	Bank of America	4,249	-
LG Chem Michigan, Inc.	2010.11.19 ~ 2013.11.18	Mizuho Bank	26,778	26,778
"	2011.04.07 ~ 2014.05.31	SMBC	64,266	64,266
"	2011.04.07 ~ 2014.04.07	JP Morgan	42,844	28,920
"	2013.06.29 ~ 2016.11.16		21,422	-
			<u>274,898</u>	<u>226,521</u>

(12) Capital expenditure contracted for as of the reporting date but not yet incurred is as follows:

(in millions of Korean won)	December 31, 2013	December 31, 2012
Property, plant and equipment	307,286	298,756

**21. Equity**

Changes in share capital and share premium are as follows:

(in millions of Korean won)	Ordinary shares		Preferred shares		Share premium
	Number of shares	Amount	Number of shares	Amount	
January 1, 2012	66,271,100	331,356	7,628,921	38,144	897,840
December 31, 2012	66,271,100	331,356	7,628,921	38,144	897,840
December 31, 2013	66,271,100	331,356	7,628,921	38,144	897,840

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Changes in treasury shares are as follows:

<i>(in millions of Korean won)</i>	Number of shares		Carrying amount	Gain on sale of treasury shares
	Ordinary shares	Preferred shares		
January 1, 2012	359,784	5,519	15,484	13,855
Purchase of treasury shares	6	-	-	-
December 31, 2012	359,790	5,519	15,484	13,855
Purchase of treasury shares	2	-	-	-
December 31, 2013	359,792	5,519	15,484	13,855

The Company intends to sell its treasury shares in the future.

## 22. Retained earnings

Details of retained earnings are as follows:

<i>(in millions of Korean won)</i>	December 31, 2013	December 31, 2012
Legal reserve <sup>1</sup>	184,750	179,029
Discretionary reserve <sup>2</sup>	8,200,700	7,107,800
Retained earnings before appropriation	1,171,671	1,393,142
<b>Total</b>	<b>9,557,121</b>	<b>8,679,971</b>

<sup>1</sup> The Commercial Code of the Republic of Korea requires the Company to appropriate an amount equal to a minimum of 10% of its cash dividends as a legal reserve until such reserve equals 50% of its paid-in capital. This reserve is not available for the payment of cash dividends, but may be transferred to common stock or used to reduce accumulated deficit, if any.

<sup>2</sup> Pursuant to the Special Tax Treatment Control Law, the Company is required to appropriate, as a reserve for business rationalization, a portion of retained earnings equal to tax reductions arising from investment and other tax credits. This reserve may be distributed as dividends after reversal.

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**23. Other components of equity**

Details of other components of equity are as follows:

<i>(in millions of Korean won)</i>	<b>December 31, 2013</b>	<b>December 31, 2012</b>
Treasury shares (Note 21)	(15,484)	(15,484)

**24. Selling, general and administrative expenses**

Selling, general and administrative expenses for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Wages and salaries	268,531	215,664
Pension costs (Note 18)	24,455	18,702
Welfare expense	55,572	50,183
Travel expense	29,567	23,834
Water & utilities	23,018	18,858
Packaging expense	6,516	4,709
Rental expense	79,414	79,365
Commission expense	236,806	223,766
Depreciation (Note 13)	54,681	49,316
Advertising expense	15,747	20,079
Freight expense	341,682	314,734
Training expense	11,557	11,244
Amortization (Note 14)	13,992	10,540
Sample expense	11,211	12,082
Others	211,935	179,880
<b>Total</b>	<u>1,384,684</u>	<u>1,232,956</u>

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**25. Expenses by nature**

Expenses that are recorded by function as cost of sales and selling, general and administrative expenses in the statements of income for the years ended December 31, 2013 and 2012, consist of:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Changes in inventories	4,683	49,963
Raw materials and consumables used	13,597,683	13,845,744
Purchase of merchandise	929,718	789,786
Employee benefit expense (Note 26)	1,002,260	837,265
Advertising expense	16,938	21,299
Transportation expense	370,560	341,297
Service fees	335,547	305,646
Depreciation, amortization	842,151	685,083
Operating lease payments	35,955	32,762
Other expenses	1,541,171	1,806,985
<b>Total</b>	<u>18,676,666</u>	<u>18,715,830</u>

**26. Employee benefit expense**

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Wages and salaries	849,415	715,843
Pension costs – Defined benefit plan (Note 18)	78,610	56,354
Pension costs – Defined contribution plan (Note 18)	1,263	951
Others	72,972	64,117
<b>Total</b>	<u>1,002,260</u>	<u>837,265</u>

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**27. Financial income and expense**

Details of finance income and expense for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
<b>Finance income</b>		
Interest income <sup>1</sup>	32,709	26,561
Dividend income	41,224	65,103
Foreign exchange gain	129,768	39,651
Gain on foreign exchange translation	2,385	7,722
Gain on settlement of trading derivatives	3,589	10,286
Gain on valuation of trading derivatives	-	2,352
<b>Total</b>	<u>209,675</u>	<u>151,675</u>
<b>Finance expense</b>		
Interest expense <sup>2</sup>	24,525	27,048
Foreign exchange loss	158,827	63,916
Loss on foreign exchange translations	990	2,059
Loss on settlement of trading derivatives	5,430	5,168
<b>Total</b>	<u>189,772</u>	<u>98,191</u>

<sup>1</sup> Details of interest income are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Bank deposits	32,700	26,552
Other receivables	9	9
<b>Total</b>	<u>32,709</u>	<u>26,561</u>

<sup>2</sup> Details of interest expense are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Interest on bank overdraft and borrowings	25,611	28,845
Interest on finance lease liabilities	320	502
Interest on debentures	24,541	23,876
Other interest expenses	751	2,061
Capitalized interest for qualifying assets	(26,698)	(28,236)
<b>Total</b>	<u>24,525</u>	<u>27,048</u>

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**28. Other non-operating income**

Details of other non-operating income for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Foreign exchange gains	300,840	285,765
Gain on foreign currency translation	13,382	31,352
Gain on disposal of property, plant and equipment	891	1,415
Gain on disposal of intangible assets	21	7
Others	17,420	22,621
<b>Total</b>	<u>332,554</u>	<u>341,160</u>

**29. Other non-operating expenses**

Details of other non-operating expenses for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Foreign exchange loss	296,995	273,557
Loss on foreign currency translation	14,292	29,366
Loss on disposal of property, plant and equipment	14,184	3,940
Loss on disposal of intangible assets	6,146	1,033
Impairment loss on property, plant and equipment (Note 13)	46,363	-
Impairment loss on of intangible assets (Note 14)	3,091	-
Impairment loss on investments in associates (Note 12)	55,696	-
Donations	20,953	24,182
Others	2,657	3,345
<b>Total</b>	<u>460,377</u>	<u>335,423</u>

**LG Chem, Ltd.**  
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**30. Income taxes**

Details of income tax expense are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Current tax on profit for the year	278,667	262,971
Adjustments in respect of prior years	(5,920)	(25,091)
Deferred tax-movement in temporary differences	40,478	99,119
Deferred tax–tax credit carryforwards	(17,136)	(6,197)
	<u>296,089</u>	<u>330,802</u>
Current tax charged directly to equity	868	15,062
Income tax expense	<u>296,957</u>	<u>345,864</u>

The income taxes charged directly to components of other comprehensive income for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
<b>Current tax</b>		
Remeasurements of net defined benefits liabilities	868	15,062
<b>Deferred tax</b>		
Cash flow hedges	(37)	(128)



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The movement in deferred tax assets (liabilities) for the years ended December 31, 2013 and 2012, is as follows:

(in millions of Korean won)

	<b>2013</b>			<b>Ending balance</b>
	<b>Beginning balance</b>	<b>Increase(Decrease)</b>		
		<b>Profit for the year</b>	<b>Other comprehensive income</b>	
Defined benefit liability	72,829	16,410	-	89,239
Plan assets	(62,627)	(29,695)	-	(92,322)
Reserve for research and human resources development	(181,500)	(53,240)	-	(234,740)
Allowance for doubtful accounts	632	47	-	679
Property, plant and equipment	18,804	12,432	-	31,236
Investments in subsidiaries, associates and joint ventures	(1,046)	-	-	(1,046)
Accrued interest income	(1,741)	633	-	(1,108)
Others	(1,697)	12,935	-	11,238
	<u>(156,346)</u>	<u>(40,478)</u>	<u>-</u>	<u>(196,824)</u>
Tax credit carryforwards	6,197	17,136	-	23,333
Deferred tax charged directly to equity	37	-	(37)	-
Deferred income tax assets(liabilities)	<u>(150,112)</u>	<u>(23,342)</u>	<u>(37)</u>	<u>(173,491)</u>

(in millions of Korean won)

	<b>2012</b>			<b>Ending balance</b>
	<b>Beginning balance</b>	<b>Increase(Decrease)</b>		
		<b>Profit for the year</b>	<b>Other comprehensive income</b>	
Defined benefit liability	46,139	26,690	-	72,829
Plan assets	(46,139)	(16,488)	-	(62,627)
Reserve for research and human resources development	(94,380)	(87,120)	-	(181,500)
Allowance for doubtful accounts	3,210	(2,578)	-	632
Property, plant and equipment	18,636	168	-	18,804
Investments in subsidiaries, associates and joint ventures	(1,046)	-	-	(1,046)
Accrued interest income	(448)	(1,293)	-	(1,741)
Others	16,801	(18,498)	-	(1,697)
	<u>(57,227)</u>	<u>(99,119)</u>	<u>-</u>	<u>(156,346)</u>
Tax credit carryforwards	-	6,197	-	6,197
Deferred tax charged directly to equity	165	-	(128)	37
Deferred income tax assets(liabilities)	<u>(57,062)</u>	<u>(92,922)</u>	<u>(128)</u>	<u>(150,112)</u>

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The reconciliation between income tax expense and accounting profit is as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Profit before income tax	<u>1,471,349</u>	<u>1,786,181</u>
<b>Income tax expense based on applicable tax rate</b>	355,605	431,794
<b>Tax adjustments</b>		
Income not subject to tax	(970)	(8)
Expenses not deductible for tax purposes	20,341	8,215
Tax credit	(76,790)	(95,448)
Others	<u>(1,229)</u>	<u>1,311</u>
Income tax expense <sup>1</sup>	<u>296,957</u>	<u>345,864</u>
Effective tax rate (income tax expense/ profit before income tax)	<u>20.18%</u>	<u>19.36%</u>

Realization of the future tax benefits related to the deferred tax assets is dependent on many factors, including the Company's ability to generate taxable income within the period during which the temporary differences reverse, the outlook of the economic environment, and the overall future industry outlook. Management periodically considers these factors in reaching its conclusion.

**31. Earnings per share**

Basic earnings per share is calculated by dividing the profit attributable to owners of the Company by the weighted average number of shares in issue excluding shares purchased by the Company and held as treasury shares. As of the reporting date, the Company has no potential ordinary shares. Preferred shares have a right to participate in the profits of the Company. These participation rights have been considered in presenting the EPS for ordinary shares and preferred shares.

Basic earnings per share attributable to the owners of the Company for the years ended December 31, 2013 and 2012, is computed as follows:

<i>(in millions of Korean won, except per share)</i>	<b>2013</b>	<b>2012</b>
Profit attributable to ordinary shares <sup>1</sup>	1,052,299	1,290,657
Weighted average number of ordinary shares outstanding <sup>2</sup>	65,911,310	65,911,316
Basic earnings per ordinary share (in won)	15,965	19,582
 <i>(in millions of Korean won)</i>	 <b>2013</b>	 <b>2012</b>
Profit attributable to preferred shares <sup>1</sup>	122,093	149,660
Weighted average number of preferred shares outstanding <sup>2</sup>	7,623,402	7,623,402
Basic earnings per preferred share (in won)	16,015	19,632

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<sup>1</sup> Profit attributable to ordinary and preferred shares are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
<b>Profit for the year</b>	1,174,392	1,440,317
Ordinary shares dividends (A)	263,645	263,645
Preferred shares dividends (B)	30,875	30,875
<b>Undistributed earnings for the year</b>	879,872	1,145,797
Undistributed earnings available for ordinary shares (C)	788,654	1,027,012
Undistributed earnings available for preferred shares (D)	91,218	118,785
<b>Profit for the year attributable to ordinary shares (A+C)</b>	1,052,299	1,290,657
<b>Profit for the year attributable to preferred shares (B+D)</b>	122,093	149,660

<sup>2</sup> Weighted average numbers of shares are calculated as follows:

<b>2013</b>				
<b>Ordinary shares</b>	<b>Period</b>	<b>Number of shares</b>	<b>Number of days</b>	<b>Number of shares x days</b>
Beginning	2013. 1. 1 ~ 2013.12.31	65,911,310	365	24,057,628,150
Purchase of treasury shares	2013.12.31 ~ 2013.12.31	(2)	1	(2)
<b>Total</b>				<u>24,057,628,148</u>

Weighted average number of ordinary shares outstanding:  $24,057,628,148 / 365 = 65,911,310$  shares

<b>2013</b>				
<b>Preferred shares</b>	<b>Period</b>	<b>Number of shares</b>	<b>Number of days</b>	<b>Number of shares x days</b>
Beginning	2013. 1. 1 ~ 2013.12.31	7,623,402	365	2,782,541,730
<b>Total</b>				<u>2,782,541,730</u>

Weighted average number of preferred shares outstanding:  $2,782,541,730 / 365 = 7,623,402$  share

<b>2012</b>				
<b>Ordinary shares</b>	<b>Period</b>	<b>Number of shares</b>	<b>Number of days</b>	<b>Number of shares x days</b>
Beginning	2012. 1. 1 ~ 2012.12.31	65,911,316	366	24,123,541,656
Purchase of treasury shares	2012.12.31 ~ 2012.12.31	(6)	1	(6)
<b>Total</b>				<u>24,123,541,650</u>

Weighted average number of ordinary shares outstanding:  $24,123,541,650 / 366 = 65,911,316$  shares

<b>2012</b>				
<b>Preferred shares</b>	<b>Period</b>	<b>Number of shares</b>	<b>Number of days</b>	<b>Number of shares x days</b>
Beginning	2012. 1. 1 ~ 2012.12.31	7,623,402	366	2,790,165,132
<b>Total</b>				<u>2,790,165,132</u>

Weighted average number of preferred shares outstanding:  $2,790,165,132 / 366 = 7,623,402$  shares

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There were no dilutive potential outstanding ordinary shares at the reporting date. Accordingly, diluted earnings per share for profit attributable to owners of the Company is identical to basic earnings per share.

**32. Dividends**

Details of dividends are as follows:

	<b>2013</b>	<b>2012</b>
Number of shares entitled to dividends: shares issued and outstanding (par value per share: ₩5,000)		
Ordinary shares	65,911,308	65,911,310
Preferred shares	7,623,402	7,623,402
Dividend per share (in won)		
Ordinary shares: cash	4,000 (80%)	4,000 (80%)
Preferred shares: cash	4,050 (81%)	4,050 (81%)
Cash dividends to distribute (in millions of Korean won)		
Ordinary shares	263,645	263,645
Preferred shares	30,875	30,875
	<u>294,520</u>	<u>294,520</u>

Dividend payout ratios for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Dividends (A)	294,520	294,520
Profit for the year attributable to owners of the parent company (B)	1,174,392	1,440,317
Dividend payout ratio (A/B)	<u>25.08%</u>	<u>20.45%</u>

Dividend yield ratios for the years ended December 31, 2013 and 2012, are as follows:

<i>(in Korean won)</i>	<b>2013</b>		<b>2012</b>	
	<b>Ordinary shares</b>	<b>Preferred Shares</b>	<b>Ordinary shares</b>	<b>Preferred Shares</b>
Dividend per share (A)	4,000	4,050	4,000	4,050
Market value at the end of year (B) <sup>1</sup>	293,875	153,875	335,625	105,625
Dividend yield ratio (A/B)	<u>1.36%</u>	<u>2.63%</u>	<u>1.19%</u>	<u>3.83%</u>

<sup>1</sup> Average price in the stock market during the week preceding the two business days before the record date of the shareholders' list for the general meeting of shareholders related to above dividends.

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**33. Related party transactions**

As of December 31, 2013 and 2012, LG Group is an entity exercising significant influence over the Company which owns 33.53% of the Company's ordinary shares.

Details of other related parties, excluding subsidiaries, associates and joint ventures (Note 12) that have sales and other transactions with the Company or have receivables and payables balances as of December 31, 2013 and 2012, are as follows:

<u>Name</u>	<u>Classification</u>
SERVEONE Co., Ltd.,	A subsidiary of LG Corp.
LG CNS Co., Ltd.	A subsidiary of LG Corp.
LG Siltron Incorporated	A subsidiary of LG Corp.
LG Management Development Institute	A subsidiary of LG Corp.
LG SPORTS Ltd.	A subsidiary of LG Corp.
LG MMA Corporation	An associates of LG Corp.
LG-TOYO Engineering Co., Ltd.	An associates of SERVEONE Co., Ltd.
LG N-Sys Inc.	An associates of LG CNS Co., Ltd.
BNE PARTNERS, Inc.	An associates of LG CNS Co., Ltd.
EVERON	An associates of LG CNS Co., Ltd.
V-ENS Co., Ltd. <sup>1</sup>	An associates of LG CNS Co., Ltd.

<sup>1</sup> V-ENS CO., LTD. is an associate of LG CNS Co., Ltd. as of December 31, 2012. However, as of December 31, 2013, V-ENS Co., Ltd. is excluded from the other related parties because it merged with LG Electronics Inc. during 2013.

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Significant transactions, which occurred in the ordinary course of business with related parties for the years ended December 31, 2013 and 2012, are summarized as follows:

(in millions of Korean won)

	<b>2013</b>			
	<b>Sales</b>	<b>Purchases</b>		
		<b>Raw materials/ merchandise</b>	<b>Acquisition of property, plant and equipment</b>	<b>Others</b>
<b>Entities with significant influence over the Company</b>	13	-	-	54,841
LG Corp				
<b>Subsidiaries</b>				
Ningbo LG Yongxing Chemical Co.,Ltd.	38,009	9,412	-	13
LG Chem HK Ltd.	247,519	-	-	3,047
LG Chem America, Inc.	599,135	-	-	2,717
LG Chem (Nanjing) Information & Electronics Materials Co.,Ltd.	524,827	1,390,114	-	2,963
LG Chem (Taiwan), Ltd.	245,433	1,026	-	8,316
LG Chem Display Materials (Beijing) Co.,Ltd.	-	-	-	12,666
Tianjin LG Bohai Chemical Co.,Ltd.	17,216	-	-	-
LG Chem (China) Investment Co.,Ltd.	-	-	-	31,366
LG Chem Europe GmbH	235,271	-	-	8,562
LG Chem Poland Sp. z o.o.	23,638	44	-	12,746
Other	18,791	1,049	-	10,833
<b>Associates and joint ventures</b>				
SEETEC Co.,Ltd.	59,413	171,866	33	78,537
TECWIN Co.,Ltd.	35	5,752	-	-
HL Greenpower Co.,Ltd.	74,893	-	-	152
Other	1,326	-	-	1,003
<b>Others</b>				
LG MMA Corporation	133,570	142,259	-	2,058
SERVEONE Co., Ltd.,	19,791	359,687	257,160	35,470
LG CNS Co., Ltd.	77	4,594	43,048	39,393
Other	4,139	6,245	14,865	11,935
<b>Key management</b>				
Key management	-	-	-	36,728
<b>Total</b>	<u>2,243,096</u>	<u>2,092,048</u>	<u>315,106</u>	<u>353,346</u>

**LG Chem, Ltd.**  
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(in millions of Korean won)

	<b>2012</b>			
	<b>Sales</b>	<b>Purchases</b>		
		<b>Raw materials/ merchandise</b>	<b>Acquisition of property, plant and equipment</b>	<b>Others</b>
<b>Entities with significant influence over the Company</b>	12	-	-	54,844
LG Corp				
<b>Subsidiaries</b>				
Ningbo LG Yongxing Chemical Co.,Ltd.	61,389	147	-	13
LG Chem HK Ltd.	260,134	-	-	3,271
LG Chem America, Inc.	559,398	-	-	1,961
LG Chem (Nanjing) Information & Electronics Materials Co.,Ltd.	474,886	1,295,832	-	24,457
LG Chem (Taiwan), Ltd.	223,184	1	-	9,301
LG Chem Display Materials (Beijing) Co.,Ltd.	-	-	-	15,326
Tianjin LG Bohai Chemical Co.,Ltd.	11,374	-	-	-
LG Chem (China) Investment Co.,Ltd.	-	-	-	30,721
LG Chem Europe GmbH	137,248	-	-	7,996
LG Chem Poland Sp. z o.o.	14,329	-	-	13,107
Other	12,791	3,251	-	10,339
<b>Associates and joint ventures</b>				
SEETEC Co.,Ltd.	36,955	94,373	6	69,782
TECWIN Co.,Ltd.	33	314	18,698	998
HL Greenpower Co.,Ltd.	78,437	-	-	1
Other	1,399	-	-	1,291
<b>Others</b>				
LG MMA Corporation	146,790	151,217	-	2,475
SERVEONE Co., Ltd.,	23,456	334,207	296,804	55,921
LG CNS Co., Ltd.	-	5,419	41,859	32,404
Other	7,065	12,912	25,772	13,067
<b>Key management</b>				
Key management	-	-	-	32,523
<b>Total</b>	<b>2,048,880</b>	<b>1,897,673</b>	<b>383,139</b>	<b>379,798</b>

**LG Chem, Ltd.**  
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Year-end balances of receivables and payables as of December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>		<b>2012</b>	
	<b>Receivables</b>	<b>Payables</b>	<b>Receivables</b>	<b>Payables</b>
<b>Entities with significant influence over the Company</b>				
LG Corp	6,935	64	6,948	1,456
<b>Subsidiaries</b>				
Ningbo LG Yongxing Chemical Co.,Ltd.	3,173	3,257	1,879	15
LG Chem HK Ltd.	20,805	236	21,890	220
LG Chem America, Inc.	120,190	265	110,251	207
LG Chem (Nanjing) Information & Electronics Materials Co.,Ltd.	187,846	254,366	218,192	276,549
LG Chem (Taiwan), Ltd.	73,919	1,802	73,284	1,630
LG Chem Display Materials (Beijing) Co.,Ltd.	-	804	931	1,325
Tianjin LG Bohai Chemical Co.,Ltd.	4,105	-	166	-
LG Chem (China) Investment Co.,Ltd.	-	2,891	-	2,515
LG Chem Europe GmbH	67,062	857	43,063	696
LG Chem Poland Sp. z o.o.	8,509	1,214	2,399	1,197
Other	10,507	1,158	7,273	1,180
<b>Associates and joint ventures</b>				
SEETEC Co.,Ltd.	-	21,135	-	19,168
TECWIN Co.,Ltd.	-	1,719	-	916
HL Greenpower Co.,Ltd.	11,440	89	27,345	-
Other	22	56	14	-
<b>Others</b>				
LG MMA Corporation	15,283	12,014	13,265	15,570
SERVEONE Co., Ltd.,	28,252	146,836	28,006	134,871
LG CNS Co., Ltd.	-	21,166	-	20,712
Other	6,529	7,456	8,957	9,477
<b>Key management</b>				
Key management	-	43,237	-	44,588
<b>Total</b>	<b>564,577</b>	<b>520,622</b>	<b>563,863</b>	<b>532,292</b>



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Fund transactions with related parties for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
	<b>Equity</b>	<b>Equity</b>
	<b>contributions in</b>	<b>contributions in</b>
	<b>cash</b>	<b>cash</b>
<b>Subsidiaries</b>		
LG Chem (Nanjing) Information & Electronics Materials Co.,Ltd.	29,076	48,384
LG Chem Display Materials (Beijing) Co.,Ltd.	-	994
LG Chem (China) Investment Co.,Ltd.	-	5,421
LGC Petrochemical India Private Limited.	299	-
Haengboknuri	600	-
LG CHEM TK KIMYA SANAVI VE TICARET LIMITED SIRKETI	174	-
<b>Associates and joint ventures</b>		
KLPE Limited Liability Partnership	18,680	75,565
LG Chem BRASIL INTERMEDICAO DE NEGOCIOS DO SETOR QUIMICO LTDA.	321	-
LG Fuel Cell Systems Inc.	6,419	15,709
<b>Total</b>	<b>55,569</b>	<b>146,073</b>

Compensation for key management of the Company for the years ended December 31, 2013 and 2012, consists of:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Wages and salaries	34,675	31,221
Pension costs	2,053	1,302
<b>Total</b>	<b>36,728</b>	<b>32,523</b>

Key management includes directors and audit committee members having duties and responsibilities over planning, operations and controlling of the Company's business activities.

The receivables from related parties are mainly from sales transactions. The receivables are unsecured in nature and bear no interest. There are no provisions held against receivables from related parties.

Details of the guarantees provided by the Company for related parties at the reporting date are disclosed in Note 20.

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**34. Cash generated from operations**

Reconciliation between operating profit and net cash inflow (outflow) from operating activities for the years ended December 31, 2013 and 2012, is as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
<b>Profit before income tax</b>	1,471,349	1,786,181
<b>Adjustments for:</b>		
Depreciation	820,649	668,594
Amortization	21,502	16,489
Pension costs	78,610	56,354
Finance income	(93,134)	(142,005)
Finance expense	45,237	62,113
Foreign exchange differences	(13,647)	(61,565)
Gain on disposal of property, plant and equipment	(891)	(1,415)
Loss on disposal of property, plant and equipment	14,184	3,940
Loss on impairment of property, plant and equipment	46,363	-
Gain on disposal of intangible assets	(21)	(7)
Loss on disposal of intangible assets	6,146	1,033
Loss on impairment of intangible assets	3,091	-
Loss on Impairment investments in associates	55,696	-
Other expenses	29,988	16,351
Inventories	153,707	(152,404)
Trade receivables	(86,913)	(48,139)
Other receivables	26,535	(60,982)
Settlement of derivatives	511	5,118
Trade payables	(264,768)	(23,638)
Other payables	155,224	(120,082)
Defined benefit liability	(137,534)	(75,033)
Other cash flows from operations	(10,528)	782
<b>Cash generated from operations</b>	<u>2,321,356</u>	<u>1,931,685</u>

The principal non-cash transactions for the years ended December 31, 2013 and 2012, are as follows:

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Transfer of construction-in-progress	1,413,748	1,546,827
Transfer of machinery-in-transit	206,712	367,134
Reclassification of long-term borrowings into current maturities	202,798	21,128
Gain on valuation of derivatives recognized as other comprehensive income	154	527

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**35. Appropriation of retained earnings**

The appropriation of retained earnings for the years ended December 31, 2013 and 2012, is as follows:

(Dates of appropriation: March 14, 2014 and March 15, 2013 for the years ended December 31, 2013 and 2012, respectively)

<i>(in millions of Korean won)</i>	<b>2013</b>	<b>2012</b>
Unappropriated retained earnings carried over from prior year	-	-
Profit for the year	1,174,392	1,440,317
Remeasurements of net defined benefits liabilities	(2,722)	(47,175)
<b>Retained earnings before appropriation</b>	<u>1,171,670</u>	<u>1,393,142</u>
<b>Transfer from other reserves</b>		
Reserve for technology development	<u>80,000</u>	<u>30,000</u>
<b>Appropriation of retained earnings</b>		
Legal reserve	-	5,721
Dividends	294,520	294,520
Reserve for technology development	957,150	1,122,901
	<u>1,251,670</u>	<u>1,423,142</u>

**36. Approval of financial statements**

The separate financial statements for the year ended December 31, 2013, were approved by the Board of Directors on January 27, 2014.

**Report of Independent Accountants'  
Review of Internal Accounting Control System**

To the Representative Director  
LG Chem, Ltd.

We have reviewed the accompanying management's report on the operations of the Internal Accounting Control System ("IACS") of LG Chem, Ltd. (the "Company") as of December 31, 2013. The Company's management is responsible for designing and operating IACS and for its assessment of the effectiveness of IACS. Our responsibility is to review the management's report on the operations of the IACS and issue a report based on our review. The management's report on the operations of the IACS of the Company states that "based on its assessment of the operations of the IACS as of December 31, 2013, the Company's IACS has been designed and is operating effectively as of December 31, 2013, in all material respects, in accordance with the IACS standards established by the Internal Accounting Control System Operations Committee (IACSOC) of the Korea Listed Companies Association."

Our review was conducted in accordance with the IACS review standards established by the Korean Institute of Certified Public Accountants. Those standards require that we plan and perform, in all material respects, the review of management's report on the operations of the IACS to obtain a lower level of assurance than an audit. A review is to obtain an understanding of a company's IACS and consists principally of inquiries of management and, when deemed necessary, a limited inspection of underlying documents, which is substantially less in scope than an audit.

A company's IACS is a system to monitor and operate those policies and procedures designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with international financial reporting standards as adopted by the Republic of Korea ("Korean IFRS"). Because of its inherent limitations, IACS may not prevent or detect a material misstatement of the financial statements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Based on our review, nothing has come to our attention that causes us to believe that management's report on the operations of the IACS, referred to above, is not presented fairly, in all material respects, in accordance with the IACS standards established by IACSOC.

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

March 6, 2014

## **Report on the Operations of the Internal Accounting Control System**

To the Board of Directors and Audit Committee of  
LG Chem, Ltd.

I, as the Internal Accounting Control Officer (“IACO”) of LG Chem, Ltd. (“the Company”), assessed the status of the design and operations of the Company’s internal accounting control system (“IACS”) for the year ended December 31, 2013.

The Company’s management including IACO is responsible for designing and operating IACS. I, as the IACO, assessed whether the IACS has been effectively designed and is operating to prevent and detect any error or fraud which may cause any misstatement of the financial statements, for the purpose of establishing the reliability of financial reporting and the preparation of financial statements for external purposes. I, as the IACO, applied the IACS standard for the assessment of design and operations of the IACS.

Based on the assessment on the operations of the IACS, the Company’s IACS has been effectively designed and is operating as of December 31, 2013, in all material respects, in accordance with the IACS standards.

January 27, 2014

Suk-Jeh Cho, Internal Accounting Control System Officer

Jin-Soo Park, Chief Executive Officer