

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 20-F

(Mark One)

- REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934
OR
 ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2016
OR
 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
OR
 SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Date of event requiring this shell company report _____
For the transition period from _____ to _____

Commission file number 1-13368

POSCO

(Exact name of Registrant as specified in its charter)

POSCO

(Translation of Registrant's name into English)

The Republic of Korea

(Jurisdiction of incorporation or organization)

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(Name, telephone, e-mail and/or facsimile number and address of company contact person)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of Each Class

Name of Each Exchange on Which Registered

American Depositary Shares, each representing
one-fourth of one share of common stock

New York Stock Exchange, Inc.

Common Stock, par value Won 5,000 per share *
Securities registered or to be registered pursuant to Section 12(g) of the Act.

New York Stock Exchange, Inc. *

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.

None

As of December 31, 2016, there were 79,997,665 shares of common stock, par value Won 5,000 per share, outstanding (not including 7,189,170 shares of common stock held by the company as treasury shares)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or an emerging growth company. See definition of "large accelerated filer," "accelerated filer" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer **Accelerated filer** **Non-accelerated filer** **Emerging growth company**

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing. **U.S. GAAP** **IFRS** **Other**

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. **Item 17** **Item 18**

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

* Not for trading, but only in connection with the registration of the American Depositary Shares.

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GLOSSARY

“ADR”	American Depositary Receipt evidencing ADSs.
“ADR depositary”	Citibank, N.A.
“ADS”	American Depositary Share representing one-fourth of one share of Common Stock.
“Australian Dollar” or “A\$”	The currency of the Commonwealth of Australia.
“Commercial Code”	Commercial Code of the Republic of Korea.
“common stock”	Common stock, par value Won 5,000 per share, of POSCO.
“deposit agreement”	Deposit Agreement, dated as of July 19, 2013, among POSCO, the ADR Depositary and all holders and beneficial owners from time to time of ADRs issued thereunder.
“Dollars,” “\$” or “US\$”	The currency of the United States of America.
“FSCMA”	Financial Investment Services and Capital Markets Act of the Republic of Korea.
“Government”	The government of the Republic of Korea.
“IASB”	International Accounting Standards Board.
“IFRS”	International Financial Reporting Standards.
“Yen” or “JPY”	The currency of Japan.
“Korea”	The Republic of Korea.
“Korean GAAP”	Generally accepted accounting principles in the Republic of Korea.
“Gwangyang Works”	Gwangyang Steel Works.
“We”	POSCO and its consolidated subsidiaries.
“Pohang Works”	Pohang Steel Works.
“POSCO Group”	POSCO and its consolidated subsidiaries.
“Renminbi”	The currency of the People’s Republic of China.
“Securities Act”	The United States Securities Act of 1933, as amended.
“Securities Exchange Act”	The United States Securities Exchange Act of 1934, as amended.
“SEC”	The United States Securities and Exchange Commission.
“tons”	Metric tons (1,000 kilograms), equal to 2,204.6 pounds.
“U.S. GAAP”	Generally accepted accounting principles in the United States of America.
“Won” or “₩”	The currency of the Republic of Korea.

Any discrepancies in any table between totals and the sums of the amounts listed are due to rounding.

PART I

Item 1. *Identity of Directors, Senior Managers and Advisers*

Item 1.A. *Directors and Senior Management*

Not applicable

Item 1.B. *Advisers*

Not applicable

Item 1.C. *Auditor*

Not applicable

Item 2. *Offer Statistics and Expected Timetable*

Not applicable

Item 2.A. *Offer Statistics*

Not applicable

Item 2.B. *Method and Expected Timetable*

Not applicable

Item 3. *Key Information*

Item 3.A. *Selected Financial Data*

The selected financial data presented below should be read in conjunction with our Consolidated Financial Statements and related notes thereto and “Item 5. Operating and Financial Review and Prospects” included elsewhere in this annual report. The selected financial data in Won as of December 31, 2015 and 2016 and for each of the years in the three-year period ended December 31, 2016 were derived from our Consolidated Financial Statements included elsewhere in this annual report. Our Consolidated Financial Statements are prepared in accordance with IFRS as issued by the IASB.

In addition to preparing financial statements in accordance with IFRS as issued by the IASB included in this annual report, we also prepare financial statements in accordance with Korean International Financial Reporting Standards (“K-IFRS”) as adopted by the Korean Accounting Standards Board (the “KASB”), which we are required to file with the Financial Services Commission and the Korea Exchange under the FSCMA. English translations of such financial statements are furnished to the SEC under Form 6-K. Starting in 2012, we were required to adopt certain amendments and interpretations to K-IFRS, relating to presentation of operating profit. Additionally, under K-IFRS, revenue from the development and sale of certain real estate is recognized using the percentage of completion method. However, under IFRS as issued by the IASB, revenue from the development and sale of real estate is recognized when an individual unit of residential real estate is delivered to the buyer. As a result, our consolidated statements of comprehensive income and our consolidated statements of financial position prepared in accordance with IFRS as issued by the IASB included in this annual report differ from our consolidated statements of comprehensive income and consolidated statements of financial position prepared in accordance with K-IFRS. See “Item 5.A. Operating Results — Explanatory Note Regarding Presentation of Certain Financial Information under K-IFRS.”

The information set forth below is not necessarily indicative of the results of future operations and should be read in conjunction with “Item 5. Operating and Financial Review and Prospects” and our consolidated financial statements and related notes included in this annual report.

Selected consolidated statement of comprehensive income data

	For the Year Ended December 31,				
	2012	2013	2014	2015	2016
	(In billions of Won, except per share data)				
Revenue ⁽¹⁾	₩ 63,345	₩ 61,766	₩ 64,759	₩ 58,522	₩ 52,940
Cost of sales ⁽²⁾	55,921	54,914	57,465	52,018	46,271
Gross profit	7,425	6,852	7,293	6,504	6,668
Administrative expenses	2,129	2,232	2,310	2,395	2,292
Selling expenses	1,679	1,632	1,760	1,729	1,554
Other operating income	448	229	269	549	215
Other operating expenses	809	651	980	1,442	756
Operating profit	3,255	2,566	2,513	1,486	2,282
Share of loss of equity-accounted investees, net	(23)	(180)	(300)	(506)	(89)
Finance income	2,897	2,381	2,397	2,557	2,232
Finance costs	2,798	2,829	3,222	3,387	3,014
Profit before income tax	3,332	1,938	1,388	150	1,412
Income tax expense	974	589	824	267	380
Profit (loss)	2,358	1,349	564	(116)	1,032
Total comprehensive income (loss)	1,720	1,363	108	(278)	1,486
Profit (loss) for the period attributable to:					
Owners of the controlling company	2,437	1,371	633	171	1,355
Non-controlling interests	(79)	(22)	(69)	(288)	(323)
Total comprehensive income (loss) attributable to:					
Owners of the controlling company	1,887	1,439	182	24	1,814
Non-controlling interests	(167)	(75)	(73)	(302)	(328)
Basic and diluted earnings per share ⁽³⁾	31,552	17,338	7,514	1,731	16,521
Dividends per share of common stock	8,000	8,000	8,000	8,000	8,000

Selected consolidated statements of financial position data

	As of December 31,				
	2012	2013	2014	2015	2016
	(In billions of Won)				
Working capital ⁽⁴⁾	₩ 11,993	₩ 11,681	₩ 10,833	₩ 9,148	₩ 10,711
Total current assets	31,817	32,039	33,208	29,502	29,655
Property, plant and equipment, net	32,276	35,760	35,241	34,523	33,770
Total non-current assets	47,711	52,802	52,636	51,246	50,483
Total assets	79,527	84,841	85,844	80,748	80,138
Short-term borrowings and current installments of long-term borrowings	10,509	10,714	12,195	12,371	10,195
Long-term borrowings, excluding current installments	14,412	15,533	15,233	12,849	12,510
Total liabilities	37,133	39,060	40,586	35,735	34,372
Share capital	482	482	482	482	482
Total equity	42,394	45,781	45,257	45,013	45,765

Selected consolidated statements of cash flows data

	For the Year Ended December 31,				
	2012	2013	2014	2015	2016
	(In billions of Won)				
Net cash provided by operating activities	₩ 7,319	₩ 4,858	₩ 3,412	₩ 7,602	₩ 5,269
Net cash used in investing activities	(6,169)	(8,752)	(3,745)	(4,535)	(3,755)
Net cash provided by (used in) financing activities	(908)	3,532	135	(2,242)	(3,951)
Net increase (decrease) in cash and cash equivalents	82	(472)	(186)	849	(2,424)
Cash and cash equivalents at beginning of the year	4,599	4,681	4,209	4,022	4,871
Cash and cash equivalents at end of the year	4,681	4,209	4,022	4,871	2,448

- (1) Includes sales by our consolidated subsidiaries of steel products purchased by such subsidiaries from third parties, including trading companies to which we sell steel products.
- (2) Includes purchases of steel products by our consolidated subsidiaries from third parties, including trading companies to which we sell steel products.
- (3) See Note 36 of Notes to Consolidated Financial Statements for method of calculation. The weighted average number of common shares outstanding used to calculate basic and diluted earnings per share was 77,244,444 shares as of December 31, 2012, 78,009,654 shares as of December 31, 2013, 79,801,539 shares as of December 31, 2014, 79,993,834 shares as of December 31, 2015 and 79,996,389 shares as of December 31, 2016.
- (4) "Working capital" means current assets minus current liabilities.

EXCHANGE RATE INFORMATION

The following table sets out information concerning the market average exchange rate for the periods and dates indicated.

Period	At End of Period	Average Rate ⁽¹⁾	High	Low
2012	1,071.1	1,126.9	1,181.8	1,071.1
2013	1,055.3	1,095.0	1,159.1	1,051.5
2014	1,099.2	1,053.2	1,118.3	1,008.9
2015	1,172.0	1,131.5	1,203.1	1,068.1
2016	1,208.5	1,160.5	1,240.9	1,093.2
October	1,145.2	1,125.3	1,145.2	1,102.0
November	1,168.5	1,161.6	1,183.6	1,137.5
December	1,208.5	1,182.3	1,208.5	1,159.1
2017 (through April 26)	1,130.5	1,149.6	1,208.5	1,112.5
January	1,157.8	1,185.1	1,208.5	1,157.8
February	1,132.1	1,144.9	1,165.5	1,131.0
March	1,116.1	1,134.8	1,158.2	1,112.5
April (through April 26)	1,130.5	1,133.3	1,145.8	1,113.8

Source: Seoul Money Brokerage Services, Ltd.

- (1) The average rate for each year is calculated as the average of the market average exchange rates on the last business day of each month during the relevant year (or portion thereof). The average rate for a month is calculated as the average of the market average exchange rates on each business day during the relevant month (or portion thereof).

Item 3.B. Capitalization and Indebtedness

Not applicable

Item 3.C. Reasons for Offer and Use of Proceeds

Not applicable

Item 3.D. Risk Factors

You should carefully consider the risks described below.

The global economic downturn may adversely affect our business and performance. The global economic outlook for the near future remains uncertain.

Our business is affected by highly cyclical market demand for our steel products from a number of industries, including the construction, automotive, shipbuilding and electrical appliances industries as well as downstream steel processors, which are sensitive to general conditions in the global economy. Macroeconomic factors, such as the economic growth rate, employment levels, interest rates, inflation rates, exchange rates, commodity prices, demographic trends and fiscal policies of governments can have a significant effect on such industries. From time to time, these industries have experienced significant and sometimes prolonged downturns, which, in turn, have negatively impacted our steel business. The global economic outlook for the near future remains uncertain, particularly in light of the slowdown of economic growth and financial instability in China and other major emerging market economies, fluctuations in oil and commodity prices, financial difficulties affecting governments in southern Europe and Latin America, and political and social instability in various countries in the Middle East and Northern Africa, including Iraq, Syria and Egypt, as well as in Ukraine and Russia. In particular, the Chinese economy, which in recent years has been one of the main demand drivers in the global steel industry, has experienced a slowdown in growth since 2012 and continues to show signs of deterioration, despite successive fiscal and monetary stimulus measures implemented by the Chinese government.

An actual or anticipated further deterioration of global economic conditions may result in a decline in demand for our products that could have a negative impact on the prices at which they can be sold. In such a case, we will likely face pressure to reduce prices and we may need to rationalize our production capacity and reduce fixed costs. In the past, we have adjusted our crude steel production levels and sales prices in response to sluggish demand from our customers in industries adversely impacted by the deteriorating economic conditions. We produced 41.4 million tons of crude steel in 2014, 42.0 million tons in 2015 and 42.2 million tons in 2016. The average unit sales prices for our semi-finished and finished steel products were Won 936 thousand per ton in 2014, Won 798 thousand per ton in 2015 and Won 745 thousand per ton in 2016.

We expect that fluctuation in demand for our steel products and trading services to continue to prevail at least in the near future. We may decide to further adjust our future crude steel production or our sales prices on an on-going basis subject to market demand for our products, the production outlook of the global steel industry and global economic conditions in general. In addition, economic downturns in the Korean and global economies could result in market conditions characterized by weaker demand for steel products from a number of industries as well as falling prices for export and import products and reduced trade levels. Deterioration of market conditions may result in changes in assumptions underlying the carrying value of certain assets, which in turn could result in impairment of such assets, including intangible assets such as goodwill. In addition, our ability to reduce expenditures for production facilities and research and development during an industry downturn is limited because of the need to maintain our competitive position. If we are unable to reduce our expenses sufficiently to offset reductions in price and sales volume, our margins will suffer and our business, financial condition and results of operations may be materially and adversely affected.

Korea is our most important market, and our current business and future growth could be materially and adversely affected if economic conditions in Korea deteriorate.

We are incorporated in Korea, and a substantial portion of our operations and assets are located in Korea. Korea is our most important market, accounting for 39.4% of our total revenue from steel products produced and sold by us in 2016. Domestic demand for our products is affected by the condition of major steel consuming industries, such as construction, shipbuilding, automotive, electrical

appliances and downstream steel processors, and the Korean economy in general. In addition, the trading operations of POSCO Daewoo Corporation (“POSCO Daewoo”) are affected by the general level of trade between Korea and other countries, which in turn tends to fluctuate based on general conditions in the Korean and global economies. As a result, we are subject to political, economic, legal and regulatory risks specific to Korea. The economic indicators in Korea in recent years have shown mixed signs, and future growth of the Korean economy is subject to many factors beyond our control, including developments in the global economy.

Due to recent liquidity and credit concerns and volatility in the global financial markets, the value of the Won relative to the Dollar and other foreign currencies and the stock prices of Korean companies have fluctuated significantly in recent years. In particular, the global financial markets continue to experience significant volatility in light of the slowdown of economic growth in China and other major emerging economies as well as concerns regarding the financial difficulties affecting many governments worldwide, including southern Europe and Latin America, and low oil prices. In addition, political and social instability in various countries in the Middle East and Northern Africa, including Iraq, Syria and Egypt, as well as in Ukraine and Russia, has resulted in an increase in volatility in the global financial markets. Accordingly, the overall prospects for the Korean and global economies in the remainder of 2017 and beyond remain uncertain. Any future deterioration of the Korean or global economy could adversely affect our business, financial condition and results of operations.

Developments that could have an adverse impact on Korea’s economy in the future include:

- declines in consumer confidence and a slowdown in consumer spending in the Korean or global economy;
- continuing adverse conditions in the economies of countries and regions that are important export markets for Korea, such as China, the United States, Europe and Japan, or in emerging market economies in Asia or elsewhere, including in the wake of a referendum in the United Kingdom in June 2016 to exit from the European Union;
- adverse changes or volatility in foreign currency reserve levels, commodity prices (including oil prices), exchange rates (including fluctuation of the U.S. dollar, the Euro or the Japanese Yen exchange rates or revaluation of the Chinese Renminbi), interest rates, inflation rates or stock markets;
- deterioration in economic or diplomatic relations between Korea and its trading partners or allies, including deterioration resulting from territorial or trade disputes or disagreements in foreign policy (such as the ongoing controversy between Korea and China, which is Korea’s largest export market, regarding the deployment of a Terminal High Altitude Area Defense system in Korea by the United States in March 2017 and the ensuing economic and other retaliatory measures by China);
- increased sovereign default risk in select countries and the resulting adverse effects on the global financial markets;
- the ongoing political scandal in Korea involving the impeachment and dismissal of the President and the resulting social unrest, as well as related investigations of large Korean business groups and their senior management for bribery, embezzlement and other possible misconduct;
- a continuing rise in the level of household debt and increasing delinquencies and credit defaults by retail and small- and medium-sized enterprise borrowers in Korea;
- social and labor unrest;
- decreases in the market prices of Korean real estate;
- the economic impact of any pending or future free trade agreements;

- a decrease in tax revenue and a substantial increase in the Government's expenditures for fiscal stimulus measures, unemployment compensation and other economic and social programs that, together, would lead to an increased government budget deficit;
- financial problems or lack of progress in the restructuring of Korean business groups, other large troubled companies (including those in the shipbuilding and shipping sectors), their suppliers or the financial sector;
- loss of investor confidence arising from corporate accounting irregularities or corporate governance issues at certain Korean companies;
- increases in social expenditures to support an aging population in Korea or decreases in economic productivity due to the declining population size in Korea;
- geo-political uncertainty and the risk of further attacks by terrorist groups around the world;
- the occurrence of severe health epidemics in Korea or other parts of the world, such as the Middle East Respiratory Syndrome outbreak in Korea in 2015;
- natural or man-made disasters that have a significant adverse economic or other impact on Korea (such as the sinking of the Sewol ferry in 2014, which significantly dampened consumer sentiment in Korea) or its major trading partners;
- political uncertainty or increasing strife among or within political parties in Korea;
- hostilities or political or social tensions involving oil producing countries in the Middle East and North Africa and any material disruption in the supply of oil or sudden increase in the price of oil;
- political or social tensions involving Russia and any resulting adverse effects on the global supply of oil or the global financial markets; and
- an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States.

We rely on export sales for a significant portion of our total sales. Adverse economic and financial developments in Asia in the future may have an adverse effect on demand for our products in Asia and increase our foreign exchange risks.

Our export sales and overseas sales to customers abroad accounted for 60.6% of our total revenue from steel products produced and sold by us in 2016. Our export sales volume to customers in Asia, including China, Japan, Indonesia, Thailand and Malaysia, accounted for 63.2% of our total export sales revenue from steel products produced and exported by us in 2016, and we expect our sales to these countries to remain important in the future. In particular, our export volume to China has increased in recent years and accounted for 29.0% of our total export sales revenue from steel products produced and exported by us in 2016. Accordingly, adverse economic and financial developments in these countries may have an adverse effect on demand for our products. Unfavorable or uncertain economic and market conditions, which can be caused, among others, by difficulties in the financial sector, corporate, political or other scandals that may reduce confidence in the markets (such as the ongoing political scandal in Korea involving the impeachment and dismissal of the President), declines in business confidence, increases in inflation, natural disasters or pandemics, outbreaks of hostilities or other geopolitical instability. Deterioration in economic or diplomatic relations between Korea and its trading partners or allies, including deterioration resulting from territorial or trade disputes or disagreements in foreign policy (such as the ongoing controversy between Korea and China, which is Korea's largest export market, regarding the deployment of a Terminal High Altitude Area Defense system in Korea by the United States in March 2017 and the ensuing economic and other retaliatory actions by China), or a combination of these or other factors, have, in the past adversely affected, and may in the future adversely affect, demand for our products.

Economic weakness in Asia may also adversely affect our sales to the Korean companies that export to the region, especially companies in the construction, shipbuilding, automotive, electrical appliances and downstream steel processing industries. Weaker demand in these countries, combined with an increase in global production capacity, may also reduce export prices in Dollar terms of our principal products sold to customers in Asia. For a discussion of production over-capacity in the global steel industry, see “— We operate in the highly competitive steel, trading and construction industries, and our failure to successfully compete would adversely affect our market position and business.” We attempt to maintain and expand our export sales to generate foreign currency receipts to cover our foreign currency purchases and debt service requirements. Consequently, any decrease in our export sales could also increase our foreign exchange risks.

Depreciation of the value of the Won against the Dollar and other major foreign currencies may have a material adverse effect on the results of our operations and on the price of the ADSs.

Our consolidated financial statements are prepared from our local currency denominated financial results, assets and liabilities and our subsidiaries around the world, which are then translated into Won. A substantial proportion of our consolidated financial results is accounted for in currencies other than the Won. Accordingly, our consolidated financial results and assets and liabilities may be materially affected by changes in the exchange rates of foreign currencies. In 2016, 60.6% of our total revenue from steel products produced and sold by us was in overseas markets outside of Korea. To the extent that we incur costs in one currency and make sales in another, our profit margins may be affected by changes in the exchange rates between the two currencies. Since the currency in which sales are recorded may not be the same as the currency in which expenses are incurred, foreign exchange rate fluctuations may materially affect our results of operations. Depreciation of the Won may materially affect the results of our operations because, among other things, it causes:

- an increase in the amount of Won required for us to make interest and principal payments on our foreign currency-denominated debt;
- an increase in Won terms in the costs of raw materials and equipment that we purchase from overseas sources and a substantial portion of our freight costs, which are denominated primarily in Dollars; and
- foreign exchange translation losses on liabilities, which lower our earnings for accounting purposes.

Appreciation of the Won against major currencies, on the other hand, causes:

- our export products to be less competitive by raising our prices in Dollar, Yen and Renminbi terms; and
- a reduction in net sales and accounts receivables in Won from export sales, which are primarily denominated in Dollars and to a lesser extent in Yen and Renminbi.

We strive to naturally offset our foreign exchange risk by matching foreign currency receivables with our foreign currency payables and our overseas subsidiaries have sought to further mitigate the adverse impact of exchange rate fluctuations by conducting business transactions in the local currency of the respective market in which the transactions occur. In particular, POSCO Daewoo's exposure to fluctuations in exchange rates, including the Won/Dollar exchange rate, is limited because trading transactions typically involve matched purchase and sale contracts, which result in limited settlement exposure, and because POSCO Daewoo's contracts with domestic suppliers of products for export and with domestic purchasers of imported products are generally denominated in Dollars. Although the impact of exchange rate fluctuations is partially mitigated by such strategies, we and our subsidiaries, particularly POSCO Daewoo and POSCO Engineering & Construction Co., Ltd. (“POSCO E&C”), also periodically enter into derivative contracts, primarily foreign currency swaps and forward exchange contracts, to further hedge some of our foreign exchange risks. However, our results of operations

have historically been affected by exchange rate fluctuations and there can be no assurance that such strategies will be sufficient to reduce or eliminate the adverse impact of such fluctuations in the future. Because of the larger positive effects of the appreciation of the Won (i.e., the reverse of the negative effects caused by the depreciation of the Won, as discussed above), depreciation of the Won generally has a negative impact on our results of operations.

Fluctuations in the exchange rate between the Won and the Dollar will also affect the Dollar equivalent of the Won price of the shares of our common stock on the KRX KOSPI Market and, as a result, will likely affect the market price of the ADSs. These fluctuations will also affect the Dollar conversion by the depository for the ADRs of cash dividends, if any, paid in Won on shares of common stock represented by the ADSs.

We are dependent on imported raw materials, and significant increases in market prices of essential raw materials could adversely affect our margins and profits.

We purchase substantially all of the principal raw materials we use from sources outside Korea, including iron ore and coal. POSCO imported approximately 52.6 million dry metric tons of iron ore and 28.4 million wet metric tons of coal in 2016. Iron ore is imported primarily from Australia, Brazil and Canada. Coal is imported primarily from Australia, Canada and Russia. Although we have not experienced significant unanticipated supply disruptions in the past, supply disruptions, which could be caused by political or other events in the countries from which we import these materials, could adversely affect our operations. In addition, we are particularly exposed to increases in the prices of coal, iron ore and nickel, which represent the largest components of our cost of goods sold. The prices of our key raw materials have fluctuated significantly in recent years. For example, the average market price of coal per wet metric ton (benchmark free on board price of Peak Downs Australian premium hard coking coal) was US\$126 in 2014, US\$102 in 2015 and US\$114 in 2016. The average market price of iron ore per dry metric ton (Iron Ore 62% Fe, CFR China index announced by Platts) was US\$88 in 2014, US\$51 in 2015 and US\$54 in 2016.

Our long-term supply contracts generally have terms of three to ten years and provide for periodic price adjustments to the then-market prices. We typically adjust the prices on a quarterly basis and maintain approximately one month of inventory of raw materials. Such price adjustments are driven by various factors, including the global economic outlook, global market prices of raw materials and steel products, supply and demand outlook of raw materials and production costs of raw materials. In the case of coal, globally influential buyers and sellers of coal determine benchmark prices of coal, based on which other buyers and sellers negotiate their prices after taking into consideration the quality of coal and other factors. In the case of iron ore, the supplier and we typically agree on the purchase price primarily based on the spot market price periodically announced by Platts (Iron Ore 62% Fe, CFR China Index). As of December 31, 2016, 144 million tons of iron ore and 22 million tons of coal remained to be purchased under long-term supply contracts. Future increases in prices of our key raw materials and our inability to pass along such increases to our customers could adversely affect our margins and profits. Increased prices may also cause potential customers to defer purchase of steel products, while rapidly falling prices may increase loss on valuation of raw material inventory purchased when prices were higher, either of which could have an adverse effect on our business, financial condition and results of operations.

We operate in the highly competitive steel, trading and construction industries, and our failure to successfully compete would adversely affect our market position and business.

Steel. The markets for our steel products are highly competitive and we face intense global competition. In recent years, driven in part by strong growth in steel consumption in the developing world, particularly in China, the global steel industry has experienced renewed interest in expansion of steel production capacity. China is the largest steel producing country in the world by a significant margin, with the balance between its domestic production and demand being an important factor in the

determination of global steel prices. In addition, the global steel industry has experienced consolidation in the past, including through the merger of Mittal and Arcelor in 2006. Competition from global steel manufacturers with expanded production capacity such as ArcelorMittal S.A. and new market entrants, especially from China and India, has resulted in significant price competition and may result in declining margins and reductions in revenue. Our larger competitors may use their resources, which may be greater than ours, against us in a variety of ways, including by making additional acquisitions, investing more aggressively in product development and capacity and displacing demand for our export products.

The increased production capacity, combined with a decrease in demand due to the recent slowdown of the global economy, has resulted in production over-capacity in the global steel industry. In particular, increase in steel production in China has outpaced its domestic demand for steel products in recent years, which imbalance has been exacerbated by the recent slowdown in China's economic growth rate. As a result, China has become an increasingly larger exporter of steel, which in turn has resulted in downward pressure on global steel prices. Production over-capacity in the global steel industry may intensify if the slowdown of the global economy is prolonged or demand from developing countries, particularly from China, continues to lag behind the growth in production capacity. Production over-capacity in the global steel industry is likely to:

- reduce export prices in Dollar terms of our principal products, which in turn may reduce our sales prices in Korea;
- increase competition in the Korean market as foreign producers seek to export steel products to Korea as other markets experience a slowdown;
- negatively affect demand for our products abroad and our ability to expand export sales; and
- affect our ability to increase steel production in general.

Steel also competes with other natural and synthetic materials that may be used as steel substitutes, such as aluminum, cement, composites, glass, plastic and wood. Government regulatory initiatives mandating the use of such materials instead of steel, whether for environmental or other reasons, as well as the development of attractive alternative substitutes for steel products, may reduce demand for steel products and increase competition in the global steel industry.

As part of our strategy to compete in this challenging landscape, we will continue to invest in developing innovative products that offer the greatest potential returns and enhance the overall quality of our products, as well as make additional investments in the development of new manufacturing technologies. However, there is no assurance that we will be able to continue to compete successfully in this economic environment or that the prolonged slowdown of the global economy or production over-capacity will not have a material adverse effect on our business, results of operations or financial condition.

Trading. POSCO Daewoo competes principally with six other Korean general trading companies, each of which is affiliated with a major domestic business group, as well as global trading companies based in other countries. In the domestic market, competition for export transactions on behalf of domestic suppliers and import transactions on behalf of domestic purchasers was limited, as most affiliated general trading companies of large Korean business groups generally relied on affiliate transactions for the bulk of their trading business. However, in recent years, many of these Korean general trading companies have reduced their reliance on their affiliated business group and transactions carried out on behalf of their member companies and instead have generally evolved to focus on segments of the import and export markets in which they have a competitive advantage. As a result, competition among Korean general trading companies in the area of traditional trade has become more intense.

The overseas trading markets in which POSCO Daewoo operates are also highly competitive. POSCO Daewoo's principal competitors in the overseas trading markets include Korean trading companies that operate in various international markets, as well as foreign trading companies, particularly those based in Japan. As POSCO Daewoo diversifies into businesses other than traditional trading such as natural resources development, it also increasingly competes with other Korean and international companies involved in these businesses. Some of POSCO Daewoo's competitors may be more experienced and have greater financial resources and pricing flexibility than POSCO Daewoo, as well as more extensive global networks and wider access to customers. There is no assurance that POSCO Daewoo will be able to continue to compete successfully in this economic environment or that the prolonged slowdown of the global economy will not have a material adverse effect on its business, results of operations or financial condition.

Construction. POSCO E&C, our consolidated subsidiary, operates in the highly competitive construction industry. Competition is based primarily on price, reputation for quality, reliability, punctuality and financial strength of contractors. Intense competition among construction companies may result in, among other things, a decrease in the price POSCO E&C can charge for its services, difficulty in winning bids for construction projects, an increase in construction costs and difficulty in obtaining high-quality contractors and qualified employees.

In Korea, POSCO E&C's main competition in the construction of residential and non-residential buildings, EPC (or engineering, procurement and construction) projects, urban planning and development projects and civil works projects consists of approximately ten major domestic construction companies, all of which are member companies of other large business groups in Korea and are capable of undertaking larger-scale, higher-value-added projects that offer greater potential returns. A series of measures introduced by the Government over the past few years to regulate housing prices in Korea, as well as increasing popularity of low-bid contracts in civil works project mandates, have contributed to increased competition in the Korean construction industry in recent years.

Competition for new project awards in overseas markets is also intense. In these markets, POSCO E&C faces competition from local construction companies, as well as international construction companies from other countries, including other major Korean construction companies with overseas operations. Construction companies from other developed countries may be more experienced, have greater financial resources and possess more sophisticated technology than POSCO E&C, while construction companies from developing countries often have the advantage of lower wage costs. Some of these competitors have achieved higher market penetration than POSCO E&C has in specific markets in which it competes, and POSCO E&C may need to accept lower margins in order for it to compete successfully against them. POSCO E&C's failure to successfully compete in the domestic or overseas construction markets could adversely affect its market position and its results of operations and financial condition.

We may not be able to successfully execute our diversification strategy.

In part to prepare for the eventual maturation of the Korean steel market, we have made investments in recent years to secure new growth engines by diversifying into new businesses related to our steel operations that we believe will offer greater potential returns, such as participation in EPC projects in the steel sector and natural resources development, as well as entering into new businesses not related to our steel operations such as power generation and alternative energy solutions, and production of comprehensive materials such as lithium, nickel, magnesium and cobalt. From time to time, we may selectively acquire or invest in companies to pursue such diversification strategy.

The success of the overall diversification strategy will depend, in part, on our ability to realize the growth opportunities and anticipated synergies. The realization of the anticipated benefits depends

on numerous factors, some of which are outside our control, including the availability of qualified personnel, establishment of new relationships and expansion of existing relationships with various customers and suppliers, procurement of necessary technology and know-how to engage in such businesses and access to investment capital at reasonable costs. The realization of the anticipated benefits may be impeded, delayed or reduced as a result of numerous factors, some of which are outside our control. These factors include:

- difficulties in integrating the operations of the acquired business, including information and accounting systems, personnel, policies and procedures, and in reorganizing or reducing overlapping operations, marketing networks and administrative functions, which may require significant amounts of time, financial resources and management attention;
- unforeseen contingent risks or latent liabilities relating to the acquisition that may become apparent in the future;
- difficulties in managing a larger business; and
- loss of key management personnel or customers.

Accordingly, we cannot assure you that our diversification strategy can be completed profitably or that the diversification efforts will not adversely affect our combined business, financial condition and results of operations.

Expansion of our production operations abroad is important to our long-term success, and our limited experience in the operation of our business outside Korea increases the risk that our international expansion efforts will not be successful.

We conduct international trading and construction operations abroad, and our business relies on a global trading network comprised of overseas subsidiaries, branches and representative offices. Although many of our subsidiaries and overseas branches are located in developed countries, we also operate in numerous countries with developing economies. In addition, we intend to continue to expand our steel production operations internationally by carefully seeking out promising investment opportunities, particularly in China, India, Southeast Asia and Latin America, in part to prepare for the eventual maturation of the Korean steel market. For example, in December 2013, PT. Krakatau POSCO Co., Ltd., a joint venture company in Indonesia in which we hold a 70.0% interest, completed the construction of a steel manufacturing plant with an annual capacity of 3.0 million tons of plates and slabs. We may enter into additional joint ventures with foreign steel producers that would enable us to rely on these businesses to conduct our operations, establish local networks and coordinate our sales and marketing efforts abroad. To the extent that we enter into these arrangements, our success will depend in part on the willingness of our partner companies to dedicate sufficient resources to their partnership with us.

In other situations, we may decide to establish manufacturing facilities by ourselves instead of relying on partners. The demand and market acceptance for our products produced abroad are subject to a high level of uncertainty and are substantially dependent upon the market condition of the global steel industry. We cannot assure you that our international expansion plan will be profitable or that we can recoup the costs related to such investments.

Expansion of our trading, construction and production operations abroad requires management attention and resources. In addition, we face additional risks associated with our expansion outside Korea, including:

- challenges caused by distance, language and cultural differences;
- higher costs associated with doing business internationally;
- legal and regulatory restrictions, including foreign exchange controls that might prevent us from repatriating cash earned in countries outside Korea;

- longer payment cycles in some countries;
- credit risk and higher levels of payment fraud;
- currency exchange risks;
- potentially adverse tax consequences;
- political and economic instability; and
- seasonal reductions in business activity during the summer months in some countries.

We have limited insurance coverage and may incur significant losses resulting from operating hazards, product liability claims from customers or business interruptions.

The normal operation of our manufacturing facilities may be interrupted by accidents caused by operating hazards, power supply disruptions and equipment failures, as well as natural disasters. As with other industrial companies, our operations involve the use, handling, generation, processing, storage, transportation and disposal of hazardous materials, which may result in fires, explosions, spills and other unexpected or dangerous accidents causing property damage as well as personal injuries or death. We are also exposed to risks associated with product liability claims in the event that the use of the products we sell results in injury. We maintain property insurance for our property, plant and equipment that we believe to be consistent with market practice in Korea. However, we may not have adequate resources to satisfy a judgment in excess of our insurance coverage in the event of a successful claim against us. Any occurrence of accidents or other events affecting our operations could result in potentially significant monetary damages, diversion of resources, production disruption and delay in delivery of our products, which may have a material adverse effect on our business, financial condition and results of operations.

We may from time to time engage in acquisitions for which we may be required to seek additional sources of capital.

From time to time, we may selectively acquire or invest in companies or businesses that may complement our business. In order to finance these acquisitions, we intend to use cash on hand, funds from operations, issuances of equity and debt securities, and, if necessary, financings from banks and other sources as well as entering into consortiums with financial investors. However, no assurance can be given that we will be able to obtain sufficient financing for such acquisitions or investments on terms commercially acceptable to us or at all. We also cannot assure you that such financings and related debt payment obligations will not have a material adverse impact on our financial condition, results of operations or cash flow.

Further increases in, or new impositions of, anti-dumping, safeguard or countervailing duty proceedings may have an adverse impact on our export sales.

As a steel producer with global sales and operations, we are involved in trade remedy proceedings in markets worldwide, including in the United States. We proactively participate in and plan for such proceedings to minimize any adverse effects and associated risks. While there has been an increase in the number of trade cases in recent years, and an increased focus on trade issues by government officials, all such cases have been product and market-specific, and thus have been limited in scope relative to our global sales and operations. We continue to carefully monitor developments with respect to trade remedy policy in all markets in which we participate and, where necessary, vigorously defend our rights through litigation before tribunals such as the U.S. Court of International Trade. Our products that are subject to anti-dumping, safeguard or countervailing duty proceedings in the aggregate currently do not account for a material portion of our total sales, and such proceedings have not had a material adverse impact on our business and operations in recent years. However, there can be no assurance that increases in, or new impositions of, anti-dumping duties,

safeguard duties, countervailing duties, quotas or tariffs on our exports of products abroad may not have a material adverse impact on our exports in the future. See “Item 4. Information on the Company — Item 4.B. Business Overview — Markets — Exports.”

We participate in overseas natural resources exploration, development and production projects abroad, which expose us to various risks.

As part of consortia or through acquisitions of minority interests, we engage in overseas natural resources exploration, development and production projects in various locations, including a gas field exploration project in Myanmar through POSCO Daewoo. POSCO Daewoo began recognizing revenue from the Myanmar gas field project starting in 2013. We may also selectively acquire or invest in companies or businesses that engage in such activities. As part of our efforts to diversify our operations, we intend to selectively expand our operations by carefully seeking out promising exploration, development and production opportunities abroad. To the extent that we enter into these arrangements, our success in these endeavors will depend in part on the willingness of our partner companies to dedicate sufficient resources to their partnership with us, as well as our ability to finance such investments.

The demand and market acceptance for such activities abroad are subject to a substantially higher level of uncertainty than our traditional steel business and are substantially dependent upon the market condition of the global natural resources industry as well as the political and social environment of the target countries. The performance of projects in which we participate may be adversely affected by the occurrence of military hostility, political unrest or acts of terrorism. In addition, some of our current exploration, development and production projects involve drilling exploratory wells on properties with no proven amount of natural resource reserves. Although all drilling, whether developmental or exploratory, involves risks, exploratory drilling involves greater risks of dry holes or failure to find commercial quantities of natural resources. Other risks to which such activities are subject include obtaining required regulatory approvals and licenses, securing and maintaining adequate property rights to land and natural resources, and managing local opposition to project development. A decrease in the market price of raw materials may also adversely impact the value of our investments related to natural resources projects. For example, in connection with our disposition of a minority interest in Nacional Minerios S.A., an iron ore mining company in Brazil in which we had invested in December 2008, we recognized Won 96 billion of impairment loss on assets held for sale in 2015 as well as an additional loss of Won 189 billion from our disposal of such assets in 2015. We have limited experience in this business, and we cannot assure you that our overseas natural resources exploration, development and production projects will be profitable, that we will be able to meet the financing requirements for such projects, or that we can recoup the costs related to such investments, which in turn could materially and adversely affect our business, financial condition and results of operations.

We may encounter problems with joint overseas natural resources exploration, development and production projects and large-scale infrastructure projects, which may materially and adversely affect our business.

We typically pursue our natural resources exploration, development and production projects jointly with consortium partners or through acquisition of minority interests in such projects, and we expect to be involved in other joint projects in the future. We sometimes hold a majority interest in the projects among the consortium partners, but we often lack a controlling interest in the joint projects. Therefore, we may not be able to require that our joint ventures sell assets or return invested capital, make additional capital contributions or take any other action without the vote of at least a majority of our consortium partners. If there are disagreements between our consortium partners and us regarding the business and operations of the joint projects, we cannot assure you that we will be able to resolve them in a manner that will be in our best interests. Certain major decisions, such as selling a stake in

the joint project, may require the consent of all other partners. These limitations may adversely affect our ability to obtain the economic and other benefits we seek from participating in these projects.

In addition, our consortium partners may:

- have economic or business interests or goals that are inconsistent with us;
- take actions contrary to our instructions, requests, policies or objectives;
- be unable or unwilling to fulfill their obligations;
- have financial difficulties; or
- have disputes with us as to their rights, responsibilities and obligations.

Any of these and other factors may have a material adverse effect on the performance of our joint projects and expose us to a number of risks, including the risk that the partners may be incapable of providing the required financial support to the partnerships and the risk that the partners may not be able to fulfill their other obligations, resulting in disputes not only between our partners and us, but also between the joint ventures and their customers. Such a material adverse effect on the performance of our joint projects may in turn materially and adversely affect our business, results of operations and financial condition.

Cyclical fluctuations based on macroeconomic factors may adversely affect POSCO E&C's business and performance.

We engage in engineering and construction activities through POSCO E&C. The Construction Segment is highly cyclical and tends to fluctuate based on macroeconomic factors, such as consumer confidence and income, employment levels, interest rates, inflation rates, demographic trends and policies of the Government. From time to time, the construction industry has experienced significant and sometimes prolonged downturns, and our construction revenues have fluctuated in the past depending on the level of public and private sector construction activities in Korea and abroad. In addition, the performance of POSCO E&C's domestic residential property business is highly dependent on the general condition of the real estate market in Korea. The Government has taken measures to support the Korean construction industry in recent years, including easing of regulations imposed on redevelopment of apartment buildings and resale restrictions in the metropolitan areas, as well as reductions in property taxes. Although the Korean residential real estate market has shown signs of recovery in recent years and the Government expects to moderately increase the level of the domestic public sector's construction activities in 2017, the demand for construction activities abroad remains weak and the overall prospects for Korean construction companies in 2017 and beyond remain uncertain.

In part due to the weakening of market conditions in the domestic construction industry as well as a decrease in demand for EPC projects in Korea and abroad, the Construction Segment's external revenue decreased by 20.5%, or Won 1,747 billion, from Won 8,516 billion in 2015 to Won 6,768 billion in 2016. In 2016, POSCO E&C and POSCO Engineering Co., Ltd., a consolidated subsidiary of POSCO E&C, also incurred restructuring expenses related to their early retirement programs as well as losses related to some of their EPC projects abroad, which contributed to an increase in loss of the Construction Segment (prior to adjusting for inter-company transactions that are eliminated during consolidation, good will and corporate fair-value adjustments, income tax expense and basis difference) by 409.2%, or Won 1,128 billion, from Won 276 billion in 2015 to Won 1,404 billion in 2016. Our Construction Segment's revenues could decrease further in the event of a prolonged general downturn in the construction market resulting in weaker demand, which could adversely affect our business, results of operations or financial condition.

Many of POSCO E&C's domestic and overseas construction projects are on a fixed-price basis, which could result in losses for us in the event that unforeseen additional expenses arise with respect to the project.

Many of POSCO E&C's domestic and overseas construction projects are carried out on a fixed-price basis according to a predetermined timetable, pursuant to the terms of a fixed-price contract. Under such fixed-price contracts, POSCO E&C retains all cost savings on completed contracts but is also liable for the full amount of all cost overruns and may be required to pay damages for late delivery. The pricing of fixed-price contracts is crucial to POSCO E&C's profitability, as is its ability to quantify risks to be borne by it and to provide for contingencies in the contract accordingly.

POSCO E&C attempts to anticipate costs of labor, raw materials, parts and components in its bids on fixed-price contracts. However, the costs incurred and gross profits realized on a fixed-price contract may vary from its estimates due to factors such as:

- unanticipated variations in labor and equipment productivity over the term of a contract;
- unanticipated increases in labor, raw material, parts and components, subcontracting and overhead costs, including as a result of bad weather;
- delivery delays and corrective measures for poor workmanship; and
- errors in estimates and bidding.

If unforeseen additional expenses arise over the course of a construction project, such expenses are usually borne by POSCO E&C, and its profit from the project will be correspondingly reduced or eliminated. For example, we incurred loss of Won 157 billion in 2016 in connection with a delay in the construction of CSP-Companhia Siderurgia do Pecem steel plant complex in Brazil. If POSCO E&C experiences significant unforeseen additional expenses with respect to its fixed price projects, it may incur losses on such projects, which could have a material adverse effect on its financial condition and results of operations.

We are subject to environmental regulations, and our operations could expose us to substantial liabilities.

We are subject to national and local environmental laws and regulations, including increasing pressure to reduce emission of carbon dioxide relating to our manufacturing process, and our steel manufacturing and construction operations could expose us to risk of substantial liability relating to environmental or health and safety issues, such as those resulting from discharge of pollutants and carbon dioxide into the environment, the handling, storage and disposal of solid or hazardous materials or wastes and the investigation and remediation of contaminated sites. We may be responsible for the investigation and remediation of environmental conditions at currently and formerly operated manufacturing or construction sites. For example, primarily relating to contamination of land near our magnesium smelting plant located in Gangneung, Korea and gas treatment plant located in our Pohang Works, we had Won 48 billion as provisions for the restoration as of December 31, 2016 (Won 10 billion as current liabilities and Won 38 billion as non-current liabilities), which represent the present value of estimated costs for recovery outstanding as of such date. We may also be subject to associated liabilities, including liabilities for natural resource damage, third party property damage or personal injury resulting from lawsuits brought by the Government or private litigants. In the course of our operations, hazardous wastes may be generated at third party-owned or operated sites, and hazardous wastes may be disposed of or treated at third party-owned or operated disposal sites. If those sites become contaminated, we could also be held responsible for the cost of investigation and remediation of such sites, for any associated natural resource damage, and for civil or criminal fines or penalties.

Failure to protect our intellectual property rights could impair our competitiveness and harm our business and future prospects.

We believe that developing new steel manufacturing technologies that can be differentiated from those of our competitors, such as FINEX, strip casting and silicon steel manufacturing technologies, is critical to the success of our business. We take active measures to obtain protection of our intellectual property by obtaining patents and undertaking monitoring activities in our major markets. However, we cannot assure you that the measures we are taking will effectively deter competitors from improper use of our proprietary technologies. Our competitors may misappropriate our intellectual property, disputes as to ownership of intellectual property may arise and our intellectual property may otherwise become known or independently developed by our competitors. Any failure to protect our intellectual property could impair our competitiveness and harm our business and future prospects.

We rely on trade secrets and other unpatented proprietary know-how to maintain our competitive position, and unauthorized disclosure of our trade secrets or other unpatented proprietary know-how could negatively affect our business.

We rely on trade secrets and unpatented proprietary know-how and information. We enter into confidentiality agreements with each of our employees and consultants upon the commencement of an employment or consulting relationship. These agreements generally provide that all inventions, ideas, discoveries, improvements and patentable material made or conceived by the individual arising out of the employment or consulting relationship and all confidential information developed or made known to the individual during the term of the relationship is our exclusive property. We cannot assure the enforceability of these types of agreements, or that they will not be breached. We also cannot be certain that we will have adequate remedies for any breach. The disclosure of our trade secrets or other know-how as a result of such a breach could adversely affect our business.

We face the risk of litigation proceedings relating to infringement of intellectual property rights of third parties, which, if determined adversely to us, could cause us to lose significant rights, pay significant damage awards or suspend the sale of certain products.

Our success depends largely on our ability to develop and use our technology and know-how in a proprietary manner without infringing the intellectual property rights of third parties. The validity and scope of claims relating to technology and patents involve complex scientific, legal and factual questions and analysis and, therefore, may be highly uncertain. In addition, because patent applications in many jurisdictions are kept confidential for an extended period before they are published, we may be unaware of other persons' pending patent applications that relate to our products or manufacturing processes. Accordingly, we face the risk of litigation proceedings relating to infringement of intellectual property rights of third parties.

The plaintiffs in actions relating to infringement of intellectual property rights typically seek injunctions and substantial damages. Although patent and other intellectual property disputes are often settled through licensing or similar arrangements, there can be no assurance that such licenses can be obtained on acceptable terms or at all. Accordingly, regardless of the scope or validity of disputed patents or the merits of any patent infringement claims by potential or actual litigants, we may have to engage in protracted litigation. The defense and prosecution of intellectual property suits, patent opposition proceedings and related legal and administrative proceedings can be both costly and time consuming and may significantly divert the efforts and resources of our technical and management personnel. An adverse determination in any such litigation or proceedings could subject us to pay substantial damages to third parties, require us to seek licenses from third parties and pay ongoing royalties or redesign certain products, or subject us to injunctions prohibiting the manufacture and sale of our products or the use of technologies in certain jurisdictions. The occurrence of any of the foregoing could have a material adverse effect on our reputation, business, financial condition and results of operations.

We may be exposed to potential claims for unpaid wages and become subject to additional labor costs arising from the Supreme Court of Korea's interpretation of ordinary wages.

Under the Labor Standards Act, an employee is legally entitled to "ordinary wages." Under the guidelines previously issued by the Ministry of Employment and Labor (formerly the Ministry of Labor), ordinary wages include base salary and certain fixed monthly allowances for overtime work performed during night shifts and holidays. Prior to the Supreme Court of Korea's decision described below, we and other companies in Korea had interpreted these guidelines as excluding fixed bonuses that are paid other than on a monthly basis (such as bi-monthly, quarterly or biannually paid bonuses) from the scope of ordinary wages.

On December 18, 2013, the Supreme Court of Korea ruled that regularly paid bonuses, including those that are paid other than on a monthly basis, shall be deemed ordinary wages if these bonuses are paid "regularly" and "uniformly" on a "fixed basis" notwithstanding differential amounts based on seniority. The Supreme Court of Korea ruled that if regular bonus payments are limited to only those working for the employer on a specific date, such bonuses are not fixed and thus do not constitute part of ordinary wage. In addition, under this decision, any collective bargaining agreement or labor-management agreement that attempts to exclude such regular bonuses from ordinary wage will be deemed void for violation of the mandatory provisions of Korean law. However, the Supreme Court of Korea further ruled that an employee's claim for underpayments under the expanded scope of ordinary wages for the past three years within the statute of limitations may be denied based on principles of good faith if (i) there is an agreement between the employer and employees that the regular bonus shall be excluded from ordinary wage in determining the total amount of wage, (ii) such claim results in further wage payments that far exceed the level of total amount of wage agreed between the employer and employees, and (iii) such claim would cause an unexpected financial burden to the employer leading to material managerial difficulty or a threat to the employer's existence. The principles of good faith, however, do not apply to an agreement on wages entered into between the employer and employees after December 18, 2013, the date of the above decision of the Supreme Court of Korea.

In light of the Supreme Court of Korea's decision above, the Ministry of Employment and Labor published its new guidelines (the "Guidelines") on January 23, 2014. According to the Guidelines, the Government excludes, from ordinary wage, regular bonuses contingent on employment on a specific date. Based on the Supreme Court of Korea's decision and the Guidelines, we believe that regular bonuses that we have paid to our employees are likely to be excluded from ordinary wage since we have paid regular bonuses to only those working for us on the initial date of payment calculation, the 15th day of each month. However, the Supreme Court decision may result in additional labor costs to us in the form of additional payments under the expanded scope of ordinary wages applicable in the past three years as well as to be incurred in the future, which may have an adverse effect on our financial condition and results of operations.

Political and societal unrest surrounding the impeachment of President Park Geun-hye could adversely affect the Korean economy.

In November 2016, the Korean prosecutor's office indicted a confidant of President Park Geun-hye who had allegedly used her ties with the President to extort donations from Korean business groups for two nonprofit foundations over which she is purported to have substantial influence, as well as a number of current and former presidential aides, on charges of, among others, abuse of power, coercion and leaking classified documents. On November 30, 2016, a special independent prosecutor was appointed to conduct an investigation of the extent of the President's involvement, and mass weekend rallies have been held in Seoul and other cities both to protest against, and to express support for, President Park.

On December 9, 2016, the National Assembly voted in favor of impeaching President Park for a number of alleged constitutional and criminal violations, including violation of the Constitution and

abuse of power by allowing her confidant to exert influence on state affairs and allowing senior presidential aides to aid in her extortion from companies. President Park was suspended from power immediately, with the prime minister simultaneously taking over the role of acting President. On March 10, 2017, the Constitutional Court unanimously upheld the parliamentary vote to impeach President Park, triggering her immediate dismissal. A special election to elect a new President is scheduled to be held on May 9, 2017. In connection with its investigation of former President Park, the special independent prosecutor also conducted related investigations of several large Korean business groups and members of their senior management for bribery, embezzlement and other possible misconduct, which the Korean prosecutor's office has continued following the end of the special independent prosecutor's term. There is no assurance that such events will not have a material adverse effect on the Korean economy.

Escalations in tensions with North Korea could have an adverse effect on us and the market value of our common shares and ADSs.

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of future events. In particular, since the death of Kim Jong-il in December 2011, there has been increased uncertainty with respect to the future of North Korea's political leadership and concern regarding its implications for political and economic stability in the region. Although Kim Jong-il's third son, Kim Jong-eun, has assumed power as his father's designated successor, the long-term outcome of such leadership transition remains uncertain.

In addition, there have been heightened security concerns in recent years stemming from North Korea's nuclear weapon and long-range missile programs as well as its hostile military actions against Korea. Some of the significant incidents in recent years include the following:

- From time to time, North Korea has conducted ballistic missile tests. In February 2016, North Korea launched a long-range rocket in violation of its agreement with the United States as well as United Nations sanctions barring it from conducting launches that use ballistic missile technology. Despite international condemnation, North Korea released a statement that it intends to continue its rocket launch program and it conducted additional ballistic missile tests in June 2016, a submarine-launched ballistic missile test in August 2016 and an intermediate-range ballistic missile test in February 2017. In February 2017, the United Nations Security Council issued a unanimous statement condemning North Korea and agreeing to continue to closely monitor the situation and to take further significant measures.
- North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and conducted three rounds of nuclear tests between October 2006 and February 2013, which increased tensions in the region and elicited strong objections worldwide. In January 2016, North Korea conducted a fourth nuclear test, claiming that the test involved its first hydrogen bomb, which claim has not been independently verified. In response to such test (as well as North Korea's long-range rocket launch in February 2016), the United Nations Security Council unanimously passed a resolution in March 2016 condemning North Korea's actions and significantly expanding the scope of the sanctions applicable to North Korea, while the United States and the European Union also imposed additional sanctions on North Korea. In September 2016, North Korea conducted a fifth nuclear test, claiming to have successfully detonated a nuclear warhead that could be mounted on missiles, which claim has not been independently verified.
- In August 2015, two Korean soldiers were injured in a landmine explosion near the Korean demilitarized zone. Claiming the landmines were set by North Koreans, the Korean army re-initiated its propaganda program toward North Korea utilizing loudspeakers near the

demilitarized zone. In retaliation, the North Korean army fired artillery rounds on the loudspeakers, resulting in the highest level of military readiness for both Koreas. High-ranking officials from North Korea and Korea subsequently met for discussions and entered into an agreement on August 25, 2015 intending to defuse military tensions.

- In March 2010, a Korean naval vessel was destroyed by an underwater explosion, killing many of the crewmen on board. The Government formally accused North Korea of causing the sinking, while North Korea denied responsibility. Moreover, in November 2010, North Korea fired more than one hundred artillery shells that hit Korea's Yeonpyeong Island near the Northern Limit Line, which acts as the de facto maritime boundary between Korea and North Korea on the west coast of the Korean peninsula, causing casualties and significant property damage. The Government condemned North Korea for the attack and vowed stern retaliation should there be further provocation.

North Korea's economy also faces severe challenges that may aggravate social and political pressures within North Korea. There can be no assurance that the level of tensions affecting the Korean peninsula will not escalate in the future. Any further increase in tensions, which may occur, for example, if North Korea experiences a leadership crisis, high-level contacts between Korea and North Korea break down or military hostilities occur, could have a material adverse effect on the Korean economy and on our business, financial condition and results of operations.

If you surrender your ADRs to withdraw shares of our common stock, you may not be allowed to deposit the shares again to obtain ADRs.

Under the deposit agreement, holders of shares of our common stock may deposit those shares with the ADR depository's custodian in Korea and obtain ADRs, and holders of ADRs may surrender ADRs to the ADR depository and receive shares of our common stock. However, under current Korean laws and regulations, the depository bank is required to obtain our prior consent for the number of shares to be deposited in any given proposed deposit that exceeds the difference between (i) the aggregate number of shares deposited by us for the issuance of ADSs (including deposits in connection with the initial and all subsequent offerings of ADSs and stock dividends or other distributions related to these ADSs) and (ii) the number of shares on deposit with the depository bank at the time of such proposed deposit. It is possible that we may not give the consent. As a result, if you surrender ADRs and withdraw shares of common stock, you may not be able to deposit the shares again to obtain ADRs. See "Item 10. Additional Information — Item 10.D. Exchange Controls."

You may not be able to exercise preemptive rights for additional shares of common stock and may suffer dilution of your equity interest in us.

The Commercial Code and our articles of incorporation require us, with some exceptions, to offer shareholders the right to subscribe for new shares in proportion to their existing ownership percentage whenever new shares are issued. If we issue new shares to persons other than our shareholders (See "Item 10.B. Memorandum and Articles of Association — Preemptive Rights and Issuance of Additional Shares"), a holder of our ADSs will experience dilution of such holding. If none of these exceptions is available, we will be required to grant preemptive rights when issuing additional common shares under Korean law. Under the deposit agreement governing the ADSs, if we offer any rights to subscribe for additional shares of our common stock or any rights of any other nature, the ADR depository, after consultation with us, may make the rights available to you or use reasonable efforts to dispose of the rights on your behalf and make the net proceeds available to you. The ADR depository, however, is not required to make available to you any rights to purchase any additional shares unless it deems that doing so is lawful and feasible and:

- a registration statement filed by us under the Securities Act is in effect with respect to those shares; or

- the offering and sale of those shares is exempt from or is not subject to the registration requirements of the Securities Act.

We are under no obligation to file any registration statement under the Securities Act to enable you to exercise preemptive rights in respect of the common shares underlying the ADSs, and we cannot assure you that any registration statement would be filed or that an exemption from the registration requirement under the Securities Act would be available. Accordingly, if a registration statement is required for you to exercise preemptive rights but is not filed by us, you will not be able to exercise your preemptive rights for additional shares and may suffer dilution of your equity interest in us.

U.S. investors may have difficulty enforcing civil liabilities against us and our directors and senior management.

We are incorporated in Korea with our principal executive offices located in Seoul. The majority of our directors and senior management are residents of jurisdictions outside the United States, and the majority of our assets and the assets of such persons are located outside the United States. As a result, U.S. investors may find it difficult to effect service of process within the United States upon us or such persons or to enforce outside the United States judgments obtained against us or such persons in U.S. courts, including actions predicated upon the civil liability provisions of the U.S. federal securities laws. It may also be difficult for an investor to enforce in U.S. courts judgments obtained against us or such persons in courts in jurisdictions outside the United States, including actions predicated upon the civil liability provisions of the U.S. federal securities laws. It may also be difficult for a U.S. investor to bring an action in a Korean court predicated upon the civil liability provisions of the U.S. federal securities laws against our directors and senior management and non-U.S. experts named in this annual report.

We expect to continue operations and investments relating to countries targeted by United States and European Union economic sanctions.

The U.S. Department of the Treasury's Office of Foreign Assets Control, or "OFAC," enforces certain laws and regulations ("OFAC Sanctions") that impose restrictions upon U.S. persons and, in some instances, foreign entities owned or controlled by U.S. persons, with respect to activities or transactions with certain countries, governments, entities and individuals that are the subject of OFAC Sanctions ("U.S. Sanctions Targets"). U.S. persons are also generally strictly prohibited from facilitating such activities or transactions. Similarly, the European Union enforces certain laws and regulations ("E.U. Sanctions") that impose restrictions upon nationals of E.U. member states, persons located within E.U. member states, entities incorporated or constituted under the law of an E.U. member state, or business conducted in whole or in part in E.U. member states with respect to activities or transactions with certain countries, governments, entities and individuals that are the subject of E.U. Sanctions ("E.U. Sanctions Targets" and together with U.S. Sanctions Targets, "Sanctions Targets"). E.U. persons are also generally prohibited from activities that promote such activities or transactions.

We engage in limited business activities in countries that are deemed Sanctions Targets, including Iran and Sudan. We produce and export, typically through our sales subsidiaries, steel products to such countries, including automotive steel sheets and other steel materials to Iranian entities. Our subsidiaries also engage in limited business activities in countries that are deemed Sanctions Targets. In particular, POSCO Daewoo engages in the trading of steel, raw materials and other items with entities in countries that are deemed Sanctions Targets, including Iran and Sudan. We believe that such activities and investments do not involve any U.S. goods or services. Our activities and investments in Iran and Sudan accounted for approximately 0.2% of our consolidated revenues in 2014, 0.7% in 2015 and 0.6% in 2016.

We expect to continue to engage in business activities and make investments in countries that are deemed Sanctions Targets over the foreseeable future. Although we believe that OFAC Sanctions

under their current terms are not applicable to our current activities, our reputation may be adversely affected, some of our U.S. investors may be required to divest their investments in us under the laws of certain U.S. states or under internal investment policies or may decide for reputational reasons to divest such investments. We are aware of initiatives by U.S. governmental entities and U.S. institutional investors, such as pension funds, to adopt or consider adopting laws, regulations or policies prohibiting transactions with or investment in, or requiring divestment from, entities doing business with countries identified as state sponsors of terrorism. We cannot assure you that the foregoing will not occur or that such occurrence will not have a material adverse effect on the value of our securities.

This annual report contains “forward-looking statements” that are subject to various risks and uncertainties.

This annual report contains “forward-looking statements” that are based on our current expectations, assumptions, estimates and projections about our company and our industry. The forward-looking statements are subject to various risks and uncertainties. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “project,” “should,” and similar expressions. Those statements include, among other things, the discussions of our business strategy and expectations concerning our market position, future operations, margins, profitability, liquidity and capital resources. We caution you that reliance on any forward-looking statement involves risks and uncertainties, and that although we believe that the assumptions on which our forward-looking statements are based are reasonable, any of those assumptions could prove to be inaccurate, and, as a result, the forward-looking statements based on those assumptions could be incorrect. The uncertainties in this regard include, but are not limited to, those identified in the risk factors discussed above. In light of these and other uncertainties, you should not conclude that we will necessarily achieve any plans and objectives or projected financial results referred to in any of the forward-looking statements. We do not undertake to release the results of any revisions of these forward-looking statements to reflect future events or circumstances.

Item 4. Information on the Company

Item 4.A. History and Development of the Company

We were established by the Government on April 1, 1968, under the Commercial Code, to manufacture and distribute steel rolled products and plates in the domestic and overseas markets. The Government owned more than 70% of our equity until 1988, when the Government reduced its ownership of our common stock to 35% through a public offering and listing our shares on the KRX KOSPI Market. In December 1998, the Government sold all of our common stock it owned directly, and The Korea Development Bank completed the sale of our shares that it owned in September 2000. The Government no longer holds any direct interest in us, and our outstanding common stock is currently held by individuals and institutions. See “Item 7. Major Shareholders and Related Party Transactions — Item 7A. Major Stockholders.”

Our legal and commercial name is POSCO. Our principal executive offices are located at POSCO Center, 440 Teheran-ro, Gangnam-gu, Seoul, Korea 06194, and our telephone number is (822) 3457-0114.

Item 4.B. Business Overview

The Company

We are the largest fully integrated steel producer in Korea, and one of the largest steel producers in the world, based on annual crude steel production. We produced approximately

42.2 million tons of crude steel in 2016 and approximately 42.0 million tons in 2015, a substantial portion of which was produced at Pohang Works and Gwangyang Works. As of December 31, 2016, we had approximately 47.6 million tons of annual crude steel and stainless steel production capacity, including 17.6 million tons of production capacity Pohang Works and 24.8 million tons of production capacity of Gwangyang Works. We believe Pohang Works and Gwangyang Works are two of the most technologically advanced integrated steel facilities in the world. We manufacture and sell a diversified line of steel products, including cold rolled and hot rolled products, stainless steel products, plates, wire rods and silicon steel sheets, and we are able to meet a broad range of customer needs from manufacturing industries that consume steel, including automotive, shipbuilding, home appliance, engineering and machinery industries.

We sell primarily to the Korean market. Domestic sales accounted for 39.4% of our total revenue from steel products produced and sold by us in 2016 and 40.3% in 2015. On a non-consolidated basis, we believe that we had an overall market share of approximately 41% of the total sales volume of steel products sold in Korea in 2016 as well as in 2015. Our export sales and overseas sales to customers abroad accounted for 60.6% of our total revenue from steel products produced and sold by us in 2016 and 59.7% in 2015. Our major export market is Asia, with China accounting for 29.0%, Asia other than China and Japan accounting for 23.9%, and Japan accounting for 10.4% of our total steel export revenue from steel products produced and exported by us in 2016 and Asia other than China and Japan accounting for 28.2%, China accounting for 25.3% and Japan accounting for 9.5% of our total steel export revenue from steel products produced and exported by us in 2015.

We also engage in businesses that complement our steel manufacturing operations as well as carefully seek out promising investment opportunities to diversify our businesses both vertically and horizontally, in part to prepare for the eventual maturation of the Korean steel market. POSCO E&C is one of the leading engineering and construction companies in Korea that primarily engages in the planning, design and construction of industrial plants and architectural works and civil engineering. POSCO Daewoo is a global trading company that primarily engages in trading of steel and raw materials as well as investing in energy and mineral development projects throughout the world. POSCO Energy Corporation is the largest private power generation company in Korea.

We generated revenue of Won 58,522 billion and loss of Won 116 billion in 2015, compared to revenue of Won 52,940 billion and profit of Won 1,032 billion in 2016. We had total assets of Won 80,748 billion and total equity of Won 45,013 billion as of December 31, 2015, compared to total assets of Won 80,138 billion and total equity of Won 45,765 billion as of December 31, 2016.

Business Strategy

Leveraging on our success over the past five decades, our goal is to strengthen our position as one of the leading steel producers in the world through focusing on core technologies, further solidifying our market leading position in Korea, and pursuing operational efficiencies to increase our margins in markets abroad. In order to compete effectively in the dynamic global market environment driven by emerging economies and increasing demand for more environmentally friendly products, we are committed to leveraging our competitive advantages that enable us to further enhance our leadership positions in the global steel industry as well as selectively pursue growth opportunities outside of the steel industry.

We seek to strengthen our competitiveness and pursue growth through the following four business strategies:

Maintain Technology Leadership in Steel Manufacturing and Focus on Premium Products

As part of our strategy, we have identified core premium products that we plan to further develop, such as premium automotive steel sheets, silicon steel and API grade steel, and we will

continue to invest in developing innovative products, such as steel products with high formability or ultra-high strength, that address the evolving needs of our sophisticated customers for their next generation of products and offer the greatest potential returns. In order to increase our competitiveness and the proportion of our sales of higher margin, higher value added products, we plan to make additional investments in the development of innovative manufacturing and engineering technologies and upgrade our facilities in Korea and abroad through continued modernization and rationalization. We believe that our proprietary technologies and expertise in developing best-in-class steel production facilities, ability to independently and cost-effectively construct such facilities, and know how in their efficient operation and management enable us to develop premium products at a highly competitive cost structure.

We believe that innovation is a key element of our culture and critical to our success. We will continue our research and development efforts on developing even more environmentally friendly technologies that align with our customers' changing needs and desires as well as addressing emerging technological trends. For example, we will continue to refine FINEX, a low cost, environmentally friendly steel manufacturing process that optimizes our production capacity by utilizing low grade iron ore fines and using coal as an energy source and a reducing agent. We believe that FINEX offers considerable environmental and economic advantages through elimination of major sources of pollution such as facilities that pretreat raw materials, as well as reducing operating and raw material costs.

Improve Profitability of Our Non-Steel Business

We have selectively explored opportunities during the past decade in growth industries that complement our core steel operations and are integral to our overall business strategy, and we have identified trading, infrastructure construction, energy and comprehensive materials as our key areas of focus. In recent years, we have pursued strategic cost cutting measures through restructuring of our subsidiaries, and management discipline has strengthened and will continue to strengthen our corporate competitiveness in our non-steel business areas. We also plan to bolster the competitiveness of these businesses by developing core capabilities that enable us to offer innovative products and services that address our evolving customers' needs as follows:

- **Trading.** POSCO Daewoo, a global trading company that we acquired in 2010, primarily engages in trading of steel and raw materials as well as investing in energy development projects. POSCO Daewoo plans to pursue opportunities to offer customized solutions to its trading partners in key global markets with the need for high value added products such as specialized steel products.
- **Infrastructure Construction.** POSCO E&C is one of the leading engineering and construction companies in Korea that primarily engages in the planning, design and construction of industrial plants and architectural works and civil engineering. POSCO E&C plans to implement a front-end engineering design approach to control project expenses, and focus on construction of industrial plants that maximize production efficiency and are environmentally friendly, as well as commercial and residential complexes that utilize innovative information and technology enhancements.
- **Energy.** POSCO Energy, Korea's largest private power generation company, plans to pursue cost-cutting through operational and process innovations to more efficiently operate LNG combined cycle power generation facilities and improve profitability.
- **Comprehensive Materials.** We plan to focus on the development of comprehensive materials that we believe will increase in demand, as described below. We will continue to identify new comprehensive materials and selectively seek investment opportunities that we believe will generate attractive returns.

Pursue Future Growth in Production of Comprehensive Materials and Offer Integrated Energy Solutions

We plan to leverage our expertise in production of various steel applied materials and venture into the fast growing and high value added business of producing environmentally friendly comprehensive materials. In particular, demand for lithium ion batteries has been increasing in recent years, and we have identified lithium, along with nickel, magnesium and titanium, as our main investment areas. We have developed proprietary technology to extract lithium from its brine in approximately one month compared to twelve months through conventional production processes. Leveraging on such technology, we completed the construction of a lithium production plant in Gwangyang Works in February 2017 with an annual production capacity of approximately 2,500 tons of lithium. Subject to market conditions, we plan to further expand our production capacity of lithium and nickel in the near future, as well as invest in the development of light-weight materials such as magnesium steel used in high-end automobiles and titanium materials for the aviation industry.

We also plan to pursue strategic investments to further strengthen our capabilities in the energy industry. We believe that the energy industry is a sustainable business area that offers us attractive opportunities. Leveraging on its know-how as the largest private power generation company in Korea, POSCO Energy plans to expand its network of gas storage tanks in Northeast Asia and engage in LNG trading activities, as well as expand its independent power producing (“IPP”) business with other member companies of the POSCO Group in strategic Southeast Asian countries where POSCO already has a presence. Leveraging the expertise of various member companies of the POSCO Group, we cover all aspects of the IPP business, including project planning, power plant construction as well as operational and maintenance services. In addition, POSCO Energy plans to invest in the renewable energy business, including commercialization of micro grids for limited geographic locations as well as development of solar power-enabled infrastructure.

Integrate Information and Communications Technology to Pursue Operational and Process Innovations and Create Additional Value

We seek to achieve cost reductions as well as create additional value through integration of information and communications technology in various aspects of our operations as follows:

- **Steel Operations.** In our steel operations, we plan to pursue modernization and rationalization of our production facilities that integrate information and communications technology to create smart factories, which will enable us to pursue additional cost reductions as well as shorten commercialization periods.
- **Construction Operations.** In our construction operations, we plan to integrate information and communications technology to minimize design errors and improve construction quality, as well as specialize in the construction of technologically advanced buildings and other architectural works.
- **Energy Operations.** In our energy operations, we plan to pursue modernization and rationalization of our power generation plants that integrate information and communications technology to create more efficient and safer power generation plants as well as enable us to more efficiently distribute power through the operation of a virtual power plant central controlling center.

Major Products

We manufacture and sell a broad line of steel products, including the following:

- cold rolled products;
- hot rolled products;

- stainless steel products;
- plates;
- wire rods; and
- silicon steel sheets.

The table below sets out our revenue of steel products produced by us and directly sold to external customers, which are recognized as external revenue of the Steel Segment, by major steel product categories for the periods indicated. Such amounts do not include steel products produced by us and sold to our consolidated subsidiaries.

Steel Products	For the Year Ended December 31,					
	2014		2015		2016	
	Billions of Won	%	Billions of Won	%	Billions of Won	%
Cold rolled products	₩ 9,336	29.3%	₩ 8,373	29.6%	₩ 8,467	31.5
Hot rolled products	5,346	16.8	4,685	16.6	4,377	16.3
Stainless steel products	6,830	21.5	6,085	21.5	6,064	22.6
Plates	3,519	11.1	2,809	9.9	2,762	10.3
Wire rods	2,160	6.8	1,932	6.8	1,747	6.5
Silicon steel sheets	1,267	4.0	1,323	4.7	1,100	4.1
Sub-total	28,458	89.4	25,208	89.1	24,517	91.3
Others	3,384	10.6	3,085	10.9	2,327	8.7
Total	₩ 31,842	100.0%	₩ 28,293	100.0%	₩ 26,844	100.0%

The table below sets out our sales volume of the principal categories of steel products produced by us and directly sold to external customers, which are recognized as external sales volume of the Steel Segment, by major steel product categories for the periods indicated. Such amounts do not include steel products produced by us and sold to our consolidated subsidiaries.

Steel Products	For the Year Ended December 31,					
	2014		2015		2016	
	Thousands of Tons	%	Thousands of Tons	%	Thousands of Tons	%
Cold rolled products	11,881	39.1%	11,995	38.0%	12,713	38.7%
Hot rolled products	7,783	25.6	8,541	27.0	8,632	26.2
Stainless steel products	2,650	8.7	2,758	8.7	3,027	9.2
Plates	4,638	15.3	4,588	14.5	4,748	14.4
Wire rods	2,400	7.9	2,667	8.4	2,737	8.3
Silicon steel sheets	1,038	3.4	1,031	3.3	1,032	3.1
Total ⁽¹⁾	30,390	100.0%	31,580	100.0%	32,888	100.0%

(1) Not including sales volume of steel products categorized under "others."

In addition to steel products produced by us and directly sold to external customers, we engage our consolidated sales subsidiaries (including POSCO Daewoo) to sell our steel products produced by us. Our revenue from steel products produced by us and sold to our consolidated sales subsidiaries that in turn sold them to their external customers amounted to Won 9,176 billion in 2014, Won 8,365 billion in 2015 and Won 6,403 billion in 2016. Sales of such steel products by our consolidated sales subsidiaries to external customers are recognized as external revenue of the Trading Segment.

Cold Rolled Products

Cold rolled coils and further refined galvanized cold rolled products are used mainly in the automotive industry to produce car body panels. Other users include the household goods, electrical appliances, engineering and metal goods industries.

Our deliveries of cold rolled products produced by us and directly sold to external customers amounted to 12.7 million tons in 2016, representing 38.7% of our total sales volume of principal steel products produced by us and directly sold to external customers.

Cold rolled products constitute our largest product category in terms of sales volume and revenue from steel products produced by us and directly sold to external customers. In 2016, our sales volume of cold rolled products produced by us and directly sold to external customers increased by 6.0% compared to our sales volume in 2015 primarily due to an increase in sales of cold rolled products manufactured and sold by POSCO Mexico S.A. de C.V.

Including sales of cold rolled products produced by us and sold through our consolidated sales subsidiaries in addition to cold rolled products produced by us and directly sold to external customers, we had a domestic market share for cold rolled products of approximately 39% on a non-consolidated basis in 2016.

Hot Rolled Products

Hot rolled coils and sheets have many different industrial applications. They are used to manufacture structural steel used in the construction of buildings, industrial pipes and tanks, and automobile chassis. Hot rolled coil is also manufactured in a wide range of widths and thickness as the feedstock for higher value-added products such as cold rolled products and silicon steel sheets.

Our deliveries of hot rolled products produced by us and directly sold to external customers amounted to 8.6 million tons in 2016, representing 26.2% of our total sales volume of principal steel products produced by us and directly sold to external customers. The largest customers of our hot rolled products are downstream steelmakers in Korea which use the products to manufacture pipes and cold rolled products.

Hot rolled products constitute our second largest product category in terms of sales volume and third largest product category in terms of revenue from steel products produced by us and directly sold to external customers. In 2016, our sales volume of hot rolled products produced by us and directly sold to external customers increased by 1.1% compared to our sales volume in 2015, primarily due to completion of rationalization of certain hot rolled product manufacturing facilities, which in turn led to increases in production and sales volume.

Including sales of hot rolled products produced by us and sold through our consolidated sales subsidiaries in addition to hot rolled products produced by us and directly sold to external customers, we had a domestic market share for hot rolled products of approximately 39% on a non-consolidated basis in 2016.

Stainless Steel Products

Stainless steel products are used to manufacture household goods and are also used by the chemical industry, paper mills, the aviation industry, the automotive industry, the construction industry and the food processing industry.

Our deliveries of stainless steel products produced by us and directly sold to external customers amounted to 3.0 million tons in 2016, representing 9.2% of our total sales volume of principal steel products produced by us and directly sold to external customers.

Stainless steel products constitute our second largest product category in terms of revenue from steel products produced by us and directly sold to external customers. Although sales of stainless steel products accounted for only 9.2% of total sales volume of the principal steel products produced by us and directly sold to external customers in 2016, they represented 22.6% of our total revenue from steel products in 2016. In 2016, our sales volume of stainless steel products produced by us and directly sold to external customers increased by 9.8% compared to our sales volume in 2015 primarily reflecting increased demand resulting from our efforts to focus more on marketing of higher margin, higher value-added products, which was in part met by an increase in our production capacity of stainless steel products, as well as a decrease in the global inventory of stainless steel products resulting from the Chinese government's restriction of steel production in China. Production efficiency enhancements to our electric furnaces used in the production of stainless steel products also contributed to increases in production and sales volume.

Including sales of stainless steel products produced by us and sold through our consolidated sales subsidiaries in addition to stainless steel products produced by us and directly sold to external customers, we had a domestic market share for stainless steel products of approximately 43% on a non-consolidated basis in 2016.

Plates

Plates are used in shipbuilding, structural steelwork, offshore oil and gas production, power generation, mining, and the manufacture of earth-moving and mechanical handling equipment, boiler and pressure vessels and other industrial machinery.

Our deliveries of plates produced by us and directly sold to external customers amounted to 4.7 million tons in 2016, representing 14.4% of our total sales volume of principal steel products produced by us and directly sold to external customers. The Korean shipbuilding industry, which uses plates to manufacture chemical tankers, rigs, bulk carriers and containers, and the construction industry are our largest customers of plates.

In 2016, our sales volume of plates produced by us and directly sold to external customers increased by 3.5% compared to our sales volume in 2015 primarily due to an increase in sales to companies in the oil and gas industry and other industrial companies, which was offset in part by a decrease in demand from the shipbuilding industry.

Including sales of plates produced by us and sold through our consolidated sales subsidiaries in addition to plates produced by us and directly sold to external customers, we had a domestic market share for plates of approximately 38% on a non-consolidated basis in 2016.

Wire Rods

Wire rods are used mainly by manufacturers of wire, fasteners, nails, bolts, nuts and welding rods. Wire rods are also used in the manufacture of coil springs, tension bars and tire cords in the automotive industry.

Our deliveries of wire rods produced by us and directly sold to external customers amounted to 2.7 million tons in 2016, representing 8.3% of our total sales volume of principal steel products produced by us and directly sold to external customers. The largest customers for our wire rods are manufacturers of wire ropes and fasteners.

In 2016, our sales volume of wire rods produced by us and directly sold to external customers increased by 2.6% compared to 2015.

Including sales of wire rods produced by us and sold through our consolidated sales subsidiaries in addition to wire rods produced by us and directly sold to external customers, we had a domestic market share for wire rods of approximately 54% on a non-consolidated basis in 2016.

Silicon Steel Sheets

Silicon steel sheets are used mainly in the manufacture of power transformers and generators and rotating machines.

Our deliveries of silicon steel sheets produced by us and directly sold to external customers amounted to 1.0 million tons in 2016, representing 3.1% of our total sales volume of principal steel products produced by us and directly sold to external customers.

In 2016, our sales volume of silicon steel sheets produced by us and directly sold to external customers increased by 0.2% compared to 2015.

Including sales of silicon steel sheets produced by us and sold through our consolidated sales subsidiaries in addition to silicon steel sheets produced by us and directly sold to external customers, we had a domestic market share for silicon steel sheets of approximately 80% on a non-consolidated basis in 2016.

Others

Other products include lower value-added semi-finished products such as pig iron, billets, blooms and slab.

Markets

Korea is our most important market. Domestic sales represented 39.4% of our total revenue from steel products produced and sold by us in 2016. Our export sales and overseas sales to customers abroad represented 60.6% of our total revenue from steel products in 2016. Our sales strategy has been to devote our production primarily to satisfy domestic demand, while seeking export sales to utilize capacity to the fullest extent and to expand our international market presence.

Domestic Market

We primarily sell in Korea higher value-added and other finished products to end-users and semi-finished products to other steel manufacturers for further processing. Local distribution companies and sales affiliates sell finished steel products to low-volume customers. We provide service technicians for large customers and distributors in each important product area.

The table below sets out our estimate of the market share of steel products sold in Korea for the periods indicated based on sales volume.

Source	For the Year Ended December 31,		
	2014	2015	2016
POSCO's sales ⁽¹⁾	40.6%	40.8%	40.6%
Other domestic steel companies' sales	27.6	27.7	27.6
Imports	31.8	31.5	31.8
Total	100.0%	100.0%	100.0%

(1) POSCO's sales volume includes steel products produced by us (but not by our subsidiaries) and sold through our consolidated sales subsidiaries in addition to steel products produced by us (but not by our subsidiaries) and directly sold to external customers.

Exports

Our export sales and overseas sales to customers abroad represented 60.6% of our total revenue from steel products produced and sold by us in 2016, 63.2% of which was generated from exports sales and overseas sales to customers in Asian countries. Our export sales and overseas sales to customers abroad in terms of revenue from such products decreased by 7.9% from 21,901 billion in 2015 to Won 20,163 billion in 2016.

The tables below set out our export sales and overseas sales to customers abroad in terms of revenue from steel products produced and sold by us (including our consolidated sales subsidiaries), by geographical market and by product for the periods indicated.

Region	For the Year Ended December 31,					
	2014		2015		2016	
	Billions of Won	%	Billions of Won	%	Billions of Won	%
China	₩ 6,057	26.6%	₩ 5,541	25.3%	₩ 5,840	29.0%
Asia (other than China and Japan)	6,434	28.3	6,174	28.2	4,821	23.9
Japan	2,668	11.7	2,075	9.5	2,089	10.4
Europe	1,428	6.3	1,751	8.0	1,914	9.5
Middle East	323	1.4	372	1.7	187	0.9
North America	2,131	9.4	2,162	9.9	2,019	10.0
Others	3,689	16.2	3,826	17.5	3,292	16.3
Total	₩ 22,731	100.0%	₩ 21,901	100.0%	₩ 20,163	100.0%

Steel Products	For the Year Ended December 31,					
	2014		2015		2016	
	Billions of Won	%	Billions of Won	%	Billions of Won	%
Cold rolled products	₩ 6,907	30.4%	₩ 6,373	29.1%	₩ 6,852	34.0%
Hot rolled products	3,646	16.0	4,032	18.4	2,999	14.9
Stainless steel products	5,615	24.7	5,265	24.0	5,227	25.9
Plates	1,596	7.0	1,465	6.7	1,486	7.4
Wire rods	783	3.4	674	3.1	585	2.9
Silicon steel sheets	771	3.4	807	3.7	821	4.1
Others	3,412	15.0	3,284	15.0	2,194	10.9
Total	₩ 22,731	100.0%	₩ 21,901	100.0%	₩ 20,163	100.0%

The table below sets out the world's apparent steel use for the periods indicated.

	For the Year Ended December 31,		
	2014	2015	2016
Apparent steel use (million metric tons)	1,545	1,501	1,515
Percentage of annual increase	0.7%	(2.9)%	1.0%

Source: World Steel Association.

Recently, the general weakness of the global economy, the slowdown in growth of the Chinese economy and fluctuations in oil and commodity prices have increased the uncertainty of global economic prospects in general and have adversely affected the global and Korean economies. The World Steel Association forecasts that global apparent steel use is expected to increase by 1.3% to 1,535 million metric tons in 2017.

In recent years, driven in part by strong growth in steel consumption in emerging economies, the global steel industry has experienced renewed interest in expansion of steel production capacity. The Organisation for Economic Co-operation and Development estimated the global crude steel production capacity to be 2,390 million metric tons in 2016. The increased production capacity, combined with weakening demand due primarily to the recent slowdown of the global economy as well as a slowdown in demand growth from China, has resulted in production over-capacity in the global steel industry. Production over-capacity in the global steel industry may intensify if the slowdown of the global economy continues or demand from developing countries that have experienced significant growth during the past decade does not meet the growth in production capacity.

We distribute our export products mostly through Korean trading companies, including POSCO Daewoo, and our overseas sales subsidiaries. Our largest export market in 2016 was China, which accounted for 29.0% of our export revenue from steel products produced and sold by us. The principal products exported to China were cold rolled products, including continuous galvanized products. Our exports to China amounted to Won 5,541 billion in 2015 and Won 5,840 billion in 2016. Our exports to China increased by 5.4% in 2016 primarily due to an increase in sales of automotive steel sheets to the Chinese automotive industry.

Our second largest export market in 2016 was Asia (other than China and Japan), which accounted for 23.9% of our export revenue from steel products produced and sold by us. The principal products exported to Asia (other than China and Japan) were hot rolled products and cold rolled products. Our exports to Asia (other than China and Japan) decreased by 21.9% from Won 6,174 billion in 2015 to Won 4,821 billion in 2016 primarily due to a decrease in export sales to India due to implementation of certain trade barriers, including reference pricing.

Anti-Dumping, Safeguard and Countervailing Duty Proceedings

From time to time, our exporting activities have become subject to anti-dumping, safeguard and countervailing proceedings. As a steel producer with global sales and operations, we are involved in trade remedy proceedings in markets worldwide, including in the United States. We proactively participate in and plan for such proceedings to minimize any adverse effects and associated risks. While there has been an increase in the number of trade cases in recent years, and an increased focus on trade issues by government officials, all such cases have been product and market-specific, and thus have been limited in scope relative to our global sales and operations. We continue to carefully monitor developments with respect to trade remedy policy in all markets in which we participate and, where necessary, vigorously defend our rights through litigation before tribunals such as the U.S. Court of International Trade. Our products that are subject to anti-dumping, safeguard or countervailing duty proceedings in the aggregate currently do not account for a material portion of our total sales, and such proceedings have not had a material adverse impact on our business and operations in recent years.

Pricing Policy

We determine the sales price of our products based on market conditions. In setting prices, we take into account our costs, including those of raw materials, supply and demand in the Korean market, exchange rates, and conditions in the international steel market. Our prices can fluctuate considerably over time, depending on market conditions and other factors. The prices of our higher value-added steel products in the largest markets are determined considering the prices of similar products charged by our competitors.

Both our export prices and domestic sales prices decreased from 2014 to 2016, reflecting production over-capacity in the global steel industry. We may decide to adjust our sales prices in the future subject to market demand for our products, prices of raw materials, the production outlook of the global steel industry and global economic conditions in general.

Raw Materials

Steel Production

The principal raw materials used in producing steel through the basic oxygen steelmaking method are iron ore and coal. We require approximately 1.7 tons of iron ore and 0.8 tons of coal to produce one ton of steel. We import all of the coal and virtually all of the iron ore that we use. In 2016, POSCO imported approximately 52.6 million dry metric tons of iron ore and 28.4 million wet metric tons of coal. Iron ore is imported primarily from Australia, Brazil and Canada. Coal is imported primarily from Australia, Canada and Russia.

In 2016, we purchased a substantial portion of our iron ore and coal imports pursuant to long-term contracts. Our long-term supply contracts generally have terms of three to ten years and provide for periodic price adjustments to the then-market prices. We typically adjust the prices on a quarterly basis and maintain approximately one month of inventory of raw materials. Such price adjustments are driven by various factors, including the global economic outlook, global market prices of raw materials and steel products, supply and demand outlook of raw materials and production costs of raw materials. In the case of coal, globally influential buyers and sellers of coal determine benchmark prices of coal, based on which other buyers and sellers negotiate their prices after taking into consideration the quality of coal and other factors. In the case of iron ore, the supplier and we typically agree on the purchase price primarily based on the spot market price periodically announced by Platts (Iron Ore 62% Fe, CFR China Index). We or the suppliers may cancel the long-term contracts only if performance under the contracts is prevented by causes beyond our or their control and these causes continue for a specified period.

We also make investments in exploration and production projects abroad to enhance our ability to meet the requirements for high-quality raw materials, either as part of a consortium or through an acquisition of a minority interest. We secured approximately 47% of our iron ore and coal imports in 2016 from foreign mines in which we have made investments. Our major investments to procure supplies of coal, iron ore and nickel are primarily located in Australia, Brazil, New Caledonia and Canada. We will continue to selectively seek opportunities to enter into additional strategic relationships that would enhance our ability to meet the requirements for principal raw materials.

The average market price of coal per wet metric ton (benchmark free on board price of Peak Downs Australian premium hard coking coal) was US\$126 in 2014, US\$102 in 2015 and US\$114 in 2016. The average market price of iron ore per dry metric ton (Iron Ore 62% Fe, CFR China index announced by Platts) was US\$88 in 2014, US\$51 in 2015 and US\$54 in 2016. We currently do not depend on any single country or supplier for our coal or iron ore.

Stainless Steel Production

The principal raw materials for the production of stainless steel are ferronickel, ferrochrome and stainless steel scrap. We purchase a majority of our ferronickel primarily from suppliers in Korea that procure nickel ore from New Caledonia, and the remainder primarily from leading suppliers in Japan, Indonesia and Colombia. Our primary suppliers of ferrochrome are located in South Africa, India and Kazakhstan. Our stainless steel scraps are primarily supplied by domestic and overseas suppliers in Japan and Southeast Asia. Revert scraps from the Pohang Steelworks are also used for our stainless steel production. The average market price of nickel per ton on the London Metal Exchange was US\$16,871 in 2014, US\$11,836 in 2015 and US\$9,599 in 2016.

Transportation

In order to meet our transportation needs for iron ore and coal, we have entered into long-term contracts with shipping companies in Korea to retain a fleet of dedicated vessels. These dedicated vessels transported approximately 84% of the total requirements in 2016, and the remaining approximately 16% was transported by vessels retained through short to medium term contracts, depending on market conditions. The Asia Pacific region, including Australia, and the Atlantic region, including Brazil, are the main regions where the vessels are loaded, and they accounted for approximately 87% and 13%, respectively, of our total requirements in 2016. We plan to continue to optimize the fleet of dedicated vessels that we use by 2020 in order to cope with changes in the global shipping environment, as well as upgrade some of the existing vessels with others that utilize more energy-efficient technologies.

The Steelmaking Process

Our major production facilities, Pohang Works and Gwangyang Works, produce steel by the basic oxygen steelmaking method. The stainless steel plant at Pohang Works produces stainless steel by the electric arc furnace method. Continuous casting improves product quality by imparting a homogenous structure to the steel. Pohang Works and Gwangyang Works produce all of their products through the continuous casting.

Steel — Basic Oxygen Steelmaking Method

First, molten pig iron is produced in a blast furnace from iron ore, which is the basic raw material used in steelmaking. Molten pig iron is then refined into molten steel in converters by blowing pure oxygen at high pressure to remove impurities. Different desired steel properties may also be obtained by regulating the chemical contents.

At this point, molten steel is made into semi-finished products such as slabs, blooms or billets at the continuous casting machine. Slabs, blooms and billets are produced at different standardized sizes and shapes. Slabs, blooms and billets are semi-finished lower margin products that we either use to produce our further processed products or sell to other steelmakers that produce further processed steel products.

Slabs are processed to produce hot rolled coil products at hot strip mills or to produce plates at plate mills. Hot rolled coils are an intermediate stage product that may either be sold to our customers as various finished products or be further processed by us or our customers into higher value-added products, such as cold rolled sheets and silicon steel sheets. Blooms and billets are processed into wire rods at wire rod mills.

Stainless Steel — Electric Arc Furnace Method

Stainless steel is produced from stainless steel scrap, chrome, nickel and steel scrap using an electric arc furnace. Stainless steel is then processed into higher value-added products by methods similar to those used for steel production. Stainless steel slabs are produced at a continuous casting mill. The slabs are processed at hot rolling mills into stainless steel hot coil, which can be further processed at cold strip mills to produce stainless cold rolled steel products.

Competition

Domestic Market

We are the largest fully integrated steel producer in Korea. In hot rolled products, where we had a market share of approximately 39% on a non-consolidated basis in 2016, we face competition from a Korean steel producer that operates mini-mills and produces hot rolled coil products from slabs and from various foreign producers, primarily from China and Japan. In cold rolled products and stainless steel products, where we had a market share of approximately 39% and 43%, respectively, on a non-consolidated basis in 2016, we compete with smaller specialized domestic manufacturers and various foreign producers, primarily from China and Japan. For a discussion of domestic market shares, see “— Markets — Domestic Market.”

We may face increased competition in the future from new specialized or integrated domestic manufacturers of steel products in the Korean market. Our biggest competitor in Korea is Hyundai Steel Co., Ltd. with an annual crude steel production of approximately 21 million tons.

The Korean Government does not impose quotas on or provide subsidies to local steel producers. As a World Trade Organization signatory, Korea has also removed all steel tariffs.

Export Markets

The competitors in our export markets include all the leading steel manufacturers of the world. In the past decade, there has been a trend toward industry consolidation among our competitors, and smaller competitors in the global steel market today may become larger competitors in the future. Competition from global steel manufacturers with significant production capacity such as ArcelorMittal S.A., and new market entrants, especially from China and India, could result in a significant increase in competition. In recent years, excess capacity from developing countries, particularly China, has resulted in downward pressure on global steel prices. Major competitive factors include range of products offered, quality, price, delivery performance and customer service. Our larger competitors may use their resources, which may be greater than ours, against us in a variety of ways, including by making additional acquisitions, investing more aggressively in product development and capacity and displacing demand for our export products.

Various export markets currently impose tariffs on different types of steel products. However, we do not believe that tariffs significantly affect our ability to compete in these markets.

Subsidiaries and Global Joint Ventures

Steel Production

In order to effectively implement our strategic initiatives and to solidify our leadership position in the global steel industry, we have established various subsidiaries and joint ventures around the world that engage in steel production activities.

Korea. In order to expand our sale of value-added products, we established POSCO Coated & Color Steel Co., Ltd. by merging a coated steel manufacturer and a color sheet manufacturer in March 1999. POSCO Coated & Color Steel has an aggregate annual production capacity of 600 thousand tons of galvanized and aluminized steel sheets widely used in the construction, automotive parts and home appliances industries. POSCO Coated & Color Steel also has an aggregate annual production capacity of 350 thousand tons of color sheets that are mainly used for interior and exterior materials and home appliances. In 2016, POSCO Coated & Color Steel produced 581 thousand tons of galvanized and aluminized steel sheets and 302 thousand tons of color sheets.

China. We entered into an agreement with Sagang Group Co. to establish Zhangjiagang Pohang Stainless Steel Co., Ltd., a joint venture company in China for the manufacture and sale of stainless cold rolled steel products. We have an 82.5% interest in the joint venture (including 23.9% interest held by POSCO China Holding Corporation), which commenced production of stainless cold rolled steel products in December 1998. Zhangjiagang Pohang Stainless Steel produced 1,212 thousand tons of stainless steel products in 2016. See “— Other Production Facilities Abroad — Zhangjiagang Pohang Stainless Steel.”

We established Qingdao Pohang Stainless Steel Co., Ltd., a wholly owned subsidiary set up to manufacture and sell stainless cold rolled steel products in China. The plant became operational in December 2004, with an annual production capacity of 180 thousand tons of stainless cold rolled steel products. Qingdao Pohang Steel produced 219 thousand tons of such products in 2016.

In August 2003, we entered into a joint venture agreement with Benxi Iron and Steel Group in China to establish Benxi Steel POSCO Cold Rolled Sheet Co., Ltd. The cold rolling mill with an annual production capacity of 1,950 thousand tons became operational in March 2006, and the company produced 1,728 thousand tons of such products in 2016. We currently hold a 25.0% interest in this joint venture.

In June 2016, we entered into agreements with Chongqing Iron & Steel Co., Ltd. in China to establish Chongqing POSCO CISL Automotive Steel Co., Ltd. and Chongqing CISL High Strength Cold Rolling Steel Co., Ltd. We currently hold a 51.0% interest in Chongqing POSCO CISL Automotive

Steel Co., Ltd., which is constructing a steel manufacturing plant with production capacity of 450 thousand tons of continuous galvanized steel with target completion in August 2018. In addition, we currently hold a 10.0% interest in Chongqing CISL High Strength Cold Rolling Steel Co., Ltd., which is constructing a steel manufacturing plant with production capacity of 1,800 thousand tons of cold-rolled and other related products with target completion in December 2018.

Indonesia. We entered into an agreement with PT. Krakatau Steel (Persero) Tbk. to establish PT. Krakatau POSCO Co., Ltd., a joint venture company in Indonesia for the manufacture and sale of plates and slabs. We hold a 70.0% interest in the joint venture. We completed the construction of a steel manufacturing plant in December 2013 with an annual production capacity of 3,000 thousand tons of plates and slabs. PT. Krakatau POSCO produced 2,988 thousand tons of plates and slabs in 2016. See “— Other Production Facilities Abroad — PT. Krakatau POSCO.”

Vietnam. We previously entered into an agreement with Nippon Steel & Sumitomo Metal Corporation to establish POSCO Vietnam Co., Ltd., a joint venture company in Vietnam for the manufacture and sale of cold rolled steel products. In March 2015, we acquired the interest owned by Nippon Steel & Sumitomo Metal Corporation, and we hold a 100.0% interest in the subsidiary. We completed the construction of a plant in September 2009 with an annual production capacity of 1,200 thousand tons of cold rolled products and commenced commercial production. POSCO Vietnam produced 1,071 thousand tons of such products in 2016.

We established POSCO SS VINA Co., Ltd., a wholly owned subsidiary engaged in the manufacture and sale of shape steel and steel reinforcement products. The plant became operational in June 2015, with an annual production capacity of 1,100 thousand tons of shape steel and steel reinforcement products. POSCO SS VINA Co., Ltd. produced 581 thousand tons of shape steel and steel reinforcement products in 2016. See “Other Production Facilities Abroad — POSCO SS VINA.”

Thailand. In order to secure an alternative sales source for stainless cold rolled steel products and an export base for expanding into the Southeast Asia stainless steel markets, we acquired a controlling interest in Thainox Stainless Public Company Limited, a major stainless steel manufacturer in Thailand, in September 2011. We renamed the company as POSCO Thainox Public Company Limited in October 2011 and currently hold an 84.9% interest in the company. The company produced 211 thousand tons of stainless cold rolled products in 2016.

United States. We entered into a 50-50 joint venture between U.S. Steel Corporation and us called USS-POSCO Industries Corporation. We sell hot rolled products to USS-POSCO Industries, which uses such products to manufacture cold rolled and galvanized steel products and tin-plate products for sale in the United States. USS-POSCO Industries produced 759 thousand tons of such products in 2016.

Mexico. In Mexico, POSCO Mexico S.A. de C.V. completed the construction of a plant in August 2009 with an annual production capacity of 0.4 million tons of cold rolled products and commenced commercial production to supply automotive manufacturers in Mexico, Southeastern United States and South America. POSCO Mexico expanded its annual production capacity to 900 thousand tons of galvanized steel products in December 2013, and produced 558 thousand tons of cold rolled products in 2016.

Others. In addition to the above investments, we are carefully seeking out additional promising investment opportunities abroad. In June 2005, we entered into a memorandum of understanding with Odisha State Government of India for the construction of an integrated steel mill and the development of iron ore mines in Odisha State. The Government of India reissued clearance for the construction of the steel mill in January 2014 and the Indian Supreme Court issued a final ruling in May 2013 with respect to authority of the central government to issue permission to develop iron ore mines in Odisha State. Progress on this project remains subject to further discussion with the Government of India.

We have also established supply chain management centers around the world to provide processing and logistics services such as cutting flat steel products to smaller sizes to meet customers' needs. In 2016, our 31 supply chain management centers recorded aggregate sales of 6,866 thousand tons of steel products.

Trading

Our trading activities consist primarily of trading activities of POSCO Daewoo. Our consolidated subsidiaries that also engage in trading activities include POSCO Asia Company Limited located in Hong Kong, POSCO Japan Co., Ltd. located in Tokyo, Japan, POSCO America Corporation located in Georgia, U.S.A. and POSCO South Asia Co., Ltd. located in Bangkok, Thailand. In March 2017, POSCO Processing & Service Co., Ltd., which primarily engaged in trading of steel products, merged into POSCO Daewoo.

POSCO Daewoo is a global trading company that primarily engages in trading of steel and raw materials as well as investing in energy and mineral development projects. It also manufactures and sells textiles. POSCO Daewoo was established in December 2000 when the international trading and construction businesses of Daewoo Corporation were spun off into three separate companies as part of a debt workout program of Daewoo Corporation.

The following table sets forth a breakdown of POSCO Daewoo's total consolidated sales by export sales, domestic sales and third-party trades as well as product category for the periods indicated:

Product Category	For the Year Ended December 31,					
	2014		2015		2016	
	(in billions of Won, except percentages)					
Export trading sales:						
Steel and metal	₩ 5,051	24.8%	₩ 4,648	26.5%	₩ 4,185	25.4%
Chemical and commodities	1,836	9.0	1,445	8.2	1,277	7.7
Automobile and machinery parts	1,965	9.6	2,003	11.4	1,986	12.0
Electronics and miscellaneous items	44	0.2	42	0.2	3	0.0
Natural resources items	—	—	—	—	2	0.0
Sub-total	8,895	43.6	8,138	46.4	7,453	45.2
Domestic trading sales:						
Steel and metal	₩ 737	3.6%	₩ 506	2.9%	₩ 473	2.9%
Chemical and commodities	81	0.4	92	0.5	90	0.5
Automobile and machinery parts	56	0.3	62	0.4	40	0.2
Electronics and miscellaneous items	11	0.1	—	—	—	—
Other goods	49	0.2	23	0.1	—	—
Sub-total	935	4.6	683	3.9	603	3.7
Manufactured product sales	₩ 22	0.1	₩ 6	0.0	₩ 13	0.1
Third-Country Trades:						
Trading	₩ 14,284	70.0%	₩ 11,569	66.0%	₩ 10,376	62.9%
Natural resources development	550	2.7	714	4.1	1,504	9.1
Manufactured product trading	266	1.3	242	1.4	192	1.2
Total third-country trades	15,100	74.0	12,525	71.5	12,072	73.2
Consolidation adjustments	(4,615)	(22.7)	(3,910)	(22.3)	(3,649)	(22.1)
Total sales	₩ 20,408	100.0%	₩ 17,527	100.0%	₩ 16,492	100.0%

Trading Activities. POSCO Daewoo's trading activities consist of exporting and importing a wide variety of products and commodities, including iron and steel, raw materials for steel production, non-ferrous metals, chemicals, automotive parts, machinery and plant equipment, electronics products, agricultural commodities and textiles. POSCO Daewoo is also engaged in third-country trade that does not involve exports from or imports to Korea. The products are obtained from and supplied to numerous suppliers and purchasers in Korea and overseas, which are procured through a global

trading network comprised of overseas trading subsidiaries, branches and representative offices. Such subsidiaries and offices support POSCO Daewoo's trading activities by locating suitable local suppliers and purchasers on behalf of customers, identifying business opportunities and providing information regarding local market conditions.

In most cases, POSCO Daewoo enters into trading transactions after the underlying sale and purchase contracts have been matched, which mitigates inventory and price risks to POSCO Daewoo. POSCO Daewoo typically enters into trading transactions as a principal, and in limited cases as an import or export agent. When acting as a principal or an agent, POSCO Daewoo derives its gross trading profit from the margin between the selling price of the products and the purchase price it pays for such products. In the case of principal transactions, the selling price is recorded as sales and the purchase price is recorded as cost of sales, while only the margin is recorded as sales in the case of agency transactions in which POSCO Daewoo does not assume the risks and rewards of ownership of the goods. In the case of principal transactions, it takes an average of approximately 51 days between POSCO Daewoo's payment of goods and its receipt of payment from its customers. In the instances in which it acts as an arranger for a third country transaction, POSCO Daewoo derives its gross trading profit from, and records as sales, the commission paid to it by the customer. The sizes of margins and commissions for POSCO Daewoo's trading activities vary depending on a number of factors, including prevailing supply and demand conditions for the product involved, the cost of financing, insurance, storage and transport and the creditworthiness of the customer, and tends to decline as the product or market matures.

In connection with its export and import transactions, POSCO Daewoo has accounts receivable and payable in a number of currencies, but principally in Dollars. POSCO Daewoo's exposure to fluctuations in exchange rates, including the Won/Dollar exchange rate, is limited because trading transactions typically involve matched purchase and sale contracts, which result in limited settlement exposure, and because POSCO Daewoo's contracts with domestic suppliers of products for export and with domestic purchasers of imported products are generally denominated in Dollars. Although the impact of exchange rate fluctuations is substantially mitigated by such strategies, POSCO Daewoo also periodically enters into derivative contracts, primarily currency forward contracts, to further hedge its foreign exchange risks.

In connection with its trading activities, POSCO Daewoo arranges insurance and product transport at the request of customers, the costs of which generally become reflected in the sales price of the relevant products, and also provides financing services to its purchasers and suppliers as necessary. In the case of trading transactions involving large-scale industrial or construction projects, POSCO Daewoo also provides necessary project planning and organizing services to its customers.

Natural Resources Development Activities. POSCO Daewoo also invests in energy and mineral development projects throughout the world. In particular, POSCO Daewoo joined a consortium with Korea Gas Corporation, ONGC Videsh Ltd. and the Gas Authority of India Ltd. in November 2002, which made a successful bid in the gas exploration, development and production project in the Myanmar A-1 gas field. In October 2005, the consortium made a successful bid in the gas exploration, development and production project in the Myanmar A-3 gas field, located adjacent to the Myanmar A-1 gas field. In December 2008, the consortium entered into a sales agreement with China National United Oil Corporation to sell the gas produced from the A-1 and A-3 gas fields for a period of 30 years after the commencement of production. In August 2010, Myanmar Oil & Gas Enterprise, the national oil and gas company of Myanmar, acquired a 15.0% interest in each of the projects. POSCO Daewoo holds a 51.0% interest in each of the A-1, A-3 and off-shore pipeline projects and a 25.0% interest in the on-shore pipeline project. Production of gas from these gas fields commenced in July 2013 and POSCO Daewoo recognized revenue from the Myanmar gas field project starting in November 2013. POSCO Daewoo recognized revenues of approximately Won 467 billion in 2014, Won 652 billion in 2015 and Won 530 billion in 2016 from the Myanmar gas field project.

Such natural resources development projects, while entailing higher risks than the traditional trading business, offer higher potential returns. POSCO Daewoo intends to continue to expand its operations by carefully seeking out promising energy development projects abroad. POSCO Daewoo mitigates the risks associated with such investments through subsidies from the Special Account for Energy Related Funds that is administered, among others, by Korea National Oil Corporation and Korea Resources Corporation, government agencies that promote natural resources development activities of the fund. The fund subsidizes a portion of the investment amount in the event the investor fails to develop viable deposits. If the natural resources development activities are successful, the investor must reimburse the fund for the subsidy amount, together with accrued interest. In most instances, POSCO Daewoo is required to obtain consent from the Ministry of Trade, Industry & Energy prior to investing in natural resources development projects.

Competition. POSCO Daewoo competes principally with six other Korean general trading companies, each of which is affiliated with a major domestic business group, as well as global trading companies based in other countries. In the domestic market, competition for export transactions on behalf of domestic suppliers and import transactions on behalf of domestic purchasers was limited, as most affiliated general trading companies of large Korean business groups generally relied on affiliate transactions for the bulk of their trading business. However, in recent years, many of these Korean general trading companies have reduced their reliance on their affiliated business group and transactions carried out on behalf of their member companies and instead have generally evolved to focus on segments of the import and export markets in which they have a competitive advantage. As a result, competition among Korean general trading companies in the area of traditional trade has become more intense. POSCO Daewoo's principal competitors in the overseas trading markets include Korean trading companies that operate in various international markets, as well as foreign trading companies, particularly those based in Japan. As POSCO Daewoo diversifies into businesses other than traditional trading such as natural resources development, it also increasingly competes with other Korean and international companies involved in these businesses.

Construction

POSCO E&C is one of the leading engineering and construction companies in Korea, primarily engaged in the planning, design and construction of industrial plants and architectural works and civil engineering projects. In particular, POSCO E&C has established itself as one of the premier engineering and construction companies in Korea through:

- its strong and stable customer base; and
- its cutting-edge technological expertise obtained from construction of advanced integrated steel plants, as well as participation in numerous modernization and rationalization projects at our Pohang Works and Gwangyang Works.

Leveraging its technical know-how and track record of building some of the leading industrial complexes in Korea, POSCO E&C has also focused on diversifying its operations into construction of high-end apartment complexes and participating in a wider range of architectural works and civil engineering projects, as well as engaging in urban planning and development projects and expanding its operations abroad. One of its landmark urban planning and development projects includes the development of a 5.7 million-square meter area of Songdo International City in Incheon, which POSCO E&C is co-developing with Gale International, a respected real estate developer based in the United States. In September 2015, we completed the sale of our 38.0% interest in POSCO E&C to PIF, the sovereign wealth fund of Saudi Arabia, for US\$1.05 billion. In connection with the sale, POSCO E&C and PIF agreed to jointly explore additional business opportunities in Saudi Arabia, including participating in various infrastructure projects sponsored by the Saudi Arabian government.

POSCO E&C also has substantial experience in the energy field obtained from the construction of various power plants for member companies of the POSCO Group, specializing primarily in

engineering and construction of liquefied natural gas (“LNG”) and coal-fired thermal power plants. In recent years, POSCO E&C has obtained various orders for such power plants, including LNG-fired power plants in Incheon, Korea and coal-fired thermal power plants in Ventanas and Angamos, Chile. In response to increasing demand from the energy industry, POSCO E&C plans to continue to target opportunities in power plant construction, which it believes offers significant growth potential, and thereby enhance its know-how and profitability.

Competition. Competition in the construction industry is based primarily on price, reputation for quality, reliability, punctuality and financial strength of contractors. In Korea, POSCO E&C’s main competition in the construction of residential and non-residential buildings, EPC projects, urban planning and development projects and civil works projects consists of approximately ten major domestic construction companies, all of which are member companies of other large business groups in Korea and are capable of undertaking larger-scale, higher-value-added projects that offer greater potential returns. A series of measures introduced by the Government over the past few years to regulate housing prices in Korea, as well as an increasing popularity of low-bid contracts in civil works project mandates, have contributed to increased competition in the Korean construction industry in recent years. In the overseas markets, POSCO E&C faces competition from local construction companies, as well as international construction companies from other countries, including other major Korean construction companies with overseas operations. Construction companies from developed countries may be more experienced, have greater financial resources and possess more sophisticated technology than POSCO E&C, while construction companies from developing countries often have the advantage of lower wage costs.

Others

As part of our diversification efforts, we strive to identify business opportunities that supplement our steel, trading and construction segments, including power generation, LNG logistics and network and system integration.

POSCO Energy Corporation. In 2006, we acquired the largest domestic private power utility company that operates LNG combined cycle power generation facilities with total power generation capacity of 1,800 megawatts and renamed it POSCO Energy Corporation. Since our acquisition, POSCO Energy Corporation has expanded its power generation capacity by constructing additional power plants in Korea and Southeast Asia. POSCO Energy Corporation’s total power generation capacity was approximately 4,526 megawatts as of December 31, 2016. POSCO Energy Corporation is also selectively seeking opportunities to expand into solar, wind and other renewable energy businesses in order to become an integrated provider of energy solutions.

LNG Logistics. In an effort to reduce our dependency on oil, we became the first private company in Korea to import LNG in 2005, and we have steadily increased the use of natural gas for energy generation at our steel production facilities. We operate an LNG receiving terminal with an aggregate capacity to process up to 2.4 million tons of LNG annually in Gwangyang. In order to achieve maximum operational efficiency of our LNG terminal, we participate in the LNG trading and LNG ship gas trial businesses. We are in the process of building a synthetic natural gas production plant with an annual capacity of 500,000 tons in Gwangyang that will become operational during 2017. We believe that the synthetic natural gas production plant provides us with a stable supply of LNG substitutes that we can utilize to meet our growing needs for energy generation.

Others. We acquired or established several subsidiaries that address specific services to support the operations of Pohang Works and Gwangyang Works. POSCO ICT Co., Ltd., founded in 1989, provides information and technology consulting and system network integration and outsourcing services. POSCO Processing & Service Co., Ltd., founded in 1994, provides material processing and fabrication services. POSCO Chemtech Company Ltd., formerly POSCO Refractories and Environment Company, Ltd., specializes in the manufacturing of refractories and lime used in steel manufacturing processes as well as a wide range of chemical products.

Insurance

We maintain property insurance for our property, plant and equipment that we believe to be consistent with market practice in Korea.

Item 4.C. Organizational Structure

The following table sets out the jurisdiction of incorporation and our ownership interests of our significant subsidiaries:

Name	Jurisdiction of Incorporation	Percentage of Ownership
POSCO Daewoo Corporation	Korea	60.3%
POSCO Engineering & Construction Co., Ltd	Korea	52.8%
POSCO Energy Corporation	Korea	89.0%
Zhangjiagang Pohang Stainless Steel Co., Ltd.	China	82.5%
POSCO ICT Co., Ltd.	Korea	65.4%

Item 4.D. Property, Plants and Equipment

Our principal properties are Pohang Works, which is located at Youngil Bay on the southeastern coast of Korea, and Gwangyang Works, which is located in Gwangyang City in the southwestern region of Korea. We also maintain and operate production properties abroad, including plants operated by Zhangjiagang Pohang Stainless Steel in China, PT. Krakatau POSCO in Indonesia and POSCO SS Vina in Vietnam. We may increase our production capacity in the future when we increase our capacity as part of our facilities expansion or as a result of continued modernization and rationalization of our existing facilities. For a discussion of major items of our capital expenditures currently in progress, see “Item 5. Operating and Financial Review and Prospects — Item 5.B. Liquidity and Capital Resources — Liquidity — Capital Expenditures and Capital Expansion.”

Production Facilities in Korea

Pohang Works

Construction of Pohang Works began in 1970 and ended in 1983. Pohang Works currently has an annual crude steel and stainless steel production capacity of 17.6 million tons. Pohang Works produces a wide variety of steel products. Products produced at Pohang Works include hot rolled sheets, plates, wire rods and cold rolled sheets, as well as specialty steel products such as stainless steel sheets and silicon steel sheets. These products can also be customized to meet the specifications of our customers.

Situated on a site of 8.9 million square meters at Youngil Bay on the southeastern coast of Korea, Pohang Works consists of 43 plants, including iron-making, crude steelmaking and continuous casting and other rolling facilities. Pohang Works also has docking facilities capable of accommodating ships as large as 250,000 tons for unloading raw materials, storage areas for up to 34 days’ supply of raw materials and separate docking facilities for ships carrying products for export. Pohang Works consumed approximately 418 thousand tons of LNG and approximately 11,464 gigawatt hours of electricity in 2016. Pohang Works is equipped with a highly advanced computerized production-management system allowing constant monitoring and control of the production process.

Gwangyang Works

Construction of Gwangyang Works began in 1985 on a site of 13.7 million square meters reclaimed from the sea in Gwangyang City in the southwestern region of Korea. Gwangyang Works currently has an annual crude steel production capacity of 24.8 million tons. Gwangyang Works specializes in high volume production of a limited number of steel products. Products manufactured at Gwangyang Works include both hot and cold rolled types.

Gwangyang Works is comprised of 47 plants, including iron-making plants, steelmaking plants, continuous casting plants, hot strip mills and thin-slab hot rolling plants. The site also features docking and unloading facilities for raw materials capable of accommodating ships as large as 300,000 tons for unloading raw materials, storage areas for approximately 25 days' supply of raw materials and separate docking facilities for ships carrying products for export. Gwangyang Works consumed approximately 317 thousand tons of LNG and approximately 13,366 gigawatt hours of electricity in 2016.

We believe Gwangyang Works is one of the most technologically advanced integrated steel facilities in the world. Gwangyang Works has a completely automated, linear production system that enables the whole production process, from iron-making to finished products, to take place without interruption. This advanced system reduces the production time for hot rolled products to only four hours. Like Pohang Works, Gwangyang Works is equipped with a highly advanced computerized production-management system allowing constant monitoring and control of the production process.

Capacity Utilization Rates

The following table sets out the capacity utilization rates of our production facilities in Korea for the periods indicated.

	As of or for the Year Ended December 31,		
	2014	2015	2016
Crude steel and stainless steel production capacity as of end of the year (million tons per year)	38.20	42.41	42.39
Actual crude steel and stainless steel output (million tons)	37.65	37.97	37.50
Capacity utilization rate (%) ⁽¹⁾	98.6%	89.5%	88.5%

(1) Calculated by dividing actual crude steel and stainless steel output by the actual crude steel and stainless steel production capacity for the relevant period as determined by us.

Production Facilities Abroad

Our various subsidiaries and joint ventures around the world, including Zhangjiagang Pohang Stainless Steel Co., Ltd. in China, PT. Krakatau POSCO Co., Ltd. in Indonesia and POSCO SS Vina Co., Ltd. in Vietnam, engage in steel production activities. For a discussion of such operations, see "Item 4. Information of the Company — Item 4.B. Business Overview — Subsidiaries and Joint Ventures."

Zhangjiagang Pohang Stainless Steel

The following table sets out Zhangjiagang's capacity utilization rates for the periods indicated.

	As of or for the Year Ended December 31,		
	2014	2015	2016
Crude steel and stainless steel production capacity as of end of the year (million tons per year)	1.10	1.10	1.10
Actual crude steel and stainless steel output (million tons)	1.15	1.17	1.16
Capacity utilization rate (%) ⁽¹⁾	104.9%	106.1%	105.2%

(1) Calculated by dividing actual crude steel and stainless steel output by the actual crude steel and stainless steel production capacity for the relevant period as determined by us.

PT. Krakatau POSCO

The following table sets out PT. Krakatau POSCO's capacity utilization rates for the periods indicated.

	As of or for the Year Ended December 31,		
	2014	2015	2016
Crude steel production capacity as of end of the year (million tons per year)	3.00	3.00	3.00
Actual crude steel output (million tons)	1.90	2.72	2.91
Capacity utilization rate (%) ⁽¹⁾	63.4%	90.7%	97.0%

(1) Calculated by dividing actual crude steel output by the actual crude steel capacity for the relevant period as determined by us.

POSCO SS VINA Co., Ltd.

The following table sets out POSCO SS VINA's capacity utilization rates for the periods indicated.

	As of or for the Year Ended December 31,	
	2015	2016
Crude steel production capacity as of end of the year (million tons per year)	1.10	1.10
Actual crude steel output (million tons)	0.17	0.64
Capacity utilization rate (%) ⁽¹⁾	15.8%	58.0%

(1) Calculated by dividing actual crude steel output by the actual crude steel production capacity for the relevant period as determined by us.

The Environment

We are vigorous in our efforts to engage in environmentally responsible management of, and to protect the environment from damage resulting from, our operations. Our levels of pollution control are higher than those mandated by Government standards. We established an on-line environmental monitoring system with real-time feedback on pollutant levels and a forecast system of pollutant concentration in surrounding areas. We also undergo periodic environmental inspection by both internal and external inspectors in accordance with ISO 14001 standards to monitor execution and maintenance of our environmental management plan. As we continue to diversify our production operations abroad and the importance of comprehensive environmental management continues to grow, we announced an integrated environmental management system in December 2010, pursuant to which all of our subsidiaries located in Korea as well as abroad acquired the ISO 14001 certification. We also operate a certification program targeting our suppliers and outsourcing partners, pursuant to which they are encouraged to establish environmental management systems of their own.

We have taken additional measures to ensure that we are appropriately addressing environmental issues. We recycle most of the by-products from the steelmaking process. A vital part of our production process requires consumption of water, and many of our operations are located on coastal sites or adjacent to major lakes and rivers. Recognizing the importance of water resources, we established mid-to-long-term water management strategies to more effectively utilize water resources, including increasing water recycling, reducing usage volume, developing substitute sources and reducing manufacturing discharge harmful to the environment. As part of our efforts to preserve biological diversity, we supply steel slag that is used in the construction of underwater facilities designed to restore marine ecosystems damaged by rising seawater temperatures. In addition, we have been developing environmentally friendly products such as chrome-free steel sheets in an effort to compete with products from the European Union, the United States and Japan and to meet

strengthened environmental regulations. Anticipating the trend toward increasing regulation of chrome in various steel products, we introduced chrome-free steel products meeting international environmental standards in 2006 that are used to manufacture automotive oil tanks.

We plan to continue to invest in developing more environmentally friendly steel manufacturing processes. We commenced research and development for a new steel manufacturing technology called FINEX in 1992 jointly with the Research Institute of Industrial Science and Technology and VOEST Alpine, an Austrian company. We will continue to refine FINEX, a low cost, environmentally friendly steel manufacturing process that we believe optimizes our production capacity by utilizing low-grade iron ore fines and using coal as an energy source and a reducing agent. We believe that FINEX offers considerable environmental and economic advantages by eliminating major sources of pollution such as facilities that pretreat raw materials, as well as decreasing operating and raw material costs.

Our climate change response program seeks to minimize the risks from changes in climate as well as to maximize the opportunities available in such environment by enhancing the energy efficiency of our production process. We have disclosed our carbon dioxide emission levels and efforts to deal with climate changes through various channels, including participating in the Carbon Disclosure Project. The Carbon Disclosure Project is an organization based in the United Kingdom that works with major corporations around the world to disclose their greenhouse gas emission levels. We are also in compliance with the Korea Emissions Trading Scheme, which was launched by the Government in January 2015 to reduce greenhouse gas emissions by limiting the total amount of allowable greenhouse gas emission by a manufacturer.

While we believe we are in compliance with applicable environmental laws and regulations in all material respects, we may be responsible for the investigation and remediation of environmental conditions at currently and formerly operated manufacturing or construction sites. For example, primarily relating to contamination of land near our magnesium smelting plant located in Gangneung, Korea and gas treatment plant located in our Pohang Works, we had Won 48 billion as provisions for the restoration as of December 31, 2016 (Won 10 billion as current liabilities and Won 38 billion as non-current liabilities), which represent the present value of estimated costs for recovery outstanding as of such date.

Item 4.E. *Unresolved Staff Comments*

We do not have any unresolved comments from the Securities and Exchange Commission staff regarding our periodic reports under the Exchange Act of 1934.

Item 5. *Operating and Financial Review and Prospects*

Item 5.A. *Operating Results*

The following discussion and analysis is based on our consolidated financial statements, which have been prepared in accordance with IFRS, as issued by the IASB. Unless otherwise noted, the amounts included in Item 5.A. are presented on a consolidated basis.

Overview

We are the largest fully integrated steel producer in Korea. We have four reportable operating segments — a steel segment, a trading segment, an engineering and construction segment and a segment that contains operations of all other entities which fall below the reporting thresholds. The steel segment includes production of steel products and sale of such products. The trading segment consists primarily of global trading activities and natural resources development activities of POSCO Daewoo. POSCO Daewoo exports and imports a wide range of steel products that are both obtained

from and supplied to POSCO, as well as between other suppliers and purchasers in Korea and overseas. The construction segment includes planning, designing and construction of industrial plants, civil engineering projects and commercial and residential buildings, both in Korea and overseas. The “others” segment includes power generation, LNG logistics, and network and system integration. See Note 41 of Notes to Consolidated Financial Statements.

One of the major factors contributing to our historical performance has been the growth of the Korean economy, and our future performance will depend at least in part on Korea’s general economic growth and prospects. For a description of recent developments that have had and may continue to have an adverse effect on our results of operations and financial condition, see “Item 3. Key Information — Item 3.D. Risk Factors — Korea is our most important market, and our current business and future growth could be materially and adversely affected if economic conditions in Korea deteriorate.” A number of other factors have had or are expected to have a material impact on our results of operations, financial condition and capital expenditures. These factors include:

- our sales volume, unit prices and product mix;
- costs and production efficiency; and
- exchange rate fluctuations.

As a result of these factors, our financial results in the past may not be indicative of future results or trends in those results.

Sales Volume, Prices and Product Mix

In recent years, our net sales have been affected by the following factors:

- the demand for our products in the Korean market and our capacity to meet that demand;
- our ability to compete for sales in the export market;
- price levels; and
- our ability to improve our product mix.

Domestic demand for our products is affected by the condition of major steel consuming industries, such as construction, shipbuilding, automotive, electrical appliances and downstream steel processors, and the Korean economy in general.

In 2015, unit sales prices in Won for our principal product lines of steel products produced by us and directly sold to external customers, other than silicon steel sheets, decreased. The weighted average unit price for such products decreased by 14.8% from 2014 to 2015, despite a depreciation in the average value of the Won against the Dollar in 2015 that increased our export prices in Won terms. The average exchange rate of the Won against the Dollar depreciated from Won 1,053.2 to US\$1.00 in 2014 to Won 1,131.5 to US\$1.00 in 2015.

The unit sales price of hot rolled products, which accounted for 27.0% of total sales volume of the principal steel products produced by us and directly sold to external customers, decreased by 20.1% in 2015. The unit sales price of wire rods, which accounted for 8.4% of total sales volume of such products, decreased by 19.5% in 2015. The unit sales price of plates, which accounted for 14.5% of total sales volume of such products, decreased by 19.3% in 2015. The unit sales price of stainless steel products, which accounted for 8.7% of total sales volume of such products, decreased by 14.4% in 2015. The unit sales price of cold rolled products, which accounted for 38.0% of total sales volume of such products, decreased by 11.2% in 2015. On the other hand, the unit sales price of silicon steel sheets, which accounted for 3.3% of total sales volume of such products, increased by 5.1% in 2015.

In 2016, unit sales prices in Won for each of our principal product lines of steel products produced by us and directly sold to external customers decreased. The weighted average unit price for such products decreased by 6.6% from 2015 to 2016, despite a depreciation in the average value of the Won against the Dollar in 2016 that increased our export prices in Won terms. The average exchange rate of the Won against the Dollar depreciated from Won 1,131.5 to US\$1.00 in 2015 to Won 1,160.5 to US\$1.00 in 2016.

The unit sales price of silicon steel products, which accounted for 3.1% of total sales volume of the principal steel products produced by us and directly sold to external customers, decreased by 17.0% in 2016. The unit sales price of wire rods, which accounted for 8.3% of total sales volume of such products, decreased by 11.9% in 2016. The unit sales price of stainless steel products, which accounted for 9.2% of total sales volume of such products, decreased by 9.2% in 2016. The unit sales price of hot rolled products, which accounted for 26.2% of total sales volume of such products, decreased by 7.6% in 2016. The unit sales price of plates, which accounted for 14.4% of total sales volume of such products, decreased by 5.0% in 2016. The unit sales price of cold rolled products, which accounted for 38.7% of total sales volume of such products, decreased by 4.6% in 2016.

The table below sets out the average unit sales prices for our semi-finished and finished steel products for the periods indicated.

Products	For the Year Ended December 31,		
	2014	2015	2016
	(In thousands of Won per ton)		
Cold rolled products	₩ 786	₩ 698	₩ 666
Hot rolled products	687	549	507
Stainless steel products	2,577	2,207	2,003
Plates	759	612	582
Wire rods	900	724	638
Silicon steel sheets	1,221	1,284	1,065
Average ⁽¹⁾	₩ 936	₩ 798	₩ 745

(1) "Average" prices are based on the weighted average, by sales volume, of our sales for the listed principal products produced by us and directly sold to external customers. See "Item 4. Information on the Company — Item 4.B. Business Overview — Major Products." The average unit sales price calculation does not include sales results of steel products categorized as "others."

Costs and Production Efficiency

Our major costs and operating expenses are raw material purchases, depreciation, labor and other purchases. The table below sets out our cost of sales and selling and administrative expenses as a percentage of our revenue as well as gross profit margin and operating profit margin for the periods indicated.

	For the Year Ended December 31,		
	2014	2015	2016
	(Percentage of net sales)		
Cost of sales	88.7%	88.9%	87.4%
Selling and administrative expenses	6.3	7.0	7.3
Gross margin	11.3	11.1	12.6
Operating profit margin	3.9	2.5	4.3

Our operating profit margin decreased from 3.9% in 2014 to 2.5% in 2015 but recovered to 4.3% in 2016, as discussed below.

We are closely monitoring changes in market conditions and we implemented the following measures in recent years to address challenges posed by the global economic downturn:

- pursuing cost reduction through enhancing product designs, improving productivity and reducing fixed costs;

- focusing on marketing activities to increase the sales of higher margin, higher value-added products and to strengthen our domestic market position; and
- establishing a special sales committee to more effectively respond to changes in market trends and preparing responses to various scenarios of future sales.

Production capacity represents our maximum production capacity that can be achieved with an optimal level of operations of our facilities. The table below sets out certain information regarding our production capacity and efficiency in the production of steel products for the periods indicated.

	For the Year Ended December 31,		
	2014	2015	2016
Crude steel and stainless steel production capacity (million tons per year) ⁽¹⁾	43.5	47.6	47.6
POSCO	38.2	42.4	42.4
POSCO Specialty Steel Co., Ltd. ⁽¹⁾	1.2	—	—
Zhangjiagang Pohang Stainless Steel Co., Ltd.	1.1	1.1	1.1
PT. Krakatau POSCO Co., Ltd.	3.0	3.0	3.0
POSCO SS VINA Co., Ltd.	—	1.1	1.1
Actual crude steel and stainless steel output (million tons) ⁽²⁾	41.4	42.0	42.2
POSCO	37.7	38.0	37.5
POSCO Specialty Steel Co., Ltd. ⁽¹⁾	0.7	—	—
Zhangjiagang Pohang Stainless Steel Co., Ltd.	1.2	1.2	1.2
PT. Krakatau POSCO Co., Ltd.	1.9	2.7	2.9
POSCO SS VINA Co., Ltd.	—	0.2	0.6
Capacity utilization rate (%) ⁽¹⁾	95.2%	88.3%	88.7%
POSCO	98.6%	89.5%	88.5%
POSCO Specialty Steel Co., Ltd. ⁽¹⁾	60.1%	—	—
Zhangjiagang Pohang Stainless Steel Co., Ltd.	100.3%	106.1%	105.2%
PT. Krakatau POSCO Co., Ltd.	—	90.7%	97.0%
POSCO SS VINA Co., Ltd.	—	15.8%	58.0%

- (1) We sold a 52.2% interest in POSCO Specialty Steel in 2015 and the remaining 19.9% interest in 2016. Accordingly, we no longer hold any interest in POSCO Specialty Steel.
- (2) Reflects production capacity of POSCO, Zhangjiagang Pohang Stainless Steel Co., Ltd, PT. Krakatau POSCO Co., Ltd. and POSCO SS VINA Co., Ltd. In 2014, also includes production capacity of POSCO Specialty Steel Co., Ltd.

Exchange Rate Fluctuations

Our consolidated financial statements are prepared from our local currency denominated financial results, assets and liabilities and our subsidiaries around the world, which are then translated into Won. A substantial proportion of our consolidated financial results is accounted for in currencies other than the Won. Accordingly, our consolidated financial results and assets and liabilities may be materially affected by changes in the exchange rates of foreign currencies. In 2016, 60.6% of our total revenue from steel products produced and sold by us was in overseas markets outside of Korea. To the extent that we incur costs in one currency and make sales in another, our profit margins may be affected by changes in the exchange rates between the two currencies. Since the currency in which sales are recorded may not be the same as the currency in which expenses are incurred, foreign exchange rate fluctuations may materially affect our results of operations. Depreciation of the Won may materially affect the results of our operations because, among other things, it causes:

- an increase in the amount of Won required for us to make interest and principal payments on our foreign currency-denominated debt;
- an increase in Won terms in the costs of raw materials and equipment that we purchase from overseas sources and a substantial portion of our freight costs, which are denominated primarily in Dollars; and
- foreign exchange translation losses on liabilities, which lower our earnings for accounting purposes.

Appreciation of the Won against major currencies, on the other hand, causes:

- our export products to be less competitive by raising our prices in Dollar terms; and
- a reduction in net sales and accounts receivables in Won from export sales, which are primarily denominated in Dollars.

We strive to naturally offset our foreign exchange risk by matching foreign currency receivables with our foreign currency payables and our overseas subsidiaries have sought to further mitigate the adverse impact of exchange rate fluctuations by conducting business transactions in the local currency of the respective market in which the transactions occur. In particular, POSCO Daewoo's exposure to fluctuations in exchange rates, including the Won/Dollar exchange rate, is limited because trading transactions typically involve matched purchase and sale contracts, which result in limited settlement exposure, and because POSCO Daewoo's contracts with domestic suppliers of products for export and with domestic purchasers of imported products are generally denominated in Dollars. Although the impact of exchange rate fluctuations is partially mitigated by such strategies, we and our subsidiaries, particularly POSCO Daewoo and POSCO E&C, also periodically enter into derivative contracts, primarily foreign currency swaps and forward exchange contracts, to further hedge our foreign exchange risks. However, our results of operations have historically been affected by exchange rate fluctuations and there can be no assurance that such strategies will be sufficient to reduce or eliminate the adverse impact of such fluctuations in the future. Because of the larger positive effects of the appreciation of the Won (i.e., the reverse of the negative effects caused by the depreciation of the Won, as discussed above), depreciation of the Won generally has a negative impact on our results of operations.

Inflation

Inflation in Korea, which was 1.3% in 2014, 0.7% in 2015 and 1.0% in 2016, has not had a material impact on our results of operations in recent years.

Critical Accounting Estimates

We have prepared our consolidated financial statements in accordance with IFRS as issued by the IASB. These accounting principles require us to make certain estimates and judgments that affect the reported amounts in our consolidated financial statements. Our estimates and judgments are based on historical experience, forecasted future events and various other assumptions that we believe to be reasonable under the circumstances. Estimates and judgments may differ under different assumptions or conditions. We evaluate our estimates and judgments on an ongoing basis. We believe the critical accounting policies discussed below are the most important to the portrayal of our financial condition and results of operations. Each of them is dependent on projections of future market conditions, and they require us to make the most difficult, subjective or complex judgments.

Allowance for Doubtful Accounts

We maintain an allowance for doubtful accounts for exposures in our receivable balances that represent our estimate of probable losses in our short-term and long-term receivable balances from the inability of our customers to make required payments. If the financial condition of our customers were to deteriorate and negatively impact their ability to make payments, additional allowances may be required. Determining the allowance for doubtful accounts requires significant management judgment and estimates including, among others, the credit worthiness of our customers, experience of historical collection patterns, potential events and circumstances affecting future collections and the ongoing risk assessment of our customer's ability to pay.

Trade account receivables are analyzed on a regular basis and, upon our becoming aware of a customer's inability to meet its financial commitments to us, the value of the receivable is reduced

through a charge to the allowance for doubtful accounts. In addition, we record a charge to the allowance for doubtful accounts upon receipt of customer claims in connection with sales that management estimates are unlikely to be collected in full. As of December 31, 2016, the percentage of allowance for doubtful accounts to trade accounts and notes receivable and other receivables was 7.45%. Our allowance for doubtful accounts decreased by 2.2%, or Won 22 billion, from Won 1,000 billion as of December 31, 2015 to Won 978 billion as of December 31, 2016. See Note 23 of Notes to Consolidated Financial Statements. Assumptions and judgments related to the allowance for doubtful accounts did not change in 2016.

Specifically, allowances for doubtful accounts are recorded when any of the following loss events occur: (i) there is objective evidence as to the uncollectability of the account observed through bankruptcy, default or involuntary dissolution of the customer; (ii) we lose a lawsuit against the customer or our right of claim gets extinguished; (iii) our costs to collect the account exceed the payments to be received; or (iv) a dispute with the customer over the collection of the account persists for more than three years.

The actual average annual uncollected percentage rate of accounts receivables resulting in write-offs for the three years in the period ended December 31, 2016 was 0.76%. These historical results, as well as current known conditions impacting the collectability of our accounts receivable balances, are significant factors for us when we estimate the amount of the necessary allowance for doubtful accounts. Historically, losses from uncollectible accounts receivables have been within expectations and in line with the allowances established. However, unforeseen circumstances such as adverse market conditions that deviate significantly from our estimates may require us to change the timing of, and make additional allowances to, our receivable balances. In this case, our results of operations, financial condition and net worth could be materially and adversely affected.

Valuation of Financial Instruments including Debt and Equity Securities and Derivatives

We invest in various financial instruments including debt and equity securities and derivatives. Depending on the accounting treatment specific to each type of financial instrument, an estimate of fair value is required to determine the instrument's effect on our consolidated financial statements.

If available, quoted market prices provide the best indication of fair value. We determine the fair value of our financial instruments using quoted market prices when available, including quotes from dealers trading those securities. If quoted market prices are not available, we determine the fair value based on pricing or valuation models, quoted prices of instruments with similar characteristics, or discounted cash flows. Determining the fair value of unlisted financial instruments involves a significant degree of management resources and judgment as no quoted prices exist and such securities are generally very thinly traded. Derivatives for which quoted market prices are not available are valued using valuation models such as the discounted cash flow method. The key inputs used in the valuation of such derivatives depend upon the type of derivative and the nature of the underlying instrument and include interest rate yield curves, foreign exchange rates, the spot price of the underlying instrument, volatility and correlation. The fair values based on pricing and valuation models and discounted cash flow analysis are subject to various assumptions used that, if changed, could significantly affect the fair value of the investments.

We assess at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. In the case of equity investments classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is also evidence that the asset is impaired. As part of this impairment review, the investee's operating results, net asset value and future performance forecasts as well as general market conditions are taken into consideration in order to assess whether there is any objective evidence such as significant financial difficulty of the issuer.

We have estimated fair values of material non-marketable securities. We estimated these fair values based on pricing or valuation models, quoted prices of instruments with similar characteristics,

or discounted cash flow models. The discounted cash flow model valuation technique is based on the estimated cash flow projections of the underlying investee. Key assumptions and estimates include market conditions, revenue growth rates, operating margin rates, income tax rates, depreciation and amortization rates, the level of capital expenditures, working capital amounts and the discount rates. These estimates are based on historical results of the investee and other market data. In these cash flows projections, the two most significant estimates are the discount rates and revenue growth rates. If the discount rates used in these valuations were increased by 0.5%, then the estimated fair values would have decreased by 9.0% in total. In addition, if the revenue growth rate assumptions were decreased by 0.5% in the cash flow models, then the estimated fair values would have decreased by 2.6% in total.

We recognized impairment losses on available-for-sale investments of Won 370 billion in 2014, Won 143 billion in 2015 and Won 248 billion in 2016. See Note 8 of Notes to Consolidated Financial Statements.

Historically, our estimates and assumptions used to evaluate impairment of investments have been within expectations. However, unforeseen circumstances such as adverse market conditions that deviate significantly from our estimates may require us to recognize additional losses on impairment of investments. We base our fair value estimates on assumptions we believe to be reasonable, but which are unpredictable and inherently uncertain. The use of alternative estimates and assumptions could increase or decrease the estimated fair values of our investments and potentially result in different impacts on our results of operations.

Long-lived Assets

At each reporting date, we review the carrying amounts of our tangible and intangible assets (excluding goodwill) to determine whether there is any indication that the carrying amount of those assets may not be recoverable through continuing use. If any such indication exists, the recoverable amount of the asset (or cash generating unit) is reviewed in order to determine the amount of the impairment, if any. The recoverable amount is the higher of the asset's net selling price (fair value reduced by selling costs) and its value in use. When the book value of long-lived asset exceeds the recoverable value of the asset due to obsolescence, physical damage or a decline in market value and such amount is material, the impairment of the asset is recognized and the asset's carrying value is reduced to its recoverable value and the resulting impairment loss is charged to current operations. Such recoverable value is based on our estimates of the future use of assets and is subject to changes in market conditions. Based on an impairment test as of December 31, 2016, we recognized impairment loss on property, plant and equipment amounting to Won 197 billion in 2016.

The depreciable lives and salvage values of our long-lived assets are estimated and reviewed each year based on industry practices and prior experience to reflect economic lives of long-lived assets. Our estimates of the useful lives and recoverable values of long-lived assets are based on historical trends adjusted to reflect our best estimate of future market and operating conditions. Also, our estimates include the expected future period in which the future cash flows are expected to be generated from continuing use of the assets that we review for impairment and cash outflows to prepare the assets for use that can be directly attributed or allocated on a reasonable and consistent basis. If applicable, estimates also include net cash flows to be received or paid for the disposal of the assets at the end of their useful lives. As a result of the impairment review, when the sum of the discounted future cash flows expected to be generated by the assets is less than the book value of the assets, we recognize impairment losses based on the recoverable value of those assets. We make a number of significant assumptions and estimates in the application of the discounted cash flow model to forecast cash flows, including business prospects, market conditions, selling prices and sales volume of products, costs of production and funding sources. The estimated cash flow forecast amounts are derived from the most recent financial budgets for the next three to five years. Beyond the

specifically forecasted period, we extrapolate the cash flows for the remaining years based on an estimated growth rate. This estimated growth rate does not exceed the long-term average growth rate of our industry. As of December 31, 2016, for the applicable cash generating units, we estimated a discount rate of 12.4% to 14.0% and a revenue growth rate of 1.0%. However, given the current economic environment, it is likely that the estimates and assumptions will be more volatile than they have been in the past. Further impairment charges may be required if triggering events occur, such as adverse market conditions, that suggest deterioration in an asset's recoverability or fair value. Assessment of the timing of when such declines become other than temporary and the amount of such impairment is a matter of significant judgment. Results in actual transactions could differ from those estimates used to evaluate the impairment of such long-lived assets. If our future cash flow projections are not realized, either because of an extended recessionary period or other unforeseen events, impairment charges may be required in future periods.

If the estimated discount rates used in these valuations were increased by 1%, then the estimated recoverable amount would have decreased by 4.3% to 5.2% in total. If the estimated revenue growth rate were decreased by 1%, then the estimated recoverable amount would have decreased by 2.2% to 2.3% in total. We believe that any reasonably possible negative change in the key assumptions on which the recoverable amount is based would result in impairment loss of long-lived assets.

Goodwill

Goodwill is tested for impairment annually at the level of the groups of cash generating units or whenever changes in circumstances indicate that the carrying amount may not be recoverable. The recoverable amounts of the groups of cash-generating units are determined from the higher of their fair value less cost to sell or their value-in-use calculations. The key assumptions for the value in use calculations are those regarding the discount rates, growth rates and expected changes to selling prices and direct costs during the period.

Our management estimates discount rates using post-tax rates that reflect current market rates for investments of similar risk. Growth rates are based on industry growth forecasts, and changes in selling prices and direct costs are based on historical experience and expectations of future changes in the market. Cash flow forecasts are derived from the most recent financial budgets for the next five years. Beyond the specifically forecasted period, we extrapolate cash flows for the remaining years based on an estimated growth rate. This rate does not exceed the average long-term growth rate for the relevant markets. Once recognized, impairment losses recognized for goodwill are not reversed.

In validating the value in use determined for the cash generating units, the sensitivity of key assumptions used in the discounted cash-flow model such as discount rates and the terminal growth rate was evaluated. If the estimated average discount rates used in these valuations were increased by 0.25%, the estimated value-in-use for the respective cash generating units would have decreased by 3.3% to 3.6% in total. If the estimated terminal growth rates were decreased by 0.25%, the estimated value-in-use for the respective cash generating units would have decreased by 0.9% to 1.9% in total. Based on an impairment test as of December 31, 2016, we recognized impairment loss on goodwill of Won 96 billion in 2016, which related primarily to impairment of goodwill of POSCO Engineering Co., Ltd. We believe that determining the existence and impairment of goodwill is a critical accounting estimate because significant management judgment is involved in the evaluation of the value of goodwill, and any reasonably possible changes in the key assumptions on which the recoverable amount is based would cause a change in impairment loss on goodwill. See Note 15 of Notes to Consolidated Financial Statements.

Inventories

Inventories are stated at the lower of cost or net realizable value. Costs of inventories are determined using the moving-weighted average or weighted average method. Materials-in-transit are determined using the specific identification method. Amounts of inventory are written down to net realizable value due to losses occurring in the normal course of business and the allowance is reported as a contra inventory account, while the related charge is recognized in cost of goods sold.

The net realizable value is determined based on the latest selling price available at the end of each quarter taking into account the directly attributable selling costs. The latest selling price is the base price which is the negotiated selling price based upon the recent transactions entered into with major customers. Considering that our inventory turnover is approximately two months and inventories at the balance sheet date would be sold during the following two months, we perform valuation of inventories using the base price as of the balance sheet date and adjust for significant changes in selling price occurring subsequent to the reporting date. The selling price range used for determining the net realizable value of our inventories ranged from the inventory cost amount less 20.7% of gross profit margin to the inventory cost amount plus 17.2% of gross profit margin. For inventories in which expected selling prices are less than the cost amount, the necessary adjustment to write-down the inventories to net realizable value is made. There was no recovery in 2014, 2015 and 2016. The valuation losses of inventories recognized within cost of goods sold were Won 42 billion in 2014, Won 153 billion in 2015 and Won 152 billion in 2016.

Investments in Associates and Joint Ventures

We hold a significant amount of investments in associates and joint ventures, which interests are accounted for using the equity method. As of December 31, 2016, the book value of our investments in associates and joint ventures was Won 3,882 billion. The carrying amounts of our investments in associates and joint ventures are reviewed at the end of the reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated.

We estimate the recoverable amount of an individual asset. If it is impossible to measure the individual recoverable amount of an asset, then we estimate the recoverable amount of cash-generating unit ("CGU"), which is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. The value in use is estimated by applying a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU for which estimated future cash flows have not been adjusted, to the estimated future cash flows expected to be generated by the asset or CGU. We treat individual operating entities as CGUs, and an impairment loss is recognized if the carrying amount of an asset or a CGU exceeds its recoverable amount. Impairment losses are recognized in profit or loss.

As part of our impairment review, the operating results, net asset value and future performance forecasts of our associates and joint ventures as well as general market conditions are taken into consideration in order to assess whether there is any objective evidence of impairment, such as significant financial difficulty of the associate or joint venture. Unforeseen circumstances such as adverse market conditions that deviate significantly from our estimates may require us to recognize additional losses on impairment of our interest in our associates and joint ventures. We base our fair value estimates on assumptions we believe to be reasonable, but which are unpredictable and inherently uncertain. The use of alternative estimates and assumptions could increase or decrease the estimated fair values used to evaluate impairment of our interest in our associates and joint ventures and potentially have different impacts on our results of operations.

Revenue Recognition for Construction Contracts

POSCO E&C, our consolidated subsidiary, engages in various construction activities, including construction of industrial plants and commercial and residential buildings, and revenue recognition are different based on types of contracts. When the outcome of a construction contract can be estimated reliably, contract revenue is recognized in profit or loss in proportion to the stage of completion of the project. Contract revenue includes the initial amount agreed in the contract plus any variation in contract work, claims and incentive payments, to the extent that it is probable that they will result in

revenue and can be measured reliably. The stage of completion of a contract is determined based on the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs. On the other hand, when the outcome of a construction contract cannot be estimated reliably, the revenue is recognized only to the extent of contract costs incurred that are likely to be recoverable. An expected loss on the construction contract is recognized as an expense immediately.

Our contract revenue recognition policy requires our management to exercise judgment in estimating the outcome of our contracts and measuring the percentage of completion and actual costs incurred in respect of our projects, which affects the amount and timing of recognition of revenues and cost of sales, provisions for estimated losses, charges against current earnings, trade account receivables and advances. For example, due to factors causing variation in costs for 2016, the estimated total contract costs were changed. Details of changes in estimated total contract costs and the impact on profit before income taxes for 2016 and future periods are as follows:

	Amount
	(In millions of Won)
Changes in estimated total contract costs	₩ 532,801
Changes in profit before income taxes of construction contracts:	
Current period	(790,391)
Future periods	69,464

The effect on current and future profit is estimated based on circumstances that have occurred from the commencement date of the contract to the end of 2016. The estimation is evaluated for total contract costs and expected total contract revenue as of the end of the period. Such estimate may change in future periods.

Our ability to measure reliably the estimated total cost of a project has a significant effect on the amount and timing of recognizing our sales and cost of sales. The timing of recognition of sales we report may differ materially from the timing of actual contract payments received. In addition, to the extent that sales recognized by us exceed the amount of payments to be received by us, such amount is reflected as trade account receivables on our balance sheet. To the extent payments received by us exceed the sales recognized, such amount is reflected under advances from customers on our balance sheet. Thus our ability to measure reliably the estimated total costs and the percentage of completion also affects the amount of our trade account receivables and advances from customers. For a discussion of uncertainty of estimates related to contract revenues and costs, see Note 29(d) of Notes to Consolidated Financial Statements.

Deferred Income Taxes

Our deferred income tax assets and liabilities reflect the tax consequences that would follow from the manner in which we expect, at the end of the reporting period, to recover or settle the carrying amount of our assets and liabilities. We recognize deferred income tax liability for all taxable temporary differences associated with investments in subsidiaries, associates and joint ventures, except to the extent that we are 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. We recognize deferred income tax asset for deductible temporary differences to the extent that it is probable that the temporary difference will reverse in the foreseeable future and taxable profit will be available against which they can be utilized. However, deferred tax is not recognized for taxable temporary differences arising on the initial recognition of goodwill or the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting profit or loss nor taxable income. The carrying amount of a deferred income tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized.

We believe that recognition of deferred tax assets and liabilities is a significant accounting policy that requires our management's estimates and assumptions regarding, among other things, the level of

future taxable income, interpretation of the tax laws and tax planning. Changes in tax laws, projected levels of taxable income and tax planning could affect the effective tax rate and tax balances recorded by us in the future.

Employee Benefits

Our accounting of employee benefits for defined benefit plans involves judgments about uncertain events including, but not limited to, discount rates, life expectancy, future pay inflation and expected rate of return on plan assets. The discount rates are determined by reference to the yield at the reporting date on high quality corporate bonds that have maturity dates approximating the terms of our benefits obligations and that are denominated in the same currency in which the benefits are expected to be paid. We determine the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset), taking into account any changes in the net defined benefit liability (asset) during the period as a result of contributions and benefit payments, net interest expense, and other expenses related to defined benefit plans that are recognized in profit or loss. Due to changing market and economic conditions, the underlying key assumptions may differ from actual developments and may lead to significant changes in our defined benefit plan. We immediately recognize all actuarial gains and losses arising from defined benefit plans in retained earnings. If the estimated average discount rates by actuarial assumptions used in these valuations were increased by 1%, then the estimated provision for severance benefits would have decreased by Won 127 billion, or 7.3% in total. If the estimated future pay inflation rates were decreased by 1%, then the estimated provision for severance benefits would have decreased by Won 129 billion, or 7.5% in total.

Recent Accounting Changes

For a discussion of new standards, interpretations and amendments to existing standards that have been published, see Note 3 of Notes to Consolidated Financial Statements.

IFRS No. 9 “Financial Instruments”

IFRS No. 9, published in July 2014, is effective for annual periods beginning on or after January 1, 2018, with earlier adoption permitted. It replaces existing guidance in IAS No. 39 “Financial Instruments: Recognition and Measurement.” We plan to adopt IFRS No. 9 beginning on January 1, 2018.

Key features of the new standard include the following:

- classification and measurement of financial assets that reflect the business model in which the assets are managed and their cash flow characteristics;
- impairment methodology that reflects “expected credit loss” model for financial assets; and
- expanded scope of hedged items and hedging instruments that qualify for hedge accounting and changes in assessment method for effect of hedging relationships.

IFRS No. 15 “Revenue from Contracts with Customers”

IFRS No. 15 “Revenue from Contracts with Customers,” published in May 2014, is effective for annual periods beginning on or after January 1, 2018, with earlier adoption permitted. It replaces existing revenue recognition guidance, including IAS No. 18 “Revenue,” IAS No. 11 “Construction Contracts,” SIC No. 31 “Revenue-Barter transactions involving advertising services,” IFRIC No. 13 “Customer Loyalty Programs,” IFRIC No. 15 “Agreements for the construction of real estate,” and

IFRIC No. 18 “Transfers of assets from customers,” We will apply this standard using one of the following two methods: (a) retrospectively to each prior reporting period presented in accordance with IAS No. 8 “Accounting Policies, Changes in Accounting Estimates and Errors” but using the practical expedients for completed contracts, in which completed contracts for the earliest prior period presented are not restated; or (b) retrospectively with the cumulative effect of initially applying this standard recognized at the date of initial application. We plan to adopt IFRS No. 15 in its consolidated financial statements for the year ending December 31, 2018, but we have not determined the transition method.

Existing IFRS standards and interpretations including IAS No. 18 provide revenue recognition guidance by transaction types such as sales of goods, rendering of services, interest income, royalty income, dividend income and construction revenue. However, under the new standard of IFRS No. 15, the five-step approach ((1) identify the contract with a customer, (2) identify the performance obligations in the contract, (3) determine the transaction price, (4) allocate the transaction price to the performance obligations under the contract and (5) recognize revenue when the entity satisfied a performance obligation) is applied for all types of contracts or agreements.

IFRS No. 16 “Leases”

IFRS No. 16 “Leases,” published in January 2016, replaces the existing guidance under IAS No. 17 “Leases,” IFRIC No. 4 “Determining whether an Arrangement contains a Lease,” SIC No. 15 “Operating Leases-Incentives” and SIC No. 27 “Evaluating the Substance of Transactions Involving the Legal Form of a Lease.” IFRS No. 16 eliminates the classification of leases as either operating leases or finance leases for a lessee. Instead, all leases are treated in a similar way to finance leases applying IAS No. 17.

IFRS No. 16 is effective beginning on January 1, 2019. Early adoption is permitted for companies that also adopt IFRS No. 15. As of December 31, 2016, we have not started the evaluation of the impact on our consolidated financial statements resulting from the application of IFRS No. 16.

Explanatory Note Regarding Presentation of Certain Financial Information under K-IFRS

In addition to preparing financial statements in accordance with IFRS as issued by the IASB included in this annual report, we also prepare financial statements in accordance with K-IFRS as adopted by the KASB, which we are required to file with the Financial Services Commission and the Korea Exchange under the FSCMA.

Starting in 2012, we were required to adopt certain amendments and interpretations to K-IFRS, relating to presentation of operating profit. Additionally, under K-IFRS, revenue from the development and sale of real estate is recognized using the percentage of completion method. However, under IFRS as issued by the IASB, revenue from the development and sale of certain real estate is recognized when an individual unit of residential real estate is delivered to the buyer. As a result, our consolidated statements of comprehensive income and our consolidated statements of financial position prepared in accordance with IFRS as issued by the IASB included in this annual report differ from our consolidated statements of comprehensive income and consolidated statements of financial position prepared in accordance with K-IFRS. The table below sets forth a reconciliation of our operating profit and net income or loss as presented in our consolidated statements of comprehensive income prepared in accordance with IFRS as issued by the IASB for each of the years ended December 31, 2014, 2015 and 2016 to our operating profit and net income or loss in our consolidated statements of comprehensive income prepared in accordance with K-IFRS, for each of the corresponding years, taking into account such differences:

	For the Year Ended December 31,		
	2014	2015	2016
	(In millions of Won)		
Operating profit under IFRS as issued by the IASB	₩ 2,512,998	₩ 1,486,380	₩ 2,282,496
Additions:			
Impairment loss on assets held for sale	17,205	133,547	24,890
Loss on disposals of assets held for sale	14	190,357	254
Loss on disposals of investments in subsidiaries, associates and joint ventures	2,556	18,996	22,499
Loss on disposals of property, plant and equipment	50,006	101,732	86,622
Impairment loss on property, plant and equipment	64,833	136,269	196,882
Impairment loss on intangible assets	55,220	161,412	127,875
Other bad debt expenses	96,373	158,071	50,225
Idle tangible assets expenses	12,214	12,773	6,437
Impairment loss on other non-current assets	38,137	12,264	9,894
Other provision expenses	126,601	18,396	53,058
Donations	69,544	62,957	43,810
Others	446,971	435,524	133,274
	<u>979,674</u>	<u>1,442,298</u>	<u>755,720</u>
Deductions:			
Gain on disposals of assets held for sale	(48,232)	(227,956)	(23,112)
Gain on disposals of investments in subsidiaries, associates and joint ventures	(41,258)	(88,718)	(23,305)
Gain on disposals of property, plant and equipment	(15,039)	(22,730)	(23,826)
Recovery of allowance for other doubtful accounts	—	(10,452)	(12,658)
Rental revenues	(1,743)	(1,019)	(1,771)
Gain on insurance proceeds	(2,924)	(14,976)	(22,400)
Others	(160,210)	(183,197)	(108,064)
	<u>(269,406)</u>	<u>(549,048)</u>	<u>(215,136)</u>
Revenue recognition related to development and sale of real estate	339,820	(329,923)	143,742
Cost of sales recognition related to development and sale of real estate	(349,556)	360,336	(122,497)
Operating profit under K-IFRS	<u>₩ 3,213,530</u>	<u>₩ 2,410,043</u>	<u>₩ 2,844,325</u>
Net income (loss) under IFRS as issued by the IASB	₩ 564,039	₩ (116,215)	₩ 1,032,065
Adjustments related to development and sale of real estate:			
Revenue	339,820	(329,923)	143,742
Cost of sales	(349,556)	360,336	(122,497)
Income tax	2,356	(10,379)	(5,141)
Net income (loss) under K-IFRS	<u>₩ 556,659</u>	<u>₩ (96,181)</u>	<u>₩ 1,048,169</u>

Revenue

The following table presents our revenue by segment and changes therein for 2015 and 2016.

	For the Year Ended December 31,		Changes	
	2015	2016	2015 versus 2016	
	(In billions of Won)		Amount	%
Steel Segment:				
External revenue	₩ 28,293	₩ 26,844	₩ (1,449)	(5.1)%
Internal revenue	16,544	16,062	(482)	(2.9)
Total revenue from Steel Segment	44,837	42,906	(1,931)	(4.3)
Trading Segment:				
External revenue	18,315	16,774	(1,541)	(8.4)
Internal revenue	8,692	9,646	954	11.0
Total revenue from Trading Segment	27,008	26,420	(587)	(2.2)
Construction Segment:				
External revenue	8,516	6,768	(1,747)	(20.5)
Internal revenue	1,352	714	(638)	(47.2)
Total revenue from Construction Segment	9,868	7,482	(2,386)	(24.2)
Others Segment:				
External revenue	3,068	2,697	(371)	(12.1)
Internal revenue	2,691	2,380	(311)	(11.6)
Total revenue from Others Segment	5,760	5,077	(683)	(11.9)
Total revenue prior to consolidation adjustments and basis difference	87,472	81,885	(5,589)	(6.4)
Consolidation adjustments	(29,279)	(28,802)	478	(1.6)
Basis difference ⁽¹⁾	330	(144)	(474)	N.A. ⁽²⁾
Revenue	₩ 58,522	₩ 52,940	(5,582)	(9.5)

(1) Basis difference is related to the difference in recognizing revenue and expenses of the Construction Segment in connection with development and sale of certain residential real estate between the report reviewed by the chief executive officer and the consolidated financial statements. See Notes 3 and 41 of Notes to Consolidated Financial Statements.

(2) N.A. means not applicable.

Our revenue decreased by 9.5%, or Won 5,582 billion, from Won 58,522 billion in 2015 to Won 52,940 billion in 2016 due to decreases in external revenues from each of our four segments. Specifically:

Steel Segment. External revenue from the Steel Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation, decreased by 5.1%, or Won 1,449 billion, from Won 28,293 billion in 2015 to Won 26,844 billion primarily due to a decrease in the average unit sales price per ton of the principal steel products produced by us and directly sold to external customers, which was offset in part by an increase in our sales volume of the steel products produced by us and directly sold to external customers (including miscellaneous steel products not included in any of our major product categories). The weighted average unit sales price per ton of the principal steel products produced by us and directly sold to external customers decreased by 6.6% from Won 798,217 per ton in 2015 to Won 745,476 per ton in 2016, while the overall sales volume of the steel products produced by us and directly sold to external customers (including miscellaneous steel products) increased by 4.1% from 31.6 million tons in 2015 to 32.9 million tons in 2016. Such factors were principally attributable to the following:

- The unit sales prices in Won of each of our major product categories decreased from 2015 to 2016. Silicon steel sheets, wire rods, stainless steel products, hot rolled products, plates and

cold rolled products produced by us and directly sold to external customers decreased by 17.0%, 11.9%, 9.2%, 7.6%, 5.0% and 4.6%, respectively, from 2015 to 2016. For a discussion of changes in the unit sales prices of each of our principal product lines, see “— Overview — Sales Volume, Prices and Product Mix” above.

- The sales volume of each of our major product categories increased from 2015 to 2016. The sales volume of stainless steel products, cold rolled products, plates, wire rods, hot rolled products and silicon steel products produced by us and directly sold to external customers increased by 9.8%, 6.0%, 3.5%, 2.6%, 1.1% and 0.2%, respectively, from 2015 to 2016. For a discussion of changes in sales volume of each of our principal product lines, see “Item 4.B. Business Overview — Major Products.”

Total revenue from the Steel Segment, which includes internal revenue from inter-company transactions, decreased by 4.3%, or Won 1,931 billion, from Won 44,837 billion in 2015 to Won 42,906 billion in 2016 as internal revenue from inter-company transactions decreased by 2.9%, or Won 482 billion, from Won 16,544 billion in 2015 to Won 16,062 billion in 2016. Such decrease primarily reflected, in addition to factors discussed above, a decrease in the average unit sales price of the steel products sold to our sales subsidiaries.

Trading Segment. External revenue from the Trading Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation, decreased by 8.4%, or Won 1,541 billion, from Won 18,315 billion in 2015 to Won 16,774 billion in 2016 primarily due to a decrease in third-country trades by POSCO Daewoo and our other trading subsidiaries from 2015 to 2016, reflecting market conditions related to the deterioration of the global economy that has been characterized by weaker demand and falling prices for export and import products, reduced trading volume and intense competition among trading companies.

Total revenue from the Trading Segment, which includes internal revenue from inter-company transactions, decreased by 2.2%, or Won 587 billion, from Won 27,008 billion in 2015 to Won 26,420 billion in 2016 as internal revenue from inter-company transactions increased by 11.0%, or Won 954 billion, from Won 8,692 billion in 2015 to Won 9,646 billion in 2016 primarily due to an increase in our steel sales activities through trading subsidiaries.

Construction Segment. External revenue from the Construction Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation, decreased by 20.5%, or Won 1,747 billion, from Won 8,516 billion in 2015 to Won 6,768 billion in 2016 primarily due to a general decrease in POSCO E&C’s construction activities reflecting weakening of market conditions in the domestic construction industry as well as a decrease in demand for EPC projects in Korea and abroad.

Total revenue from the Construction Segment, which includes internal revenue from inter-company transactions, decreased by 24.2%, or Won 2,386 billion, from Won 9,868 billion in 2015 to Won 7,482 billion in 2016 as internal revenue from inter-company transactions decreased by 47.2%, or Won 638 billion, from Won 1,352 billion in 2015 to Won 714 billion in 2016. Such decrease in internal revenue reflected a decrease in the amount of construction activities for member companies of the POSCO Group in 2016 compared to 2015.

Others Segment. The Others Segment primarily includes power generation, LNG production, network and system integration, logistics and magnesium coil and sheet production. External revenue from the Others Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation, decreased by 12.1%, or Won 371 billion, from Won 3,068 billion in 2015 to Won 2,697 billion in 2016 primarily due to a decrease in revenue of POSCO Energy Corporation reflecting decreases in the unit price as well as volume of electric power sold.

Total revenue from the Others Segment, which includes internal revenue from inter-company transactions, decreased by 11.9%, or Won 683 billion, from Won 5,760 billion in 2015 to

Won 5,077 billion in 2016 as internal revenue from inter-company transactions decreased by 11.6% or Won 311 billion, from Won 2,691 billion in 2015 to Won 2,380 billion in 2016. Such decrease primarily reflected a decrease in inter-company sales related to a general reduction in investments made by the POSCO Group in 2016.

Cost of Sales

Our cost of sales decreased by 11.0%, or Won 5,747 billion, from Won 52,018 billion in 2015 to Won 46,271 billion in 2016. The decrease in cost of sales was primarily due to decreases in the average price in Won terms of key raw materials that were used to manufacture our finished goods sold, as well as a decrease in construction activities as discussed above, which were partially offset by an increase in our sales volume of steel products.

The following table presents a breakdown of our cost of sales by segment, prior to adjusting for inter-company transactions that are eliminated during consolidation and basis difference, and changes therein for 2015 and 2016.

	For the Year Ended December 31,		Changes	
			2015 versus 2016	
	2015	2016	Amount	%
	(In billions of Won)			
Steel Segment	₩ 40,381	₩ 37,437	₩ (2,944)	(7.3)%
Trading Segment	25,563	25,090	(473)	(1.8)
Construction Segment	9,248	7,564	(1,685)	(18.2)
Others Segment	5,158	4,507	(651)	(12.6)
Consolidation adjustments	(28,692)	(28,204)	488	(1.7)
Basis difference ⁽¹⁾	360	(123)	(483)	N.A. ⁽²⁾
Cost of sales	₩ 52,018	₩ 46,271	₩ (5,747)	(11.0)%

(1) Basis difference is related to the difference in recognizing revenue and expenses of the Construction Segment in connection with development and sale of certain residential real estate between the report reviewed by the chief executive officer and the consolidated financial statements. See Notes 3 and 41 of Notes to Consolidated Financial Statements.

(2) N.A. means not applicable.

Steel Segment. The cost of sales of our Steel Segment, prior to consolidation adjustments, decreased by 7.3%, or Won 2,944 billion, from Won 40,381 billion in 2015 to Won 37,437 billion in 2016 primarily due to decreases in the average price in Won terms of key raw materials that were used to manufacture our finished goods sold, the impact of which was partially offset by an increase in our sales volume of the principal steel products produced by us and sold to external and internal customers.

Trading Segment. The cost of sales of our Trading Segment, prior to consolidation adjustments, decreased by 1.8%, or Won 473 billion, from Won 25,563 billion in 2015 to Won 25,090 billion in 2016 primarily due to decreases in cost of export and import products sold as well as our trading volumes, the impact of which was partially offset by an increase in the production costs related to gas produced at the Myanmar gas fields and sold to customers.

Construction Segment. The cost of sales of our Construction Segment, prior to consolidation adjustments, decreased by 18.2%, or Won 1,685 billion, from Won 9,248 billion in 2015 to Won 7,564 billion in 2016 in line with the decrease in the level of construction activities described above.

Others Segment. The cost of sales of our Others Segment, prior to consolidation adjustments, decreased by 12.6%, or Won 651 billion, from Won 5,158 billion in 2015 to Won 4,507 billion in 2016 primarily due to decreases in the average price in Won terms of key raw materials used to produce electricity as well as the volume of electricity produced and sold by POSCO Energy Corporation.

Gross Profit

Our gross profit increased by 2.5%, or Won 164 billion, from Won 6,504 billion in 2015 to Won 6,668 billion in 2016 primarily due to an increase in gross profit of our Steel Segment, which was partially offset by decreases in gross profit of our Construction Segment, Trading Segment and Others Segment. Our gross margin increased from 11.1% in 2015 to 12.6% in 2016.

The following table presents our gross profit by segment, prior to adjusting for inter-company transactions that are eliminated during consolidation and basis difference, and changes therein for 2015 and 2016.

	For the Year Ended December 31,		Changes	
			2015 versus 2016	
	2015	2016	Amount	%
	(In billions of Won)			
Steel Segment	₩ 4,456	₩ 5,469	₩ 1,013	22.7%
Trading Segment	1,445	1,330	(115)	(7.9)
Construction Segment	619	(82)	(701)	N.A. (2)
Others Segment	601	570	(32)	(5.3)
Consolidation adjustments	(587)	(598)	(11)	1.9
Basis difference (1)	(30)	(21)	9	(30.0)
Gross profit	₩ 6,504	₩ 6,668	₩ 164	2.5%

(1) Basis difference is related to the difference in recognizing revenue and expenses of the Construction Segment in connection with development and sale of certain residential real estate between the report reviewed by the chief executive officer and the consolidated financial statements. See Notes 3 and 41 of Notes to Consolidated Financial Statements.

(2) N.A. means not applicable.

Steel Segment. The gross profit of our Steel Segment, prior to consolidation adjustments, increased by 22.7%, or Won 1,013 billion, from Won 4,456 billion in 2015 to Won 5,469 billion in 2016 primarily due to a decrease in the average price in Won terms of coal and other key raw materials that were used to manufacture our finished steel products sold as well as an increase in the overall sales volume of our principal steel products, which were partially offset by a decrease in the average unit sales price per ton of the principal steel products produced by us and sold to external and internal customers, as discussed above. The gross margin of our Steel Segment, which is gross profit as a percentage of total revenue prior to consolidation adjustments, increased from 9.9% in 2015 to 12.7% in 2016, as we focused our production and marketing efforts on selling higher margin, higher value added premium products in 2016.

Trading Segment. The gross profit of our Trading Segment, prior to consolidation adjustments, decreased by 7.9%, or Won 115 billion, from Won 1,445 billion in 2015 to Won 1,330 billion in 2016, reflecting a decrease in trading margins from weaker demand and falling prices for export and import products, which was partially offset by an increase in gross profit of the Myanmar gas fields. The gross margin of our Trading Segment, prior to consolidation adjustments, decreased from 5.3% in 2015 to 5.0% in 2016.

Construction Segment. Our Construction Segment recorded gross profit of Won 619 billion in 2015 compared to gross loss of Won 82 billion in 2016, and the gross margin decreased from 6.3% in 2015 to (1.1)% in 2016, primarily due to losses incurred in connection with overseas construction projects, in particular a loss of Won 157 billion in 2016 related to delay in construction of the CSP-Companhia Siderurgia do Pecem steel plant complex in Brazil, as well as a decrease in the amount of relatively high-margin construction projects for member companies of the POSCO Group. Weakening of market conditions in the domestic construction industry in recent years, particularly relating to the public sector, resulted in an increase in competition.

Others Segment. The gross profit of our Others Segment, prior to consolidation adjustments, decreased by 5.3%, or Won 32 billion, from Won 601 billion in 2015 to Won 570 billion in 2016 primarily due to decreases in gross profit of POSCO Energy Corporation. Despite such decreases, gross margin increased from 10.4% in 2015 to 11.2% in 2016 due to the larger decrease in revenue as discussed above.

Selling and Administrative Expenses

The following table presents a breakdown of our selling and administrative expenses and changes therein for 2015 and 2016.

	For the Year Ended December 31,		Changes	
	2015	2016	2015 versus 2016	
	(In billions of Won)		Amount	%
Freight and custody expenses	₩ 1,532	₩ 1,342	₩ (190)	(12.4)%
Sales commissions	80	94	14	17.7
Sales promotion	22	11	(12)	(52.5)
Sales insurance premium	31	31	1	2.3
Contract cost	38	49	11	28.8
Others	25	26	0	1.7
Total selling expenses	₩ 1,729	₩ 1,554	(175)	(10.1)
Wages and salaries	₩ 811	₩ 770	₩ (41)	(5.1)%
Expenses related to post-employment benefits	87	201	114	130.2
Other employee benefits	194	177	(17)	(8.9)
Depreciation and amortization	274	243	(31)	(11.3)
Taxes and public dues	74	79	5	6.2
Rental	120	82	(38)	(31.6)
Advertising	91	86	(5)	(5.0)
Research and development	136	121	(15)	(11.0)
Service fees	219	201	(18)	(8.1)
Bad debt allowance	190	165	(24)	(12.9)
Others	200	167	(33)	(16.5)
Total administrative expenses	₩ 2,395	₩ 2,292	(104)	(4.3)
Total selling and administrative expenses	₩ 4,124	₩ 3,845	(279)	(6.8)

Our selling and administrative expenses decreased by 6.8%, or Won 279 billion, from Won 4,124 billion in 2015 to Won 3,845 billion in 2016 primarily due to decreases in freight and custody expenses, wages and salaries and rental expenses, which were partially offset by an increase in expenses related to post-employment benefits. Such factors were principally attributable to the following:

- Our freight and custody expenses decreased by 12.4%, or Won 190 billion, from Won 1,532 billion in 2015 to Won 1,342 billion in 2016 primarily due to a decrease in freight rates, which was offset in part by an increase in our export volume.
- Our wages and salaries decreased by 5.1%, or Won 41 billion, from Won 811 billion in 2015 to Won 770 billion in 2016 primarily due to a decrease in the number of administrative personnel, including decrease related to the early retirement programs of POSCO E&C and POSCO Engineering in 2016.
- Our rental expenses decreased by 31.6%, or Won 38 billion, from Won 120 billion in 2015 to Won 82 billion in 2016 primarily due to decreases in payments for data communications lease lines and lease cars.
- Our expenses related to post-employment benefits increased by 130.2%, or Won 114 billion, from Won 87 billion in 2015 to Won 201 billion in 2016 primarily due to expenses related to the early retirement programs of POSCO E&C and POSCO Engineering Co., Ltd.

Other Operating Income and Expenses

The following table presents a breakdown of our other operating income and expenses and changes therein for 2015 and 2016.

	For the Year Ended December 31,		Changes	
	2015	2016	2015 versus 2016	
	(In billions of Won)		Amount	%
Gain on disposals of assets held for sale	₩ 228	₩ 23	₩ (205)	(89.9)%
Gain on disposals of investments in subsidiaries, associates and joint ventures	89	23	(65)	(73.7)
Gain on disposals of property, plant and equipment	23	24	1	4.8
Recovery of allowance for other doubtful accounts	10	13	2	21.1
Gain on insurance proceeds	15	22	7	49.6
Others	184	110	(74)	(40.4)
Total other operating income	₩ 549	₩ 215	(334)	(60.8)

Our other operating income decreased by 60.8%, or Won 334 billion, from Won 549 billion in 2015 to Won 215 billion in 2016 primarily due to decreases in gain on disposals of assets held for sale and gain on disposals of investments in subsidiaries, associates and joint ventures. Our gain on disposals of assets held for sale decreased by 89.9%, or Won 205 billion, from Won 228 billion in 2015 to Won 23 billion in 2016. In 2015, we recognized a gain of Won 228 billion on disposals of assets held for sale primarily from the disposal of our 52.2% interest in SeAH Changwon Integrated Special Steel (formerly POSCO Specialty Steel Co., Ltd.) and our shares in POSFINE Co., Ltd. In 2016, we recognized a gain of Won 23 billion on disposal of assets held for sale primarily from the disposal of our 80.0% interest in POSCO LED Co., Ltd. Our gain on disposals of investments in subsidiaries, associates and joint ventures decreased by 73.7%, or Won 65 billion, from Won 89 billion in 2015 to Won 23 billion in 2016 primarily due to a decrease in disposition of our interests in some of our subsidiaries and associates as part of our reorganization efforts.

	For the Year Ended December 31,		Changes	
	2015	2016	2015 versus 2016	
	(In billions of Won)		Amount	%
Impairment loss on assets held for sale	₩ 134	₩ 25	(109)	(81.4)%
Loss on disposals of assets held for sale	190	0	(190)	(99.9)
Loss on disposals of investments in subsidiaries, associates and joint ventures	19	22	4	18.4
Loss on disposals of property, plant and equipment	102	87	(15)	(14.9)
Impairment loss on property, plant and equipment	136	197	61	44.5
Impairment loss on intangible assets	161	128	(34)	(20.8)
Other bad debt expenses	158	50	(108)	(68.2)
Idle tangible assets expenses	13	6	(6)	(49.6)
Impairment loss on other non-current assets	12	10	(2)	(19.3)
Other provision expenses	18	53	35	188.4
Donations	63	44	(19)	(30.4)
Others ⁽¹⁾	436	133	(302)	(69.4)
Total other operating expenses	₩ 1,442	₩ 756	(687)	(47.6)

(1) Includes lawsuit settlement expenses of Won 299 billion in 2015.

Our other operating expenses decreased by 47.6%, or Won 687 billion, from Won 1,442 billion in 2015 to Won 756 billion in 2016, primarily due to our recognition of lawsuit settlement expenses related to the litigation with Nippon Steel & Sumitomo Metal Corporation in 2015 as well as decreases

in our loss on disposals of assets held for sale, impairment loss on assets held for sale, other bad debt expenses and impairment loss on intangible assets, which were partially offset by an increase in impairment loss on property, plant and equipment. Such factors were principally attributable to the following:

- We recognized lawsuit settlement expenses of Won 299 billion in 2015 related to the litigation with Nippon Steel & Sumitomo Metal Corporation, compared to no such expenses in 2016.
- Our loss on disposals of assets held for sale decreased by 99.9%, or Won 190 billion, from Won 190 billion in 2015 to Won 0.3 billion in 2016 primarily due to the loss related to disposal of our investment in Nacional Minerios S.A. in 2015.
- Our impairment loss on assets held for sale decreased by 81.4%, or Won 109 billion, from Won 134 billion in 2015 to Won 25 billion in 2016. In 2015, our impairment loss related primarily to classification of our investment in Nacional Minerios S.A. as assets held for sale and impairment loss from the fair value of such investment less cost to sell being below the carrying amount. In 2016, our impairment loss related primarily to a decrease in value of a building in Songdo.
- Our other bad debt expenses decreased by 68.2%, or Won 108 billion, from Won 158 billion in 2015 to Won 50 billion in 2016. In 2015, our other bad debt expenses primarily related to POSCO Plantec's receivables in Iran and POSCO Daewoo's receivables in Kazakhstan. In 2016, our other bad debt expenses related primarily to financing of the Dongtan Metapolis project of POSCO E&C.
- Our impairment loss on intangible assets decreased by 20.8%, or Won 34 billion, from Won 161 billion in 2015 to Won 128 billion in 2016. In 2015, we recognized impairment losses on goodwill relating to EPC Equities LLP of Won 46 billion, POSCO Plantec Co., Ltd. of Won 38 billion and POSCO Thainox Public Company Limited of Won 16 billion. In 2016, our impairment loss on intangible assets related primarily to impairment loss on goodwill of Won 83 billion relating to POSCO Engineering Co., Ltd. In addition, we recognized full impairment loss of Won 12 billion relating to SANTOS CMI S.A.
- Our impairment loss on property, plant and equipment increased by 44.5%, or Won 61 billion, from Won 136 billion in 2015 to Won 197 billion in 2016 primarily due to Won 62 billion of impairment loss in 2016 related to continuing operating loss of the fuel cell business of POSCO Energy. In addition, we recorded Won 58 billion of impairment loss in 2016 related to disposal plans of certain assets.

Operating Profit

Due to the factors described above, our operating profit increased by 53.6%, or Won 796 billion, from Won 1,486 billion in 2015 to Won 2,282 billion in 2016. Our operating margin increased from 2.5% in 2015 to 4.3% in 2016.

Share of Loss of Equity-Accounted Investees

Our share of loss of equity-accounted investees decreased by 82.5%, or by Won 417 billion, from Won 506 billion in 2015 to Won 89 billion in 2016. In 2015, we recognized a net loss for our proportionate share of equity-accounted investees of Won 506 billion primarily due to our share of losses of Eureka Moly LLC (Won 147 billion), CSP-Compania Siderurgica do Pecem (Won 145 billion) and DMSA/AMSA (Won 138 billion), which were partially offset by our share of profits of South-East Asia Gas Pipeline Company Ltd. (Won 54 billion), KOBRASCO (Won 31 billion) and AES-VCM Mong Duong Power Company Limited (Won 30 billion). In 2016, we recognized a net loss for our proportionate share of equity-accounted investees of Won 89 billion primarily due to our share of losses of POSCO Plantec Co., Ltd. (Won 172 billion) and DMSA/AMSA (Won 60 billion), which were

partially offset by our share of profits of CSP-Compania Siderurgica do Pecem (Won 117 billion) and South-East Asia Gas Pipeline Company Ltd. (Won 47 billion). See Note 11 of Notes to Consolidated Financial Statements.

Finance Income and Finance Costs

The following table presents a breakdown of our finance income and costs and changes therein for 2015 and 2016.

	For the Year Ended December 31,		Changes	
			2015 versus 2016	
	2015	2016	Amount	%
	(In billions of Won)			
Interest income	₩ 210	₩ 182	₩ (28)	(13.2)%
Dividend income	184	41	(143)	(77.7)
Gain on foreign currency transactions	1,025	1,033	7	(0.7)
Gain on foreign currency translations	466	378	(88)	(19.0)
Gain on derivatives transactions	366	317	(50)	(13.6)
Gain on valuation of derivatives	155	147	(8)	(5.3)
Gain on disposals of available-for-sale financial assets	139	131	(8)	(6.0)
Others	11	4	(7)	(65.4)
Total finance income	₩ 2,557	₩ 2,232	(325)	(12.7)
Interest expenses	₩ 789	₩ 659	(130)	(16.5)%
Loss on foreign currency transactions	1,157	1,147	(10)	(0.9)
Loss on foreign currency translations	717	405	(311)	(43.4)
Loss on derivatives transactions	343	338	(5)	(1.4)
Loss on valuation of derivatives	72	163	91	125.5
Impairment loss on available-for-sale financial assets	143	248	106	74.0
Others	166	53	(113)	(67.8)
Total finance costs	₩ 3,387	₩ 3,014	(373)	(11.0)

Our net loss on foreign currency translations decreased by 89.0%, or Won 223 billion, from Won 251 billion in 2015 to Won 28 billion in 2016, and our net loss on foreign currency transactions decreased by 13.1%, or Won 17 billion, from Won 132 billion in 2015 to Won 115 billion in 2016, as the Won depreciated against the Dollar in both 2015 and 2016. Such net losses were also impacted by depreciation of the Won against the Brazilian real and the Australian dollar in 2015 compared to appreciation of the Won against the Brazilian real and the Australian dollar in 2016. In terms of the market average exchange rates announced by Seoul Money Brokerage Services, Ltd., the Won depreciated from Won 1,099.2 to US\$1.00 as of December 31, 2014 to Won 1,172.0 to US\$1.00 as of December 31, 2015 and further depreciated, but to a lesser extent, to Won 1,208.5 to US\$1.00 as of December 31, 2016. Against such fluctuations, we recognized a net gain on valuation of derivatives of Won 83 billion in 2015 compared to a net loss on valuations of derivatives of Won 16 billion in 2016, as well as a net gain on transactions of derivatives of Won 23 billion in 2015 compared to a net loss on transactions of derivatives of Won 22 billion in 2016.

Our interest expenses decreased by 16.5%, or Won 130 billion, from Won 789 billion in 2015 to Won 659 billion in 2016 primarily due to a general decrease in interest rates in Korea as well as a decrease in the level of short-term borrowings.

Our impairment loss on available-for-sale financial assets increased by 74.0%, or Won 106 billion, from Won 143 billion in 2015 to Won 248 billion in 2016 primarily due to an increase in our impairment related primarily to a significant and prolonged decline in the fair value of shares of Nippon Steel & Sumitomo Metal Corporation below cost.

Our dividend income decreased by 77.7%, or Won 143 billion, from Won 184 billion in 2015 to Won 41 billion in 2016 primarily due to dividends of Won 146 billion in 2015 related to our interest in Nacional Minerios S.A. compared to no such dividends in 2016.

Income Tax Expense

Our income tax expense increased by 42.4%, or Won 113 billion, from Won 267 billion in 2015 to Won 380 billion in 2016. Our effective tax rate decreased from 177.3% in 2015 to 26.9% in 2016 primarily due to the following:

- a decrease in tax related to investments in subsidiaries, associates and joint ventures from Won 440 billion in 2015 to Won 77 billion in 2016 (that resulted in a decrease in effective tax rate of 286.9%). In 2015, some of our consolidated subsidiaries incurred losses, which caused Won 212 billion of decrease in unrecognized deferred tax assets for subsidiaries and associates during such year.
- a decrease in tax credits from Won 152 billion in 2015 to Won 30 billion in 2016 (that resulted in an increase in effective tax rate of 99.1%). In 2015, there was a large amount of tax credit primarily due to claim for rectification.
- a decrease in over provision from prior years from Won 47 billion in 2015 to Won 12 billion in 2016 (that resulted in an increase in effective tax rate of 30.5%). In 2015, there was an increase in over provision from prior years related to a favorable ruling in a tax audit appeal.

See Note 35 of Notes to Consolidated Financial Statements.

Profit (Loss)

Due to the factors described above, we recorded loss of Won 116 billion in 2015 compared to profit of Won 1,032 billion in 2016.

The following table presents our profit and loss by segment, prior to adjusting for inter-company transactions that are eliminated during consolidation, goodwill and corporate fair-value adjustments, income tax expense and basis difference, and changes therein for 2015 and 2016.

	For the Year Ended December 31,		Changes	
	2015	2016	2015 versus 2016	
			Amount	%
	(In billions of Won)			
Steel Segment	₩ 181	₩ 1,511	₩ 1,330	732.7%
Trading Segment	39	53	14	37.1
Construction Segment	(276)	(1,404)	(1,128)	409.2
Others Segment	(66)	(26)	40	(60.5)
Goodwill and corporate fair value adjustments	(95)	(123)	(28)	29.4
Elimination of inter-segment profits	120	1,036	916	764.6
Income tax expense	277	385	108	38.9
Basis difference ⁽²⁾	(30)	(21)	9	(30.1)
Profit (loss) for the year	₩ (116)	₩ 1,032	₩ 1,148	N.A. ⁽¹⁾

(1) N.A. means not applicable.

(2) Basis difference is related to the difference in recognizing revenue and expenses of the Construction Segment in connection with development and sale of certain residential real estate between the report reviewed by the chief executive officer and the consolidated financial statements. See Notes 3 and 41 of Notes to Consolidated Financial Statements.

Operating Results – 2014 Compared to 2015

The following table presents our income statement information and changes therein for 2014 and 2015.

	For the Year Ended December 31,		Changes 2014 versus 2015	
	2014	2015	Amount	%
	(In billions of Won)			
Revenue	₩ 64,759	₩ 58,522	₩ (6,236)	(9.6)%
Cost of sales	57,465	52,018	(5,447)	(9.5)
Gross profit	7,293	6,504	(789)	(10.8)
Administrative expenses	2,310	2,395	85	3.7
Selling expenses	1,760	1,729	(31)	(1.8)
Other operating income	269	549	280	103.8
Other operating expenses	980	1,442	463	47.2
Operating profit	2,513	1,486	(1,027)	(40.9)
Share of loss of equity-accounted investees	300	506	206	68.7
Finance income	2,397	2,557	160	6.7
Finance costs	3,222	3,387	165	5.1
Profit before income tax	1,388	150	(1,238)	(89.2)
Income tax expense	824	267	(557)	(67.6)
Profit (loss)	564	(116)	(680)	N.A. ⁽¹⁾
Profit for the period attributable to owners of the controlling company	633	171	(461)	(72.9)
Loss for the period attributable to non-controlling interests	(69)	(288)	(219)	319.0

(1) N.A. means not applicable.

Revenue

The following table presents our revenue by segment and changes therein for 2014 and 2015.

	For the Year Ended December 31,		Changes	
	2014	2015	2014 versus 2015	
			Amount	%
	(In billions of Won)			
Steel Segment:				
External revenue	₩ 31,842	₩ 28,293	₩ (3,549)	(11.1)%
Internal revenue	17,755	16,544	(1,211)	(6.8)
Total revenue from Steel Segment	49,597	44,837	(4,760)	(9.6)
Trading Segment:				
External revenue	21,166	18,315	(2,850)	(13.5)
Internal revenue	10,095	8,692	(1,403)	(13.9)
Total revenue from Trading Segment	31,261	27,008	(4,253)	(13.6)
Construction Segment:				
External revenue	8,119	8,516	397	4.9
Internal revenue	2,185	1,352	(832)	(38.1)
Total revenue from Construction Segment	10,304	9,868	(436)	(4.2)
Others Segment:				
External revenue	3,972	3,068	(903)	(22.7)
Internal revenue	3,095	2,691	(403)	(13.0)
Total revenue from Others Segment	7,066	5,760	(1,307)	(18.5)
Total revenue prior to consolidation adjustments and basis difference	98,228	87,472	(10,756)	(11.0)
Consolidation adjustments	(33,129)	(29,279)	3,850	(11.6)
Basis difference ⁽¹⁾	(340)	330	670	N.A. ⁽²⁾
Revenue	₩ 64,759	₩ 58,522	(6,236)	(9.6)

(1) Basis difference is related to the difference in recognizing revenue and expenses of the Construction Segment in connection with development and sale of certain residential real estate between the report reviewed by the chief executive officer and the consolidated financial statements. See Notes 3 and 41 of Notes to Consolidated Financial Statements.

(2) N.A. means not applicable.

Our revenue decreased by 9.6%, or Won 6,236 billion, from Won 64,759 billion in 2014 to Won 58,522 billion in 2015 primarily due to decreases in external revenues from the Steel Segment, the Trading Segment and the Others Segment, which were offset in part by an increase in external revenues from the Construction Segment. Specifically:

Steel Segment. External revenue from the Steel Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation, decreased by 11.1%, or Won 3,549 billion, from Won 31,842 billion in 2014 to Won 28,293 billion primarily due to a decrease in the average unit sales price per ton of the principal steel products produced by us and directly sold to external customers, which was offset in part by an increase in our sales volume of the steel products produced by us and directly sold to external customers (including miscellaneous steel products not included in any of our major product categories). The weighted average unit sales price per ton of the principal steel products produced by us and directly sold to external customers decreased by 14.8% from Won 936,405 per ton in 2014 to Won 798,217 per ton in 2015, while the overall sales volume of the steel products produced by us and directly sold to external customers

(including miscellaneous steel products) increased by 3.9% from 30.4 million tons in 2014 to 31.6 million tons in 2015. Such factors were principally attributable to the following:

- The unit sales prices in Won of hot rolled products, wire rods, plates, stainless steel products and cold rolled products produced by us and directly sold to external customers decreased by 20.1%, 19.5%, 19.3%, 14.4% and 11.2%, respectively, from 2014 to 2015. On the other hand, the unit sales prices in Won of silicon steel sheets produced by us and directly sold to external customers increased by 5.1% from 2014 to 2015. For a discussion of changes in the unit sales prices of each of our principal product lines, see “— Overview — Sales Volume, Prices and Product Mix” above.
- The sales volume of wire rods, hot rolled products, stainless steel products and cold rolled products produced by us and directly sold to external customers increased by 11.2%, 9.7%, 4.1% and 1.0%, respectively, from 2014 to 2015. On the other hand, our sales volume of plates and silicon steel sheets produced by us and directly sold to external customers decreased by 1.1% and 0.7%, respectively, from 2014 to 2015. For a discussion of changes in sales volume of each of our principal product lines, see “Item 4.B. Business Overview — Major Products.”

Total revenue from the Steel Segment, which includes internal revenue from inter-company transactions, decreased by 9.6%, or Won 4,760 billion, from Won 49,597 billion in 2014 to Won 44,837 billion in 2015 as internal revenue from inter-company transactions decreased by 6.8%, or Won 1,211 billion, from Won 17,755 billion in 2014 to Won 16,543 billion in 2015. Such decrease primarily reflected a decrease in the average unit sales price of the steel products sold to our sales subsidiaries, which was offset in part by an increase in reliance on sales subsidiaries for the sale of our steel products.

Trading Segment. External revenue from the Trading Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation, decreased by 13.5%, or Won 2,850 billion, from Won 21,166 billion in 2014 to Won 18,315 billion in 2015 primarily due to a decrease in third-country trades by POSCO Daewoo and our other trading subsidiaries from 2014 to 2015, reflecting market conditions related to the deterioration of the global economy that has been characterized by weaker demand and falling prices for export and import products, reduced trading volume and intense competition among trading companies, which were partially offset by an increase in revenue from natural resources development activities, particularly from revenue related to the gas produced at the Myanmar gas fields.

Total revenue from the Trading Segment, which includes internal revenue from inter-company transactions, decreased by 13.6%, or Won 4,253 billion, from Won 31,261 billion in 2014 to Won 27,008 billion in 2015 as internal revenue from inter-company transactions decreased by 13.9%, or Won 1,403 billion, from Won 10,095 billion in 2014 to Won 8,692 billion in 2015 primarily due to the reasons stated above.

Construction Segment. External revenue from the Construction Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation, increased by 4.9%, or Won 397 billion, from Won 8,119 billion in 2014 to Won 8,516 billion in 2015 primarily due to an increase in POSCO E&C’s construction activities in Brazil relating to the construction of a steel plant.

Total revenue from the Construction Segment, which includes internal revenue from inter-company transactions, decreased by 4.2%, or Won 436 billion, from Won 10,304 billion in 2014 to Won 9,868 billion in 2015 as internal revenue from inter-company transactions decreased by 38.1%, or Won 832 billion, from Won 2,185 billion in 2014 to Won 1,352 billion in 2015. Such decrease primarily reflected a decrease in the amount of construction activities for member companies of the POSCO Group, which was partially offset by an increase in external revenue as discussed above.

Others Segment. The Others Segment includes power generation, LNG production, network and system integration, logistics and magnesium coil and sheet production. External revenue from the Others Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation, decreased by 22.7%, or Won 903 billion, from Won 3,972 billion in 2014 to Won 3,068 billion in 2015 primarily due to a decrease in revenue of POSCO Energy Corporation reflecting a decrease in the unit price of electric power sold, which was offset in part by an increase in the volume of power sold.

Total revenue from the Others Segment, which includes internal revenue from inter-company transactions, decreased by 18.5%, or Won 1,307 billion, from Won 7,066 billion in 2014 to Won 5,760 billion in 2015 as internal revenue from inter-company transactions decreased by 13.0%, or Won 403 billion, from Won 3,095 billion in 2014 to Won 2,691 billion in 2015. Such decrease primarily reflected a decrease in inter-company sales of POSCO ICT Co., Ltd. due to a general reduction in investments made by the POSCO Group in 2015, which in turn reduced demand for system network integration and outsourcing services provided by POSCO ICT Co., Ltd. In addition, inter-company sales between eNtoB Corporation and POSCO E&C related to the construction of a synthetic natural gas production plant in Gwangyang also decreased in 2015 due to the substantial completion of POSCO E&C's construction activities during 2015.

Cost of Sales

Our cost of sales decreased by 9.5%, or Won 5,447 billion, from Won 57,465 billion in 2014 to Won 52,018 billion in 2015. The decrease in cost of sales was primarily due to decreases in the average price in Won terms of key raw materials that were used to manufacture our finished goods sold, as well as a decrease in trading activities as discussed above, which were partially offset by an increase in our sales volume of steel products.

The following table presents a breakdown of our cost of sales by segment, prior to adjusting for inter-company transactions that are eliminated during consolidation, and changes therein for 2014 and 2015.

	For the Year Ended December 31,		Changes	
			2014 versus 2015	
	2014	2015	Amount	%
	(In billions of Won)			
Steel Segment	₩ 44,587	₩ 40,381	₩ (4,207)	(9.4)%
Trading Segment	29,884	25,563	(4,321)	(14.5)
Construction Segment	9,554	9,248	(305)	(3.2)
Others Segment	6,366	5,158	(1,208)	(19.0)
Consolidation adjustments	(32,577)	(28,692)	3,884	(11.9)
Basis difference ⁽¹⁾	(350)	360	710	N.A. ⁽²⁾
Cost of sales	₩ 57,465	₩ 52,018	(5,447)	(9.5)

(1) Basis difference is related to the difference in recognizing revenue and expenses of the Construction Segment in connection with development and sale of certain residential real estate between the report reviewed by the chief executive officer and the consolidated financial statements. See Notes 3 and 41 of Notes to Consolidated Financial Statements.

(2) N.A. means not applicable.

Steel Segment. The cost of sales of our Steel Segment, prior to consolidation adjustments, decreased by 9.4%, or Won 4,207 billion, from Won 44,587 billion in 2014 to Won 40,381 billion in 2015 primarily due to decreases in the average price in Won terms of key raw materials that were used to manufacture our finished goods sold, the impact of which was partially offset by an increase in our sales volume of the principal steel products produced by us and directly sold to external customers.

Trading Segment. The cost of sales of our Trading Segment, prior to consolidation adjustments, decreased by 14.5%, or Won 4,321 billion, from Won 29,884 billion in 2014 to

Won 25,563 billion in 2015 primarily due to decreases in cost of export and import products sold as well as our trading volumes, the impact of which was partially offset by an increase in the production costs related to gas produced at the Myanmar gas fields and sold to customers.

Construction Segment. The cost of sales of our Construction Segment, prior to consolidation adjustments, decreased by 3.2%, or Won 305 billion, from Won 9,554 billion in 2014 to Won 9,248 billion in 2015 in line with the decrease in total revenue from the Construction Segment.

Others Segment. The cost of sales of our Others Segment, prior to consolidation adjustments, decreased by 19.0%, or Won 1,208 billion, from Won 6,366 billion in 2014 to Won 5,158 billion in 2015 primarily due to decreases in the average price in Won terms of key raw materials of POSCO Energy Corporation.

Gross Profit

Our gross profit decreased by 10.8%, or Won 789 billion, from Won 7,293 billion in 2014 to Won 6,504 billion in 2015 primarily due to decreases in gross profit of our Steel Segment, Construction Segment and Others Segment, which were partially offset by an increase in gross profit of our Trading Segment. Our gross margin decreased from 11.3% in 2014 to 11.1% in 2015.

The following table presents our gross profit by segment, prior to adjusting for inter-company transactions that are eliminated during consolidation, and changes therein for 2014 and 2015.

	For the Year Ended December 31,		Changes	
			2014 versus 2015	
	2014	2015	Amount	%
	(In billions of Won)			
Steel Segment	₩ 5,010	₩ 4,456	₩ (553)	(11.0)%
Trading Segment	1,376	1,445	68	4.9
Construction Segment	750	619	(130)	(17.4)
Others Segment	700	601	(99)	(14.1)
Consolidation adjustments	(553)	(587)	(34)	6.2
Basis difference ⁽¹⁾	10	(30)	(40)	N.A. ⁽²⁾
Gross profit	₩ 7,293	₩ 6,504	(789)	(10.8)

(1) Basis difference is related to the difference in recognizing revenue and expenses of the Construction Segment in connection with development and sale of certain residential real estate between the report reviewed by the chief executive officer and the consolidated financial statements. See Notes 3 and 41 of Notes to Consolidated Financial Statements.

(2) N.A. means not applicable.

Steel Segment. The gross profit of our Steel Segment, prior to consolidation adjustments, decreased by 11.0%, or Won 553 billion, from Won 5,010 billion in 2014 to Won 4,456 billion in 2015 primarily due to a decrease in the average unit sales price per ton of the principal steel products produced by us and directly sold to external customers, which was partially offset by a decrease in the average price in Won terms of coal and other key raw materials that were used to manufacture our finished steel products sold and an increase in the overall sales volume of our principal steel products, as discussed above. The gross margin of our Steel Segment, which is gross profit as a percentage of total revenue prior to consolidation adjustments, decreased from 10.1% in 2014 to 9.9% in 2015.

Trading Segment. The gross profit of our Trading Segment, prior to consolidation adjustments, increased by 4.9%, or Won 68 billion, from Won 1,376 billion in 2014 to Won 1,445 billion in 2015, reflecting POSCO Daewoo's and our other trading subsidiaries' efforts to streamline their trading operations to focus on higher margin trades, as well as an increase in gross profit of the Myanmar gas fields. The gross margin of our Trading Segment, prior to consolidation adjustments, increased from 4.4% in 2014 to 5.3% in 2015.

Construction Segment. The gross profit of our Construction Segment, prior to consolidation adjustments, decreased by 17.4%, or Won 130 billion, from Won 750 billion in 2014 to Won 619 billion in 2015, and the gross margin decreased from 7.3% in 2014 to 6.3% in 2015 primarily due to a decrease in construction activities for member companies of the POSCO Group, as well as the weakening of market conditions in the domestic construction industry in 2015 that resulted in an increase in competition.

Others Segment. The gross profit of our Others Segment, prior to consolidation adjustments, decreased by 14.1%, or Won 99 billion, from Won 700 billion in 2014 to Won 601 billion in 2015 primarily due to decreases in gross profit of POSCO Chemtech Co., Ltd., POS-HIMetal Co., Ltd. and POSCO ICT Co., Ltd. Despite such decreases, gross margin increased from 9.9% in 2014 to 10.4% in 2015 due to the larger decrease in revenue as discussed above.

Selling and Administrative Expenses

The following table presents a breakdown of our selling and administrative expenses and changes therein for 2014 and 2015.

	For the Year Ended December 31,		Changes	
	2014	2015	2014 versus 2015	
			Amount	%
	(In billions of Won)			
Freight and custody expenses	₩ 1,552	₩ 1,532	₩ (20)	(1.3)%
Sales commissions	66	80	14	20.8
Sales promotion	26	22	(3)	(12.9)
Sales insurance premium	40	31	(9)	(22.4)
Contract cost	50	38	(11)	(23.0)
Others	27	25	(2)	(5.6)
Total selling expenses	₩ 1,760	₩ 1,729	(31)	(1.8)
Wages and salaries	₩ 781	₩ 811	₩ 29	3.8%
Expenses related to post-employment benefits	67	87	21	30.8
Other employee benefits	174	194	20	11.4
Depreciation and amortization	273	274	1	0.3
Taxes and public dues	56	74	19	33.5
Rental	137	120	(18)	(12.8)
Advertising	104	91	(14)	(13.2)
Research and development	175	136	(40)	(22.7)
Service fees	216	219	3	1.3
Bad debt allowance	109	190	81	74.1
Others	217	200	(16)	(7.5)
Total administrative expenses	₩ 2,310	₩ 2,395	85	3.7
Total selling and administrative expenses	₩ 4,070	₩ 4,124	54	1.3

Our selling and administrative expenses increased by 1.3%, or Won 54 billion, from Won 4,070 billion in 2014 to Won 4,124 billion in 2015 primarily due to increases in bad debt allowance, labor-related expenses and expenses related to post-employment benefits, which were partially offset by a decrease in research and development expenses and freight and custody expenses. Such factors were principally attributable to the following:

- Our bad debt allowance increased by 74.1%, or Won 81 billion, from Won 109 billion in 2014 to Won 190 billion in 2015 primarily due to additional bad debt allowance recognized related to POSCO Daewoo's outstanding receivables in Kazakhstan as well as POSCO E&C's bad debt allowance related to pre-sales of residential apartments in Chungnam, Korea.
- Our labor-related expenses included in selling and administrative expenses, which consist of wages and salaries, other employee benefits and expenses related to post-employment

benefits, increased by 6.8%, or Won 70 billion, from Won 1,022 billion in 2014 to Won 1,092 billion in 2015 primarily due to increases in wages as well as post-employment benefits and other employee benefits related to an increase in early retirement of our employees in 2015, which were offset in part by a decrease in the number of administrative personnel.

- Our research and development expenses decreased by 22.7%, or Won 40 billion, from Won 175 billion in 2014 to Won 136 billion in 2015 primarily due to a decrease in our development activities for new products.
- Our freight and custody expenses decreased by 1.3%, or Won 20 billion, from Won 1,552 billion in 2014 to Won 1,532 billion in 2015 primarily due to an increase in our export volume, which was offset in part by a decrease in freight rates.

Other Operating Income and Expenses

The following table presents a breakdown of our other operating income and expenses and changes therein for 2014 and 2015.

	For the Year Ended December 31,		Changes	
	2014	2015	2014 versus 2015	
			Amount	%
		(In billions of Won)		
Gain on disposals of assets held for sale	₩ 48	₩ 228	₩ 180	372.6%
Gain on disposals of investments in subsidiaries, associates and joint ventures	41	89	47	115.0
Gain on disposals of property, plant and equipment	15	23	8	51.1
Recovery of allowance for other doubtful accounts	—	10	10	N.A. ⁽¹⁾
Gain on insurance proceeds	3	15	12	412.2
Others	162	184	22	13.7
Total other operating income	₩ 269	₩ 549	280	103.8

(1) N.A. means not applicable.

Our other operating income increased by 103.8%, or Won 280 billion, from Won 269 billion in 2014 to Won 549 billion in 2015 primarily due to increases in gain on disposals of assets held for sale and gain on disposals of investments in subsidiaries, associates and joint ventures. Our gain on disposals of assets held for sale increased by 372.6%, or Won 180 billion, from Won 48 billion in 2014 to Won 228 billion in 2015. In 2014, we recognized a gain of Won 48 billion on disposals of assets held for sale primarily from our disposition of International Business Center Corporation shares. In 2015, we recognized a gain of Won 228 billion on disposals of assets held for sale primarily from the disposal of our 52.2% interest in SeAH Changwon Integrated Special Steel (formerly POSCO Specialty Steel Co., Ltd.) and our shares in POSFINE Co., Ltd. Our gain on disposals of investments in subsidiaries, associates and joint ventures increased by 115.0%, or Won 47 billion, from Won 41 billion in 2014 to Won 89 billion in 2015 primarily due to disposition of our interests in some of our subsidiaries and associates as part of our reorganization efforts.

	For the Year Ended December 31,		Changes	
			2014 versus 2015	
	2014	2015	Amount	%
			(In billions of Won)	
Impairment loss on assets held for sale	₩ 17	134	116	676.2%
Loss on disposals of assets held for sale	0	190	190	N.A. ⁽¹⁾
Loss on disposals of investments in subsidiaries, associates and joint ventures	3	19	16	643.2
Loss on disposals of property, plant and equipment	50	102	52	103.4
Impairment loss on property, plant and equipment	65	136	71	110.2
Impairment loss on intangible assets	55	161	106	192.3
Other bad debt expenses	96	158	62	64.0
Idle tangible assets expenses	12	13	1	4.6
Impairment loss on other non-current assets	38	12	(26)	(67.8)
Other provision expenses	127	18	(108)	(85.5)
Donations	70	63	(7)	(9.5)
Others ⁽²⁾	447	436	(11)	(2.6)
Total other operating expenses	₩ 980	₩ 1,442	463	47.2

(1) N.A. means not applicable.

(2) Includes penalty and additional tax payments of Won 352 billion in 2014 and lawsuit settlement expenses of Won 299 billion in 2015.

Our other operating expenses increased by 47.2%, or Won 463 billion, from Won 980 billion in 2014 to Won 1,442 billion in 2015, primarily due to our recognition of lawsuit settlement expenses in 2015 related to the litigation with Nippon Steel & Sumitomo Metal Corporation as well as increases in our loss on disposals of assets held for sale, impairment loss on assets held for sale, impairment loss on intangible assets and impairment loss on property, plant and equipment, which were partially offset by decreases in penalty and additional tax payments and our other provision expenses. Such factors were principally attributable to the following:

- We recognized lawsuit settlement expenses of Won 299 billion in 2015 related to the litigation with Nippon Steel & Sumitomo Metal Corporation, compared to no such expenses in 2014. See “Item 8.A. Consolidated Statements and Other Financial Information — Legal Proceedings.”
- We recognized a loss on disposals of assets held for sale of Won 190 billion in 2015 primarily due to the disposal of our investment in Nacional Minerios S.A. In 2014, we only recognized Won 14 million of loss on disposals of assets held for sale.
- Our impairment loss on assets held for sale increased by 676.2%, or Won 116 billion, from Won 17 billion in 2014 to Won 134 billion in 2015 primarily due to classification of our investment in Nacional Minerios S.A. as assets held for sale and impairment loss from the fair value of such investment less cost to sell being below the carrying amount.
- Our impairment loss on intangible assets increased by 192.3%, or Won 106 billion, from Won 55 billion in 2014 to Won 161 billion in 2015 primarily due to impairment losses in goodwill in 2015 relating to EPC Equities LLP of Won 46 billion, POSCO Plantec Co., Ltd. of Won 38 billion and POSCO Thainox Public Company Limited of Won 16 billion.
- Our impairment loss on property, plant and equipment increased by 110.2%, or Won 71 billion, from Won 65 billion in 2014 to Won 136 billion in 2015 primarily due to an impairment loss of Won 46 billion related to the suspension of operation of our magnesium plant in Gangneung, Korea.
- Our penalty and additional tax payments decreased by 98.7%, or Won 348 billion, from Won 352 billion in 2014 to Won 5 billion in 2015 primarily due to additional tax payments of Won 272 billion resulting from Korea National tax Service’s periodic audit completed in 2014, which mostly related to value added taxes, compared to no such expenses in 2015.

- Our other provision expenses decreased by 85.5%, or Won 108 billion, from Won 127 billion in 2014 to Won 18 billion in 2015 primarily due to a decrease in our provision related to restoration costs of contaminated land near our magnesium plant in Gangneung, Korea, from Won 89 billion in 2014 to Won 37 billion in 2015.

Operating Profit

Due to the factors described above, our operating profit decreased by 40.9%, or Won 1,027 billion, from Won 2,513 billion in 2014 to Won 1,486 billion in 2015. Our operating margin decreased from 3.9% in 2014 to 2.5% in 2015.

Share of Loss of Equity-Accounted Investees

Our share of loss of equity-accounted investees increased by 68.7%, or by Won 206 billion, from Won 300 billion in 2014 to Won 506 billion in 2015. In 2014, we recognized a net loss for our proportionate share of equity-accounted investees of Won 300 billion primarily due to our share of loss of POSCO Plantec Co., Ltd. (Won 211 billion) and CSP-Compania Siderurgica do Pecem (Won 57 billion), which was partially offset by our share of profit of KOBRASCO (Won 30 billion) and South-East Asia Gas Pipeline Company Ltd. (Won 26 billion). In 2015, we recognized a net loss for our proportionate share of equity-accounted investees of Won 506 billion primarily due to our share of losses of Eureka Moly LLC (Won 147 billion), CSP-Compania Siderurgica do Pecem (Won 145 billion) and DMSA/AMSA (Won 138 billion), which were partially offset by our share of profits of South-East Asia Gas Pipeline Company Ltd. (Won 54 billion), KOBRASCO (Won 31 billion) and AES-VCM Mong Duong Power Company Limited (Won 30 billion). See Note 11 of Notes to Consolidated Financial Statements.

Finance Income and Finance Costs

The following table presents a breakdown of our finance income and costs and changes therein for 2014 and 2015.

	For the Year Ended December 31,		Changes	
	2014	2015	2014 versus 2015	
			Amount	%
	(In billions of Won)			
Interest income	₩ 228	₩ 210	₩ (18)	(7.9)%
Dividend income	48	184	136	284.1
Gain on foreign currency transactions	1,022	1,025	3	0.3
Gain on foreign currency translations	453	466	13	2.8
Gain on derivatives transactions	328	366	39	11.8
Gain on valuation of derivatives	73	155	82	112.0
Gain on disposals of available-for-sale financial assets	236	139	(97)	(41.2)
Others	7	11	3	46.0
Total finance income	₩ 2,397	₩ 2,557	160	6.7
Interest expenses	₩ 796	₩ 789	(7)	(0.9)%
Loss on foreign currency transactions	1,034	1,157	123	11.9
Loss on foreign currency translations	429	717	288	67.1
Loss on derivatives transactions	353	343	(10)	(2.9)
Loss on valuation of derivatives	101	72	(29)	(28.8)
Impairment loss on available-for-sale financial assets	370	143	(227)	(61.4)
Others	139	166	27	19.4
Total finance costs	₩ 3,222	₩ 3,387	165	5.1

We recognized a net gain on foreign currency translations of Won 25 billion in 2014 compared to a net loss on foreign currency translations of Won 251 billion in 2015, and net loss on foreign

currency transactions increased more than ten-fold, or Won 120 billion, from Won 11 billion in 2014 to Won 132 billion in 2015, as the Won depreciated against the Dollar in both 2014 and 2015 and the Won appreciated against the Yen in 2014 while it depreciated against the Yen in 2015. In terms of the market average exchange rates announced by Seoul Money Brokerage Services, Ltd., the Won depreciated from Won 1,055.3 to US\$1.00 as of December 31, 2013 to Won 1,099.2 to US\$1.00 as of December 31, 2014 and depreciated further to Won 1,172.0 to US\$1.00 as of December 31, 2015. The Won appreciated against the Yen from Won 1,004.7 per Yen 100 as of December 31, 2013 to Won 920.1 per Yen 100 as of December 31, 2014 but depreciated to Won 972.0 per Yen 100 as of December 31, 2015. Against such fluctuations, we recognized a net loss on valuation of derivatives of Won 28 billion in 2014 compared to a net gain on valuations of derivatives of Won 83 billion in 2015, as well as a net loss on transactions of derivatives of Won 26 billion in 2014 compared to a net gain on transactions of derivatives of Won 23 billion in 2015.

Our gain on disposals of available-for-sale financial assets decreased by 41.2%, or Won 97 billion, from Won 236 billion in 2014 to Won 139 billion in 2015. Our gain in 2014 related primarily to our disposal of interest in SK Telecom Co., Ltd., and our gain in 2015 related primarily to our acquisition of, and subsequent partial disposal of, shares in Congonhas Minerios S.A., as well as our disposal of interest in Sandfire Resources NL by POSCO Australia Pty Ltd. We acquired shares in Congonhas Minerios S.A., a Brazil-based iron ore mining company, in exchange for our shares in Nacional Minerios S.A. For a discussion of our impairment loss on our investment in Nacional Minerios S.A., see “— Operating Results — 2014 Compared to 2015 — Other Operating Income and Expenses.”

Our impairment loss on available-for-sale financial assets decreased by 61.4%, or Won 227 billion, from Won 370 billion in 2014 to Won 143 billion in 2015 primarily due to a decrease in our impairment in recent years that related primarily to a significant and prolonged decline in the fair value of shares of Hyundai Heavy Industries Co., Ltd. and Dongbu Metal Co., Ltd. below cost.

Our dividend income increased by 284.1%, or Won 136 billion, from Won 48 billion in 2014 to Won 184 billion in 2015 primarily due to the dividend we received from Nacional Minerios S.A.

Income Tax Expense

Our income tax expense decreased by 67.6%, or Won 557 billion, from Won 824 billion in 2014 to Won 267 billion in 2015. Our effective tax rate increased from 59.4% in 2014 to 177.3% in 2015 primarily due to an increase in tax related to investments in subsidiaries, associates and joint ventures from Won 372 billion in 2014 to Won 440 billion in 2015 (that resulted in an increase in effective tax rate of 265.6%), an increase in tax credits from Won 50 billion in 2014 to Won 152 billion in 2015 due to an increase in investment tax credit (that resulted in a decrease in effective tax rate of 97.6%), a decrease in tax effects due to permanent differences from Won 70 billion in 2014 to Won (26) billion in 2015 (that resulted in a decrease in effective tax rate of 22.4%), as well as an increase over provision from prior years from Won 0.5 billion in 2014 to 47 billion in 2015 (that resulted in a decrease in effective tax rate of 31.3%). See Note 35 of Notes to Consolidated Financial Statements.

Profit

Due to the factors described above, we recorded profit of Won 564 billion in 2014 compared to loss of Won 116 billion in 2015.

The following table presents our profit and loss by segment, prior to adjusting for inter-company transactions that are eliminated during consolidation, goodwill and corporate fair-value adjustments, income tax expense and basis difference, and changes therein for 2014 and 2015.

	For the Year Ended December 31,		Changes	
	2014	2015	2014 versus 2015	
	(In billions of Won)		Amount	%
Steel Segment	₩ 857	₩ 181	₩ (676)	(78.8)%
Trading Segment	181	39	(142)	(78.6)
Construction Segment	13	(276)	(289)	N.A. ⁽¹⁾
Others Segment	9	(66)	(74)	N.A. ⁽¹⁾
Goodwill and corporate fair value adjustments	(122)	(95)	27	(22.0)
Elimination of inter-segment profits	(381)	120	501	N.A. ⁽¹⁾
Income tax expense	821	277	(545)	(66.3)
Basis difference ⁽²⁾	10	(30)	(40)	N.A. ⁽¹⁾
Profit (loss) for the period	₩ 564	₩(116)	₩ (680)	N.A. ⁽¹⁾

(1) N.A. means not applicable.

(2) Basis difference is related to the difference in recognizing revenue and expenses of the Construction Segment in connection with development and sale of certain residential real estate between the report reviewed by the chief executive officer and the consolidated financial statements. See Notes 3 and 41 of Notes to Consolidated Financial Statements.

Item 5.B. Liquidity and Capital Resources

The following table sets forth the summary of our cash flows for the periods indicated.

	For the Year Ended December 31,		
	2014	2015	2016
	(In billions of Won)		
Net cash provided by operating activities	₩ 3,412	₩ 7,602	₩ 5,269
Net cash used in investing activities	(3,745)	(4,535)	(3,755)
Net cash provided by (used in) financing activities	135	(2,242)	(3,951)
Effect of exchange rate fluctuations on cash held	12	23	13
Cash and cash equivalents at beginning of period	4,209	4,022	4,871
Cash and cash equivalents at end of period	4,022	4,871	2,448
Net increase (decrease) in cash and cash equivalents	(186)	849	(2,424)

Capital Requirements

Historically, uses of cash consisted principally of purchases of property, plant and equipment and other assets and repayments of outstanding debt and payments of dividends.

Net cash used in investing activities was Won 3,745 billion in 2014, Won 4,535 billion in 2015 and Won 3,755 billion in 2016. These amounts included acquisition of property, plant and equipment of Won 3,506 billion in 2014, Won 2,560 billion in 2015 and Won 2,324 billion in 2016. We plan to spend approximately Won 3.5 trillion in capital expenditures in 2017, which we may adjust on an on-going basis subject to market demand for our products, the production outlook of the global steel industry and global economic conditions in general. We may delay or not implement some of our current capital expenditure plans based on our assessment of such market conditions. We had net disposals of short-term financial instruments of Won 1,539 billion in 2014 and net acquisitions of short-term financial instruments of Won 2,443 billion in 2015 and Won 1,401 billion in 2016. We also had net disposals of available-for-sale investments of Won 176 billion in 2014 and Won 220 billion in 2015 and net acquisition of available-for-sale investments of Won 48 billion in 2016.

In our financing activities, we used cash of Won 2,802 billion in 2014, Won 3,510 billion in 2015 and Won 4,275 billion in 2016 for repayments of borrowings. We paid dividends on common stock in the amount of Won 677 billion in 2014, Won 823 billion in 2015 and Won 709 billion in 2016.

In recent years, we have also selectively considered various opportunities to acquire or invest in companies that may complement our businesses, as well as invest in overseas resources development projects. We may require additional capital for such acquisitions or entering into other strategic relationships. Other than capital required for such activities, we anticipate that capital expenditures, repayments of outstanding debt and payments of cash dividends will represent the most significant uses of funds for the next several years.

Payments of contractual obligations and commitments will also require considerable resources. In our ordinary course of business, we routinely enter into commercial commitments for various aspects of our operations, as well as issue guarantees for indebtedness of our related parties and others. For our contingent liabilities on outstanding guarantees provided by us, see Note 38(b) of Notes to Consolidated Financial Statements. The following table sets forth the amount of long-term debt, capital lease and operating lease obligations as of December 31, 2016.

	Payments Due by Period				
	Total	Less than 1 Year	1 to 3 Years	4 to 5 Years	More than 5 Years
	(In billions of Won)				
Long-term debt obligations ^(a)	₩ 15,061	₩ 2,164	₩ 5,938	₩ 4,174	₩ 2,785
Interest payments on long-term debt ^(b)	1,944	472	654	344	474
Capital lease obligations	126	28	25	72	1
Operating lease obligations	41	13	14	14	—
Purchase obligations ^(c)	23,011	10,490	7,240	3,666	1,615
Accrued severance benefits ^(d)	2,376	84	312	314	1,666
Total	₩ 42,559	₩ 13,251	₩ 14,183	₩ 8,584	₩ 6,541

- (a) Includes the current portion and premium on bond redemption but excludes amortization of discount on debentures and issuance costs.
- (b) As of December 31, 2016, a portion of our long-term debt carried variable interest rates. We used the interest rate in effect as of December 31, 2016 in calculating the interest payments on long-term debt for the periods indicated.
- (c) Our purchase obligations include supply contracts to purchase iron ore, coal, nickel, LNG and other raw materials. These contracts generally have terms of one to ten years and the long-term contracts provide for periodic price adjustments according to the market prices. As of December 31, 2016, 144 million tons of iron ore and 22 million tons of coal remained to be purchased under long-term contracts. In addition, we entered into an agreement with Tangguh LNG Consortium in Indonesia to purchase 550 thousand tons of LNG for 20 years commencing in August 2005. The purchase price under the agreement with Tangguh LNG Consortium is variable based on the monthly standard oil price (as represented by the Japan Customs cleared Crude Price), subject to a ceiling. We used the market price and exchange rate in effect as of December 31, 2016 in calculating the iron ore, coal and LNG purchase obligations described above for the periods indicated.
- (d) Represents, as of December 31, 2016, the expected amount of severance benefits that we will be required to pay under applicable Korean law to all of our employees when they reach their normal retirement age. The amounts were determined based on the employees' current salary rates and the number of service years that will be accumulated upon their retirement. These amounts do not include amounts that may be paid to employees who cease to work at the company before their normal retirement age.

Capital Resources

We have traditionally met our working capital and other capital requirements principally from cash provided by operations, while raising the remainder of our requirements primarily through long-term debt and short-term borrowings. We expect that these sources will continue to be our principal sources of cash in the future. From time to time, we may also generate cash through issuance of hybrid bonds and sale of treasury shares and our holdings in available-for-sale securities.

Our net cash provided by operating activities increased by 122.8%, or Won 4,190 billion, from Won 3,412 billion in 2014 to Won 7,602 billion in 2015. Our gross cash flow from our sales activities decreased as discussed above. However, we managed our inventory level in 2015 in response to the continuing uncertainties in the global economy and overcapacity in the global steel industry. The inventory turnover was faster in 2015 compared to 2014 as we maintained a lower level of inventory level. Our outstanding trade accounts and notes receivable also decreased in 2015, as we shortened payment terms for some of our key customers, which in turn positively impacted our net cash provided by operating activities.

Our net cash provided by operating activities decreased by 30.7%, or Won 2,332 billion, from Won 7,602 billion in 2015 to Won 5,269 billion in 2016. Our gross cash flow from our sales activities decreased as discussed above. In addition, the overall inventory turnover was slower in 2016 compared to 2015 as our materials-in-transit increased during the year. However, we continued to actively manage our finished goods inventory level in 2016 in response to the continuing uncertainties in the global economy and overcapacity in the global steel industry. Offsetting such impact from usage of cash, our outstanding trade accounts and notes payable increased in 2016, as we lengthened payment terms of some of our key suppliers, which in turn positively impacted our net cash provided by operating activities.

We had net repayments of borrowings, after adjusting for proceeds from borrowings, of Won 280 billion in 2014, Won 1,731 billion in 2015 and Won 2,286 billion in 2016. Net proceeds from short-term borrowings, after deducting for repayments of short-term borrowings, were Won 1,038 billion in 2014. We had net repayment of short-term borrowings, after deducting for repayment of short-term borrowings, of Won 846 billion in 2015 and Won 886 billion in 2016. Long-term borrowings, excluding current installments, were Won 15,233 billion as of December 31, 2014, Won 12,849 billion as of December 31, 2015 and Won 12,510 billion as of December 31, 2016. Total short-term borrowings and current installments of long-term borrowings were Won 12,195 billion as of December 31, 2014, Won 12,371 billion as of December 31, 2015 and Won 10,195 billion as of December 31, 2016. Outstanding hybrid bonds were Won 997 billion as of December 31, 2014, 2015 and 2016. Our net borrowings-to-equity ratio, which is calculated by deducting cash and cash equivalents from total borrowings and dividing the net amount with our total equity, was 45.21% as of December 31, 2015 and 44.26% as of December 31, 2016.

We periodically increase our short-term borrowings and adjust our long-term debt financing levels depending on changes in our capital requirements. We also generated cash of Won 43 billion in 2014 from the sale of our treasury shares. We believe that we have sufficient working capital for our current requirements and that we have a variety of alternatives available to us to satisfy our liquidity requirements to the extent that they are not met by funds generated by operations, including the issuance of debt and equity securities and bank borrowings denominated in Won and various foreign currencies. However, our ability to rely on some of these alternatives could be affected by factors such as the liquidity of the Korean and the global financial markets, prevailing interest rates, our credit rating and the Government's policies regarding Won currency and foreign currency borrowings.

Liquidity

We had working capital (current assets minus current liabilities) of Won 10,833 billion as of December 31, 2014, Won 9,148 billion as of December 31, 2015 and Won 10,711 billion as of December 31, 2016. Our holdings of cash and cash equivalents (which do not include cash and cash equivalents categorized under "assets for sale") were Won 3,811 billion as of December 31, 2014, Won 4,870 billion as of December 31, 2015 and Won 2,448 billion as of December 31, 2016. See Notes 5 and 10 of Notes to Consolidated Financial Statements. Our holding of other receivables and other short-term financial assets were Won 3,419 billion as of December 31, 2014, Won 5,590 billion as of December 31, 2015 and Won 6,765 billion as of December 31, 2016. As of December 31, 2016, approximately 22% of our cash and cash equivalents, other receivables and other short-term financial

assets were held outside of Korea, which we expect to use in our operations abroad, including capital expenditure activities. In the event that such assets are needed for our operations in Korea, such amounts are typically not restricted under local laws from being used in Korea. In addition, we believe that there are no material tax implications in the event our foreign subsidiaries elect to grant cash dividends to us. POSCO had total available credit lines of Won 2,895 billion as of December 31, 2016, Won 300 billion of which was used as of such date. We have not had, and do not believe that we will have, difficulty gaining access to short-term financing sufficient to meet our current requirements.

Our liquidity is affected by exchange rate fluctuations. See “— Overview — Exchange Rate Fluctuations.”

Capital Expenditures and Capacity Expansion

Cash used for acquisitions of property, plant and equipment was Won 3,506 billion in 2014, Won 2,560 billion in 2015, and Won 2,324 billion in 2016. We plan to spend approximately Won 3.5 trillion in capital expenditures in 2017, which we may adjust on an on-going basis subject to market demand for our products, the production outlook of the global steel industry and global economic conditions in general. We may delay or not implement some of our current capital expenditure plans based on our assessment of such market conditions.

Our current plan for capital investment in production facilities emphasizes capacity rationalization, increased production of higher value-added products and improvements in the efficiency of older facilities in order to reduce operating costs. The following table sets out the major items of our capital expenditures as of December 31, 2016:

Project	Expected Completion Date	Total Cost of Project	Estimated Remaining Cost of Completion as of December 31, 2016
(In billions of Won)			
Steel Segment:			
Miscellaneous capital expenditures, including rationalization and upgrading of raw materials treatment and transportation facilities	December 2018	3,534	2,653
Construction of SNG plant	June 2017	1,194	59
Rationalization of furnace no. 3 at Pohang Works	December 2017	546	342
Construction of no. 7 continuous galvanizing line at Gwangyang Works	June 2017	255	40
Construction of no. 1 continuous galvanizing line at POSCO (Chongqing) Automotive Processing Center Co., Ltd.	August 2018	245	198

Item 5.C. Research and Development, Patents and Licenses, Etc.

We maintain a research and development program to carry out basic research and applied technology development activities. As of December 31, 2016, POSCO Technical Research Laboratories employed 979 personnel, including 511 researchers. Our technology development department also works closely with the Pohang University of Science & Technology, Korea’s first research-oriented college founded by us in 1986, and the Research Institute of Industrial Science and Technology, Korea’s first private comprehensive research institute founded by us in 1987. We also established POSCO Research Institute (POSRI) in 1994, which engages in research activities and consulting services.

We recorded research and development expenses of Won 353 billion as cost of sales in 2014, Won 356 billion in 2015 and Won 324 billion in 2016, as well as research and development expenses of Won 175 billion as selling and administrative expenses in 2014, Won 136 billion in 2015 and Won 121 billion in 2016.

Our research and development program has filed approximately 41,500 industrial rights applications relating to steel-making technology, approximately 15,000 of which were registered as of December 31, 2016, and has successfully applied many of these to the improvement of our manufacturing process.

Item 5.D. *Trend Information*

These matters are discussed under Item 5.A. and Item 5.B. above where relevant.

Item 5.E. *Off-balance Sheet Arrangements*

As of December 31, 2015 and 2016, we did not have any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Item 5.F. *Tabular Disclosure of Contractual Obligations*

These matters are discussed under Item 5.B. above where relevant.

Item 5.G. *Safe Harbor*

See “Item 3. Key Information — Item 3.D. Risk Factors — This annual report contains “forward-looking statements” that are subject to various risks and uncertainties.

Item 6. *Directors, Senior Management and Employees*

Item 6.A. *Directors and Senior Management*

Board of Directors

Our board of directors has the ultimate responsibility for the management of our business affairs. Our board consists of five directors who are our executive officers (“Inside Directors”) and seven directors who are outside directors (“Outside Directors”). Our shareholders elect both the Inside Directors and Outside Directors at a general meeting of shareholders. Candidates for Inside Directors are recommended to shareholders by the board of directors after the board reviews such candidates’ qualifications, and candidates for Outside Directors are recommended to the shareholders by a separate board committee consisting of three Outside Directors and one Inside Director (“Director Candidate Recommendation Committee”) after the committee reviews such candidates’ qualifications. Any shareholder holding our outstanding shares with voting rights may suggest candidates for Outside Directors to the Director Candidate Recommendation Committee.

Our board of directors maintains the following six sub-committees:

- the Director Candidate Recommendation Committee;
- the Evaluation and Compensation Committee;
- the Finance and Operation Committee;
- the Executive Management Committee;
- the Audit Committee; and
- the Related Party Transactions Committee.

Our board committees are described in greater detail below under “— Item 6.C. Board Practices.”

Under the Commercial Code and our articles of incorporation, one Chairman should be elected among the Outside Directors and several Representative Directors may be elected among the Inside Directors by our board of directors' resolution.

Inside Directors

Our current Inside Directors are:

Name	Position	Responsibilities and Division	Years as Director	Years with POSCO	Age	Expiration of Term of Office
Kwon, Oh-Joon	Chief Executive Officer and Representative Director	—	3	28	66	March 2020
Oh, In-Hwan	President and Representative Director	Chief Operating Officer / Head of Steel Business and Operation	2	34	58	March 2018
Choi, Jeong-Woo	President and Representative Director	Head of Corporate Strategy & Finance Center	1	31	60	March 2018
Chang, In-Hwa	Senior Executive Vice President	Head of Steel Production Division	0	6	61	March 2018
Yu, Seong	Senior Executive Vice President	Head of Technology and Investment Division	0	31	60	March 2018

All Inside Directors are engaged in our business on a full-time basis.

Outside Directors

Our current Outside Directors are set out in the table below. Each of our Outside Directors meets the applicable independence standards set forth under the rules of the Financial Investment Services and Capital Markets of Korea (the "FSCMA").

Name	Position	Principal Occupation	Years as Director	Age	Expiration of Term of Office
Bahk, Byong-Won	Chairman	Chairman, Korea Employers Federation	2	64	March 2018
Shin, Chae-Chol	Director	Former Chairman and CEO, IBM Korea Inc.	4	69	March 2018
Lee, Myoung-Woo	Director	President, Dongwon Industries	4	63	March 2019
Kim, Joo-Hyun	Director	Former Advisory, Hyundai Research Institute	2	64	March 2018
Kim, Shin-Bae	Director	Former Vice Chairman, SK Group	0	62	March 2019
Chung, Moon-Ki	Director	Associate Professor in Accounting, Sungkyunkwan University	0	58	March 2019
Chang, Seung-Wha	Director	Professor of Law, Seoul National University	0	53	March 2020

The term of office of the Directors elected in March 2017 is up to three (3) years. Each Director's term expires at the close of the ordinary general meeting of shareholders convened in respect of the fiscal year that is the last one to end during such Director's tenure.

Senior Management

In addition to the Inside Directors who are also our executive officers, we have the following executive officers:

<u>Name</u>	<u>Position</u>	<u>Responsibility and Division</u>	<u>Years with POSCO</u>	<u>Age</u>
An, Tong-Il	Senior Executive Vice President	Head of Pohang Works	30	57
Kim, Hag-Dong	Senior Executive Vice President	Head of Gwangyang Works	30	57
Ko, Suk-Bum	Senior Executive Vice President	Head of Management Support Division	32	59
Min, Kyung-Zoon	Senior Executive Vice President	President, PT Krakatau POSCO Co., Ltd.	33	58
Jeong, Tak	Executive Vice President	Head of Steel Business Strategy Office	5	57
Yang, Heung-Yul	Executive Vice President	Head of Labor and Outside Services Office	27	56
Han, Sung-Hee	Executive Vice President	Head of Public Relations Office	18	56
Kim, Hak-Yong	Executive Vice President	Head of Plant, Equipment and Materials Procurement Office	28	55
Lee, Duk-Lak	Executive Vice President	Head of Steel Solution Marketing Office	31	56
Kwak Jeong-Shik	Executive Vice President	Head of External Relations Office	29	59
Kim, Dong-Soo	Executive Vice President	Head of Technology Management Office	30	58
Jeong, Ki-Seop	Executive Vice President	Head of Domestic Business Management Office	2	55
Kim, Byung-Hwi	Executive Vice President	Head of Human Resources Management Office	26	53
Cho, Il-Hyun	Executive Vice President	Head of Investment Planning & Engineering Office	30	55
Choi, Joo	Executive Vice President	Head of Technical Research Laboratories	33	58
Yoo, Byeong-Og	Executive Vice President	Head of Corporate Strategy Office	28	54
Kim, Kwang-Soo	Executive Vice President	Head of Stainless Steel Marketing Office	32	57
Lee, Sung-Wook	Executive Vice President	Head of Legal Affairs Office		52
Choi, Jong-Jin	Senior Vice President	Deputy Head of Works (Administration, Pohang Works)	27	53
Park, Young-Kwan	Senior Vice President	Deputy Head of Works (Iron and Steel Making, Gwangyang Works)	31	58
Nam, Soo-hi	Senior Vice President	Deputy Head of Works (Iron and Steel Making, Pohang Works)	29	57
Noh, Min-Yong	Senior Vice President	Head of Corporate Audit Office	27	53
Jung, Kyu-Jin	Senior Vice President	Head of Raw Materials Office II	25	56
Jung, Hae-Seong	Senior Vice President	Head of Raw Materials Office I	23	52
Kim, Dong-Ho	Senior Vice President	President, CSP-Compania Siderurgica do Pecem	32	57
Yun, Yang-Su	Senior Vice President	Head of Automotive Materials Marketing Office	26	53
Yang, Weon-Jun	Senior Vice President	Head of Human Resources and Innovation Office	28	51
Lee, Eun-Seok	Senior Vice President	Deputy Head of Works (Stainless Steel Production, Pohang Works)	31	56
Kim, Soon-Ki	Senior Vice President	Deputy Head of Works (Administration, Gwangyang Works)	26	52
Park, Mi-Hwa	Senior Vice President	Head of Information Planning Office	2	50
Lee, Si-Woo	Senior Vice President	Deputy Head of Works (Hot and Cold Rolling, Gwangyang Works)	31	56
Kim, Gwang-Soo	Senior Vice President	Head of Global Marketing Coordination Office	30	55

<u>Name</u>	<u>Position</u>	<u>Responsibility and Division</u>	<u>Years with POSCO</u>	<u>Age</u>
Min, Jung-Ki	Senior Vice President	Head of Production Division, PT Krakatau POSCO Co., Ltd.	30	57
Ha, Dae-Ryong	Senior Vice President	Head of Electrical and Electronic Materials Marketing Office	28	53
Park, Hyeon	Senior Vice President	Head of New Business Office	16	50
Lim, Seung-Kyu	Senior Vice President	Head of Overseas Business Management Office	28	53
Choo, Se-Don	Senior Vice President	Head of Energy and Shipbuilding Materials Marketing Office	23	55
Lee, Sang-Hyeon	Senior Vice President	Head of Pohang Research Lab	13	56
Yoon, Duk-II	Senior Vice President	Head of Finance Office	26	53
Kim, Bok-Tae	Senior Vice President	Head of Safety and Production Strategy Office	29	55
Chun, Sung-Lae	Senior Vice President	Head of Hot Rolled and Construction Steel Materials Marketing Office	28	53
Kim, Min-Chul	Senior Vice President	Deputy Head of Works (Maintenance, Gwangyang Works)	31	54
Chun, Myung-Sik	Senior Vice President	Head of Gwangyang Research Lab	13	57
Kim, Jeong-Su	Senior Vice President	Head of Wire Rod Marketing Office	21	53
Choi, Hyun-Soo	Senior Vice President	Head of Europe Office	25	57
Kim, Dong-Yeong	Senior Vice President	Deputy Head of Works (Safety and Maintenance, Pohang Works)	28	55
Kim, Ki-Soo	Senior Vice President	Head of Engineering Solution Office	22	51
Choi, Young-Jun	Senior Vice President	Deputy Head of Works (Hot and Cold Rolling, Pohang Works)	27	52
Kim, Jeong-Sik	Executive Vice President	Steel Production Division	34	60
Lee, Jong-Sub	Executive Vice President	Steel Business Division	33	60
Kim, Gyo-Sung	Executive Vice President	Steel Business Division	32	55
Choi, Bong-Joo	Senior Vice President	Steel Production Division	25	58
Park, Yong-Kyu.	Senior Vice President	Steel Production Division	32	57
Yi, Sang-Ho	Senior Vice President	Steel Production Division	32	56
Kang, Seog-Beom	Senior Vice President	Steel Business Division	31	56
Won, Hyung-II	Senior Vice President	Legal Affairs Office	5	48
Kim, Sun-Koo	Senior Vice President	Technical Research Laboratories	26	57
Lee, Ki-Ho	Senior Vice President	Steel Production Division	33	57
Kim, Jong-Sang	Senior Vice President	Technical Research Laboratories	22	56
Lee, Pil-Jong	Senior Vice President	Technology and Investment Division	13	52
Lee, Sang-Chun	Senior Vice President	Public Relations Office	26	51
Choi, In-Yong	Senior Vice President	Technology and Investment Division	31	56

Item 6.B. Compensation

Compensation of Directors and Officers

Salaries and bonuses for Inside Directors and salaries for Outside Directors are paid in accordance with standards decided by the board of directors within the limitation of directors remuneration approved by the annual general meeting of shareholders. In addition, executive officers' compensation is paid in accordance with standards decided by the board of directors. In 2016, the aggregate compensation paid and accrued to all Directors and executive officers was approximately

Won 42 billion and the aggregate amount set aside or accrued by us to provide pension and retirement benefits to such persons was Won 7 billion.

The compensation of our directors and executive officers who received total annual compensation exceeding Won 500 million in 2016 were as follows:

Name	Position	Total Compensation in 2016	Long-term Incentive Compensation for Payment Subsequent to 2016 (In millions of Won)
Kwon, Oh-Joon	Chief Executive Officer and Representative Director	₩1,642	—
Oh, In-Hwan	President and Representative Director	₩1,084	—
Choi, Jeong-Woo	President and Representative Director	₩ 881	—
Kim, Jin-Il	Former President and Representative Director	₩ 840	—

We have also granted stock options to some of our Directors and executive officers. See “— Item 6.E. Share Ownership” for a list of stock options granted to our Directors and executive officers. At the annual shareholders’ meeting held in February 2006 our shareholders elected to terminate the stock option program. Stock options granted prior to this meeting remain valid and outstanding pursuant to the articles of incorporation in effect at the time of the issuance of the stock option.

Item 6.C. Board Practices

Director Candidate Recommendation Committee

The Director Candidate Recommendation Committee is composed of three Outside Directors, Lee, Myoung-Woo (committee chair), Kim, Shin-Bae, and Chang, Seung-Wha, and one Inside Director, Choi, Jeong-Woo. The Director Candidate Recommendation Committee reviews the qualifications of potential candidates and proposes nominees to serve on our board of directors as an Outside Director. Any shareholder holding our outstanding shares with voting rights may suggest candidates for Outside Directors to the Director Candidate Recommendation Committee.

Evaluation and Compensation Committee

The Evaluation and Compensation Committee is composed of four Outside Directors, Shin, Chae-Chol (committee chair), Kim, Joo-Hyun, Kim, Shin-Bae and Chung, Moon-Ki. The Evaluation and Compensation Committee’s primary responsibilities include establishing evaluation procedures and compensation plans for executive officers and taking necessary measures to execute such plans.

Finance and Operation Committee

The Finance and Operation Committee is composed of three Outside Directors, Lee, Myoung-Woo (committee chair), Shin, Chae-Chol, Bahk, Byong-Won and two Inside Directors, Oh, In-Hwan and Chang, In-Hwa. This committee is an operational committee that oversees decisions with respect to finance and operational matters, including making assessments with respect to potential capital investments and evaluating prospective capital-raising activities.

Executive Management Committee

The Executive Management Committee is composed of five Inside Directors, Kwon, Oh-Joon (committee chair), Oh, In-Hwan, Choi, Jeong-Woo, Chang, In-Hwa and Yu, Seong. This committee oversees decisions with respect to our operational and management matters, including review of management’s proposals of new strategic initiatives, as well as deliberation over critical internal matters related to organization structure and development of personnel.

Audit Committee

Under Korean law and our articles of incorporation, we are required to have an Audit Committee. The Audit Committee may be composed of three or more directors; all members of the Audit Committee must be Outside Directors. Audit Committee members must also meet the applicable independence criteria set forth under the rules and regulations of the Sarbanes-Oxley Act of 2002. Members of the Audit Committee are elected by the shareholders at the ordinary general meeting of shareholders. We currently have an Audit Committee composed of three Outside Directors. Members of our Audit Committee are Kim, Joo-Hyun (committee chair), Chang, Seung-Wha and Chung, Moon-Ki.

The duties of the Audit Committee include:

- engaging independent auditors;
- approving independent audit fees;
- approving audit and non-audit services;
- reviewing annual financial statements;
- reviewing audit results and reports, including management comments and recommendations;
- reviewing our system of controls and policies, including those covering conflicts of interest and business ethics; and
- examining improprieties or suspected improprieties.

In addition, in connection with general meetings of stockholders, the committee examines the agenda for, and financial statements and other reports to be submitted by, the board of directors at each general meeting of stockholders. Our internal and external auditors report directly to the Audit Committee. The committee holds regular meetings at least once each quarter, and more frequently as needed.

Related Party Transactions Committee

The Related Party Transaction Committee is composed of three Outside Directors, Kim, Joo-Hyun (committee chair), Chung, Moon-Ki and Chang, Seung-Wha. This committee reviews related party and other internal transactions and ensures compliance with the Monopoly Regulation and Fair Trade Act.

Item 6.D. Employees

As of December 31, 2016, we had 31,768 employees, including 15,184 persons employed by our subsidiaries, almost all of whom were employed within Korea. Of the total number of employees, approximately 80% are technicians and skilled laborers and 20% are administrative staff. We use subcontractors for maintenance, cleaning and transport activities. We had 34,327 employees, including 17,282 persons employed by our subsidiaries, as of December 31, 2015, and 37,225 employees, including 19,538 persons employed by our subsidiaries, as of December 31, 2014.

We consider our relations with our work force to be good. We have never experienced a work stoppage or strike. Wages of our employees are among the highest of manufacturing companies in Korea. In addition to a base monthly wage, employees receive periodic bonuses and allowances. Base wages are determined annually following consultation between the management and employee representatives, who are currently elected outside the framework of the POSCO labor union. A labor union was formed by our employees in June 1988. Union membership peaked at 19,026 employees at the beginning of 1991, but has steadily declined since then. As of December 31, 2016, only 10 of our employees were members of the POSCO labor union.

In accordance with the National Pension Act of Korea, we contribute an amount equal to 4.5% of an employee's standard monthly wages, and each employee contributes 4.5% of his or her standard monthly wages, into his or her personal pension account. Our employees, including executive officers as well as non-executive employees, are subject to a pension insurance system, under which we make monthly contributions to the pension accounts of the employees, and upon retirement, such employees are paid from their pension accounts. Prior to 2011, our executive and non-executive employees were subject to a lump-sum severance payment system, under which they were entitled to receive a lump-sum severance payment upon termination of their employment, based on their length of service and salary level at the time of termination. Starting in 2011, in accordance with the Korean Employee Retirement Income Security Act, we replaced such lump-sum severance payment system with our current pension insurance system in the form of either a defined benefit plan or a defined contribution plan. Our employees have the option of choosing either the defined benefit plan or the defined contribution plan. See Note 21 of Notes to Consolidated Financial Statements. Lump-sum severance amounts previously accrued prior to our adoption of the current pension insurance system continue to remain payable. We also provide a wide range of fringe benefits to our employees, including housing, housing loans, company-provided hospitals and schools, a company-sponsored pension program, an employee welfare fund, industrial disaster insurance, and cultural and athletic facilities.

As of December 31, 2016, our employees owned, through our employee stock ownership association, approximately 1.77% of our common stock in their employee accounts.

Item 6.E. Share Ownership

Common Stock

The persons who are currently our Directors or executive officers held, as a group, 19,630 common shares as of March 31, 2017, the most recent practicable date for which this information is available. The table below shows the ownership of our common shares by our Directors and executive officers.

Name	Number of Common Shares
Kwon, Oh-Joon	1,801
Park, Yong-Gyu	712
Kim, Jeong-Sik	669
Kim, Hak-Yong	632
Lee, Ki-Ho	581
Noh, Min-Yong	572
Min, Kyung-Zoon	540
Kim, Hag-Dong	465
Kim, Dong-Soo	458
Ko, Suk-Bum	436
Jung, Hae-Seong	426
Kim, Sun-Koo	423
Kim, Kwang Soo	409
Lee, Eun-Seok	396
Yi, Sang-Ho	391
Kim, Dong-Ho	386
Yu, Seong	383
Ha, Dae-Ryong	379
Kim, Soon-Ki	365
Shin, Chae-Chol	350
An, Tong-Il	350
Park, Young-Kwan	339
Kang, Seog-Beom	339
Yoo, Byeong-Og	331
Choi, Joo	330
Lee, Pil Jong	324
Choi, Bong Joo	322

Name	Number of Common Shares
Kim, Min-Chul	314
Yang, Weon-Jun	293
Cho, Il-Hyun	291
Kwak, Jeong-Shik	286
Chun, Myung-Sik	282
Kim, Gyo-Sung	280
Oh, In-Hwan	275
Choi, Jeong-Woo	272
Lee, Jong-Seob	261
Nam, Soo-Hi	259
Park, Hyeon	258
Choi, In-Yong	247
Choi, Hyeon-Soo	223
Yang, Heung-Yul	222
Chang, In-Hwa	217
Lim, Seung-Kyu	203
Choi, Jong-Jin	202
Kim, Byung Hwi	191
Choo, Se-Don	178
Chun, Sung-Lae	167
Yun, Yang-Su	161
Kim, Jong Sang	158
Jeong, Tak	154
Min, Jung Ki	138
Lee, Duk-Lak	94
Kim, Gwang-Soo	92
Lee, Si-Woo	86
Lee, Sang-Hyeon	86
Choi, Yong-Jun	86
Kim, Kisoo	80
Kim, Boktae	74
Kim, Jeong-Su	70
Lee, Sangchun	68
Park, Mi Hwa	65
Won, Hyung Il	65
Han, Sung-Hee	61
Kim, Dong-Yeong	43
Jung, Kyu-Jin	18
Yoon, Duk-II	1
Total	19,630

Stock Options

With respect to the options granted, we may elect either to issue shares of common stock, distribute treasury stock or to pay in cash the difference between the exercise and the market price at the date of exercise. The options may be exercised by a person who has continued employment with POSCO for two or more years from the date on which the options are granted. Expiration date of options is seven years from the date on which the options are granted. All of the stock options below relate to our common stock.

At the annual shareholders' meeting held in February 2006, our shareholders elected to terminate the stock option program. Stock options granted prior to this meeting remain valid and outstanding pursuant to the articles of incorporation in effect at the time of the issuance of the stock option. Currently, there are no outstanding exercisable stock options. The following table sets forth information regarding the stock options we have granted to our current Directors and executive officers.

Director	Grant Date	Exercise Period		Exercise Price	Granted Options	Exercised Options	Exercisable Options
		From	To				
Kwon, Oh-Joon	April 26, 2003	4/27/2005	4/26/2010	102,900	9,604	9,604	0
Kim, Jin-Il	April 25, 2003	4/27/2005	4/26/2010	102,900	9,604	9,604	0

Item 7. Major Shareholders and Related Party Transactions

Item 7.A. Major Shareholders

The following table sets forth certain information relating to the shareholders of our common stock issued as of December 31, 2016.

Shareholders	Number of Shares Owned	Percentage
National Pension Service	9,482,959	10.88%
Nippon Steel & Sumitomo Metal Corporation ⁽¹⁾	2,894,712	3.32
BlackRock Institutional Trust Company, N.A.	2,236,618	2.57
KB Financial Group Inc. and subsidiaries	2,091,553	2.40
Saudi Arabian Monetary Agency	2,071,515	2.38
Directors and executive officers as a group	19,630	0.02
Public ⁽²⁾	61,200,678	70.18
POSCO (held in the form of treasury stock)	7,189,170	8.25
Total issued shares of common stock	87,186,835	100.00%

(1) Held in the form of ADRs.

(2) Includes ADRs.

As of December 31, 2016, there were 9,972,390 shares of common stock outstanding in the form of ADRs, representing 11.44% of the total issued shares of common stock.

Item 7.B. Related Party Transactions

We have issued guarantees in favor of affiliated and related companies, and we have also engaged in various transactions with our subsidiaries and affiliated companies. See Notes 37 and 38 of Notes to Consolidated Financial Statements.

As of December 31, 2014, 2015 and 2016, we had no loans outstanding to our executive officers and Directors.

Item 7.C. Interests of Experts and Counsel

Not applicable

Item 8. Financial Information

Item 8.A. Consolidated Statements and Other Financial Information

See "Item 18. Financial Statements" and pages F-1 through F-120.

Legal Proceedings

As a steel producer with global sales and operations, we are involved in trade remedy proceedings in markets worldwide, including in the United States. We proactively participate in and plan for such proceedings to minimize any adverse effects and associated risks. While there has been an increase in the number of trade cases in recent years, and an increased focus on trade issues by government officials, all such cases have been product and market-specific, and thus have been limited in scope relative to our global sales and operations. We continue to carefully monitor developments with respect to trade remedy policy in all markets in which we participate and, where necessary, vigorously defend our rights through litigation before tribunals such as the U.S. Court of International Trade. Our products that are subject to anti-dumping, safeguard or countervailing duty proceedings in the aggregate currently do not account for a material portion of our total sales, and such proceedings have not had a material adverse impact on our business and operations in recent years. However, there can be no assurance that increases in, or new impositions of, anti-dumping duties, safeguard duties, countervailing duties, quotas or tariffs on our exports of products abroad may not have a material adverse impact on our exports in the future. See “Item 4. Information on the Company — Item 4.B. Business Overview — Markets — Exports.”

In 2012, the Korea Fair Trade Commission imposed a total fine of Won 108.6 billion on us and POSCO Coated & Color Steel Co., Ltd. (“POSCO Coated & Color Steel”), our consolidated subsidiary, for alleged antitrust violations in Korea relating to galvanized steel sheets and color sheets. Subsequent to paying such fines, we and POSCO Coated & Color Steel each filed for judicial review of such fines in the Seoul High Court in February 2013. In July 2015, the Seoul High Court ruled in our favor for reimbursement of the fine of Won 89.3 billion imposed on us, which was subsequently appealed by the Korea Fair Trade Commission to the Supreme Court of Korea. The Supreme Court of Korea subsequently remanded the proceeding to the Seoul High Court in November 2016, which outcome is currently pending. We intend to continue to vigorously defend against such administrative action. In January 2016, the Seoul High Court ruled against POSCO Coated & Color Steel with respect to the fine of Won 19.3 billion imposed against it. POSCO Coated & Color Steel appealed with respect to Won 3.0 billion of such fine, which it lost in November 2016.

In May 2002, Industrial Development Bank of India brought a suit against POSCO Daewoo, Daewoo Motors India Ltd., Daewoo Co., Ltd. and Daewoo Engineering & Construction Co., Ltd. in the India Delhi Mumbai Court, regarding its loans to Daewoo Motors India Ltd. guaranteed by Daewoo Co., Ltd. (predecessor of POSCO Daewoo). The total claim amount is Won 77 billion, and POSCO Daewoo recorded provision of Won 23 billion relating to its portion of the guarantee. The outcome of such lawsuits remains uncertain and POSCO Daewoo’s provision is classified as a non-current liability as of December 31, 2016.

Except as described above, we are not involved in any pending or threatened legal or arbitration proceedings that may have, or have had during the last 12 months, a material adverse effect on our results of operations or financial position.

Dividends

The amount of dividends paid on our common stock is subject to approval at the annual general meeting of shareholders, which is typically held in February or March of the following year. In addition to our annual dividends, our board of directors is authorized to declare and distribute quarterly dividends under our articles of incorporation. If we decide to pay quarterly dividends, our articles of incorporation authorize us to pay them in cash to the shareholders of record as of the end of March, June and September of the relevant fiscal year. We may pay cash dividends out of retained earnings that have not been appropriated to statutory reserves.

The table below sets out the annual dividends declared on the outstanding common stock to shareholders of record on December 31 of the years indicated and the interim dividends (including

quarterly dividends starting in the second half of 2016), declared on the outstanding common stock to applicable shareholders of record of the years indicated. A total of 87,186,835 shares of common stock were issued as of December 31, 2016. Of these shares and as of such date, 79,997,665 shares were outstanding and 7,189,170 shares were held by us in treasury. The annual dividends set out for each of the years below were paid in the immediately following year.

Year	Annual Dividend per Common Stock to Public	Interim Dividend per Common Stock (In Won)	Average Total Dividend per Common Stock
2012	6,000	2,000	8,000
2013	6,000	2,000	8,000
2014	6,000	2,000	8,000
2015	6,000	2,000	8,000
2016	5,750	2,250	8,000

Owners of the ADSs are entitled to receive any dividends payable in respect of the underlying shares of common stock.

Historically, we have paid to holders of record of our common stock an annual dividend. However, we can give no assurance that we will continue to declare and pay any dividends in the future.

Item 8.B. Significant Changes

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our Consolidated Financial Statements included in this annual report.

Item 9. The Offer and Listing

Item 9.A. Offer and Listing Details

Market Price Information

Notes

Not applicable

Common Stock

The principal trading market for our common stock is the KRX KOSPI Market. Our common stock, which is in registered form and has a par value of Won 5,000 per share, has been listed on the first section of the KRX KOSPI Market since June 1988 under the identifying code 005490. The table below shows the high and low trading prices and the average daily volume of trading activity on the KRX KOSPI Market for our common stock.

	Price		Average Daily Trading Volume (Number of Shares)
	High (In Won)	Low	
2012			
First Quarter	424,000	376,000	198,239
Second Quarter	385,000	351,500	169,135
Third Quarter	391,000	353,500	159,508
Fourth Quarter	367,000	308,000	202,895
2013			
First Quarter	371,000	321,500	169,232
Second Quarter	326,000	292,500	182,277
Third Quarter	340,000	292,500	225,474
Fourth Quarter	338,000	307,500	183,055
2014			
First Quarter	322,000	272,500	222,494
Second Quarter	317,000	285,500	170,778
Third Quarter	361,000	291,500	201,548
Fourth Quarter	321,500	275,500	191,916
2015			
First Quarter	290,500	242,500	211,737
Second Quarter	269,000	214,500	256,415
Third Quarter	229,000	168,500	285,052
Fourth Quarter	193,000	162,000	380,436
2016			
First Quarter	222,000	156,000	394,379
Second Quarter	249,000	194,000	403,338
Third Quarter	238,500	200,500	288,876
Fourth Quarter	282,500	226,000	371,851
October	249,000	226,000	364,225
November	264,500	231,500	402,605
December	282,500	249,500	345,805
2017			
First Quarter	296,500	244,000	321,295
January	278,000	244,000	335,619
February	293,500	262,500	289,075
March	296,500	270,000	337,566
Second Quarter (through April 26)	282,500	261,500	261,049
April (through April 26)	282,500	261,500	261,049

ADSs

Our common stock is also listed on the New York Stock Exchange, the London Stock Exchange and the Tokyo Stock Exchange in the form of ADSs. The ADSs have been issued by Citibank, N.A. as ADR depository and are listed on the New York Stock Exchange under the symbol "PKX." One ADS represents one-fourth of one share of common stock. As of December 31, 2016, 39,889,560 ADSs representing 9,972,390 common shares were outstanding, representing 11.44% shares of common stock.

The table below shows the high and low trading prices and the average daily volume of trading activity on the New York Stock Exchange for our ADSs.

	Price		Average Daily Trading Volume (Number of ADSs)
	High (In US\$)	Low (In US\$)	
2012			
First Quarter	94.06	80.28	268,347
Second Quarter	85.09	74.82	262,176
Third Quarter	85.55	77.21	190,260
Fourth Quarter	82.97	71.85	187,932
2013			
First Quarter	86.69	72.41	258,130
Second Quarter	74.82	63.23	252,261
Third Quarter	78.75	64.29	186,347
Fourth Quarter	80.40	72.19	177,415
2014			
First Quarter	75.88	64.03	298,320
Second Quarter	76.56	69.60	223,292
Third Quarter	86.37	71.97	232,861
Fourth Quarter	75.11	63.61	361,829
2015			
First Quarter	66.00	54.66	305,147
Second Quarter	61.95	48.17	279,028
Third Quarter	51.03	34.48	475,594
Fourth Quarter	42.62	33.73	455,010
2016			
First Quarter	47.61	32.26	388,580
Second Quarter	54.85	41.06	412,522
Third Quarter	53.97	42.98	297,820
Fourth Quarter	59.54	49.95	326,351
October	54.70	49.95	307,939
November	56.15	51.01	262,052
December	59.54	52.55	409,061
2017			
First Quarter	66.45	50.60	328,362
January	59.87	50.60	333,002
February	63.70	57.82	319,380
March	66.45	60.68	331,937
Second Quarter (through April 26)	62.25	56.58	354,055
April (through April 26)	62.25	56.58	354,055

Item 9.B. Plan of Distribution

Not applicable

Item 9.C. Markets

The Korean Securities Market

On January 27, 2005, the Korea Exchange was established pursuant to the Korea Securities and Futures Exchange Act by consolidating the Korea Stock Exchange, the Korea Futures Exchange, the KOSDAQ Stock Market, Inc., or the KOSDAQ, and the KOSDAQ Committee of the Korea Securities Dealers Association, which had formerly managed the KOSDAQ. There are three different markets operated by the Korea Exchange: the KRX KOSPI Market, the KRX KOSDAQ Market, and the KRX Derivatives Market. The Korea Exchange has two trading floors located in Seoul, one for the KRX KOSPI Market and one for the KRX KOSDAQ Market, and one trading floor in Busan for the KRX Derivatives Market. The Korea Exchange is a limited liability company, the shares of which are held by (i) investment brokers and investment dealers that were formerly members of the Korea Futures

Exchange or the Korea Stock Exchange and (ii) the stockholders of the KOSDAQ. Currently, the Korea Exchange is the only stock exchange in Korea and is operated by membership, having as its members most of the Korean investment brokers and investment dealers and some Korean branches of foreign investment brokers and investment dealers.

According to data published by the Korea Exchange, as of December 31, 2016, the aggregate market value of equity securities listed on the KRX KOSPI Market and the KRX KOSDAQ Market was approximately Won 1,510 trillion, and the average daily trading volume of equity securities for 2016 was approximately 1,071 million shares with an average transaction value of Won 7,917 billion. The Korea Exchange has the power in some circumstances to suspend trading in the shares of a given company or to de-list a security pursuant to the Regulation on Listing on the Korea Exchange. The Korea Exchange also restricts share price movements. All listed companies are required to file accounting reports annually, semi-annually and quarterly and to release immediately all information that may affect trading in a security.

The Government has in the past exerted, and continues to exert, substantial influence over many aspects of the private sector business community that can have the intention or effect of depressing or boosting the market. In the past, the Government has informally both encouraged and restricted the declaration and payment of dividends, induced mergers to reduce what it considers excess capacity in a particular industry and induced private companies to offer publicly their securities.

The Korea Exchange publishes the Korea Composite Stock Price Index, or KOSPI, every ten seconds, which is an index of all equity securities listed on the Korea Exchange. On January 1, 1983, the method of computing KOSPI was changed from the Dow Jones method to the aggregate value method. In the new method, the market capitalizations of all listed companies are aggregated, subject to certain adjustments, and this aggregate is expressed as a percentage of the aggregate market capitalization of all listed companies as of the base date, January 4, 1980.

Movements in KOSPI are set out in the following table together with the associated dividend yields and price earnings ratios.

Year	Opening	High	Low	Closing	Period Average	
					Dividend Yield ⁽¹⁾ (Percent)	Price Earnings Ratio ⁽²⁾
1986	161.40	279.67	153.85	272.61	4.3	7.6
1987	264.82	525.11	264.82	525.11	2.6	10.9
1988	532.04	922.56	527.89	907.20	2.4	11.2
1989	919.61	1,007.77	844.75	909.72	2.0	13.9
1990	908.59	928.82	566.27	696.11	2.2	12.8
1991	679.75	763.10	586.51	610.92	2.6	11.2
1992	624.23	691.48	459.07	678.44	2.2	10.9
1993	697.41	874.10	605.93	866.18	1.6	12.7
1994	879.32	1,138.75	855.37	1,027.37	1.2	16.2
1995	1,027.45	1,016.77	847.09	882.94	1.2	16.4
1996	882.29	986.84	651.22	651.22	1.3	17.8
1997	647.67	792.29	350.68	376.31	1.5	17.0
1998	374.41	579.86	280.00	562.46	1.9	10.8
1999	565.10	1,028.07	498.42	1,028.07	1.1	13.5
2000	1,028.33	1,059.04	500.60	504.62	1.6	18.6
2001	503.31	704.50	468.76	693.70	1.7	29.3
2002	698.00	937.61	584.04	627.55	1.8	15.6
2003	633.03	822.16	515.24	810.71	2.1	10.1
2004	821.26	936.06	719.59	895.92	2.1	15.8
2005	896.00	1,379.37	870.84	1,379.37	1.7	11.0
2006	1,383.32	1,464.70	1,203.86	1,434.46	1.7	11.4
2007	1,438.89	2,015.48	1,345.08	1,897.13	1.4	16.8
2008	1,891.45	1,888.88	938.75	1,124.47	2.6	9.0
2009	1,132.87	1,718.88	1,018.81	1,682.77	1.2	23.7
2010	1,681.71	2,052.97	1,552.79	2,051.00	1.1	17.8
2011	2,063.69	2,231.47	1,644.11	1,825.12	1.5	10.9
2012	1,831.69	2,057.28	1,758.99	1,997.05	1.3	12.9
2013	2,031.10	2,059.58	1,780.63	2,011.34	1.1	15.3
2014	2,013.11	2,093.08	1,881.73	1,915.19	1.1	15.3
2015	1,926.44	2,173.41	1,829.81	1,961.31	1.3	15.1
2016	1,918.76	2,068.72	1,835.28	2,026.46	1.5	13.9
2017 (through April 26)	2,026.16	2,207.84	2,026.16	2,207.84	1.4	15.0

Source: The KRX KOSPI Market

(1) Dividend yields are based on daily figures. Before 1983, dividend yields were calculated at the end of each month. Dividend yields after January 3, 1984 include cash dividends only.

(2) The price earnings ratio is based on figures for companies that record a profit in the preceding year.

Shares are quoted “ex-dividend” on the first trading day of the relevant company’s accounting period. Since the calendar year is the accounting period for the majority of listed companies, this may account for the drop in KOSPI between its closing level at the end of one calendar year and its opening level at the beginning of the following calendar year.

With certain exceptions, principally to take account of a share being quoted “ex-dividend” and “ex-rights,” permitted upward and downward movements in share prices of any category of shares on any day are limited under the rules of the Korea Exchange to 30% of the previous day’s closing price of the shares, rounded down as set out below:

<u>Previous Day’s Closing Price (Won)</u>	<u>Rounded Down to (Won)</u>
Less than 1,000	1
1,000 to less than 5,000	5
5,000 to less than 10,000	10
10,000 to less than 50,000	50
50,000 to less than 100,000	100
100,000 to less than 500,000	500
500,000 or more	1,000

As a consequence, if a particular closing price is the same as the price set by the fluctuation limit, the closing price may not reflect the price at which persons would have been prepared, or would be prepared to continue, if so permitted, to buy and sell shares. Orders are executed on an auction system with priority rules to deal with competing bids and offers.

Due to deregulation of restrictions on brokerage commission rates, the brokerage commission rate on equity securities transactions may be determined by the parties, subject to commission schedules being filed with the Korea Exchange by the financial investment companies with a brokerage license. In addition, a securities transaction tax of 0.5% of the sales price will generally be imposed on the transfer of shares or certain securities representing rights to subscribe for shares if traded on the KRX KOSPI Market. An agricultural and fishery special surtax of 0.15% of the sales prices will also be imposed on transfer of these shares and securities on the Korea Exchange. See “Item 10. Additional Information — Item 10.E. Taxation — Korean Taxation.”

The number of companies listed on the KRX KOSPI Market, the corresponding total market capitalization at the end of the periods indicated and the average daily trading volume for those periods are set forth in the following table:

Year	Market Capitalization on the Last Day of Each Period		Average Daily Trading Volume, Value	
	Number of Listed Companies	(Billions of Won)	Thousands of Shares	(Millions of Won)
1986	355	₩ 11,994	31,755	₩ 32,870
1987	389	26,172	20,353	70,185
1988	502	64,544	10,367	198,364
1989	626	95,477	11,757	280,967
1990	669	79,020	10,866	183,692
1991	686	73,118	14,022	214,263
1992	688	84,712	24,028	308,246
1993	693	112,665	35,130	574,048
1994	699	151,217	36,862	776,257
1995	721	141,151	26,130	487,762
1996	760	117,370	26,571	486,834
1997	776	70,989	41,525	555,759
1998	748	137,799	97,716	660,429
1999	725	349,504	278,551	3,481,620
2000	704	188,042	306,163	2,602,211
2001	689	255,850	473,241	1,997,420
2002	683	258,681	857,245	3,041,598
2003	684	355,363	542,010	2,216,636
2004	683	412,588	372,895	2,232,109
2005	702	655,075	467,629	3,157,662
2006	731	704,588	279,096	3,435,180
2007	745	951,900	363,741	5,539,653
2008	763	576,888	352,599	3,211,039
2009	770	887,935	485,657	5,595,552
2010	777	1,141,885	380,859	5,619,768
2011	791	1,041,999	353,760	6,836,146
2012	930	1,154,294	486,479	4,823,642
2013	777	1,185,974	328,425	3,993,422
2014	773	1,192,253	278,081	3,983,580
2015	770	1,242,832	455,256	5,351,734
2016	779	1,308,440	376,773	4,523,044
2017 (through April 26)	770	1,403,108	393,724	4,525,758

Source: The Korea Exchange

The Korean securities markets are principally regulated by the Financial Services Commission and under the regulations set forth in the FSCMA. In August 2007, the National Assembly of Korea enacted the FSCMA. The FSCMA, which came into effect on February 4, 2009, comprehensively regulates the Korean capital markets, the financial investment business (including collective investment businesses and trust businesses) and financial investment products (such as securities and derivatives). The FSCMA imposes restrictions on insider trading and price manipulation, requires specified information to be made available by listed companies to investors and establishes rules regarding margin trading, proxy solicitation, takeover bids, acquisition of treasury shares and reporting requirements for shareholders holding substantial interests. The FSCMA regulates the operation and monitoring of the securities and derivatives markets.

Protection of Customer's Interest in Case of Insolvency of Investment Brokers or Investment Dealers

Under Korean law, the relationship between a customer and an investment broker or an investment dealer in connection with a securities sell or buy order is deemed to be a consignment and

the securities acquired by a consignment agent (i.e., the investment broker or the investment dealer) through such sell or buy order are regarded as belonging to the customer in so far as the customer and the consignment agent's creditors are concerned. Therefore, in the event of a bankruptcy or reorganization procedure involving an investment broker or an investment dealer, the customer of the investment broker or the investment dealer is entitled to the proceeds of the securities sold by the investment broker or the investment dealer.

When a customer places a sell order with an investment broker or an investment dealer that is not a member of the KRX KOSPI Market or the KRX KOSDAQ Market and this investment broker or investment dealer places a sell order with another investment broker or investment dealer that is a member of the KRX KOSPI Market or the KRX KOSDAQ Market, the customer is still entitled to the proceeds of the securities sold and received by the non-member company from the member company regardless of the bankruptcy or reorganization of the non-member company.

Under the FSCMA, the Korea Exchange is obliged to indemnify any loss or damage incurred by a counterparty as a result of a breach by members of the KRX KOSPI Market or the KRX KOSDAQ Market. If an investment broker or an investment dealer that is a member of the KRX KOSPI Market or the KRX KOSDAQ Market breaches its obligation in connection with a buy order, the Korea Exchange is obliged to pay the purchase price on behalf of the breaching member. Therefore, the customer can acquire the securities that have been ordered to be purchased by the breaching member.

When a customer places a buy order with a non-member company and the non-member company places a buy order with a member company, the customer has the legal right to the securities received by the non-member company from the member company because the purchased securities are regarded as belonging to the customer in so far as the customer and the non-member company's creditors are concerned.

As the cash deposited with an investment broker or an investment dealer is regarded as belonging to the investment broker or investment dealer, which is liable to return the same at the request of its customer, the customer cannot take back deposited cash from the investment broker or the investment dealer if a bankruptcy or rehabilitation procedure is instituted against the investment broker or the investment dealer and, therefore, can suffer from loss or damage as a result. However, in case of the investment broker or the investment dealer's bankruptcy, liquidation, cancellation of investment broker or investment dealer license or other insolvency events, the Depositor Protection Act provides that the Korea Deposit Insurance Corporation will, upon the request of the investors, pay each investor up to a total of Won 50 million, which shall represent both actual cash deposited and any interest accrued thereon. Pursuant to the FSCMA, as amended, investment brokers or investment dealers are required to deposit the cash received from its customers at the securities finance company established pursuant to the FSCMA. Set-off or attachment of cash deposits by investment brokers or investment dealers is prohibited. The premiums related to this insurance are paid by investment brokers or investment dealers.

Clearance and Settlement

The settlement of trades on the Korea Exchange is required to be handled by a settlement agency of the Korea Exchange. The Korea Securities Depository is the institution commissioned by the Korea Exchange to handle all such settlement of trades. The settlement of trades on the Korea Exchange takes place through a clearance and settlement procedure. The Korea Exchange has adopted the multilateral netting system and carries out the clearance of the trades by netting the sales and purchases of each Korea Securities Depository participant. The Korea Exchange is required to provide the daily net settlement results of the trades to the Korea Securities Depository one business day after the day of the sale and purchase contract. The Korea Securities Depository then handles settlement of the securities and the funds based on the information received from the Korea Exchange. The securities are settled through book-entry changes in the accounts of Korea Securities Depository

participants and the funds are settled by transfer to an account at a bank designated by the Korea Securities Depository. Settlement of trades is generally required to take place on the third day following the day of the sale and purchase contract.

Item 9.D. *Selling Shareholders*

Not applicable

Item 9.E. *Dilution*

Not applicable

Item 9.F. *Expenses of the Issuer*

Not applicable

Item 10. *Additional Information*

Item 10.A. *Share Capital*

Currently, our authorized share capital is 200,000,000 shares, which consists of shares of common stock, par value Won 5,000 per share ("Common Shares") and shares of non-voting stock, par value Won 5,000 per share ("Non-Voting Preferred Shares"). Our Non-Voting Preferred Shares have a preferential right to dividend payments. Common Shares and Non-Voting Preferred Shares together are referred to as "Shares." Under our articles of incorporation, we are authorized to issue Non-Voting Preferred Shares up to the limit prescribed by applicable law, the aggregate of which currently is one-quarter of our total issued and outstanding capital stock. As of December 31, 2016, 87,186,835 Common Shares were issued, of which 7,189,170 shares were held by us in treasury. We have never issued any Non-Voting Preferred Shares. All of the issued and outstanding Common Shares are fully-paid and non-assessable and are in registered form. We issue share certificates in denominations of 1, 5, 10, 50, 100, 500, 1,000 and 10,000 shares.

Item 10.B. *Memorandum and Articles of Association*

This section provides information relating to our capital stock, including brief summaries of material provisions of our articles of incorporation, the FSCMA, the Commercial Code and related laws, all as currently in effect. The following summaries are subject to, and are qualified in their entirety by reference to, our articles of incorporation and the applicable provisions of the FSCMA and the Commercial Code. We have filed copies of our articles of incorporation and these laws (except for the newly enacted the FSCMA) as exhibits to registration statements under the Securities Act or the Securities Exchange Act previously filed by us.

Dividends

We distribute dividends to our shareholders in proportion to the number of shares owned by each shareholder. The Common Shares represented by the ADSs have the same dividend rights as other outstanding Common Shares.

Holders of Non-Voting Preferred Shares are entitled to receive dividends in priority to the holders of Common Shares in an amount not less than 9% of the par value of the Non-Voting Preferred Shares as determined by the board of directors at the time of their issuance. If the amount available for dividends is less than the aggregate amount of such minimum dividend, we do not have to declare dividends on the Non-Voting Preferred Shares.

We may declare dividends annually at the annual general meeting of shareholders which is held within three months after the end of the fiscal year. We pay the annual dividend shortly after the annual general meeting to the shareholders of record as of the end of the preceding fiscal year. We may distribute the annual dividend in cash, Shares or other form of property. However, a dividend of Shares must be distributed at par value. Dividends in Shares may not exceed one-half of the annual dividend. In addition, we may declare, and distribute in cash, interim dividends pursuant to a board resolution once a fiscal year to the eligible shareholders recorded as of the end of March, June and September of the relevant fiscal year. We have no obligation to pay any annual dividend unclaimed for five years from the payment date.

Under the Commercial Code, we may pay an annual dividend only to the extent the net asset amount in our balance sheets exceeds the sum of the following: (i) our stated capital, (ii) the total amount of our capital surplus reserve and earned surplus reserve accumulated up to the end of the relevant dividend period, (iii) the legal reserve to be set aside for annual dividend, and (iv) unrealized profits determined in the Presidential Decree to the Commercial Code. We may not pay an annual dividend unless we have set aside as earned surplus reserve an amount equal to at least 10% of the cash portion of the annual dividend or unless we have accumulated earned surplus reserve of not less than one-half of our stated capital. We may not use legal reserve to pay cash dividends but may transfer amounts from legal reserve to capital stock or use legal reserve to reduce an accumulated deficit.

Distribution of Free Shares

In addition to paying dividends in Shares out of our retained or current earnings, we may also distribute to our shareholders an amount transferred from our capital surplus or legal reserve to our stated capital in the form of free shares. We must distribute such free shares to all our shareholders in proportion to their existing shareholdings.

Preemptive Rights and Issuance of Additional Shares

We may issue authorized but unissued shares at the times and, unless otherwise provided in the Commercial Code, on the terms our board of directors may determine. All our shareholders are generally entitled to subscribe for any newly issued Shares in proportion to their existing shareholdings. We must offer new Shares on uniform terms to all shareholders who have preemptive rights and are listed on our shareholders' register as of the relevant record date. Under the Commercial Code, we may vary, without shareholders' approval, the terms of these preemptive rights for different classes of shares. We must give public notice of the preemptive rights regarding new Shares and their transferability at least two weeks before the relevant record date. Our board of directors may determine how to distribute Shares for which preemptive rights have not been exercised or where fractions of Shares occur.

Under our articles of incorporation, we may issue new Shares pursuant to a board resolution to persons other than existing shareholders, who in these circumstances will not have preemptive rights, if the new Shares are:

- offered publicly or to underwriters for underwriting pursuant to the FSCMA;
- issued to members of our employee stock ownership association pursuant to the FSCMA;
- represented by depositary receipts pursuant to the FSCMA;
- issued in a general public offering pursuant to a board resolution in accordance with the FSCMA, the amount of which is no more than 10% of the outstanding Shares;
- issued to our creditors pursuant to a debt-equity swap;

- issued to domestic or foreign corporations pursuant to a joint venture agreement, strategic coalition or technology inducement agreement when deemed necessary for management purposes; or
- issued to domestic or foreign financial institutions when necessary for raising funds in emergency cases.

In addition, we may issue convertible bonds or bonds with warrants, each up to an aggregate principal amount of Won 2 trillion, to persons other than existing shareholders.

Members of our employee stock ownership association, whether or not they are our shareholders, generally have a preemptive right to subscribe for up to 20% of the Shares publicly offered pursuant to the FSCMA. This right is exercisable only to the extent that the total number of Shares so acquired and held by members of our employee stock ownership association does not exceed 20% of the total number of Shares then issued. As of December 31, 2016, our employees owned, through our employee stock ownership association, approximately 1.77% of our common stock in their employee accounts.

General Meeting of Shareholders

We hold the annual general meeting of shareholders within three months after the end of each fiscal year. The record date of the register of shareholders is December 31 of each year, and such shareholders listed on the register of shareholder as of the record date are entitled to exercise their right at the general meeting of shareholders. Subject to a board resolution or court approval, we may hold an extraordinary general meeting of shareholders:

- as necessary;
- at the request of holders of an aggregate of 3% or more of our outstanding Shares;
- at the request of shareholders holding an aggregate of 1.5% or more of our outstanding Shares for at least six months; or
- at the request of our audit committee.

Holders of Non-Voting Preferred Shares may request a general meeting of shareholders only after the Non-Voting Preferred Shares become entitled to vote or “enfranchised,” as described under “— Voting Rights” below.

We must give shareholders written notice or electronic document setting out the date, place and agenda of the meeting at least two weeks before the date of the general meeting of shareholders. However, for holders of 1% or less of the total number of issued and outstanding voting Shares, we may give notice by placing at least two public notices in at least two daily newspapers or by notices to be posted on the electronic disclosure database system maintained by the Financial Supervisory Service or the Korea Exchange at least two weeks in advance of the meeting. Currently, we use *The Seoul Shinmun* published in Seoul, *The Maeil Shinmun* published in Taegu and *The Kwangju Ilbo* published in Kwangju for this purpose. Shareholders not on the shareholders’ register as of the record date are not entitled to receive notice of the general meeting of shareholders or attend or vote at the meeting. Holders of Non-Voting Preferred Shares, unless enfranchised, are not entitled to receive notice of general meetings of shareholders, but may attend such meetings. Our general meetings of shareholders are held either in Pohang or Seoul.

Voting Rights

Holders of our Common Shares are entitled to one vote for each Common Share, except that voting rights of Common Shares held by us, or by a corporate shareholder that is more than 10%

owned by us either directly or indirectly, may not be exercised. The Commercial Code permitted cumulative voting, under which voting method each shareholder would have multiple voting rights corresponding to the number of directors to be appointed in the voting and may exercise all voting rights cumulatively to elect one director.

Our shareholders may adopt resolutions at a general meeting by an affirmative majority vote of the voting Shares present or represented at the meeting, where the affirmative votes also represent at least one-fourth of our total voting Shares then issued and outstanding. However, under the Commercial Code and our articles of incorporation, the following matters, among others, require approval by the holders of at least two-thirds of the voting Shares present or represented at a meeting, where the affirmative votes also represent at least one-third of our total voting Shares then issued and outstanding:

- amending our articles of incorporation;
- removing a director;
- effecting any dissolution, merger or consolidation of us;
- transferring the whole or any significant part of our business;
- acquisition of all or a part of the business of any other company that may have a material impact on our business;
- issuing any new Shares at a price lower than their par value; or
- approving matters required to be approved at a general meeting of shareholders, which have material effects on our assets, as determined by the Board of Directors.

In general, holders of Non-Voting Preferred Shares are not entitled to vote on any resolution or receive notice of any general meeting of shareholders. However, in the case of amendments to our articles of incorporation, or any merger or consolidation of us, or in some other cases that affect the rights or interests of the Non-Voting Preferred Shares, approval of the holders of Non-Voting Preferred Shares is required. We may obtain the approval by a resolution of holders of at least two-thirds of the Non-Voting Preferred Shares present or represented at a class meeting of the holders of Non-Voting Preferred Shares, where the affirmative votes also represent at least one-third of our total issued and outstanding Non-Voting Preferred Shares.

Shareholders may exercise their voting rights by proxy. When a shareholder is a corporate entity, such shareholder may give proxies to its officers or directors.

Holders of ADRs exercise their voting rights through the ADR depositary, an agent of which is the record holder of the underlying Common Shares. Subject to the provisions of the deposit agreement, ADR holders are entitled to instruct the ADR depositary how to vote the Common Shares underlying their ADSs.

Rights of Dissenting Shareholders

In some limited circumstances, including the transfer of the whole or any significant part of our business and our merger or consolidation with another company, dissenting shareholders have the right to require us to purchase their Shares. Only the shareholders who have executed a share purchase agreement evidencing their acquisition of the relevant Shares on or prior to the day immediately following the public disclosure of the board resolutions approving any of the aforementioned transactions have the rights to require us to purchase their Shares. To exercise this right, shareholders, including holders of Non-Voting Preferred Shares, must submit to us a written notice of their intention to dissent before the general meeting of shareholders. Within 20 days after the relevant resolution is passed at a meeting, the dissenting shareholders must request us in writing to

purchase their Shares. We are obligated to purchase the Shares of dissenting shareholders within one month after the expiration of the 20-day period. The purchase price for the Shares is required to be determined through negotiation between the dissenting shareholders and us. If we cannot agree on a price through negotiation, the purchase price will be the average of (1) the weighted average of the daily Share prices on the Korea Exchange for the two-month period before the date of the adoption of the relevant board resolution, (2) the weighted average of the daily Share price on the Korea Exchange for the one month period before the date of the adoption of the relevant resolution and (3) the weighted average of the daily Share price on the Korea Exchange for the one week period before such date of the adoption of the relevant resolution. However, the court may determine this price if we or dissenting shareholders do not accept the purchase price. Holders of ADSs will not be able to exercise dissenter's rights unless they have withdrawn the underlying common stock and become our direct shareholders.

Register of Shareholders and Record Dates

Our transfer agent, Kookmin Bank, maintains the register of our shareholders at its office in Seoul, Korea. It registers transfers of Shares on the register of shareholders on presentation of the Share certificates.

The record date for annual dividends is December 31. For the purpose of determining the shareholders entitled to annual dividends, the register of shareholders may be closed for the period from January 1 to January 15 of each year. Further, for the purpose of determining the shareholders entitled to some other rights pertaining to the Shares, we may, on at least two weeks' public notice, set a record date and/or close the register of shareholders for not more than three months. The trading of Shares and the delivery of share certificates may continue while the register of shareholders is closed.

Annual Report

At least one week before the annual general meeting of shareholders, we must make our annual report and audited financial statements available for inspection at our principal office and at all of our branch offices. In addition, copies of annual reports, the audited financial statements and any resolutions adopted at the general meeting of shareholders will be available to our shareholders.

Under the FSCMA, we must file with the Financial Services Commission and the Korea Exchange (1) an annual business report within 90 days after the end of our fiscal year, (2) a half-year report within 45 days after the end of the first six months of our fiscal year, and (3) quarterly reports within 45 days after the end of the third month and the ninth month of our fiscal year. Copies of these reports are or will be available for public inspection at the Financial Services Commission and the Korea Exchange.

Transfer of Shares

Under the Commercial Code, the transfer of Shares is effected by delivery of share certificates. However, to assert shareholders' rights against us, the transferee must have his name and address registered on our register of shareholders. For this purpose, a shareholder is required to file his name, address and seal with our transfer agent. A non-Korean shareholder may file a specimen signature in place of a seal, unless he is a citizen of a country with a sealing system similar to that of Korea. In addition, a non-resident shareholder must appoint an agent authorized to receive notices on his behalf in Korea and file a mailing address in Korea. The above requirements do not apply to the holders of ADSs.

Under current Korean regulations, the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a brokerage, dealing or collective investment license and internationally recognized custodians may act as agents and provide related services for foreign shareholders. Certain foreign exchange controls and securities regulations apply to the transfer of Shares by non-residents or non-Koreans. See "Item 10. Additional Information — Item 10.D. Exchange Controls."

Our transfer agent is Kookmin Bank, located at 26, Gukjegeumyung-ro 8-gil, Yeongdeungpo-gu, Seoul, Korea.

Acquisition of Shares by Us

We may acquire our own Shares, subject to the approval by the general meeting of shareholders. In addition, we may acquire Shares through purchases on the Korea Exchange or through a tender offer or by acquiring the interests in a trust account holding our own Shares through agreements with trust companies and asset management companies. The aggregate purchase price for the Shares may not exceed the total amount available for distribution of dividends available at the end of the preceding fiscal year less the amount of dividends and mandatory reserves required to be set aside for that fiscal year, subject to certain procedural requirements.

In accordance with the Commercial Code, we may resell or transfer any Shares acquired by us to a third party, subject to the approval by the Board of Directors. In general, corporate entities in which we own more than 50% equity interest may not acquire our Shares. Under the FSCMA, we are subject to certain selling restrictions for the Shares acquired by us.

Liquidation Rights

In the event of our liquidation, after payment of all debts, liquidation expenses and taxes, our remaining assets will be distributed among shareholders in proportion to their shareholdings. Holders of Non-Voting Preferred Shares have no preference in liquidation.

Item 10.C. *Material Contracts*

None.

Item 10.D. *Exchange Controls*

Shares and ADSs

The Foreign Exchange Transaction Act and the Presidential Decree and regulations under that Act and Decree (collectively, "Foreign Exchange Transaction Laws") and the Foreign Investment Promotion Law regulate investment in Korean securities by non-residents and issuance of securities outside Korea by Korean companies. Under the Foreign Exchange Transaction Laws, non-residents may invest in Korean securities subject to procedural requirements in accordance with these laws. The Financial Services Commission has also adopted, pursuant to its authority under the FSCMA, regulations that restrict investment by foreigners in Korean securities.

Subject to certain limitations, the Ministry of Strategy and Finance has the authority to take the following actions under the Foreign Exchange Transaction Laws:

- if the Government deems it necessary on account of war, armed conflict, natural disaster or grave and sudden and significant changes in domestic or foreign economic circumstances or similar events or circumstances, the Ministry of Strategy and Finance may temporarily suspend performance under any or all foreign exchange transactions, in whole or in part, to which the Foreign Exchange Transaction Laws apply (including suspension of payment and receipt of foreign exchange) or impose an obligation to deposit, safe-keep or sell any means of payment to The Bank of Korea, a foreign exchange stabilization fund, certain other governmental agencies or financial companies; and
- if the Government concludes that the international balance of payments and international financial markets are experiencing or are likely to experience significant disruption or that the movement of capital between Korea and other countries is likely to adversely affect the Won,

exchange rates or other macroeconomic policies, the Ministry of Strategy and Finance may take action to require any person who intends to effect a capital transaction to obtain permission or to require any person who effects a capital transaction to deposit a portion of the means of payment acquired in such transactions with The Bank of Korea, a foreign exchange stabilization fund, certain other governmental agencies or financial companies.

Government Review of Issuance of ADSs

In order for us to issue shares represented by ADSs, we are required to file a prior report of the issuance with our designated foreign exchange bank or the Ministry of Strategy and Finance, depending on the issuance amount. No further Korean governmental approval is necessary for the initial offering and issuance of the ADSs.

Under current Korean laws and regulations, the depositary bank is required to obtain our prior consent for the number of shares to be deposited in any given proposed deposit which exceeds the difference between (1) the aggregate number of shares deposited by us for the issuance of ADSs (including deposits in connection with the initial and all subsequent offerings of ADSs and stock dividends or other distributions related to these ADSs) and (2) the number of shares on deposit with the depositary bank at the time of such proposed deposit. We can give no assurance that we would grant our consent, if our consent is required.

Reporting Requirements for Holders of Substantial Interests

Under the FSCMA, any person whose direct or beneficial ownership of shares with voting rights, whether in the form of shares or ADSs, certificates representing the rights to subscribe for Shares and equity-related debt securities including convertible bonds and bonds with warrants (collectively, "Equity Securities") together with the Equity Securities beneficially owned by certain related persons or by any person acting in concert with the person accounts for 5% or more of the total outstanding Equity Securities is required to report the status and the purpose (whether or not to exert an influence on management control over the issuer) of the holdings to the Financial Services Commission and the Korea Exchange within five business days after reaching the 5% ownership interest. In addition, any change in the purpose of holding such ownership interest or a change in the ownership interest subsequent to the report which equals or exceeds 1% of the total outstanding Equity Securities is required to be reported to the Financial Services Commission and the Korea Exchange within five business days from the date of the change. However, the reporting deadline of such reporting requirement is extended to the tenth day of the month immediately following the month of such change in their shareholding for (1) certain professional investors, as specified under the FSCMA, or (2) persons who hold shares for purposes other than management control. Those who report the purpose of shareholding as management control of the issuer are prohibited from exercising their voting rights and acquiring additional shares for five days subsequent to their report under the FSCMA.

Violation of these reporting requirements may subject a person to criminal sanctions such as fines or imprisonment and may result in a loss of voting rights with respect to the ownership of Equity Securities exceeding 5%. Furthermore, the Financial Services Commission may issue an order to dispose of non-reported Equity Securities.

In addition to the reporting requirements described above, any person whose direct or beneficial ownership of a company's shares accounts for 10% or more of the total issued and outstanding shares with voting rights (a "major stockholder") must report the status of his or her shareholding to the Securities and Futures Commission and the Korea Exchange within five business days after he or she becomes a major stockholder. In addition, any change in the ownership interest subsequent to the report must be reported to the Securities and Futures Commission and the Korea Exchange by the fifth business day of any changes in his or her shareholding. Violation of these reporting requirements may subject a person to criminal sanctions such as fines or imprisonment.

Under the KRX regulations, if a company listed on the KRX KOSPI Market has submitted public disclosure of material matters to a foreign financial investment supervisory authority pursuant to the laws of the foreign jurisdiction, then it must submit a copy of the public disclosure and a Korean translation thereof to the Korea Exchange. In addition, if a company listed on the KRX KOSPI Market is approved for listing on a foreign stock exchange or determined to be de-listed from the foreign stock exchange or actually lists on, or de-lists from, a foreign stock exchange, then it must submit to the Korea Exchange a copy, together with a Korean translation thereof, of all documents submitted to, or received from, the relevant foreign government, supervisory authority or stock exchange.

Restrictions Applicable to ADSs

No Korean governmental approval is necessary for the sale and purchase of ADSs in the secondary market outside Korea or for the withdrawal of shares underlying ADSs and the delivery inside Korea of shares in connection with the withdrawal, provided that a foreigner who intends to acquire the shares must obtain an investment registration card from the Financial Supervisory Service as described below. The acquisition of the shares by a foreigner must be immediately reported by the foreigner or his standing proxy in Korea to the Governor of the Financial Supervisory Service (“Governor”).

Persons who have acquired shares as a result of the withdrawal of shares underlying the ADSs may exercise their preemptive rights for new shares, participate in free distributions and receive dividends on shares without any further governmental approval.

In addition, under the Financial Services Commission regulations, effective as of November 30, 2006, we are required to file a securities registration statement with the Financial Services Commission and such securities registration statement has to become effective pursuant to the FSCMA in order for us to issue shares represented by ADSs, except in certain limited circumstances.

Restrictions Applicable to Shares

Under the Foreign Exchange Transaction Laws and the Financial Services Commission regulations (together, the “Investment Rules”), foreigners may invest, with limited exceptions and subject to procedural requirements, in all shares of Korean companies, whether listed on the KRX KOSPI Market or the KRX KOSDAQ Market, unless prohibited by specific laws. Foreign investors may trade shares listed on the KRX KOSPI Market or the KRX KOSDAQ Market only through the KRX KOSPI Market or the KRX KOSDAQ Market, except in limited circumstances, including, among others:

- odd-lot trading of shares;
- acquisition of shares (“Converted Shares”) by exercise of warrant, conversion right under convertible bonds or withdrawal right under depositary receipts issued outside of Korea by a Korean company;
- acquisition of shares as a result of inheritance, donation, bequest or exercise of shareholders’ rights, including preemptive rights or rights to participate in free distributions and receive dividends;
- over-the-counter transactions between foreigners of a class of shares for which the ceiling on aggregate acquisition by foreigners, as explained below, has been reached or exceeded with certain exceptions;
- shares acquired by direct investment as defined in the Foreign Investment Promotion Law;
- disposal of shares pursuant to the exercise of appraisal rights of dissenting shareholders;
- disposal of shares in connection with a tender offer;

- acquisition of shares by a foreign depository in connection with the issuance of depository receipts;
- acquisition and disposal of shares through overseas stock exchange market if such shares are simultaneously listed on the KRX KOSPI Market or the KRX KOSDAQ Market and such overseas stock exchange; and
- arm's length transactions between foreigners, if all of such foreigners belong to an investment group managed by the same person.

The Investment Rules require a foreign investor who wishes to invest in shares for the first time on the Korea Exchange (including Converted Shares) to register its identity with the Financial Supervisory Service prior to making any such investment; however, the registration requirement does not apply to foreign investors who acquire Converted Shares with the intention of selling such Converted Shares within three months from the date of acquisition of the Converted Shares or who acquire the shares in an over-the-counter transaction or dispose of shares where such acquisition or disposal is deemed to be a foreign direct investment pursuant to the Foreign Investment Promotion Law. Upon registration, the Financial Supervisory Service will issue to the foreign investor an investment registration card which must be presented each time the foreign investor opens a brokerage account with a financial investment company with a brokerage license or dealing license in Korea. Foreigners eligible to obtain an investment registration card include foreign nationals who are individuals residing abroad for more than six months, foreign governments, foreign municipal authorities, foreign public institutions, international financial institutions or similar international organizations, corporations incorporated under foreign laws and any person in any additional category designated by the Enforcement Decree to the FSCMA. All Korean offices of a foreign corporation as a group are treated as a separate foreigner from the offices of the corporation outside Korea. However, a foreign corporation or depository issuing depository receipts may obtain one or more investment registration cards in its name in certain circumstances as described in the relevant regulations.

Upon a foreign investor's purchase of shares through the Korea Exchange, no separate report by the investor is required because the investment registration card system is designed to control and oversee foreign investment through a computer system. However, a foreign investor's acquisition or sale of shares outside the Korea Exchange (as discussed above) must be reported by the foreign investor or his standing proxy to the Governor at the time of each such acquisition or sale; provided, however, that a foreign investor must ensure that any acquisition or sale by it of shares outside the Korea Exchange in the case of trades in connection with a tender offer, odd-lot trading of shares or trades of a class of shares for which the aggregate foreign ownership limit has been reached or exceeded, is reported to the Governor by the Korea Securities Depository, financial investment companies with a dealing or brokerage license or securities finance companies engaged to facilitate such transaction. A foreign investor must appoint one or more standing proxies from among the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks) financial investment companies with a dealing, brokerage or collective investment license and internationally recognized custodians which will act as a standing proxy to exercise shareholders' rights or perform any matters related to the foregoing activities if the foreign investor does not perform these activities himself. However, a foreign investor may be exempted from complying with these standing proxy rules with the approval of the Governor in cases deemed inevitable by reason of conflict between laws of Korea and those of the home country of the foreign investor.

Certificates evidencing shares of Korean companies must be kept in custody with an eligible custodian in Korea. Only foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a dealing, brokerage or collective investment license, the Korea Securities Depository and internationally recognized custodians are eligible to act as a custodian of shares for a non-resident or foreign investor. A foreign investor must ensure that his custodian deposits its shares with the Korea Securities Depository. However, a foreign investor may be exempted from complying with this deposit requirement with the approval of the Governor in circumstances where

compliance with that requirement is made impracticable, including cases where compliance would contravene the laws of the home country of such foreign investor.

Under the Investment Rules, with certain exceptions, foreign investors may acquire shares of a Korean company without being subject to any foreign investment ceiling. As one such exception, designated public corporations are subject to a 40% ceiling on the acquisition of shares by foreigners in the aggregate. Designated public corporations may set a ceiling on the acquisition of shares by a single person according to its articles of incorporation. We set this ceiling at 3% until the discontinuation of our designation as a public corporation on September 28, 2000. As a result, we currently do not have any ceiling on the acquisition of shares by a single person or by foreigners in the aggregate. Furthermore, an investment by a foreign investor of not less than 10% of the outstanding shares with voting rights of a Korean company is defined as a direct foreign investment under the Foreign Investment Promotion Law, which is, in general, subject to the report to, and acceptance by, the Ministry of Trade, Industry & Energy. The acquisition of shares of a Korean company by a foreign investor may also be subject to certain foreign shareholding restrictions in the event that the restrictions are prescribed in each specific law which regulates the business of the Korean company.

Under the Foreign Exchange Transaction Laws, a foreign investor who intends to acquire shares must designate a foreign exchange bank at which he must open a foreign currency account and a Won account exclusively for stock investments. No approval is required for remittance into Korea and deposit of foreign currency funds in the foreign currency account. Foreign currency funds may be transferred from the foreign currency account at the time required to place a deposit for, or settle the purchase price of, a stock purchase transaction to a Won account opened in the name of a financial investment company with a dealing, brokerage or collective investment license. Funds in the foreign currency account may be remitted abroad without any governmental approval.

Dividends on Shares are paid in Won. No governmental approval is required for foreign investors to receive dividends on, or the Won proceeds of the sale of, any shares to be paid, received and retained in Korea. Dividends paid on, and the Won proceeds of the sale of, any shares held by a non-resident of Korea must be deposited either in a Won account with the investor's financial investment company with a dealing, brokerage or collective investment license or his Won Account. Funds in the investor's Won Account may be transferred to his foreign currency account or withdrawn for local living expenses up to certain limitations. Funds in the Won Account may also be used for future investment in shares or for payment of the subscription price of new shares obtained through the exercise of preemptive rights.

Financial investment companies with a dealing, brokerage or collective investment license are allowed to open foreign currency accounts with foreign exchange banks exclusively for accommodating foreign investors' stock investments in Korea. Through these accounts, these financial investment companies and asset management companies may enter into foreign exchange transactions on a limited basis, such as conversion of foreign currency funds and Won funds, as counterparty to foreign investors, without the investors having to open their own accounts with foreign exchange banks.

Item 10.E. *Taxation*

The following summary is based upon tax laws of the United States and Korea as in effect on the date of this annual report on Form 20-F, and is subject to any change in United States or Korean law that may come into effect after such date. Investors in the shares of common stock or ADSs are advised to consult their own tax advisers as to the United States, Korean or other tax consequences of the purchase, ownership and disposition of such securities, including the effect of any foreign, state or local tax laws.

Korean Taxation

The following is a summary of the principal Korean tax consequences to owners of the common shares or ADSs, as the case may be, who are non-resident individuals or non-Korean corporations

without a permanent establishment in Korea to which the relevant income is attributable or with which the relevant income is effectively connected (“Non-resident Holders”). The statements regarding Korean tax laws set forth below are based on the laws in force and as interpreted by the Korean taxation authorities as of the date hereof. This summary is not exhaustive of all possible tax considerations which may apply to a particular investor and potential investors are advised to satisfy themselves as to the overall tax consequences of the acquisition, ownership and disposition of the common shares or ADSs, including specifically the tax consequences under Korean law, the laws of the jurisdiction of which they are resident, and any tax treaty between Korea and their country of residence, by consulting their own tax advisers.

Tax on Dividends

Dividends on the common shares or ADSs paid (whether in cash or in shares) to a Non-resident Holder will be subject to Korean withholding taxes at the rate of 22% (including local income tax) or such lower rate as is applicable under a treaty between Korea and such Non-resident Holder’s country of tax residence. Free distributions of shares representing a capitalization of certain capital surplus reserves may be subject to Korean withholding taxes.

The tax is withheld by the payer of the dividend. Since the payer is required to withhold the tax, Korean law does not entitle the person who was subject to the withholding of Korean tax to recover from the Government any part of the Korean tax withheld, even if it subsequently produces evidence that it was entitled to have tax withheld at a lower rate, except in certain limited circumstances.

Tax on Capital Gains

As a general rule, capital gains earned by Non-resident Holders upon transfer of the common shares or ADSs are subject to Korean withholding tax at the lower of (i) 11% (including local income tax) of the gross proceeds realized or (ii) 22% (including local income tax) of the net realized gains (subject to the production of satisfactory evidence of the acquisition costs and certain direct transaction costs), unless exempt from Korean income taxation under the effective Korean tax treaty with the Non-resident Holder’s country of tax residence or Korean tax law.

However, a Non-resident Holder will not be subject to Korean income taxation on capital gains realized upon the sale of the common shares through the KRX KOSPI Market if the Non-resident Holder (i) has no permanent establishment in Korea and (ii) did not or has not owned (together with any shares owned by any entity with a specified special relationship with such Non-resident Holder) 25% or more of the total issued and outstanding shares of us at any time during the calendar year in which the sale occurs and during the five calendar years prior to the calendar year in which the sale occurs.

It should be noted that capital gains earned by you (regardless of whether you have a permanent establishment in Korea) from a transfer of ADSs outside Korea will generally be exempt from Korean income taxation, provided that the ADSs are deemed to have been issued overseas. If and when an owner of the underlying common shares transfers the ADSs following the conversion of the underlying shares for ADSs, such person will not be exempt from Korean income taxation.

Inheritance Tax and Gift Tax

Korean inheritance tax is imposed upon (1) all assets (wherever located) of the deceased if at the time of his death he was domiciled in Korea and (2) all property located in Korea which passes on death (irrespective of the domicile of the deceased). Gift tax is imposed in similar circumstances to the above. The taxes are imposed if the value of the relevant property is above a certain limit and the rate varies from 10% to 50% depending on the value of the property.

Under Korean inheritance and gift tax laws, securities issued by a Korean corporation are deemed to be located in Korea irrespective of where they are physically located or by whom they are owned and consequently, the Korea inheritance and gift taxes will be imposed on transfers of the securities by inheritance or gift.

Securities Transaction Tax

Securities transaction tax is imposed on the transfer of shares issued by a Korean corporation or the right to subscribe for such shares generally at the rate of 0.5% of the sales price. In the case of the transfer of shares listed on the KRX KOSPI Market (such as the common shares), the securities transaction tax is imposed generally at the rate of (i) 0.3% of the sales price of such shares (including agricultural and fishery special surtax thereon) if traded on the KRX KOSPI Market or (ii) subject to certain exceptions, 0.5% of the sales price of such shares if traded outside the KRX KOSPI Market.

Securities transaction tax or the agricultural and fishery special surtax is not applicable if (i) the shares or rights to subscribe for shares are listed on a designated foreign stock exchange and (ii) the sale of the shares takes place on such exchange.

Securities transaction tax, if applicable, must be paid by the transferor of the shares or rights, in principle. When the transfer is effected through a securities settlement company, such settlement company is generally required to withhold and pay (to the tax authority) the tax, and when such transfer is made through a financial investment company with a brokerage license only, such company is required to withhold and pay the tax. Where the transfer is effected by a Non-resident Holder without a permanent establishment in Korea, other than through a securities settlement company or a financial investment company with a brokerage license, the transferee is required to withhold the securities transaction tax. Failure to do so will result in the imposition of penalties equal to the sum of (i) between 10% to 40% of the tax amount due, depending on the nature of the improper reporting, and (ii) 10.95% per annum on the tax amount due for the default period.

Tax Treaties

Currently, Korea has income tax treaties with a number of countries, including, inter alia, Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Italy, Japan, Luxembourg, Ireland, the Netherlands, New Zealand, Norway, Singapore, Sweden, Switzerland, the United Kingdom and the United States of America, under which the rate of withholding tax on dividend and interest is reduced, generally to between 5% and 16.5% (including local income tax), and the tax on capital gains derived by a non-resident from the transfer of securities issued by a Korean company is often eliminated.

Each Non-resident Holder of common shares should inquire for itself whether it is entitled to the benefits of a tax treaty with Korea. It is the responsibility of the party claiming the benefits of a tax treaty in respect of interest, dividend, capital gains or "other income" to submit to us (or our agent), the purchaser or the financial investment company with a brokerage license, as the case may be, prior to or at the time of payment, such evidence of tax residence of the party claiming the treaty benefit as the Korean tax authorities may require in support of its claim for treaty protection. In the absence of sufficient proof, we (or our agent), the purchaser or the financial investment company with a brokerage license, as the case may be, must withhold tax at the normal rates.

Furthermore, in order for a non-resident of Korea to obtain the benefits of tax exemption on certain Korean source income (e.g., capital gains and interest) under an applicable tax treaty, Korean tax law requires such non-resident (or its agent) to submit to the payer of such Korean source income an application for a tax exemption along with a certificate of tax residency of such non-resident issued by a competent authority of the non-resident's country of tax residence, subject to certain exceptions. The payer of such Korean source income, in turn, is required to submit such application to the relevant district tax office by the ninth day of the month following the date of the first payment of such income.

For a non-resident of Korea to obtain the benefits of treaty-reduced tax rates on certain Korean source income (e.g., capital gains and interest) under an applicable tax treaty, Korean tax law requires such non-resident (or its agents) to submit to the payer of such Korean source income an application for treaty-reduced tax rates prior to receipt of such Korean source income; provided, however, that an owner of ADSs who is a non-resident of Korea is not required to submit such application, if the Korean source income on the ADSs is paid through an account opened at the Korea Securities Depository by a foreign depository.

If Korean source income is paid to a non-resident through an overseas investment vehicle, such investment vehicle must obtain an application for tax exemption or reduced tax rates from each non-resident, who is the beneficial owner of such investment vehicle and submit to the payer of such Korean source incomes an overseas investment vehicle report, together with the applications for tax exemptions or reduced tax rates prepared by the non-resident beneficial owner. An overseas investment vehicle means an organization established outside of Korea that manages funds collected through investment solicitation by way of acquiring, disposing, or otherwise investing in investment targets and then distributes the outcome of such management to investors. An application for tax exemption or reduced tax rates submitted by the non-resident remains effective for three years from submission, and if any material changes occur with respect to information provided in the application, an application reflecting such change must be newly submitted.

At present, Korea has not entered into any tax treaty relating to inheritance or gift tax.

United States Taxation

This summary describes the material U.S. federal income tax consequences for a U.S. holder (as defined below) of owning our shares of common stock or ADSs. This summary applies to you only if you hold shares of common stock or ADSs as capital assets for tax purposes. This summary does not apply to you if you are a member of a class of holders subject to special rules, such as:

- a dealer in securities or currencies;
- a trader in securities that elects to use a mark-to-market method of accounting for your securities holdings;
- a bank;
- a life insurance company;
- a tax-exempt organization;
- a person that holds shares of common stock or ADSs that are a hedge or that are hedged against interest rate or currency risks;
- a person that holds shares of common stock or ADSs as part of a straddle or conversion transaction for tax purposes;
- a person whose functional currency for tax purposes is not the Dollar;
- a person that owns or is deemed to own 10% or more of any class of our stock; or
- an entity treated as a partnership for U.S. federal income tax purposes that holds shares of common stock or ADSs, or an investor therein.

This summary is based on laws, treaties and regulatory interpretations in effect on the date hereof, all of which are subject to change, possibly on a retroactive basis.

Please consult your own tax advisers concerning the U.S. federal, state, local and other foreign tax consequences of purchasing, owning and disposing of shares of common stock or ADSs in your particular circumstances.

For purposes of this summary, you are a “U.S. holder” if you are a beneficial owner of a share of common stock or ADS that is:

- a citizen or resident of the United States;
- a U.S. domestic corporation; or
- otherwise subject to U.S. federal income tax on a net income basis with respect to income from the share of common stock or ADS.

Shares of Common Stock and ADSs

In general, if you are the beneficial owner of ADSs, you will be treated as the beneficial owner of the shares of common stock represented by those ADSs for U.S. federal income tax purposes, and no gain or loss will be recognized if you exchange an ADS for the shares of common stock represented by that ADS.

Dividends

The gross amount of cash dividends that you receive (prior to deduction of Korean taxes) generally will be subject to U.S. federal income taxation as foreign source dividend income. Dividends paid in Won will be included in your income in a Dollar amount calculated by reference to the exchange rate in effect on the date of your (or, in the case of ADSs, the depository’s) receipt of the dividend, regardless of whether the payment is in fact converted into Dollars. If such a dividend is converted into Dollars on the date of receipt, you generally should not be required to recognize foreign currency gain or loss in respect of the dividend income. U.S. holders should consult their own tax advisers regarding the treatment of any foreign currency gain or loss on any Won received by U.S. holders that are converted into Dollars on a date subsequent to receipt.

Subject to certain exceptions for short-term and hedged positions, the Dollar amount of dividends received by an individual U.S. holder with respect to the ADSs and common stock will be subject to taxation at a preferential rate applicable to long-term capital gains if the dividends are “qualified dividends.” Dividends paid on the ADSs and common stock will be treated as qualified dividends if (i) we are eligible for the benefits of a comprehensive income tax treaty with the United States that the Internal Revenue Service has approved for the purposes of the qualified dividend rules and (ii) we were not, in the year prior to the year in which the dividend is paid, and are not, in the year in which the dividend is paid, a passive foreign investment company (“PFIC”). The income tax treaty between Korea and the United States (“Treaty”) has been approved for the purposes of the qualified dividend rules, and we believe we are eligible for benefits under the Treaty. Based on our audited financial statements and relevant market and shareholder data, we believe that we were not treated as a PFIC for U.S. federal income tax purposes with respect to our 2015 or 2016 taxable year. In addition, based on our current expectations regarding the value and nature of our assets, the sources and nature of our income, and relevant market and shareholder data, we do not anticipate becoming a PFIC for our 2017 taxable year. You should consult your own tax advisers regarding the availability of the reduced dividend tax rate in the light of your own particular circumstances.

Distributions of additional shares in respect of shares of common stock or ADSs that are made as part of a pro-rata distribution to all of our shareholders generally will not be subject to U.S. federal income tax.

Sales and Other Dispositions

For U.S. federal income tax purposes, you will recognize taxable gain or loss on any sale, exchange or other taxable disposition of common stock or ADSs equal to the difference, if any, between the amount realized on the sale or exchange and your adjusted tax basis in the common

stock or ADSs. Any gain realized by a U.S. holder on the sale or other disposition of common stock or ADSs generally will be treated as U.S. source income for U.S. foreign tax credit purposes. This gain or loss will be capital gain or loss, and will be long-term capital gain or loss to the extent that the shares of common stock or ADSs sold or disposed of were held for more than one year. Your ability to offset capital losses against ordinary income is limited. Long-term capital gain recognized by an individual U.S. holder generally is subject to taxation at a reduced rate.

Foreign Tax Credit Considerations

You should consult your own tax advisers to determine whether you are subject to any special rules that limit your ability to make effective use of foreign tax credits, including the possible adverse impact of failing to take advantage of benefits under the income tax treaty between the United States and Korea. If no such rules apply, you generally may claim a credit, up to any applicable reduced rates provided under the Treaty, against your U.S. federal income tax liability for Korean taxes withheld from dividends on shares of common stock or ADSs, so long as you have owned the shares of common stock or ADSs (and not entered into specified kinds of hedging transactions) for at least a 16-day period that includes the ex-dividend date. Instead of claiming a credit, you may, at your election, deduct such Korean taxes in computing your taxable income, provided that you do not elect to claim a foreign tax credit for any foreign income taxes paid or accrued for the relevant tax year and subject to generally applicable limitations under U.S. tax law. Foreign tax credits will not be allowed for withholding taxes imposed in respect of certain short-term or hedged positions in securities and may not be allowed in respect of arrangements in which your expected economic profit is insubstantial. You may not be able to use the foreign tax credit associated with any Korean withholding tax imposed on a distribution of additional shares that is not subject to U.S. federal income tax unless you can use the credit against U.S. federal income tax due on other foreign-source income.

Any Korean securities transaction tax or agriculture and fishery special tax that you pay will not be creditable for foreign tax credit purposes.

The calculation of foreign tax credits and, in the case of a U.S. holder that elects to deduct foreign taxes, the availability of deductions involves the application of complex rules that depend on a U.S. holder's particular circumstances. You should consult your own tax advisers regarding the creditability or deductibility of such taxes.

Specified Foreign Financial Assets

Certain U.S. holders that own "specified foreign financial assets" with an aggregate value in excess of US\$50,000 are generally required to file an information statement along with their tax returns, currently on Form 8938, with respect to such assets. "Specified foreign financial assets" include any financial accounts held at a non-U.S. financial institution, as well as securities issued by a non-U.S. issuer (which would include the common stock or ADSs) that are not held in accounts maintained by financial institutions. Higher reporting thresholds apply to certain individuals living abroad and to certain married individuals. Regulations extend this reporting requirement to certain entities that are treated as formed or availed of to hold direct or indirect interests in specified foreign financial assets based on certain objective criteria. U.S. holders who fail to report the required information could be subject to substantial penalties. In addition, the statute of limitations for assessment of tax would be suspended, in whole or part. Prospective investors should consult their own tax advisors concerning the application of these rules to their investment in the common stock or ADSs, including the application of the rules to their particular circumstances.

U.S. Information Reporting and Backup Withholding Rules

Payments in respect of shares of common stock or ADSs that are made within the United States or through certain U.S.-related financial intermediaries are subject to information reporting and may be

subject to backup withholding unless the holder (1) is a corporation or other exempt recipient and demonstrates this when required or (2) provides a taxpayer identification number and certifies that no loss of exemption from backup withholding has occurred. Holders that are not U.S. persons generally are not subject to information reporting or backup withholding. However, such a holder may be required to provide a certification of its non-U.S. status in connection with payments received within the United States or through a U.S.-related financial intermediary.

Item 10.F. *Dividends and Paying Agents*

See “Item 8.A. Consolidated Statements and Other Financial Information — Dividends” above for information concerning our dividend policies and our payment of dividends. See “Item 10.B. Memorandum and Articles of Association — Dividends” for a discussion of the process by which dividends are paid on shares of our common stock. The paying agent for payment of our dividends on ADSs in the United States is the Citibank, N.A.

Item 10.G. *Statements by Experts*

Not applicable

Item 10.H. *Documents on Display*

We file reports, including annual reports on Form 20-F, and other information with the SEC pursuant to the rules and regulations of the SEC that apply to foreign private issuers. You may read and copy any materials filed with the SEC at the Public Reference Rooms in Washington, D.C., New York, New York and Chicago, Illinois. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Any filings we make electronically will be available to the public over the Internet at the SEC’s web site at <http://www.sec.gov>.

Item 10.I. *Subsidiary Information*

Not applicable

Item 11. *Quantitative and Qualitative Disclosures about Market Risk*

We are exposed to foreign exchange rate and interest rate risk primarily associated with underlying liabilities, and to changes in the commodity prices of principal raw materials. Following evaluation of these positions, we selectively enter into derivative financial instruments to manage the related risk exposures, primarily with respect to foreign exchange rate and interest rate risks, which are entered into with major financial institutions in order to minimize the risk of credit loss. Our market risk management policy determines the market risk tolerance level, measuring period, controlling responsibilities, management procedures, hedging period and hedging ratio very specifically. We also prohibit all speculative hedging transactions and evaluate and manage foreign exchange exposures to receivables and payables.

None of our loss exposures related to derivative contracts are unlimited, and we do not believe that our net derivative positions could result in a material loss to our profit before income tax or total equity due to significant fluctuations of major currencies against the Korean Won. Due to the nature of our derivative contracts primarily as hedging instruments that manage foreign exchange risks, net gain or net loss on derivatives transactions and valuation of derivatives are typically offset by net loss or net gain on foreign currency transaction and translation. We recorded net loss on derivatives transactions of Won 26 billion and net loss on valuation of derivatives of Won 28 billion in 2014, net gain on valuation of derivatives of Won 83 billion and net gain on derivatives transactions of Won 23 billion in 2015 and net loss on derivatives transactions of Won 22 billion and net loss on valuation of derivatives of Won 16 billion in 2016.

Exchange Rate Risk

Korea is our most important market and, therefore, a substantial portion of our cash flow is denominated in Won. Most of our exports are denominated in Dollars. Japan is also an important market for us, and we derive significant cash flow denominated in Yen. We are exposed to foreign exchange risk related to foreign currency denominated liabilities and anticipated foreign exchange payments. Anticipated foreign exchange payments, which represent a substantial sum and are mostly denominated in Dollars, relate primarily to imported raw material costs and freight costs. Foreign currency denominated liabilities relate primarily to foreign currency denominated debt.

We strive to naturally offset our foreign exchange risk by matching foreign currency receivables with our foreign currency payables and our overseas subsidiaries have sought to further mitigate the adverse impact of exchange rate fluctuations by conducting business transactions in the local currency of the respective market in which the transactions occur. In particular, POSCO Daewoo's exposure to fluctuations in exchange rates, including the Won/Dollar exchange rate, is limited because trading transactions typically involve matched purchase and sale contracts, which result in limited settlement exposure, and because POSCO Daewoo's contracts with domestic suppliers of products for export and with domestic purchasers of imported products are generally denominated in Dollars. Although the impact of exchange rate fluctuations is partially mitigated by such strategies, we and our subsidiaries, particularly POSCO Daewoo and POSCO E&C, also periodically enter into derivative contracts, primarily foreign currency swaps and forward exchange contracts, to further hedge some of our foreign exchange risks.

Our foreign currency exposure and changes in gain or loss resulting from a 10% foreign exchange rate change against the Korean Won are as follows:

	For the Years Ended December 31,					
	2014		2015		2016	
	Increase	Decrease	Increase	Decrease	Increase	Decrease
	(In billions of Won)					
US Dollars	₩ (356)	₩ 356	₩ (166)	₩ 166	₩ (163)	₩ 163
Japanese Yen	(96)	96	(97)	97	(78)	78
Euro	(30)	30	(22)	22	(9)	9

Interest Rate Risk

We are also subject to market risk exposure arising from changing interest rates. In particular, we are exposed to interest rate risk on our existing floating rate borrowings and on additional debt financings that we may periodically undertake for various reasons, including capital expenditures and refinancing of our existing borrowings. A rise in interest rates will increase the cost of our existing variable rate borrowings. If interest rates on borrowings with floating rates had been 1% higher or lower with all other variables held constant, the impact on the gain or loss of the applicable period would be as follows:

	For the Years Ended December 31,		
	2014	2015	2016
	(In billions of Won)		
Increase or decrease in annual profit and net equity	₩ 102	₩ 118	₩ 120

A reduction of interest rates also increases the fair value of our debt portfolio, which is primarily of a fixed interest nature. From time to time, we use, to a limited extent, interest rate swaps to reduce interest rate volatility on some of our debt and manage our interest expense by achieving a balanced mixture of floating and fixed rate debt.

The following table summarizes the carrying amounts, fair values, principal cash flows by maturity date and weighted average interest rates of our short-term and long-term liabilities as of December 31, 2016 which are sensitive to exchange rates and/or interest rates. The information is presented in Won, which is our reporting currency.

	Maturities									
							December 31, 2016		December 31, 2015	
	2017	2018	2019	2020	2021	Thereafter	Total	Fair Value	Total	Fair Value
	(In billions of Won except rates)									
Local currency:										
Fixed rate	2,017	1,134	1,400	359	621	533	6,064	5,943	8,658	8,674
Average weighted rate ⁽¹⁾	3.27%	2.19%	2.47%	1.48%	1.67%	1.53%	2.45%		3.37%	
Variable rate	329	339	193	61	33	84	1,039	1,034	981	984
Average weighted rate ⁽¹⁾	2.62%	3.56%	1.58%	2.78%	3.27%	3.64%	2.84%		2.91%	
Sub-total	2,346	1,473	1,593	420	654	617	7,103	6,977	9,639	9,658
Foreign currency, principally Dollars and Yen:										
Fixed rate	2,685	415	189	1,033	999	454	5,775	5,639	4,812	4,994
Average weighted rate ⁽¹⁾	2.44%	1.35%	4.19%	4.01%	4.88%	2.93%	3.15%		3.45%	
Variable rate	4,963	1,051	200	715	33	2,865	9,827	9,837	10,769	10,762
Average weighted rate ⁽¹⁾	1.50%	1.22%	2.13%	3.03%	3.10%	6.02%	2.92%		2.13%	
Sub-total	7,648	1,466	389	1,748	1,032	3,319	15,602	15,476	15,581	15,756
Total	9,994	2,939	1,982	2,168	1,686	3,936	22,705	22,453	25,220	25,414

(1) Weighted average rates of the portfolio at the period end.

Item 12. Description of Securities Other than Equity Securities

Not applicable

Item 12.A. Debt Securities

Not applicable

Item 12.B. Warrants and Rights

Not applicable

Item 12.C. Other Securities

Not applicable

Item 12.D. American Depositary Shares

Fees and Charges

We switched our depository from The Bank of New York Mellon to Citibank, N.A. in July 2013. Holders of our ADSs are required to pay the following service fees to the depository:

Services	Fees
Issuance of ADSs upon deposit of shares	Up to \$5.00 per 100 ADSs issued
Delivery of deposited shares against surrender of ADSs	Up to \$5.00 per 100 ADSs surrendered
Distributions of cash dividends or other cash distributions	Up to \$5.00 per 100 ADSs held
Distribution of ADSs pursuant to (i) stock dividends or other free stock distributions, or (ii) exercise of rights to purchase additional ADSs	Up to \$5.00 per 100 ADSs held
Distribution of securities other than ADSs or rights to purchase additional ADSs	Up to \$5.00 per 100 ADSs held
General depository services	Up to \$5.00 per 100 ADSs held

Holders of our ADSs are also responsible for paying certain fees and expenses incurred by the depository such as:

- fees for the transfer and registration of shares charged by the registrar and transfer agent for the shares in Korea (i.e., upon deposit and withdrawal of shares);
- expenses incurred for converting foreign currency into Dollars;
- expenses for cable, telex and fax transmissions and for delivery of securities;
- taxes (including applicable interest and penalties) and other governmental charges;
- fees and expenses incurred in connection with compliance with exchange control regulations and other regulatory requirements; and
- fees and expenses incurred in connection with the delivery or servicing of shares on deposit.

Depository fees payable upon the issuance and surrender of ADSs are typically paid to the depository by the brokers (on behalf of their clients) receiving the newly issued ADSs from the depository and by the brokers (on behalf of their clients) delivering the ADSs to the depository for surrender. The brokers in turn charge these fees to their clients. Depository fees payable in connection with distributions of cash or securities to ADS holders and the depository services fee are charged by the depository to the holders of record of ADSs as of the applicable ADS record date.

The depository fees payable for cash distributions are generally deducted from the cash being distributed. In the case of distributions other than cash (i.e., stock dividend, rights), the depository charges the applicable fee to the ADS record date holders concurrent with the distribution. In the case of ADSs registered in the name of the investor (whether certificated or uncertificated in direct registration), the depository sends invoices to the applicable record date ADS holders. In the case of ADSs held in brokerage and custodian accounts (via the Korea Securities Depository, or KSD), the depository generally collects its fees through the systems provided by KSD (whose nominee is the registered holder of the ADSs held in KSD) from the brokers and custodians holding ADSs in their KSD accounts. The brokers and custodians who hold their clients' ADSs in KSD accounts in turn charge their clients' accounts the amount of the fees paid to the depository.

In the event of refusal to pay the depository fees, the depository may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set off the amount of the depository fees from any distribution to be made to such holder of ADSs.

The fees and charges that holders of our ADSs may be required to pay may vary over time and may be changed by us and by the depository. Holders of our ADSs will receive prior notice of such changes.

Fees and Payments from the Depository to Us

In 2016, we received \$770,000 from the depository for reimbursement of various costs, including preparation of SEC filing and submission, listing fees, proxy process expenses (printing, postage and distribution), legal fees and contributions for our investor relations activities.

In addition, as part of its service to us, the depository waives its fees for the standard costs associated with the administration of the ADS facility, associated operating expenses, investor relations advice and access to an internet-based tool used in our investor relations activities.

PART II

Item 13. *Defaults, Dividend Arrearages and Delinquencies*

Not applicable

Item 14. *Material Modifications to the Rights of Security Holders and Use of Proceeds*

Not applicable

Item 15. *Controls and Procedures*

a. Disclosure Controls and Procedures

Our management has evaluated, with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, as of December 31, 2016. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance of achieving their control objectives. Based upon our evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report. Our disclosure controls and procedures are designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms, and that it is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure.

b. Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is a process designed by, and under the supervision of, our principal executive, principal operating and principal financial officers, and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Our internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and (3) provide reasonable

assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our financial statements would be prevented or detected. 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.

Our management has completed an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2016 based on criteria in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this assessment, management concluded that our internal control over financial reporting was effective as of December 31, 2016.

c. Report of the Independent Registered Public Accounting Firm

The report of our independent registered public accounting firm, KPMG Samjong Accounting Corp. (“KPMG Samjong”), on the effectiveness of our internal control over financial reporting as of December 31, 2016 is included in Item 18 of this Form 20-F.

d. Changes in Internal Control Over Financial Reporting

There has been no change in our internal control over financial reporting that occurred during the year covered by this annual report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Our adoption of Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission did not have, and is not reasonably likely to have, any material effect on our internal control over financial reporting.

Item 16. [Reserved]

Item 16.A. Audit Committee Financial Expert

The board of directors has approved the members of our audit committee. Chung, Moon-Ki is an audit committee financial expert and is independent within the meaning of applicable SEC rules.

Item 16.B. Code of Ethics

We have adopted a code of business conduct and ethics, as defined in Item 16B. of Form 20-F under the Securities Exchange Act of 1934, as amended. Our code of business conduct and ethics, called Code of Conduct, applies to our chief executive officer and chief financial officer, as well as to our directors, other officers and employees. Our Code of Conduct is available on our web site at www.posco.com. If we amend the provisions of our Code of Conduct that apply to our chief executive officer or chief financial officer and persons performing similar functions, or if we grant any waiver of such provisions, we will disclose such amendment or waiver on our web site at the same address.

Item 16.C. *Principal Accountant Fees and Services*

Audit and Non-Audit Fees

The following table sets forth the fees billed to us by our independent auditor, KPMG, in 2015 and 2016:

	For the Year Ended December 31,	
	2015	2016
	(In millions of Won)	
Audit fees	₩5,491	₩5,159
Audit-related fees	—	—
Tax fees	974	1,267
Other fees	3	—
Total fees	<u>₩6,468</u>	<u>₩6,426</u>

Audit fees in 2015 and 2016 as set forth in the above table are the aggregate fees billed by KPMG in connection with the audit of our annual financial statements and the annual financial statements of other related companies and review of interim financial statements.

Tax fees in 2015 and 2016 as set forth in the above table are fees billed by KPMG for our tax compliance and tax planning, as well as compliance related to transfer pricing.

Other fees in 2015 as set forth in the above table are fees billed by KPMG primarily in relation to certifications in connection with forward contracts.

Audit Committee Pre-Approval Policies and Procedures

Our audit committee has not established pre-approval policies and procedures for the engagement of our independent auditors for services. Our audit committee expressly approves on a case-by-case basis any engagement of our independent auditors for audit and non-audit services provided to our subsidiaries or us.

Item 16.D. *Exemptions from the Listing Standards for Audit Committees*

Not applicable

Item 16.E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

The following table sets forth the repurchases of common shares by us or any affiliated purchasers during the fiscal year ended December 31, 2016:

Period	Total Number of Shares Purchased	Average Price Paid Per Share (In Won)	Total Number of Shares Purchased as Part of Publicly Announced Plans	Maximum Number of Shares that May Yet Be Purchased Under the Plans
January 1 to January 31	—	—	—	—
February 1 to February 29	—	—	—	—
March 1 to March 31	—	—	—	—
April 1 to April 30	—	—	—	—
May 1 to May 31	—	—	—	—
June 1 to June 30	—	—	—	—
July 1 to July 31	—	—	—	—
August 1 to August 31	—	—	—	—
September 1 to September 30	—	—	—	—
October 1 to October 31	—	—	—	—
November 1 to November 30	—	—	—	—
December 1 to December 31	—	—	—	—
Total	—	—	—	—

Item 16.F. Change in Registrant's Certifying Accountant

Not applicable

Item 16.G. Corporate Governance

Pursuant to the rules of the New York Stock Exchange applicable to foreign private issuers like us that are listed on the New York Stock Exchange, we are required to disclose significant differences between the New York Stock Exchange's corporate governance standards and those that we follow under Korean law and in accordance with our own internal procedures. The following is a summary of such significant differences.

NYSE Corporate Governance Standards	POSCO's Corporate Governance Practice
<p>Director Independence</p> <p>Listed companies must have a majority of independent directors</p>	<p>Our articles of incorporation provide that our board of directors must comprise no less than a majority of Outside Directors. Our Outside Directors must meet the criteria for outside directorship set forth under the Korean Securities and Exchange Act.</p> <p>The majority of our board of directors is independent (as defined in accordance with the New York Stock Exchange's standards), and seven out of 12 directors are Outside Directors. Under our articles of incorporation, we may have up to five Inside Directors and seven Outside Directors.</p>
<p>Nomination/Corporate Governance Committee</p> <p>A nomination/corporate governance committee of independent directors is required. The committee must have a charter that addresses the purpose, responsibilities (including development of corporate governance guidelines) and annual performance evaluation of the committee</p>	<p>We have not established a separate nomination corporate governance committee. However, we maintain a Director Candidate Recommendation Committee composed of three Outside Directors and one Inside Director.</p>
<p>Compensation Committee</p> <p>A compensation committee of independent directors is required. The committee must have a charter that addresses the purpose,</p>	<p>We maintain an Evaluation and Compensation Committee composed of four Outside Directors.</p>

NYSE Corporate Governance Standards

responsibilities and annual performance evaluation of the committee. The charter must be made available on the company's website. In addition, in accordance with the U.S. Securities and Exchange Commission rules adopted pursuant to Section 952 of the Dodd-Frank Act, the New York Stock Exchange listing standards were amended to expand the factors relevant in determining whether a committee member has a relationship with the company that will materially affect that member's duties to the compensation committee.

Additionally, the committee may obtain or retain the advice of a compensation adviser only after taking into consideration all factors relevant to determining that adviser's independence from management

Executive Session

Non-management directors must meet in regularly scheduled executive sessions without management. Independent directors should meet alone in an executive session at least once a year

Audit Committee

Listed companies must have an audit committee that satisfies the independence and other requirements of Rule 10A-3 under the Exchange Act. All members must be independent. The committee must have a charter addressing the committee's purpose, an annual performance evaluation of the committee, and the duties and responsibilities of the committee. The charter must be made available on the company's website

Audit Committee Additional Requirements

Listed companies must have an audit committee that is composed of at least three directors.

Shareholder Approval of Equity Compensation Plan

Listed companies must allow their shareholders to exercise their voting rights with respect to any material revision to the company's equity compensation plan

Corporate Governance Guidelines

Listed companies must adopt and disclose corporate governance guidelines

Code of Business Conduct and Ethics

Listed companies must adopt and disclose a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers

Item 16.H. Mine Safety Disclosure

Not applicable

POSCO's Corporate Governance Practice

Our Outside Directors hold meetings solely attended by Outside Directors in accordance with operation guidelines of our board of directors.

We maintain an Audit Committee comprised of three Outside Directors who meet the applicable independence criteria set forth under Rule 10A-3 under the Exchange Act.

Our Audit Committee has three members, as described above.

We currently have an Employee Stock Ownership Program. We previously provided a stock options program for officers and directors, as another equity compensation plan. However, during our annual shareholders' meeting in February 2006, our shareholders resolved to terminate the stock option program and amended our articles of incorporation to delete the provision allowing grant of stock options to officers and directors. Consequently, since February 24, 2006, we have not granted stock options to officers and directors. Matters related to the Employee Stock Ownership Program are not subject to shareholders' approval under Korean law.

We have adopted a Corporate Governance Charter setting forth our practices with respect to relevant corporate governance matters. Our Corporate Governance Charter is in compliance with Korean law but does not meet all requirements established by the New York Stock Exchange for U.S. companies listed on the exchange. A copy of our Corporate Governance Charter is available on our website at www.posco.com.

We have adopted a Code of Conduct for all directors, officers and employees. A copy of our Code of Conduct is available on our website at www.posco.com.

PART III

Item 17. *Financial Statements*

Not applicable

Item 18. *Financial Statements*

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Item 19. *Exhibits*

- 1.1 — Articles of Incorporation of POSCO (English translation)
- 2.1 — Form of Common Stock Certificate (including English translation) (incorporated by
reference to Exhibit 4.3 to the Registrant's Registration Statement No. 333-189473)*
- 2.2 — Form of Deposit Agreement (including Form of American Depositary Receipts)
(incorporated by reference to the Registrant's Registration Statement (File No. 33-84318)
on Form F-6)*
- 8.1 — List of consolidated subsidiaries
- 12.1 — Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 12.2 — Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 13.1 — Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* Filed previously

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Shareholders
POSCO:

We have audited the accompanying consolidated statements of financial position of POSCO and subsidiaries as of December 31, 2015 and 2016 and the related consolidated statements of comprehensive income (loss), changes in equity and cash flows for each of the years in the three-year period ended December 31, 2016. These consolidated financial statements are the responsibility of POSCO's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of POSCO and subsidiaries as of December 31, 2015 and 2016 and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2016, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of POSCO's internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated April 26, 2017 expressed an unqualified opinion on the effectiveness of POSCO's internal control over financial reporting.

/s/ KPMG Samjong Accounting Corp.
Seoul, Korea
April 26, 2017

Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting

The Board of Directors and Shareholders
POSCO:

We have audited POSCO's internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. POSCO's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on POSCO's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. 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.

In our opinion, POSCO maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated statements of financial position of POSCO and subsidiaries as of December 31, 2015 and 2016, and the related consolidated statements of comprehensive income (loss), changes in equity and cash flows for each of the years in the three-year period ended December 31, 2016, and our report dated April 26, 2017 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG Samjong Accounting Corp.
Seoul, Korea
April 26, 2017

POSCO and Subsidiaries
Consolidated Statements of Financial Position
As of December 31, 2015 and 2016

	Notes	December 31, 2015	December 31, 2016
(in millions of Won)			
Assets			
Cash and cash equivalents	4,5,23	₩ 4,870,185	2,447,619
Trade accounts and notes receivable, net	6,17,23,29,37	9,575,264	9,674,026
Other receivables, net	7,23	1,679,879	1,539,742
Other short-term financial assets	8,23,37	3,910,387	5,224,911
Inventories	9	8,566,882	9,515,895
Current income tax assets	35	33,765	46,473
Assets held for sale	10	57,281	311,958
Other current assets	16	808,252	894,484
Total current assets		<u>29,501,895</u>	<u>29,655,108</u>
Long-term trade accounts and notes receivable, net	6,23	120,338	51,124
Other receivables, net	7,23	863,258	762,912
Other long-term financial assets	8,23	2,341,460	2,657,692
Investments in associates and joint ventures	11	3,945,333	3,882,389
Investment property, net	13	1,084,292	1,117,720
Property, plant and equipment, net	14	34,522,855	33,770,339
Intangible assets, net	15	6,405,754	6,088,729
Defined benefit assets, net	21	—	83,702
Deferred tax assets	35	1,333,785	1,500,219
Other long-term assets	16	629,000	567,680
Total non-current assets		<u>51,246,075</u>	<u>50,482,506</u>
Total assets		<u>₩80,747,970</u>	<u>80,137,614</u>

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries
Consolidated Statements of Financial Position, Continued
As of December 31, 2015 and 2016

	Notes	December 31, 2015	December 31, 2016
(in millions of Won)			
Liabilities			
Trade accounts and notes payable	23,37	₩ 3,125,348	4,073,286
Short-term borrowings and current installments of long-term borrowings	4,17,23	12,371,032	10,194,807
Other payables	18,23	2,129,093	1,851,659
Other short-term financial liabilities	19,23,37	202,117	149,748
Current income tax liabilities	35	377,962	446,071
Liabilities of disposal group held for sale	10	34,202	—
Provisions	20	102,320	114,865
Other current liabilities	22,29	2,011,452	2,113,873
Total current liabilities		<u>20,353,526</u>	<u>18,944,309</u>
Long-term trade accounts and notes payable	23,37	11,098	44,512
Long-term borrowings, excluding current installments	4,17,23	12,849,199	12,510,191
Other payables	18,23	134,470	208,559
Other long-term financial liabilities	19,23	54,696	81,309
Defined benefit liabilities, net	21	182,025	123,604
Deferred tax liabilities	35	1,676,658	1,642,939
Long-term provisions	20	221,692	337,739
Other long-term liabilities	22	251,405	479,183
Total non-current liabilities		<u>15,381,243</u>	<u>15,428,036</u>
Total liabilities		<u>35,734,769</u>	<u>34,372,345</u>
Equity			
Share capital	24	482,403	482,403
Capital surplus	24	1,393,079	1,407,247
Hybrid bonds	25	996,919	996,919
Reserves	26	(594,756)	(143,985)
Treasury shares	27	(1,533,898)	(1,533,468)
Retained earnings		40,461,496	41,125,712
Equity attributable to owners of the controlling company		<u>41,205,243</u>	<u>42,334,828</u>
Non-controlling interests	25	3,807,958	3,430,441
Total equity		<u>45,013,201</u>	<u>45,765,269</u>
Total liabilities and equity		<u>₩ 80,747,970</u>	<u>80,137,614</u>

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries
Consolidated Statements of Comprehensive Income (loss)
For the years ended December 31, 2014, 2015 and 2016

	Notes	2014	2015	2016
		(in millions of Won, except per share information)		
Revenue	28,29,37	₩ 64,758,625	58,522,268	52,939,771
Cost of sales	29,31,34,37	(57,465,485)	(52,018,434)	(46,271,465)
Gross profit		7,293,140	6,503,834	6,668,306
Selling and administrative expenses	30,34			
Administrative expenses	31	(2,309,756)	(2,395,248)	(2,291,540)
Selling expenses		(1,760,118)	(1,728,956)	(1,553,686)
Other operating income and expenses	32,37			
Other operating income		269,406	549,048	215,136
Other operating expenses	34	(979,674)	(1,442,298)	(755,720)
Operating profit		2,512,998	1,486,380	2,282,496
Share of loss of equity-accounted investees, net	11	(299,893)	(506,054)	(88,677)
Finance income and costs	23,33			
Finance income		2,396,762	2,557,073	2,231,980
Finance costs		(3,221,987)	(3,387,054)	(3,014,190)
Profit before income taxes		1,387,880	150,345	1,411,609
Income tax expense	35	(823,841)	(266,560)	(379,544)
Profit (loss)		564,039	(116,215)	1,032,065
Other comprehensive income (loss)				
Items that will not be reclassified subsequently to profit or loss :				
Remeasurements of defined benefit pension plans	21	(75,101)	41,954	20,540
Items that are or may be reclassified subsequently to profit or loss :				
Capital adjustment arising from investments in equity-method investees		(45,754)	(82,509)	134,590
Net changes in the unrealized fair value of available-for-sale investments	23	(333,891)	(187,854)	310,608
Foreign currency translation differences		(836)	66,280	(11,491)
Other comprehensive income (loss), net of tax		(455,582)	(162,129)	454,247
Total comprehensive income (loss)		₩ 108,457	(278,344)	1,486,312
Profit (loss) attributable to :				
Owners of the controlling company		₩ 632,706	171,494	1,354,807
Non-controlling interests		(68,667)	(287,709)	(322,742)
Profit (loss)		₩ 564,039	(116,215)	1,032,065
Total comprehensive income (loss) attributable to :				
Owners of the controlling company		₩ 181,525	23,864	1,814,030
Non-controlling interests		(73,068)	(302,208)	(327,718)
Total comprehensive income (loss)		₩ 108,457	(278,344)	1,486,312
Basic and diluted earnings per share (in Won)	36	7,514	1,731	16,521

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries
Consolidated Statements of Changes in Equity
For the years ended December 31, 2014, 2015 and 2016

	Attributable to owners of the controlling company						Non-controlling interests	Total	
	Share capital	Capital surplus	Hybrid bonds	Reserves	Treasury shares (in millions of Won)	Retained earnings			Sub total
Balance as of January 1, 2014	₩482,403	1,078,266	996,919	(23,076)	(1,579,124)	41,053,632	42,009,020	3,771,662	45,780,682
Comprehensive income (loss):									
Profit (loss)	—	—	—	—	—	632,706	632,706	(68,667)	564,039
Other comprehensive income (loss)									
Remeasurements of defined benefit pension plans, net of tax	—	—	—	—	—	(65,152)	(65,152)	(9,949)	(75,101)
Capital adjustment arising from investments in equity-method investees, net of tax	—	—	—	(50,920)	—	—	(50,920)	5,166	(45,754)
Net changes in the unrealized fair value of available-for-sale investments, net of tax	—	—	—	(335,626)	—	—	(335,626)	1,735	(333,891)
Foreign currency translation differences, net of tax	—	—	—	517	—	—	517	(1,353)	(836)
Total comprehensive income (loss)	—	—	—	(386,029)	—	567,554	181,525	(73,068)	108,457
Transactions with owners of the controlling company, recognized directly in equity:									
Year-end dividends	—	—	—	—	—	(478,702)	(478,702)	(32,887)	(511,589)
Interim dividends	—	—	—	—	—	(159,568)	(159,568)	(76,854)	(236,422)
Changes in subsidiaries	—	—	—	—	—	—	—	91,551	91,551
Changes in ownership interests in subsidiaries	—	(9,401)	—	—	—	—	(9,401)	44,265	34,864
Interest of hybrid bonds	—	—	—	—	—	(43,600)	(43,600)	(26,175)	(69,775)
Disposal of treasury shares	—	14,576	—	—	44,667	—	59,243	—	59,243
Others	—	277	—	332	—	(2,168)	(1,559)	1,944	385
Total transactions with owners of the controlling company	—	5,452	—	332	44,667	(684,038)	(633,587)	1,844	(631,743)
Balance as of December 31, 2014	₩482,403	1,083,718	996,919	(408,773)	(1,534,457)	40,937,148	41,556,958	3,700,438	45,257,396

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries
Consolidated Statements of Changes in Equity, Continued
For the years ended December 31, 2014, 2015 and 2016

	Attributable to owners of the controlling company						Total		
	Share capital	Capital surplus	Hybrid bonds	Reserves	Treasury shares	Retained earnings		Sub total	Non-controlling interests
	(in millions of Won)								
Balance as of January 1, 2015	₩ 482,403	1,083,718	996,919	(408,773)	(1,534,457)	40,937,148	41,556,958	3,700,438	45,257,396
Comprehensive income (loss):									
Profit (loss)	—	—	—	—	—	171,494	171,494	(287,709)	(116,215)
Other comprehensive income (loss)	—	—	—	—	—	38,771	38,771	3,183	41,954
Remeasurements of defined benefit pension plans, net of tax	—	—	—	—	—	—	—	—	—
Capital adjustment arising from investments in equity-method investees, net of tax	—	—	—	(81,418)	—	—	(81,418)	(1,091)	(82,509)
Net changes in the unrealized fair value of available-for-sale investments, net of tax	—	—	—	(183,077)	—	—	(183,077)	(4,777)	(187,854)
Foreign currency translation differences, net of tax	—	—	—	78,094	—	—	78,094	(11,814)	66,280
Total comprehensive income (loss)	—	—	—	(186,401)	—	210,265	23,864	(302,208)	(278,344)
Transactions with owners of the controlling company, Recognized directly in equity:									
Year-end dividends	—	—	—	—	—	(479,958)	(479,958)	(32,410)	(512,368)
Interim dividends	—	—	—	—	—	(159,987)	(159,987)	(67,700)	(227,687)
Changes in subsidiaries	—	—	—	—	—	—	—	(311,548)	(311,548)
Changes in ownership interests in subsidiaries	—	310,485	—	—	—	—	310,485	844,769	1,155,254
Interest of hybrid bonds	—	—	—	—	—	(43,574)	(43,574)	(24,187)	(67,761)
Disposal of treasury shares	—	(35)	—	—	559	—	524	—	524
Others	—	(1,089)	—	418	—	(2,398)	(3,069)	804	(2,265)
Total transactions with owners of the controlling company	—	309,361	—	418	559	(685,917)	(375,579)	409,728	34,149
Balance as of December 31, 2015	₩ 482,403	1,393,079	996,919	(594,756)	(1,533,898)	40,461,496	41,205,243	3,807,958	45,013,201

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries
Consolidated Statements of Changes in Equity, Continued
For the years ended December 31, 2014, 2015 and 2016

	Attributable to owners of the controlling company						Non-controlling interests	Total
	Share capital	Capital surplus	Hybrid bonds	Reserves	Treasury shares	Retained earnings		
Balance as of January 1, 2016	₩482,403	1,393,079	996,919	(594,756)	(1,533,898)	40,461,496	41,205,243	45,013,201
Comprehensive income (loss):						(in millions of Won)		
Profit (loss)	—	—	—	—	—	1,354,807	1,354,807	3,807,958
Other comprehensive income (loss)								
Remeasurements of defined benefit pension plans, net of tax	—	—	—	—	—	9,787	9,787	10,753
Capital adjustment arising from investments in equity-method investees, net of tax	—	—	—	124,626	—	—	124,626	134,590
Net changes in the unrealized fair value of available-for-sale investments, net of tax	—	—	—	314,428	—	—	314,428	310,608
Foreign currency translation differences, net of tax	—	—	—	10,382	—	—	10,382	(21,873)
Total comprehensive income (loss)	—	—	—	449,436	—	1,364,594	1,814,030	1,486,312
Transactions with owners of the controlling company, Recognized directly in equity:								
Year-end dividends	—	—	—	—	—	(479,974)	(479,974)	(530,307)
Interim dividends	—	—	—	—	—	(179,992)	(179,992)	(179,992)
Changes in subsidiaries	—	—	—	—	—	—	—	49,250
Changes in ownership interests in subsidiaries	—	8,650	—	—	—	—	8,650	(7,894)
Interest of hybrid bonds	—	—	—	—	—	(43,832)	(43,832)	(68,085)
Disposal of treasury shares	—	32	—	—	430	—	462	462
Others	—	5,486	—	1,335	—	3,420	10,241	(7,919)
Total transactions with owners of the controlling company	—	14,168	—	1,335	430	(700,378)	(684,445)	(734,244)
Balance as of December 31, 2016	₩482,403	1,407,247	996,919	(143,985)	(1,533,468)	41,125,712	42,334,828	45,765,289

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See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries
Consolidated Statements of Cash Flows
For the years ended December 31, 2014, 2015 and 2016

	Notes	2014	2015	2016
		(in millions of Won)		
Cash flows from operating activities				
Profit (loss)		₩ 564,039	(116,215)	1,032,065
Adjustments for:				
Depreciation		2,894,609	2,836,663	2,835,843
Amortization		343,940	381,583	378,004
Finance income		(1,046,718)	(1,165,340)	(882,905)
Finance costs		1,801,015	1,852,862	1,501,953
Income tax expense		823,841	266,560	379,544
Gain on disposal of property, plant and equipment		(15,039)	(22,730)	(23,826)
Loss on disposal of property, plant and equipment		50,006	101,732	86,622
Impairment loss on property, plant and equipment		64,833	136,269	196,882
Share of loss of equity-accounted investees		299,893	506,054	88,677
Expenses related to post-employment benefits		237,886	245,402	333,139
Increase to provisions		245,470	86,903	189,914
Bad debt expenses		205,306	337,235	202,717
Loss on valuation of inventories		41,713	152,952	152,249
Impairment loss on goodwill and intangible assets		55,220	161,412	127,875
Gain on disposal of assets held for sale		(48,232)	(227,956)	(23,112)
Loss on disposal of assets held for sale		14	190,357	254
Impairment loss on assets held for sale		17,205	133,547	24,890
Others, net		56,876	(21,643)	7,073
		<u>6,027,838</u>	<u>5,951,862</u>	<u>5,575,793</u>
Changes in operating assets and liabilities	39	(1,853,782)	2,784,452	(404,570)
Interest received		238,817	198,193	206,839
Interest paid		(882,183)	(831,566)	(691,264)
Dividends received		114,694	237,715	152,559
Income taxes paid		(797,324)	(622,612)	(602,004)
Net cash provided by operating activities		<u>₩ 3,412,099</u>	<u>7,601,829</u>	<u>5,269,418</u>
Cash flows from investing activities				
Acquisitions of short-term financial instruments		₩(3,096,602)	(13,037,990)	(18,578,809)
Proceeds from disposal of short-term financial instruments		4,635,120	10,595,379	17,177,409
Acquisition of long-term financial instruments		(24,683)	(34,733)	(8,249)
Increase in loans		(361,671)	(295,689)	(603,332)
Collection of loans		76,717	308,906	557,064
Acquisitions of available-for-sale investments		(75,582)	(87,824)	(328,151)
Proceeds from disposal of available-for-sale investments		252,056	308,161	280,066
Acquisitions of investments of equity-accounted investees		(702,989)	(77,155)	(173,769)
Proceeds from disposal of investments of equity-accounted investees		21,359	11,813	7,914
Acquisitions of property, plant and equipment		(3,505,549)	(2,560,244)	(2,324,112)
Proceeds from disposal of property, plant and equipment		62,829	59,031	44,330
Acquisitions of investment property		(406,603)	(61,478)	(45,735)
Proceeds from disposal of investment property		43,167	1,120	11,624
Acquisitions of intangible assets		(343,804)	(289,148)	(138,181)
Proceeds from disposal of intangible assets		9,043	12,832	8,672
Proceeds from disposal of assets held for sale		1,291	127,133	305,813
Cash received from (paid in) acquisition of business, net of cash acquired		(388,578)	—	4,503
Cash received from disposal of business, net of cash transferred		48,949	469,576	21,223
Others, net		10,348	15,634	27,093
Net cash used in investing activities		<u>(3,745,182)</u>	<u>(4,534,676)</u>	<u>(3,754,627)</u>

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries
Consolidated Statements of Cash Flows, Continued
For the years ended December 31, 2014, 2015 and 2016

	Notes	2014	2015	2016
		(in millions of Won)		
Cash flows from financing activities				
Proceeds from borrowings		2,522,495	1,779,097	1,988,665
Repayment of borrowings		(2,802,150)	(3,509,970)	(4,274,895)
Proceeds from (repayment of) short-term borrowings, net		1,037,912	(846,230)	(885,861)
Payment of cash dividends		(677,000)	(822,570)	(708,970)
Payment of interest of hybrid bonds		(69,713)	(67,725)	(68,097)
Capital contribution from non-controlling interests and proceeds from disposal of subsidiary while maintaining control		54,066	1,260,053	24,704
Capital deduction from non-controlling interests and additional acquisition of interests in subsidiaries		—	(10,810)	(11,301)
Proceeds from disposal of treasury shares		43,188	—	—
Others, net		26,314	(23,446)	(15,212)
Net cash provided by (used in) financing activities		135,112	(2,241,601)	(3,950,967)
Effect of exchange rate fluctuation on cash held		11,545	23,496	12,611
Net increase (decrease) in cash and cash equivalents		(186,426)	849,048	(2,423,565)
Cash and cash equivalents at beginning of the period	5	4,208,562	4,022,136	4,871,184
Cash and cash equivalents at end of the period	5	₩ 4,022,136	4,871,184	2,447,619

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements

As of December 31, 2014, 2015 and 2016

1. General Information

General information about POSCO, its 38 domestic subsidiaries including POSCO ENGINEERING & CONSTRUCTION CO., LTD., 160 foreign subsidiaries including POSCO America Corporation (collectively “the Company”) and its 102 associates and joint ventures are as follows:

(a) The controlling company

POSCO, the controlling company, was incorporated on April 1, 1968, under the Commercial Code of the Republic of Korea to manufacture and sell steel rolled products and plates in the domestic and foreign markets.

The shares of POSCO have been listed on the Korea Exchange on June 10, 1988. POSCO owns and operates two steel plants (Pohang and Gwangyang) and one office in Korea and it also operates internationally through seven of its overseas liaison offices.

As of December 31, 2016, POSCO’s shareholders are as follows:

Shareholder’s name	Number of shares	Ownership (%)
National Pension Service	9,482,959	10.88
Nippon Steel & Sumitomo Metal Corporation ^{(*)1}	2,894,712	3.32
BlackRock Institutional Trust Company, N.A. ^{(*)1}	2,236,618	2.57
KB Financial Group Inc. and subsidiaries ^{(*)2}	2,091,553	2.40
Saudi Arabian Monetary Authority	2,071,515	2.38
Others	68,409,478	78.45
	87,186,835	100.00

(*)1 Includes American Depository Receipts (ADRs) of POSCO, each of which represents 0.25 share of POSCO’s common share which has par value of ₩5,000 per share.

(*)2 Includes shares held by subsidiaries pursuant to Articles of Incorporation.

As of December 31, 2016, the shares of POSCO are listed on the Korea Exchange, while its ADRs are listed on the New York Stock Exchange.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2014, 2015 and 2016

(b) Consolidated subsidiaries

Details of consolidated subsidiaries as of December 31, 2015 and 2016 are as follows:

	Principal operations	Ownership (%)						Region
		December 31, 2015			December 31, 2016			
		POSCO	Subsidiaries	Total	POSCO	Subsidiaries	Total	
[Domestic]								
POSCO ENGINEERING & CONSTRUCTION., LTD.	Engineering and construction	52.80	—	52.80	52.80	—	52.80	Pohang
POSCO Processing & Service	Steel sales and trading	96.01	—	96.01	93.95	0.45	94.40	Seoul
POSCO COATED & COLOR STEEL Co., Ltd.	Coated steel manufacturing	56.87	—	56.87	56.87	—	56.87	Pohang
POSCO ICT	Computer hardware and software distribution	65.38	—	65.38	65.38	—	65.38	Pohang
POSCO Research Institute	Economic research and consulting	100.00	—	100.00	100.00	—	100.00	Seoul
POSMATE	Business facility maintenance	57.25	11.05	68.30	57.25	11.05	68.30	Seoul
POSCO A&C	Architecture and consulting	100.00	—	100.00	100.00	—	100.00	Seoul
POSCO Venture Capital Co., Ltd.	Investment in venture companies	95.00	—	95.00	95.00	—	95.00	Pohang
eNtoB Corporation	Electronic commerce	7.50	53.63	61.13	7.50	53.63	61.13	Seoul
POSCO CHEMTECH	Refractories manufacturing and sales	60.00	—	60.00	60.00	—	60.00	Pohang
POSCO-Terminal Co., Ltd.	Transporting and warehousing	51.00	—	51.00	51.00	—	51.00	Gwangyang
POSCO M-TECH	Packing materials manufacturing and sales	48.85	—	48.85	48.85	—	48.85	Pohang
POSCO ENERGY CO., LTD.	Generation of electricity	89.02	—	89.02	89.02	—	89.02	Seoul
POSCO NIPPON STEEL RHF JOINT VENTURE. CO., Ltd.	Steel manufacturing and sales	70.00	—	70.00	70.00	—	70.00	Pohang
IT Engineering CO. Ltd	Automotive engineering service	—	17.00	17.00	—	17.00	17.00	Seoul
MegaAsset Co., Ltd.	Real estate rental and sales	—	100.00	100.00	—	100.00	100.00	Incheon
POSCO Engineering CO., Ltd	Construction and engineering service	—	95.56	95.56	—	95.56	95.56	Incheon
Future Creation Fund Postech Early Stage account	Investment in venture companies	—	40.00	40.00	—	40.00	40.00	Seoul
POSCO WOMAN'S FUND	Investment in venture companies	—	40.00	40.00	—	40.00	40.00	Seoul
POSPower Co., Ltd.	Other generation	—	100.00	100.00	—	100.00	100.00	Samcheok
Songdo Posco Family housing	House manufacturing and management	—	100.00	100.00	—	100.00	100.00	Incheon
Posco Group University	Education service and real estate business	100.00	—	100.00	100.00	—	100.00	Incheon
HOTEL LAONZENA	Hotel business	—	100.00	100.00	—	100.00	100.00	Daegu
Growth Ladder POSCO K-Growth Global Fund	Investment in venture companies	—	50.00	50.00	—	50.00	50.00	Pohang
2015 POSCO New technology II Fund	Investment in venture companies	—	25.00	25.00	—	25.00	25.00	Pohang
POCA STEM Co., Ltd	Stem cell medicine development	—	—	—	—	100.00	100.00	Seoul
Posco e&c Songdo International Building(*1)	Non-residential building rental	—	—	—	—	100.00	100.00	Seoul
POSCO ES MATERIALS CO., Ltd.(*2)	Secondary and storage battery manufacturing	—	—	—	75.32	—	75.32	Gumi

POSCO and Subsidiaries

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		December 31, 2015			December 31, 2016			
		POSCO	Subsidiaries	Total	POSCO	Subsidiaries	Total	
Poscoene	Refuse derived fuel and power generation	—	100.00	100.00	—	100.00	100.00	Seoul
POSCO Humans	Construction	90.30	—	90.30	90.30	—	90.30	Pohang
Mapo Hibroad Parking co., Ltd.	Construction	—	70.99	70.99	—	70.99	70.99	Seoul
BLUE O&M Co., Ltd.	Engineering service	—	100.00	100.00	—	100.00	100.00	Pohang
Busan E&E Co., Ltd.	Refuse derived fuel and power generation	70.00	—	70.00	70.00	—	70.00	Busan
POSCO Family Strategy Fund	Investment in venture companies	69.91	30.09	100.00	69.91	30.09	100.00	Pohang
POSCO DAEWOO Corporation (formerly, Daewoo International Corporation)	Trading, energy & resource development and others	60.31	—	60.31	60.31	—	60.31	Seoul
Pohang Scrap Recycling Distribution Center Co., Ltd.	Steel processing and sales	—	51.00	51.00	—	51.00	51.00	Pohang
PSC Energy Global Co., Ltd.	Investment in energy industry	—	100.00	100.00	—	100.00	100.00	Pohang
Suncheon Eco Trans Co., Ltd.	Train manufacturing and management	100.00	—	100.00	100.00	—	100.00	Suncheon
POSCO TMC Co., Ltd.	Component manufacturing	—	74.56	74.56	—	—	—	Cheonan
Tamra Offshore Wind Power Co., Ltd.	Cogeneration plant operation	—	64.00	64.00	—	—	—	Jeju
POSCO Green Gas Technology Co., Ltd.	Gas production and sales	100.00	—	100.00	—	—	—	Gwangyang
POSCO AST	Steel manufacturing and sales	—	100.00	100.00	—	—	—	Ansan
POSHIMETAL Co., Ltd.	Ferromanganese manufacturing and sales	100.00	—	100.00	—	—	—	Gwangyang
Steel Processing and Fabricating Center Co., LTD	Steel manufacturing	—	84.89	84.89	—	—	—	Gwangyang
POSCO LED Co., Ltd.	LED lightening	16.70	63.30	80.00	—	—	—	Seongnam
[Foreign]								
POSCO America Corporation	Steel trading	99.45	0.55	100.00	99.45	0.55	100.00	USA
POSCO AUSTRALIA PTY LTD	Iron ore sales & mine development	100.00	—	100.00	100.00	—	100.00	Australia
POSCO Canada Ltd.	Coal sales	—	100.00	100.00	—	100.00	100.00	Canada
POSCO Asia Co., Ltd.	Steel and raw material trading	100.00	—	100.00	100.00	—	100.00	China
POSCO-CTPC Co., Ltd.	Steel manufacturing	56.60	43.40	100.00	56.60	43.40	100.00	China
POSCO E&C Vietnam Co., Ltd.	Steel manufacturing	—	100.00	100.00	—	100.00	100.00	Vietnam
Zhangjiagang Pohang Stainless Steel Co., Ltd.	Stainless steel manufacturing	58.60	23.88	82.48	58.60	23.88	82.48	China
POSCO(Guangdong) Coated Steel Co., Ltd.	Plating steel sheet manufacturing	87.04	10.04	97.08	87.04	10.04	97.08	China
POSCO (Thailand) Company Limited	Steel manufacturing	85.62	14.38	100.00	85.62	14.38	100.00	Thailand
Myanmar POSCO Steel Co., Ltd.	Zinc relief manufacturing	70.00	—	70.00	70.00	—	70.00	Myanmar
POSCO-MKPC SDN BHD	Steel manufacturing	44.69	25.31	70.00	44.69	25.31	70.00	Malaysia
Qingdao Pohang Stainless Steel Co., Ltd.	Stainless steel manufacturing	70.00	30.00	100.00	70.00	30.00	100.00	China
POSCO(Suzhou) Automotive Processing Center Co., Ltd.	Steel manufacturing	90.00	10.00	100.00	90.00	10.00	100.00	China

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		POSCO	Subsidiaries	Total	POSCO	Subsidiaries	Total	
POSEC Hawaii, Inc.	Real estate Industry	—	100.00	100.00	—	100.00	100.00	USA
POSCO-China Qingdao Processing Center Co., Ltd.	Steel manufacturing	—	100.00	100.00	—	100.00	100.00	China
POS-ORE PTY LTD	Iron ore sales & mine development	—	100.00	100.00	—	100.00	100.00	Australia
POSCO-China Holding Corp.	Holding company	100.00	—	100.00	100.00	—	100.00	China
POSCO JAPAN Co., Ltd.	Steel trading	100.00	—	100.00	100.00	—	100.00	Japan
POS-CD PTY LTD	Coal sales	—	100.00	100.00	—	100.00	100.00	Australia
POS-GC PTY LTD	Coal sales	—	100.00	100.00	—	100.00	100.00	Australia
POSCO-India Private Limited	Steel manufacturing	99.99	—	99.99	99.99	—	99.99	India
POSCO-India Pune Processing Center. Pvt. Ltd.	Steel manufacturing	65.00	—	65.00	65.00	—	65.00	India
POSCO Japan PC CO., LTD (formerly, POSCO-JEPC Co., Ltd.)	Steel manufacturing	—	88.02	88.02	—	86.12	86.12	Japan
POSCO-CFPC Co., Ltd.	Steel manufacturing	39.60	60.40	100.00	39.60	60.40	100.00	China
POSCO E&C CHINA Co., Ltd.	Construction and civil engineering	—	100.00	100.00	—	100.00	100.00	China
POSCO MPPC S.A. de C.V.	Steel manufacturing	—	95.00	95.00	—	95.00	95.00	Mexico
Zhangjigang Pohang Port Co., Ltd.	Loading and unloading service	—	100.00	100.00	—	100.00	100.00	China
POSCO-VIETNAM Co., Ltd.	Steel manufacturing	100.00	—	100.00	100.00	—	100.00	Vietnam
POSCO MEXICO S.A. DE C.V.	Automotive steel sheet manufacturing	84.84	15.16	100.00	84.84	15.16	100.00	Mexico
POSCO India Delhi Steel Processing Centre Private Limited	Steel manufacturing	66.40	10.00	76.40	66.40	10.00	76.40	India
POSCAN Elkview	Coal sales	—	100.00	100.00	—	100.00	100.00	Canada
POSCO-Poland Wroclaw Processing Center Sp. z o. o.	Steel manufacturing	60.00	—	60.00	60.00	—	60.00	Poland
POS-NP PTY LTD	Coal sales	—	100.00	100.00	—	100.00	100.00	Australia
POSCO-Vietnam Processing Center Co., Ltd.	Steel manufacturing	87.07	4.98	92.05	87.07	4.98	92.05	Vietnam
POSCO(Chongqing) Automotive Processing Center Co., Ltd.	Steel manufacturing	90.00	10.00	100.00	90.00	10.00	100.00	China
SUZHOU POSCO-CORE TECHNOLOGY CO., LTD.	Component manufacturing	—	100.00	100.00	—	100.00	100.00	China
POSCO-Malaysia SDN. BHD.	Steel manufacturing	81.79	13.63	95.42	81.79	13.63	95.42	Malaysia
POS-Minerals Corporation	Mine development & sales	—	100.00	100.00	—	100.00	100.00	USA
POSCO(Wuhu) Automotive Processing Center Co., Ltd.	Steel manufacturing	68.57	31.43	100.00	68.57	31.43	100.00	China
POSCO Engineering and Construction India Private Limited	Construction and engineering	—	100.00	100.00	—	100.00	100.00	India
POSCO E&C SMART S DE RL DE CV	Construction and engineering	—	100.00	100.00	—	100.00	100.00	Mexico
POSCO Philippine Manila Processing Center, Inc.	Steel manufacturing	—	100.00	100.00	—	100.00	100.00	Philippines
POSCO Suzhou Processing Center Co., Ltd.	Steel manufacturing	30.00	70.00	100.00	30.00	70.00	100.00	China
POSCO Gulf SFC LLC								United Arab Emirates
SANPU TRADING Co., Ltd.	Steel manufacturing Raw material trading	—	81.93	81.93	—	81.93	81.93	China

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		POSCO	Subsidiaries	Total	POSCO	Subsidiaries	Total	
Zhangjiagang BLZ Pohang International Trading	Steel transit trading	—	100.00	100.00	—	100.00	100.00	China
POSCO MESDC S.A. DE C.V.	Steel product sales	—	56.80	56.80	—	56.80	56.80	Mexico
POSCO ICT-China	IT service and DVR business	—	100.00	100.00	—	100.00	100.00	China
Pos-Sea Pte Ltd	Steel transit trading	—	67.54	67.54	—	67.54	67.54	Singapore
POSCO Europe Steel Distribution Center	Steel product sales	50.00	20.00	70.00	50.00	20.00	70.00	Slovenia
POSCO ENGINEERING (THAILAND) CO., LTD.	Chemical plant	—	100.00	100.00	—	100.00	100.00	Thailand
POSCO VST CO., LTD.	Stainless steel sheet manufacturing and sales	95.65	—	95.65	95.65	—	95.65	Vietnam
POSCO Maharashtra Steel Private Limited	Steel manufacturing	100.00	—	100.00	100.00	—	100.00	India
POSCO India Chennai Steel Processing Centre Pvt.Ltd.	Steel manufacturing	100.00	—	100.00	100.00	—	100.00	India
POSCO TNPC Otomotiv Celik San. Ve Tic. A.S	Steel manufacturing	100.00	—	100.00	100.00	—	100.00	Turkey
POSCO VNPC(Vietnam HANOI Processing Center) Co., Ltd.	Steel manufacturing	70.00	—	70.00	70.00	—	70.00	Vietnam
POSCO(Liaoning) Automotive Processing Center Co., Ltd.	Steel manufacturing	90.00	10.00	100.00	90.00	10.00	100.00	China
POSCO-Indonesia Jakarta Processing Center	Steel manufacturing	65.00	20.00	85.00	65.00	20.00	85.00	Indonesia
POSCO E&C VENEZUELA C.A.	Construction and engineering	—	100.00	100.00	—	100.00	100.00	Venezuela
PT.MRI	Mine development	65.00	—	65.00	65.00	—	65.00	Indonesia
POSCO TMC INDIA PRIVATE LIMITED	Steel manufacturing	—	100.00	100.00	—	100.00	100.00	India
POSCO-AAPC	Steel manufacturing	—	100.00	100.00	—	97.80	97.80	USA
PT PEN INDONESIA	Construction	—	100.00	100.00	—	100.00	100.00	Indonesia
POSCO(Yantai)Automotive Processing Center Co., Ltd.	Steel manufacturing	90.00	10.00	100.00	90.00	10.00	100.00	China
POSCO India Steel Distribution Center Private Ltd.	Steel logistics	—	100.00	100.00	—	100.00	100.00	India
POSCO China Dalian Plate Processing Center Co., Ltd.	Steel manufacturing	80.00	10.00	90.00	80.00	10.00	90.00	China
POSCO-South Asia Company Limited	Steel product sales	100.00	—	100.00	100.00	—	100.00	Thailand
POSCO SS-VINA Co., Ltd	Steel manufacturing	100.00	—	100.00	100.00	—	100.00	Vietnam
POSCO NCR Coal Ltd.	Coal sales	—	100.00	100.00	—	100.00	100.00	Canada
POSCO WA PTY LTD	Iron ore sales & mine development	100.00	—	100.00	100.00	—	100.00	Australia
POSCO Engineering and Construction - UZ	Construction	—	100.00	100.00	—	100.00	100.00	Uzbekistan
POSCO AUSTRALIA GP PTY LIMITED	Resource development	—	100.00	100.00	—	100.00	100.00	Australia
POSCO YongXin Rare Earth Metal Co., Ltd.	Magnet material manufacturing and sales	—	51.60	51.60	—	51.60	51.60	China
POSCO DAEWOO POWER (PNGPOM) LTD.	Electricity production	—	100.00	100.00	—	100.00	100.00	Papua New Guinea
POSCO DAEWOO AMERICA CORP.	Trading business	—	100.00	100.00	—	100.00	100.00	USA

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		POSCO	Subsidiaries	Total	POSCO	Subsidiaries	Total	
POSCO DAEWOO DEUTSCHLAND GMBH	Trading business	—	100.00	100.00	—	100.00	100.00	Germany
POSCO DAEWOO JAPAN Corp	Trading business	—	100.00	100.00	—	100.00	100.00	Japan
POSCO DAEWOO SINGAPORE PTE LTD.	Trading business	—	100.00	100.00	—	100.00	100.00	Singapore
POSCO DAEWOO ITALIA S.R.L.	Trading business	—	100.00	100.00	—	100.00	100.00	Italy
POSCO DAEWOO CHINA CO., LTD	Trading business	—	100.00	100.00	—	100.00	100.00	China
Daewoo Textile LLC	Textile manufacturing	—	100.00	100.00	—	100.00	100.00	Uzbekistan
POSCO DAEWOO AUSTRALIA HOLDINGS PTY. LTD.	Resource development	—	100.00	100.00	—	100.00	100.00	Australia
POSCO MAURITIUS LIMITED	Coal development and sales	—	100.00	100.00	—	100.00	100.00	Mauritius
PT. KRAKATAU POSCO	Steel manufacturing	70.00	—	70.00	70.00	—	70.00	Indonesia
POSCO DAEWOO MEXICO S.A. DE C.V.	Trading business	—	100.00	100.00	—	100.00	100.00	Mexico
Daewoo International Guangzhou Corp.	Trading business	—	100.00	100.00	—	100.00	100.00	China
POSCO (Zhangjiagang) STS Processing Center Co., Ltd	Steel manufacturing	—	100.00	100.00	—	100.00	100.00	China
POSCO DAEWOO MALAYSIA SDN BHD	Trading business	—	100.00	100.00	—	100.00	100.00	Malaysia
POSCO DAEWOO SHANGHAI CO., LTD.	Trading business	—	100.00	100.00	—	100.00	100.00	China
PGSF, L.P.	Investment in bio tech Industry	—	100.00	100.00	—	100.00	100.00	USA
POSCO DAEWOO INDIA PVT., LTD.	Trading business	—	100.00	100.00	—	100.00	100.00	India
PT. POSCO E&C INDONESIA	Construction	—	100.00	100.00	—	100.00	100.00	Indonesia
HUME COAL PTY LTD	Raw material manufacturing	—	100.00	100.00	—	100.00	100.00	Australia
EPC EQUITIES LLP	Construction	—	80.00	80.00	—	80.00	80.00	England
SANTOS CMI CONSTRUCTION TRADING LLP	Construction	—	99.90	99.90	—	99.90	99.90	England
SANTOS CMI INC. USA	Construction	—	100.00	100.00	—	100.00	100.00	USA
SANTOS CMI ENGENHARIA E CONSTRUCOES LTDA	Construction	—	99.98	99.98	—	99.98	99.98	Brazil
SANTOS CMI PERU S.A.	Construction	—	99.99	99.99	—	99.99	99.99	Peru
SANTOS CMI CONSTRUCCIONES S.A.	Construction	—	100.00	100.00	—	100.00	100.00	Uruguay
GENTECH INTERNATIONAL INC.	Construction	—	90.00	90.00	—	90.00	90.00	Panama
SANTOS CMI S.A.	Construction	—	80.00	80.00	—	80.00	80.00	Ecuador
SANTOS CMI CONSTRUCCIONES DE CHILE S.A.	Construction	—	99.00	99.00	—	99.00	99.00	Chile
COMPANIADAEUTOMATIZACION &CONTROL, GENESYS S.A.	Construction	—	90.00	90.00	—	90.00	90.00	Ecuador
POSCO ASSAN TST STEEL INDUSTRY	Steel manufacturing	60.00	10.00	70.00	60.00	10.00	70.00	Turkey
HONG KONG POSCO E&C (CHINA) INVESTMENT Co., Ltd.	Investment	—	100.00	100.00	—	100.00	100.00	Hong Kong

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		POSCO	Subsidiaries	Total	POSCO	Subsidiaries	Total	
POSCO ENGINEERING & CONSTRUCTION DO BRAZIL LTDA.	Construction	—	100.00	100.00	—	100.00	100.00	Brazil
POSCO Electrical Steel India Private Limited	Electrical steel manufacturing	100.00	—	100.00	100.00	—	100.00	India
PT.POSCO-Indonesia Inti POSCO(Dalian) IT Center Development Co., Ltd.	Mine development	99.99	—	99.99	99.99	—	99.99	Indonesia
Brazil Sao Paulo Steel Processing Center DAESAN (CAMBODIA) Co., Ltd.	Investment	—	100.00	100.00	—	100.00	100.00	China
PT.POSCO ICT INDONESIA	Steel manufacturing	—	76.00	76.00	—	76.00	76.00	Brazil
PT. POSCO MTECH INDONESIA	Investment	—	100.00	100.00	—	100.00	100.00	Cambodia
PT. KRAKATAU POSCO ENERGY	IT service and electric control engineering	—	66.99	66.99	—	66.99	66.99	Indonesia
POSCO RUS LLC	Steel manufacturing	—	99.98	99.98	—	99.98	99.98	Indonesia
POSCO Thainox Public Company Limited	Manufacturing & management	—	90.00	90.00	—	90.00	90.00	Indonesia
POSCO DAEWOO WAIGAIQIAO SHANGHAI CO., LTD	Trading business	90.00	10.00	100.00	90.00	10.00	100.00	Russia
PT. Bio Inti Agrindo	Steel manufacturing	84.93	—	84.93	84.93	—	84.93	Thailand
POSCO ENGINEERING AND CONSTRUCTION AUSTRALIA (POSCO E&C AUSTRALIA) PTY LTD	Merchandising trade	—	100.00	100.00	—	100.00	100.00	China
POSCO-TISCO (JILIN) PROCESSING CENTER Co., Ltd.	Forest resources development	—	85.00	85.00	—	85.00	85.00	Indonesia
Hunchun Posco Hyundai Logistics	Iron ore sales	—	100.00	100.00	—	100.00	100.00	Australia
USA-SRDC	Steel manufacturing	50.00	10.00	60.00	50.00	10.00	60.00	China
POSCO DAEWOO VIETNAM CO., LTD	Logistics	—	80.00	80.00	—	80.00	80.00	China
PT.Krakatau Posco Chemtech Calcination	Scrap sales	—	100.00	100.00	—	100.00	100.00	USA
POSCO AFRICA (PROPRIETARY) LIMITED	Trading business	—	100.00	100.00	—	100.00	100.00	Vietnam
POSCO ICT BRASIL	Quicklime manufacturing and sales	—	80.00	80.00	—	80.00	80.00	Indonesia
LA-SRDC	Mine development	100.00	—	100.00	100.00	—	100.00	South Africa
DONG FANG JIN HONG	IT service and engineering	—	100.00	100.00	—	100.00	100.00	Brazil
POSCO AMERICA COMERCIALIZADORA S DE RL DE CV	Scrap manufacturing	—	100.00	100.00	—	100.00	100.00	USA
POSCO(Guangdong) Automotive Steel Co., Ltd.	Real estate development, rental and management	—	100.00	100.00	—	100.00	100.00	China
POSCO MAPC SA DE CV	Human resource service	—	100.00	100.00	—	100.00	100.00	Mexico
PT KRAKATAU BLUE WATER	Steel manufacturing and sales	83.64	10.00	93.64	83.64	10.00	93.64	China
	Steel manufacturing and sales	80.00	20.00	100.00	80.00	20.00	100.00	Mexico
	Wastewater treatment facilities operation and maintenance	—	67.00	67.00	—	67.00	67.00	Indonesia

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		POSCO	Subsidiaries	Total	POSCO	Subsidiaries	Total	
POSCO DAEWOO MYANMAR CORPORATION LIMITED	Trading business	—	100.00	100.00	—	100.00	100.00	Myanmar
POSCO-Italy Processing Center	Stainless steel sheet manufacturing and sales	80.00	10.00	90.00	80.00	10.00	90.00	Italy
POSCO DAEWOO E&P CANADA CORPORATION	Crude oil and natural gas mining	—	100.00	100.00	—	100.00	100.00	Canada
Yingkou Puxiang Trade Co., Ltd.	Refractory quality test and import and export trade	—	100.00	100.00	—	100.00	100.00	China
Myanmar POSCO C&C Company, Limited.	Steel manufacturing and sales	—	70.00	70.00	—	70.00	70.00	Myanmar
POSCO ICT VIETNAM	IT service and electric control engineering	—	100.00	100.00	—	100.00	100.00	Vietnam
Daewoo Global Development. Pte., Ltd	Real estate development	—	51.00	51.00	—	51.00	51.00	Myanmar
Myanmar POSCO Engineering & Construction Company, Limited.	Construction and engineering service	—	100.00	100.00	—	100.00	100.00	Myanmar
POSCO COATED STEEL (THAILAND) CO., LTD.	Automotive steel sheet manufacturing and sales	100.00	—	100.00	100.00	—	100.00	Thailand
Daewoo Power and Infra (PTY) Limited	Electricity	—	100.00	100.00	—	100.00	100.00	South Africa
Daewoo Amara Company Limited	Real estate development	—	98.54	98.54	—	98.54	98.54	Myanmar
POSMATE-CHINA CO., LTD	Business facility maintenance	—	100.00	100.00	—	100.00	100.00	China
Daewoo Precious Resources Co., Ltd.	Resources development	—	70.00	70.00	—	70.00	70.00	Myanmar
POSCO-Mexico Villagran Wire-rod Processing Center	Steel manufacturing	56.75	10.00	66.75	56.75	10.00	66.75	Mexico
SANTOS CMI Guatemala S.A.	Construction	—	100.00	100.00	—	100.00	100.00	Guatemala
POSCO-CDSFC	Steel manufacturing	42.16	25.39	67.55	50.20	49.80	100.00	China
POSCO ChengDu Processing Center	Steel manufacturing	33.00	10.00	43.00	33.00	10.00	43.00	China
POSCO E&C HOLDINGS CO., Ltd.	Holding company	—	100.00	100.00	—	100.00	100.00	Thailand
POSCO E&C (THAILAND) CO., Ltd.	Construction	—	100.00	100.00	—	100.00	100.00	Thailand
DAEWOO POWER PNG Ltd.	Electricity production	—	100.00	100.00	—	100.00	100.00	Papua New Guinea
POSCO India Ahmedabad Steel Processing Center Pvt.Ltd.	Steel manufacturing	100.00	—	100.00	100.00	—	100.00	India
COINSA INGENIERIA Y PETROQUIMICA S.R.L	Construction	—	50.00	50.00	—	50.00	50.00	Bolivia
PT.Krakatau Posco Social Enterprise	Social enterprise	—	100.00	100.00	—	100.00	100.00	Indonesia
POSCO Vietnam Holdings Co., LTD.	Holding company	79.28	20.72	100.00	79.28	20.72	100.00	Vietnam
Ventanas Philippines Construction Inc	Construction	—	100.00	100.00	—	100.00	100.00	Philippines
POSCO E&C Mongolia	Construction	—	100.00	100.00	—	100.00	100.00	Mongolia
Daewoo Minerals Canada Corporation	Resources development	—	—	—	—	100.00	100.00	Canada
Chongqing POSCO CISL Automotive Steel Co., Ltd.	Automotive steel sheet manufacturing and sales	—	—	—	51.00	—	51.00	China

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

	Principal operations	Ownership (%)						Region
		December 31, 2015			December 31, 2016			
		POSCO	Subsidiaries	Total	POSCO	Subsidiaries	Total	
POSCO-JWPC Co., Ltd.	Steel manufacturing	—	89.18	89.18	—	—	—	Japan
POSCO Investment Co., Ltd.	Financial Service	100.00	—	100.00	—	—	—	China
Qingdao Pos-metal Co., Ltd. Dalian POSCO	Steel manufacturing	—	100.00	100.00	—	—	—	China
ICT-DONGFANG Engineering Co., Ltd.	Electric control machine manufacturing	—	100.00	100.00	—	—	—	China
POSCO MEXICO HUMAN TECH S.A. de C.V.	Service	80.00	20.00	100.00	—	—	—	Mexico
DAEWOO TEXTILE BUKHARA LLC	Textile manufacturing	—	100.00	100.00	—	—	—	Uzbekistan
Daewoo Paper Manufacturing Co., Ltd.	Paper manufacturing	—	66.70	66.70	—	—	—	China
Tianjin Daewoo Paper Manufacturing Co., Ltd.	Paper manufacturing	—	68.00	68.00	—	—	—	China
Xenesys Inc.	Power generation equipment manufacturing	29.58	21.35	50.93	—	—	—	Japan
POSCO FOUNDATION	Non-profit charitable organization	—	100.00	100.00	—	—	—	India
EPC INGENIERIA & SERVICIOS DE COSTA RICA SA	Construction and engineering	—	100.00	100.00	—	—	—	Costa Rica
PMM PIPE	Common steel welded pipe manufacturing and sales	—	50.00	50.00	—	—	—	Japan
KRAKATAU POS-CHEM DONG-SUH CHEMICAL (*3)	Chemical by-product manufacturing and sales	—	45.00	45.00	—	—	—	Indonesia

(*1) Reclassified to subsidiary from associate during the year ended December 31, 2016.

(*2) Reclassified to subsidiary from joint venture during the year ended December 31, 2016.

(*3) Reclassified to associate from subsidiary during the year ended December 31, 2016.

The equity of controlling company increased by ₩301,029 million (POSCO ENGINEERING & CONSTRUCTION., LTD., PT PEN INDONESIA and others) and ₩8,650 million (POSCO Processing & Service and others) in 2015 and 2016, respectively, as a result of changes in the Company's ownership interests in subsidiaries that did not result in a loss of control.

Cash dividends paid to POSCO by subsidiaries in 2014, 2015 and 2016 amounted to ₩58,488 million, ₩437,194 million and ₩75,830 million, respectively.

As of December 31, 2016, there are no restrictions on the ability of subsidiaries to transfer funds to the controlling company, such as in the form of cash dividends, repayment of loans or payment of advances.

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

(c) Details of non-controlling interest as of and for the years ended December 31, 2014, 2015 and 2016 are as follows:

1) December 31, 2014

	POSCO DAEWOO Corporation (formerly, Daewoo International Corporation)	PT. KRAKATAU POSCO	POSCO CHEMTECH	POSCO ENGINEERING & CONSTRUCTION CO., LTD.	POSCO ENERGY Co., Ltd.	Others	Total
	(in millions of Won)						
Current assets	₩ 5,177,495	645,598	360,673	5,082,514	501,219	12,781,184	24,548,683
Non-current assets	6,028,358	3,303,632	251,206	1,333,612	3,393,917	10,135,827	24,446,552
Current liabilities	(5,046,468)	(988,132)	(131,389)	(3,494,647)	(546,791)	(11,493,074)	(21,700,501)
Non-current liabilities	(1,807,698)	(2,118,519)	(7,150)	(882,025)	(2,513,129)	(3,681,307)	(11,009,828)
Equity	4,351,687	842,579	473,340	2,039,454	835,216	7,742,630	16,284,906
Non-controlling interests	1,727,078	252,773	189,336	213,624	91,668	1,677,400	4,151,879
Sales	19,938,711	1,129,977	1,331,527	7,174,890	2,533,673	28,738,206	60,846,984
Profit (loss) for the period	83,167	(232,503)	68,196	50,023	21,100	(159,066)	(169,083)
Profit (loss) attributable to non-controlling interests	33,007	(69,751)	27,278	5,240	2,316	(62,302)	(64,212)
Cash flows from operating activities	(149,695)	(27,383)	20,676	24,592	36,346	(121,697)	(217,161)
Cash flows from investing activities	(167,573)	(74,454)	(28,349)	(33,755)	(117,154)	(230,954)	(652,239)
Cash flows from financing activities (before dividends to non-controlling interest)	336,114	75,680	—	(15,162)	83,014	406,904	886,550
Dividend to non-controlling interest	(13,558)	—	(3,544)	(1,923)	(24,125)	(5,748)	(48,898)
Effect of exchange rate fluctuation on cash held	(46)	134	43	(8)	—	3,636	3,759
Net increase (decrease) in cash and cash equivalents	5,242	(26,023)	(11,174)	(26,256)	(21,919)	52,141	(27,989)

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

2) December 31, 2015

	POSCO DAEWOO Corporation (formerly, Daewoo International Corporation)	PT. KRAKATAU POSCO	POSCO CHEMTECH	POSCO ENGINEERING & CONSTRUCTION CO., LTD.	POSCO ENERGY Co., Ltd.	Others	Total
	(in millions of Won)						
Current assets	₩ 3,930,857	441,999	360,812	5,115,325	590,460	9,648,917	20,088,370
Non-current assets	4,777,482	3,363,935	248,549	1,756,367	3,333,351	7,776,264	21,255,948
Current liabilities	(3,568,714)	(1,004,002)	(106,167)	(3,125,697)	(663,945)	(9,692,004)	(18,160,529)
Non-current liabilities	(1,941,909)	(2,315,554)	(5,405)	(768,529)	(2,420,547)	(2,567,980)	(10,019,924)
Equity	3,197,716	486,378	497,789	2,977,466	839,319	5,165,197	13,163,865
Non-controlling interests	1,269,096	145,913	199,116	1,405,391	92,118	1,182,137	4,293,771
Sales	16,890,723	1,227,266	1,175,272	6,866,802	1,909,919	25,784,254	53,854,236
Profit (loss) for the period	79,092	(398,438)	35,516	108,895	15,831	(835,389)	(994,493)
Profit (loss) attributable to non-controlling interests	31,390	(119,531)	14,206	51,399	1,738	(247,106)	(267,904)
Cash flows from operating activities	433,493	(13,595)	19,921	434,257	6,075	(72,371)	807,780
Cash flows from investing activities	(74,644)	(8,994)	25,318	21,075	(20,980)	(110,712)	(168,937)
Cash flows from financing activities (before dividends to non-controlling interest)	(340,532)	18,886	66	69,615	11,572	289,715	49,322
Dividend to non-controlling interest	(22,597)	—	(4,135)	(703)	(24,125)	(145,582)	(197,142)
Effect of exchange rate fluctuation on cash held	430	83	—	819	—	3,502	4,834
Net increase (decrease) in cash and cash equivalents	(3,850)	(3,620)	41,170	525,063	(27,458)	(35,448)	495,857

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

3) December 31, 2016

	POSCO DAEWOO Corporation (formerly, Daewoo International Corporation)	PT. KRAKATAU POSCO	POSCO CHEMTECH	POSCO ENGINEERING & CONSTRUCTION CO., LTD.	POSCO ENERGY Co., Ltd.	Others	Total
	(in millions of Won)						
Current assets	₩ 4,038,313	460,376	397,370	5,163,436	713,039	9,696,140	20,468,674
Non-current assets	4,510,085	3,304,292	243,401	1,710,398	3,038,665	7,749,277	20,556,118
Current liabilities	(3,662,811)	(1,120,077)	(109,016)	(3,284,090)	(937,668)	(9,669,053)	(18,782,715)
Non-current liabilities	(1,681,182)	(2,337,612)	(2,337)	(855,791)	(2,172,226)	(2,856,498)	(9,905,646)
Equity	3,204,405	306,979	529,418	2,733,953	641,810	4,919,866	12,336,431
Non-controlling interests	1,271,750	92,094	211,767	1,290,450	70,441	945,962	3,882,464
Sales	15,417,550	1,244,711	1,076,455	5,352,395	1,657,890	23,251,563	48,000,564
Profit (loss) for the period	113,832	(187,151)	41,829	(760,187)	(130,809)	(461,034)	(1,383,520)
Profit (loss) attributable to non-controlling interests	45,177	(56,145)	16,732	(358,815)	(14,357)	(312,297)	(679,705)
Cash flows from operating activities	337,338	45,672	30,295	(211,182)	18,107	53,050	273,280
Cash flows from investing activities	(35,054)	(8,804)	(42,021)	(102,939)	(1,047)	(253,206)	(443,071)
Cash flows from financing activities (before dividends to non-controlling interest)	(295,226)	(36,286)	(1,250)	(20,953)	(2,875)	204,797	(151,793)
Dividend to non-controlling interest	(22,597)	—	(4,726)	(14,800)	(24,378)	(7,349)	(73,850)
Effect of exchange rate fluctuation on cash held	10	67	1	760	—	1,687	2,525
Net increase (decrease) in cash and cash equivalents	(15,529)	649	(17,701)	(349,114)	(10,193)	(1,021)	(392,909)

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

(d) Details of associates and joint ventures

1) Associates

Details of associates as of December 31, 2015 and 2016 are as follows:

Investee	Category of business	Ownership (%)		Region
		2015	2016	
[Domestic]				
EQP POSCO Global NO1 Natural Resources				
PEF	Investment in new technologies	28.93	29.37	Seoul
POSCO PLANTEC Co., Ltd. ^{(*)2}	Construction of industrial plant	73.94	73.94	Ulsan
SNNC	Raw material manufacturing and sales	49.00	49.00	Gwangyang
QSONE Co.,Ltd.	Real estate rental and facility management	50.00	50.00	Seoul
Chun-cheon Energy Co., Ltd	Electricity generation	29.90	29.90	Chuncheon
Incheon-Gimpo Expressway Co., Ltd.	Construction	22.32	20.04	Anyang
BLUE OCEAN Private Equity Fund	Private equity financial	27.52	27.52	Seoul
UITrans LRT Co., Ltd.	Transporting	38.19	38.19	Seoul
Keystone-HYUNDAI SECURITIES NO. 1. Private Equity Fund	Private equity financial	40.45	40.45	Seoul
CHUNGJU ENTERPRISE CITY DEVELOPMENT Co.,Ltd				
Daesung Steel ^{(*)1}	Real estate development	25.10	29.53	Chungju
KoFC POSCO HANWHA KB Shared Growth NO. 2. Private Equity Fund ^{(*)1}	Steel sales	17.54	17.54	Busan
KONES, Corp.	Investment in new technologies	12.50	12.50	Seoul
Gale International Korea, LLC	Technical service	41.67	41.67	Gyeongju
Pohang Techno Valley PFV Corporation	Real estate rental	29.90	29.90	Seoul
Gunggi Green Energy ^{(*)1}	Real estate development and rental	54.99	30.28	Pohang
Pohang Special Welding Co.,Ltd.	Electricity generation	19.00	19.00	Hwaseong
KC Chemicals CORP ^{(*)1}	Welding material and tools manufacturing and sales	50.00	50.00	Pohang
Posco-IDV Growth Ladder IP Fund ^{(*)1}	Machinery manufacturing	19.00	19.00	Hwaseong
DAEHO GLOBAL MANAGEMENT CO., LTD.	Investment in new technologies	17.86	17.86	Seoul
Clean Gimpo Co., Ltd.	Investment advisory service	35.82	35.82	Pohang
Postech Early Stage Fund ^{(*)1}	Construction	29.58	29.58	Gimpo
POSCO Energy Valley Fund	Investment in new technologies	10.00	10.00	Pohang
Pureun Tongyeong Enviro Co., Ltd.	Investment in new technologies	20.00	20.00	Pohang
Posgreen Co., Ltd. ^{(*)1}	Sewerage treatment	20.40	20.40	Tongyeong
Pohang E&E Co., Ltd.	Plaster manufacturing	19.00	19.00	Gwangyang
POSTECH Social Enterprise Fund ^{(*)1}	Investment in waste energy	30.00	30.00	Pohang
Applied Science Corp.	Investment in new technologies	9.17	9.17	Seoul
Noeul Green Energy ^{(*)1}	Machinery manufacturing	25.73	24.88	Paju
Universal Studios Resort Asset Management Corporation	Electricity generation	20.00	10.00	Seoul
Pohang Techno Valley AMC	Real estate services	26.17	26.17	Seoul
METAPOLIS Co.,Ltd.	Construction	29.50	29.50	Pohang
New Songdo International City Development, LLC ..	Multiplex development	40.05	40.05	Hwaseong
Busan-Gimhae Light Rail Transit Co., Ltd.	Real estate rental	29.90	29.90	Seoul
Mokpo Deayang Industrial Corporation	Transporting	25.00	25.00	Gimhae
Clean Iksan Co., Ltd.	Real estate development	27.40	27.40	Mokpo
Innovalley Co., Ltd.	Construction	23.50	23.50	Iksan
Pure Gimpo Co., Ltd.	Real estate development	28.77	28.77	Yongin
Garolim Tidal Power Plant Co.,Ltd	Construction	28.79	28.79	Seoul
	Tidal power plant construction and management	32.13	32.13	Seosan

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

Investee	Category of business	Ownership (%)		Region
		2015	2016	
2016 PoscoPlutus New Technology Investment Fund ^{(*)3}	Investment in new technologies	—	25.17	Seoul
Hyundai Invest Guggenheim CLO				
Private Special Asset Investment Trust II ^{(*)3}	Investment in new technologies	—	38.47	Seoul
PoscoPlutus Bio Fund ^{(*)1,3}	Investment in new technologies	—	11.97	Seoul
PoscoPlutus Project Fund ^{(*)1,3}	Investment in new technologies	—	11.91	Seoul
Posco Agrifood Export Investment Fund ^{(*)3}	Investment in new technologies	—	30.00	Seoul
PoscoPlutus Project II Investment Fund ^{(*)1,3}	Investment in new technologies	—	0.61	Seoul
Posco Culture Contents Fund ^{(*)3}	Investment in new technologies	—	31.67	Seoul
SeAH Changwon Integrated Special Steel ^{(*)4}	Steel manufacturing and sales	19.94	—	Changwon
Green Jang Ryang Co.Ltd ^{(*)4}	Sewerage treatment	25.00	—	Pohang
Daewoo Public Car Sales (Gwangju) CO.,Ltd ^{(*)4}	Leasing services	50.00	—	Gwangju
Synergy Private Equity Fund ^{(*)5}	Investment in new technologies	17.86	—	Seoul
Posco e&c Songdo International Building ^{(*)6}	Non-residential building lease	49.00	—	Seoul
[Foreign]				
South-East Asia Gas Pipeline Company Ltd.	Pipeline construction	25.04	25.04	Myanmar
AES-VCM Mong Duong Power Company Limited	Electricity generation	30.00	30.00	Vietnam
7623704 Canada Inc. ^{(*)1}	Investments management	10.40	10.40	Canada
Eureka Moly LLC	Raw material manufacturing and sales	20.00	20.00	USA
AMCI (WA) PTY LTD.	Iron ore sales & mine development	49.00	49.00	Australia
KOREA LNG LTD.	Gas production and sales	20.00	20.00	England
Nickel Mining Company SAS	Raw material manufacturing and sales	49.00	49.00	New Caledonia
NCR LLC	Coal sales	29.41	29.41	Canada
PT. Batutua Tembaga Raya	Raw material manufacturing and sales	24.10	24.10	Indonesia
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	Tinplate manufacturing and sales	34.00	34.00	China
PT. Wampu Electric Power	Construction and engineering service	20.00	20.00	Indonesia
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	Steel processing and sales	25.00	25.00	China
VSC POSCO Steel Corporation	Steel processing and sales	50.00	50.00	Vietnam
IMFA ALLOYS FINLEASE LTD.	Raw material manufacturing and sales	24.00	24.00	India
General Medicines Company Ltd.	Medicine manufacturing and sales	33.00	33.00	Sudan
PT.INDONESIA POS CHEMTECH CHOSUN Ref	Refractory manufacturing and sales	30.19	30.19	Indonesia
POSK(Pinghu) Steel Processing Center Co., Ltd.	Steel processing and sales	20.00	20.00	China
SHANGHAI LANSHENG DAEWOO CORP.	Trading	49.00	49.00	China
AN KHANH NEW CITY DEVELOPMENT J.V CO., LTD.	Highway construction and new town development	50.00	50.00	Vietnam
POS-SEAHSTEELWIRE(TIANJIN)CO., Ltd	Steel processing and sales	25.00	25.00	China
SHANGHAI WAIGAOQIAO FREE TRADE ZONE LANSHENG DAEWOO IN'L TRADING CO., LTD.	Trading	49.00	49.00	China
PT. Tanggamus Electric Power ^{(*)1}	Construction and engineering service	17.50	17.50	Indonesia
NS-Thainox Auto Co., Ltd.	Steel manufacturing and sales	49.00	49.00	Vietnam
Hamparan Mulya	Resource development	45.00	45.00	Indonesia
Sebang Steel	Scrap sales	49.00	49.00	Japan
GLOBAL KOMSCO Daewoo LLC	Mintage	35.00	35.00	Uzbekistan
POSCO-Poggenamp Electrical Steel Pvt. Ltd.	Steel manufacturing	26.00	26.00	India
Fifth Combined Heat and Power Plant LLC	Thermal power generation	30.00	30.00	Mongolia
KIRIN VIETNAM CO., LTD ^{(*)1}	Panel manufacturing	19.00	19.00	Vietnam
POSCHROME (PROPRIETARY) LIMITED	Raw material manufacturing and sales	50.00	50.00	South Africa

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

Investee	Category of business	Ownership (%)		Region
		2015	2016	
CAML RESOURCES PTY LTD.	Raw material manufacturing and sales	33.34	33.34	Australia
KG Power(M) SDN. BHD	Energy & resource development	20.00	20.00	Malaysia
LI3 ENERGY INC	Energy & resource development	26.06	26.06	Peru
LLP POSUK Titanium	Titanium manufacturing and sales	36.83	36.83	Kazakhstan
POS-SeAH Steel Wire (Thailand) Co., Ltd. ^(*)3)	Steel manufacturing and sales	—	25.00	Thailand
Jupiter Mines Limited ^(*)1,3)	Energy & resource development	—	17.08	Australia
Chongqing CISL High Strength Cold Rolling Steel Co., Ltd. ^(*)1,3)	Steel manufacturing and sales	—	10.00	China
KRAKATAU POS-CHEM DONG-SUH CHEMICAL ^(*)1,7)	Chemical by-product manufacturing and sales	—	19.00	Indonesia
XG Sciences ^(*)8)	New materials manufacturing and development	10.50	—	USA

- (*1) The Company is able to exercise significant influence even though the Company's percentage of ownership is below 20%.
- (*2) On September 30, 2015, in order to improve its financial standing and normalize operation, the associates reached a workout agreement with its Creditor Financial Institutions Committee. As a result, the Company lost its control and classified its shares as investment in an associate.
- (*3) These associates were newly established or acquired in 2016.
- (*4) Excluded from associates due to the disposal of shares during the year ended December 31, 2016.
- (*5) Excluded from associates due to liquidation during the year ended December 31, 2016.
- (*6) Reclassified to subsidiary from associate during the year ended December 31, 2016.
- (*7) Reclassified to associate from subsidiary during the year ended December 31, 2016.
- (*8) Excluded from associates due to the loss of significant influence caused by change in composition of the Board of Directors during the year ended December 31, 2016.

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

2) Joint ventures

Details of joint ventures as of December 31, 2015 and 2016 are as follows:

Investee	Category of business	Ownership (%)		Region
		2015	2016	
[Domestic]				
POSCO MITSUBISHI CARBON TECHNOLOGY	Steel processing and sales	60.00	60.00	Gwangyang
POSCO ES MATERIALS CO., LTD (*1)	Secondary battery manufacturing	50.00	—	Gumi
[Foreign]				
Roy Hill Holdings Pty Ltd.	Energy & resource development	12.50	12.50	Australia
POSCO-NPS Niobium LLC	Mine development	50.00	50.00	USA
CSP — Companhia Siderurgica do Pecem	Steel manufacturing and sales	20.00	20.00	Brazil
BX STEEL POSCO Cold Rolled Sheet Co., Ltd.	Steel processing and sales	25.00	25.00	China
KOBRASCO	Steel materials manufacturing and sales	50.00	50.00	Brazil
DMSA/AMSA	Energy & resource development	4.07	4.00	Madagascar
PT. POSMI Steel Indonesia	Steel processing and sale	36.69	36.69	Indonesia
Henan Tsingpu Ferro Alloy Co., Ltd.	Raw material manufacturing and sales	49.00	49.00	China
VNS-DAEWOO Co., Ltd.	Steel scrap processing and sale	40.00	40.00	Vietnam
YULCHON MEXICO S.A. DE C.V.	Tube for automobile manufacturing	19.00	19.00	Mexico
POSCO-SAMSUNG-Slovakia Processing Center	Steel processing and sales	30.00	30.00	Slovakia
Zhangjiagang Pohang Refractories Co., Ltd.	Refractory manufacturing	50.00	50.00	China
United Spiral Pipe, LLC	Material manufacturing and sales	35.00	35.00	USA
Korea Siberia Wood CJSC	Forest resource development	50.00	50.00	Russia
Hyunson Engineering & Construction HYENCO	Construction	4.90	4.90	Algeria
USS-POSCO Industries	Cold rolled coil manufacturing and sales	50.00	50.00	USA
POSCO E&C Saudi Arabia (*2)	Construction	—	40.00	Saudi Arabia
TANGGANG-POSCO LED (*3)	LED manufacturing and sales	50.00	—	China

(*1) Reclassified to subsidiary from joint venture during the year ended December 31, 2016.

(*2) These joint ventures were newly established in 2016.

(*3) Excluded from joint ventures due to the disposal of shares during the year ended December 31, 2016.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2014, 2015 and 2016

(e) Newly included subsidiaries

Consolidated subsidiaries acquired or newly established during the year ended December 31, 2016 are as follows:

Company	Date of addition	Ownership (%)	Reason
Daewoo Minerals Canada Corporation	March 2016	100.00	New establishment
POCA STEM Co., Ltd.	June 2016	100.00	Acquisition of control
Chongqing POSCO CISL Automotive Steel Co., Ltd.	July 2016	51.00	New establishment
Posco e&c Songdo International Building	September 2016	100.00	Reclassification from associate
POSCO ES MATERIALS CO., LTD.	December 2016	75.32	Reclassification from joint venture

(f) Excluded subsidiaries

Subsidiaries that were excluded from consolidation during the year ended December 31, 2016 are as follows:

Company	Date of exclusion	Reason
Tamra Offshore Wind Power Co., Ltd	January 2016	Disposal
POSCO Investment Co., Ltd.	January 2016	Merged into POSCO Asia Co., Ltd.
Xenesys Inc.	February 2016	Disposal
POSCO LED Co., Ltd.	March 2016	Disposal
POSHIMETAL Co., Ltd.	March 2016	Merged into POSCO
PMM PIPE	April 2016	Merged into POSCO Japan PC CO., LTD. (formerly, POSCO-JEPC Co., Ltd.)
POSCO Green Gas Technology	May 2016	Merged into POSCO
Qingdao Pos-metal Co., Ltd.	May 2016	Disposal
POSCO FOUNDATION	June 2016	Exclusion upon liquidation
POSCO MEXICO HUMAN TECH S.A. de C.V.	June 2016	Merged into POSCO MEXICO S.A. DE C.V.
POSCO AST	July 2016	Merged into POSCO Processing&Service
KRAKATAU POS-CHEM DONG-SUH CHEMICAL	September 2016	Reclassification to associates due to decline in ownership
Dalian POSCO ICT-DONGFANG Engineering Co., Ltd.	September 2016	Merged into POSCO ICT-China
POSCO-JWPC Co., Ltd.	November 2016	Merged into POSCO Japan PC CO., LTD. (formerly, POSCO-JEPC Co., Ltd.)
Steel Processing and Fabricating Center Co., LTD	November 2016	Merged into POSCO Processing&Service
POSCO TMC Co., Ltd.	November 2016	Merged into POSCO Processing&Service
Daewoo Paper Manufacturing Co., Ltd.	December 2016	Disposal
Tianjin Daewoo Paper Manufacturing Co., Ltd.	December 2016	Exclusion upon liquidation
DAEWOO TEXTILE BUKHARA LLC	December 2016	Merged into Daewoo Textile LLC
EPC INGENIERIA & SERVICIOS DE COSTA RICA SA	December 2016	Exclusion upon liquidation

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2. Statement of Compliance and Basis of Presentation

Statement of compliance

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (“IFRSs”), as issued by the International Accounting Standards Board.

The consolidated financial statements were authorized for issue by the authorized directors on March 2, 2017.

Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis, except for the following material items in the statement of financial position, as described in the accounting policy below.

- (a) Derivatives instruments are measured at fair value
- (b) Available-for-sale financial assets are measured at fair value
- (c) Defined benefit liabilities are measured at the present value of the defined benefit obligation less the fair value of the plan assets

Functional and presentation currency

The financial statements of POSCO and subsidiaries are prepared in functional currency of the respective operation. These consolidated financial statements are presented in Korean Won, which is POSCO’s functional currency which is the currency of the primary economic environment in which POSCO operates.

Use of estimates and judgments

The preparation of the consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period prospectively.

(a) Judgments

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the consolidated financial statements is included in the following notes:

- Note 1 — Subsidiaries, associates and joint ventures
- Note 10 — Assets held for sale
- Note 11 — Investments in associates and joint ventures
- Note 12 — Joint operations
- Note 25 — Hybrid bonds

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(b) Assumptions and estimation uncertainties

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next fiscal year is included in the following notes:

- Note 11 — Investments in associates and joint ventures
- Note 15 — Goodwill and other intangible assets, net
- Note 20 — Provisions
- Note 21 — Employee benefits
- Note 29 — Construction contracts
- Note 35 — Income taxes
- Note 38 — Commitments and contingencies

(c) Measurement of fair value

The Company's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities. The Company has an established control framework with respect to the measurement of fair values. This includes a valuation team that has overall responsibility for overseeing all significant fair value measurements, including Level 3 fair values, and reports directly to the financial officer.

The valuation team regularly reviews significant unobservable inputs and valuation adjustments. If third party information, such as broker quotes or pricing services, is used to measure fair values, then the valuation team assesses the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of IFRS including the level in the fair value hierarchy in which such valuation techniques should be classified.

Significant valuation issues are reported to the Company's Audit Committee.

When measuring the fair value of an asset or a liability, the Company uses market observable data as far as possible. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows.

- Level 1 — unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 — inputs other than quoted prices included in Level 1 that are observable for the assets or liability, either directly or indirectly.
- Level 3 — inputs for the assets or liability that are not based on observable market data.

If the inputs used to measure the fair value of an asset or a liability might be categorized in different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement. The Company recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Information about the assumptions made in measuring fair values is included in the following note:

- Note 23 — Financial instruments

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3. Summary of Significant Accounting Policies

The significant accounting policies applied by the Company in preparation of its consolidated financial statements are included below. The accounting policies set out below have been applied consistently to all periods presented in these financial statements.

Basis of consolidation

(a) Business combinations

The Company accounts for business combinations using the acquisition method when control is transferred to the Company.

The consideration transferred in the acquisition is generally measured at fair value, as are the identifiable net assets acquired. Any goodwill that arises is tested annually for impairment. Any gain on bargain purchase is recognized in profit or loss immediately. Transaction costs are expensed as incurred, except if related to the issue of debt or equity securities. The consideration transferred does not include amounts related to the settlement of pre-existing relationships. Such amounts are generally recognized in profit or loss.

Any contingent consideration payable is measured at fair value at the acquisition date. If the contingent consideration is classified as equity, then it is not remeasured and settlement is accounted for within equity. Otherwise, subsequent changes in the fair value of the contingent consideration are recognized in profit or loss.

If share-based payment awards (replacement awards) are required to be exchanged for awards held by the acquiree's employees (acquiree's awards), then all or a portion of the amount of the acquirer's replacement awards is included in measuring the consideration transferred in the business combination. This determination is based on the market-based measure of the replacement awards compared with the market-based measure of the acquiree's awards and the extent to which the replacement awards relate to pre-combination service.

(b) Non-controlling interests

Non-controlling interests are measured at their proportionate share of the acquiree's identifiable net assets at the acquisition date. Changes in the Company's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

(c) Subsidiaries

Subsidiaries are entities controlled by the Company. The Company controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

(d) Loss of control

When the Company loses control over a subsidiary, it derecognizes the assets and liabilities of the subsidiary, and any related non-controlling interests and other components of equity. Any resulting gain or loss is recognized in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

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(e) Interests in equity-accounted investees

The Company's interests in equity-control investees comprise interests in associates and joint ventures. Associates are those entities in which the Company has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Company has joint control, whereby the Company has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Interests in associates and joint ventures are accounted for using the equity method. They are recognized initially at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Company's share of the profit or loss and other comprehensive income of equity-accounted investees, until the date on which significant influence or joint control ceases.

(f) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated. Unrealized gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Company's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

Foreign currency transactions and translation

(a) Foreign currency transactions

Foreign currency transactions are initially recorded using the spot exchange rate between the functional currency and the foreign currency at the date of the transaction. At the end of each reporting period, foreign currency monetary items are translated using the closing rate. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the original transaction. Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rate at the date fair value was initially determined.

Exchange differences arising on the settlement of monetary items or on translating monetary items at rates different from those at which they were translated on initial recognition during the period or in previous financial statements are recognized in profit or loss in the period in which they arise. When gains or losses on non-monetary items are recognized in other comprehensive income, exchange components of those gains or losses are recognized in other comprehensive income. Conversely, when gains or losses on non-monetary items are recognized in profit or loss, exchange components of those gains or losses are recognized in profit or loss.

(b) Foreign operations

If the presentation currency of the Company is different from a foreign operation's functional currency, the financial statements of the foreign operation are translated into the presentation currency using the following methods:

The assets and liabilities of foreign operations, whose functional currency is not the currency of a hyperinflationary economy, are translated to presentation currency at

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exchange rates at the reporting date. The income and expenses of foreign operations are translated to functional currency at exchange rates at the dates of the transactions. Foreign currency differences are recognized in other comprehensive income.

Any goodwill arising on the acquisition of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition of that foreign operation are treated as assets and liabilities of the foreign operation. Thus, they are expressed in the functional currency of the foreign operation and translated at the closing rate.

When a foreign operation is disposed of, the relevant amount in the translation is transferred to profit or loss as part of the profit or loss on disposal. On the partial disposal of a subsidiary that includes a foreign operation, the relevant proportion of such cumulative amount is reattributed to non-controlling interest. In any other partial disposal of a foreign operation, the relevant proportion is reclassified to profit or loss.

Foreign exchange gains or losses arising from a monetary item receivable from or payable to a foreign operation, the settlement of which is neither planned nor likely to occur in the foreseeable future and which in substance is considered to form part of the net investment in the foreign operation, are recognized in other comprehensive income in the translation reserve.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, demand deposits, and short-term investments in highly liquid securities that are readily convertible to known amounts of cash with maturities of three months or less from the acquisition date and which are subject to an insignificant risk of changes in value. Equity investments are excluded from cash and cash equivalents.

Non-derivative financial assets

The Company recognizes and measures non-derivative financial assets by the following four categories: financial assets at fair value through profit or loss, held-to-maturity financial assets, loans and receivables and available-for-sale financial assets. The Company recognizes financial assets in the consolidated statement of financial position when the Company becomes a party to the contractual provisions of the instrument.

Upon initial recognition, non-derivative financial assets are measured at their fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the asset's acquisition or issuance.

(a) Financial assets at fair value through profit or loss

Financial assets are classified at fair value through profit or loss if they are held for trading or designated as such upon initial recognition. Upon initial recognition, transaction costs are recognized in profit or loss when incurred. Financial assets at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss.

(b) Held-to-maturity financial assets

A non-derivative financial asset with a fixed or determinable payment and fixed maturity, for which the Company has the positive intention and ability to hold to maturity, is classified as

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held-to-maturity. Subsequent to initial recognition, held-to-maturity financial assets are measured at amortized cost using the effective interest rate method.

(c) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Subsequent to initial recognition, loans and receivables are measured at amortized cost using the effective interest method unless the effect of discounting is immaterial.

(d) Available-for-sale financial assets

Available-for-sale financial assets are those non-derivative financial assets that are designated as available-for-sale or are not classified as financial assets at fair value through profit or loss, held-to-maturity financial assets or loans and receivables. Subsequent to initial recognition, they are measured at fair value, with changes in fair value, net of any tax effect, recorded in other comprehensive income in equity. Investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured and derivatives that are linked to and must be settled by delivery of such unquoted equity instruments are measured at cost. When a financial asset is derecognized or impairment losses are recognized, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss. Dividends on an available-for-sale equity instrument are recognized in profit or loss when the Company's right to receive payment is established.

(e) Derecognition of non-derivative financial assets

The Company derecognizes non-derivative financial assets when the contractual rights to the cash flows from the financial asset expire, or the Company transfers the rights to receive the contractual cash flows from the financial asset as well as substantially all the risks and rewards of ownership of the financial asset. Any interest in a transferred financial asset that is created or retained by the Company is recognized as a separate asset or liability.

If the Company retains substantially all the risks and rewards of ownership of the transferred financial assets, the Company continues to recognize the transferred financial assets and recognizes financial liabilities for the consideration received.

(f) Offsetting a financial asset and a financial liability

Financial assets and financial liabilities are offset and the net amount is presented in the consolidated statement of financial position only when the Company currently has a legally enforceable right to offset the recognized amounts, and there is the intention to settle on a net basis or to realize the asset and settle the liability simultaneously.

Inventories

Inventory costs, except materials-in-transit in which costs are determined by using specific identification method, are determined by using the moving-weighted average method. The cost of inventories comprise all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. The allocation of fixed production overheads to the costs of finished goods or work in progress are based on the normal capacity of the production facilities.

Inventories are measured at the lower of cost or net realizable value. The amount of any write-down of inventories to net realizable value and all losses of inventories are recognized as an expense

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in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories arising from an increase in net realizable value is recognized as a reduction in the amount of inventories recognized as a cost of goods sold in the period in which the reversal occurs.

The carrying amount of those inventories is recognized as cost of goods sold in the period in which the related revenue is recognized.

Non-current assets held for sale

Non-current assets or disposal groups comprising assets and liabilities that are expected to be recovered primarily through sale rather than through continuing use are classified as held for sale. In order to be classified as held for sale, the assets or disposal groups must be available for immediate sale in their present condition and their sale must be highly probable. The assets or disposal groups that are classified as non-current assets held for sale are measured at the lower of their carrying amount and fair value less cost to sell.

The Company recognizes an impairment loss for any initial or subsequent write-down of an asset or disposal group to fair value less costs to sell, and a gain for any subsequent increase in fair value less costs to sell, up to the cumulative impairment loss previously recognized in accordance with IAS No. 36 "Impairment of Assets".

A non-current asset that is classified as held for sale or part of a disposal group classified as held for sale is not depreciated (or amortized).

Investment property

Property held to earn rentals or for capital appreciation or both is classified as investment property. Investment property is measured initially at its cost. Transaction costs are included in the initial measurement. Subsequently, investment property is carried at depreciated cost less any accumulated impairment losses.

Subsequent costs are recognized in the carrying amount of investment property at cost or, if appropriate, as separate items if it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the day-to-day servicing are recognized in profit or loss as incurred.

Depreciation methods, useful lives and residual values are reviewed at the end of each reporting date and adjusted, if appropriate. The change is accounted for as a change in an accounting estimate.

Property, plant and equipment

Property, plant and equipment are initially measured at cost and after initial recognition, are carried at cost less accumulated depreciation and any accumulated impairment losses. The cost of property, plant and equipment includes expenditures arising directly from the construction or acquisition of the asset, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and, when the Company has an obligation to remove the asset or restore the site, an estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

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The cost of replacing a part of an item is recognized in the carrying amount of the item of property, plant and equipment, if the following recognition criteria are met:

- (a) it is probable that future economic benefits associated with the item will flow to the Company, and
- (b) the cost can be measured reliably.

The carrying amount of the replaced part is derecognized at the time the replacement part is recognized. The costs of the day-to-day servicing of the item are recognized in profit or loss as incurred.

Items of property, plant and equipment are depreciated from the date they are available for use or, in respect of self-constructed assets, from the date that the asset is completed and ready for use. Other than land, the costs of an asset less its estimated residual value are depreciated. Depreciation of property, plant and equipment is recognized in profit or loss on a straight-line basis, which most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset, over the estimated useful lives of each component of an item of property, plant and equipment. Leased assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Company will obtain ownership by the end of the lease term. Land is not depreciated.

Each part of an item of property, plant and equipment with a cost that is significant in relation to the total cost of the item is depreciated separately.

The gain or loss arising from the derecognition of an item of property, plant and equipment is included in profit or loss when the item is derecognized.

The estimated useful lives for the current and comparative periods are as follows:

Buildings	3-60 years
Structures	4-50 years
Machinery and equipment	2-25 years
Vehicles	3-10 years
Tools	4-10 years
Furniture and fixtures	3-10 years
Lease assets	3-20 years

The estimated residual value, useful lives and the depreciation method are reviewed at least at the end of each reporting period and, if expectations differ from previous estimates, the changes are accounted for as changes in accounting estimates.

Borrowing costs

The Company capitalizes borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. Other borrowing costs are recognized in expense as incurred. A qualifying asset is an asset that requires a substantial period of time to get ready for its intended use or sale. Financial assets and inventories that are manufactured or otherwise produced over a short period of time are not qualifying assets. Assets that are ready for their intended use or sale when acquired are not qualifying assets.

To the extent that the Company borrows funds specifically for the purpose of obtaining a qualifying asset, the Company determines the amount of borrowing costs eligible for capitalization as the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings. The Company immediately recognizes other borrowing

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costs as an expense. To the extent that the Company borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the Company shall determine the amount of borrowing costs eligible for capitalization by applying a capitalization rate to the expenditures on that asset. The capitalization rate shall be the weighted average of the borrowing costs applicable to the borrowings of the Company that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. The amount of borrowing costs that the Company capitalizes during a period shall not exceed the amount of borrowing costs incurred during that period.

Intangible assets

Intangible assets are measured initially at cost and, subsequently, are carried at cost less accumulated amortization and accumulated impairment losses.

Amortization of intangible assets except for goodwill is calculated on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use. The residual value of intangible assets is zero. However, as there are no foreseeable limits to the periods over which club memberships are expected to be available for use, this intangible asset is determined as having an indefinite useful life and not amortized.

Intellectual property rights	5-10 years
Development costs	3-10 years
Port facilities usage rights	4-75 years
Other intangible assets	2-25 years

Amortization periods and the amortization methods for intangible assets with finite useful lives are reviewed at the end of each reporting period. The useful lives of intangible assets that are not being amortized are reviewed at the end of each reporting period to determine whether events and circumstances continue to support indefinite useful life assessments for those assets. Changes are accounted for as changes in accounting estimates.

Expenditures on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, are recognized in profit or loss as incurred. Development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Company intends to and has sufficient resources to complete development and to use or sell the asset. Other development expenditures are recognized in profit or loss as incurred.

Subsequent expenditures are capitalized only when they increase the future economic benefits embodied in the specific asset to which they relate. All other expenditures, including expenditures on internally generated goodwill and brands, are recognized in profit or loss as incurred.

Exploration for and evaluation of mineral resources

POSCO is engaged in exploration projects for mineral resources through subsidiaries, associates and joint ventures or other contractual arrangements. Expenditures related to the development of mineral resources are recognized as exploration or development intangible assets. The nature of these intangible assets are as follows:

(a) Exploration and evaluation assets

Exploration and evaluation assets consist of expenditures for topographical studies, geophysical studies and trenching. These assets are reclassified as development assets when it is proved that the exploration has identified commercially viable mineral deposit.

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(b) Development assets

When proved reserves are determined and development is sanctioned, development expenditures incurred are capitalized. These expenditures include evaluation of oil fields, construction of oil/gas wells, drilling for viability and others. On completion of development and inception of extraction for commercial production of developed proved reserves, the development assets are reclassified as either property, plant and equipment or as intellectual property rights (mining rights) under intangible assets based on the nature of the capitalized expenditure.

The respective property, plant and equipment and intellectual property (mining rights) are each depreciated and amortized based on proved reserves on a unit of production basis.

Government grants

Government grants are not recognized unless there is reasonable assurance that the Company will comply with the grant's conditions and that the grant will be received.

(a) Grants related to assets

Government grants whose primary condition is that the Company purchase, construct or otherwise acquire long-term assets are deducted from the carrying amount of the assets and recognized in profit or loss on a systematic and rational basis over the life of the depreciable assets.

(b) Grants related to income

Government grants which are intended to compensate the Company for expenses incurred are deducted from the related expenses.

Leases

The Company classifies and accounts for leases as either a finance or operating lease, depending on the terms. Leases where the Company assumes substantially all of the risks and rewards of ownership are classified as finance leases. All other leases are classified as operating leases.

(a) Finance leases

At the commencement of the lease term, the Company recognizes as finance assets and finance liabilities the lower amount of the fair value of the leased property and the present value of the minimum lease payments, each determined at the inception of the lease. Any initial direct costs are added to the amount recognized as an asset.

Minimum lease payments are apportioned between the finance charge and the reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability. Contingent rents are charged as expenses in the periods in which they are incurred.

The depreciable amount of a leased asset is allocated to each accounting period during the period of expected use on a systematic basis consistent with the depreciation policy the Company adopts for similar depreciable assets that are owned. If there is no reasonable certainty that the Company will obtain ownership by the end of the lease term, the asset is fully depreciated over the shorter of the lease term and its useful life.

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(b) Operating leases

Lease obligations under operating leases are recognized as an expense on a straight-line basis over the lease term. Contingent rents are charged as expenses in the periods in which they are incurred.

(c) Determining whether an arrangement contains a lease

Determining whether an arrangement is, or contains, a lease is based on the substance of the arrangement and requires an assessment of whether fulfillment of the arrangement is dependent on the use of a specific asset or assets (the asset) and the arrangement conveys a right to use the asset.

At inception or reassessment of the arrangement, management of the Company separates payments and other consideration required by such an arrangement into those for the lease and those for other elements on the basis of their relative fair values. If management of the Company concludes for a financial lease that it is impracticable to separate the payments reliably, the Company recognizes an asset and a liability at an amount equal to the fair value of the underlying asset that was identified as the subject of the lease. Subsequently, the liability shall be reduced as payments are made and an imputed finance charge on the liability recognized using the purchaser's incremental borrowing rate of interest.

Impairment for financial assets

A financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is objective evidence that it is impaired. A financial asset is impaired if objective evidence indicates that a loss event has occurred after the initial recognition of the asset, and that the loss event had a negative effect on the estimated future cash flows of that asset that can be estimated reliably. However, losses expected as a result of future events, regardless of likelihood, are not recognized.

Objective evidence that a financial asset or group of financial assets are impaired includes:

- (a) significant financial difficulty of the issuer or obligor;
- (b) a breach of contract, such as a default or delinquency in interest or principal payments;
- (c) the lender, for economic or legal reasons relating to the borrower's financial difficulty, granting to the borrower a concession that the lender would not otherwise consider;
- (d) it becoming probable that the borrower will enter bankruptcy or other financial reorganization;
- (e) the disappearance of an active market for that financial asset because of financial difficulties;
or
- (f) observable data indicating that there is a measurable decrease in the estimated future cash flows from a group of financial assets since the initial recognition of those assets, although the decrease cannot yet be identified with the individual financial assets in the group.

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In addition, for an investment in an equity security, a significant or prolonged decline in its fair value below its cost is objective evidence of impairment.

If there is objective evidence that financial assets are impaired, impairment losses are measured and recognized.

(a) Financial assets measured at amortized cost

An impairment loss in respect of a financial asset measured at amortized cost is calculated as the difference between its carrying amount and the present value of its estimated future cash flows discounted at the asset's original effective interest rate. If it is not practicable to obtain the instrument's estimated future cash flows, impairment losses would be measured by using prices from any observable current market transactions. The Company can recognize impairment losses directly or establish a provision to cover impairment losses. If, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss shall be reversed either directly or by adjusting an allowance account.

(b) Financial assets carried at cost

If there is objective evidence that an impairment loss has occurred on an unquoted equity instrument that is not carried at fair value because its fair value cannot be reliably measured, or on a derivative asset that is linked to and must be settled by delivery of such an unquoted equity instrument, the amount of the impairment loss is measured as the difference between the carrying amount of the financial asset and the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment losses are not reversed.

(c) Available-for-sale financial assets

When a decline in the fair value of an available-for-sale financial asset has been recognized in other comprehensive income and there is objective evidence that the asset is impaired, the cumulative loss that had been recognized in other comprehensive income shall be reclassified from equity to profit or loss as a reclassification adjustment even though the financial asset has not been derecognized. Impairment losses recognized in profit or loss for an investment in an equity instrument classified as available-for-sale are not reversed through profit or loss. If, in a subsequent period, the fair value of a debt instrument classified as available-for-sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognized in profit or loss, the impairment loss shall be reversed, with the amount of the reversal recognized in profit or loss.

Impairment for non-financial assets

The carrying amounts of the Company's non-financial assets, other than assets arising from construction contracts, employee benefits, inventories, deferred tax assets and non-current assets held for sale, are reviewed at the end of the reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Goodwill and intangible assets that have indefinite useful lives or that are not yet available for use, irrespective of whether there is any indication of impairment, are tested for impairment annually by comparing their recoverable amount to their carrying amount.

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Management estimates the recoverable amount of an individual asset. If it is impossible to measure the individual recoverable amount of an asset, then management estimates the recoverable amount of cash-generating unit ("CGU"). A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. The Company determined that individual operating entities are CGUs.

The recoverable amount of an asset or CGU is the greater of its value-in-use and its fair value less costs to sell. The value-in-use is estimated by applying a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU for which estimated future cash flows have not been adjusted, to the estimated future cash flows expected to be generated by the asset or CGU.

An impairment loss is recognized if the carrying amount of an asset or a CGU exceeds its recoverable amount. Impairment losses are recognized in profit or loss.

Goodwill acquired in a business combination is allocated to each CGU that is expected to benefit from the synergies arising from the goodwill acquired. Any impairment identified at the CGU level will first reduce the carrying amount of goodwill and then be used to reduce the carrying amount of the other assets in the CGU on a pro rata basis. Except for impairment losses in respect of goodwill which are never reversed, an impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

Derivative financial instruments and hedges

Derivatives are initially recognized at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are recognized in profit or loss.

(a) Embedded derivatives

Embedded derivatives are separated from the host contract and accounted for separately only if the following criteria have been met: (a) the economic characteristics and risks of the host contract and the embedded derivatives are not clearly and closely related to a separate instrument with the same terms as the embedded derivative that would meet the definition of a derivative, and (b) the hybrid (combined) instrument is not measured at fair value through profit or loss. Changes in the fair value of separable embedded derivatives from the host contract are recognized immediately in profit or loss. However, convertible rights of convertible bonds are not separated from the host contract and the compound financial instruments of bonds and convertible rights are designated and measured at fair value through profit and loss.

(b) Other derivatives

Changes in the fair value of a derivative that is not designated as a hedging instrument are recognized immediately in profit or loss.

Non-derivative financial liabilities

The Company classifies non-derivative financial liabilities into financial liabilities at fair value through profit or loss or other financial liabilities in accordance with the substance of the contractual

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arrangement and the definitions of financial liabilities. The Company recognizes financial liabilities in the consolidated statement of financial position when the Company becomes a party to the contractual provisions of the financial liability.

(a) Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading or designated as such upon initial recognition. Subsequent to initial recognition, financial liabilities at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss. Upon initial recognition, transaction costs that are directly attributable to the acquisition are recognized in profit or loss as incurred.

(b) Other financial liabilities

Non-derivative financial liabilities other than financial liabilities at fair value through profit or loss are classified as other financial liabilities. At the date of initial recognition, other financial liabilities are measured at fair value minus transaction costs that are directly attributable to the acquisition. Subsequent to initial recognition, other financial liabilities are measured at amortized cost using the effective interest method. The Company derecognizes a financial liability from the consolidated statement of financial position when it is extinguished (i.e. when the obligation specified in the contract is discharged, cancelled or expires).

Construction work in progress

The gross amount due from customers for contract work is presented for all contracts in which costs incurred plus recognized profits (less recognized losses) exceed progress billings. If progress billings exceed costs incurred plus recognized profits (less recognized losses), then the gross amount due to customers for contract work is presented. Cost includes all expenditures related directly to specific projects and an allocation of fixed and variable overheads incurred in the Company's contract activities based on normal operating capacity.

The Company recognizes advances received regarding the amount received from the ordering organization before the commencement of the construction. Also, the Company recognized trade accounts and notes receivable with respect to the amount billed to the ordering organization.

Employee benefits

(a) Short-term employee benefits

Short-term employee benefits are employee benefits that are due to be settled within twelve months after the end of the period in which the employees render the related service. When an employee has rendered service to the Company during an accounting period, the Company recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service as profit or loss. If the Company has a legal or constructive obligation which can be reliably measured, the Company recognizes the amount of expected payment for profit-sharing and bonuses payable as liabilities.

(b) Other long-term employee benefits

Other long-term employee benefits include employee benefits that are settled beyond 12 months after the end of the period in which the employees render the related service,

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and are calculated at the present value of the amount of future benefit that employees have earned in return for their service in the current and prior periods, less the fair value of any related assets. Any actuarial gains and losses are recognized in profit or loss in the period in which they arise.

(c) Retirement benefits: Defined contribution plans

For defined contribution plans, when an employee has rendered service to the Company during a period, the Company recognizes the contribution payable to a defined contribution plan in exchange for that service as an accrued expense, after deducting any contributions already paid. If the contributions already paid exceed the contribution due for service before the end of the reporting period, the Company recognizes that excess as an asset (prepaid expense) to the extent that the prepayment will lead to a reduction in future payments or a cash refund.

(d) Retirement benefits: Defined benefit plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Company's net obligation in respect of defined benefit plans is calculated by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value. The fair value of plan assets is deducted. The calculation is performed annually by an independent actuary using the projected unit credit method.

The discount rate is the yield at the reporting date on corporate bonds that have maturity dates approximating the terms of the Company's obligations and that are denominated in the same currency in which the benefits are expected to be paid. The Company recognizes all actuarial gains and losses arising from actuarial assumption changes and experiential adjustments in other comprehensive income when incurred.

When the fair value of plan assets exceeds the present value of the defined benefit obligation, the Company recognizes an asset, to the extent of the present value of the total of cumulative any economic benefits available in the form of refunds from the plan or reduction in the future contributions to the plan.

Remeasurements of net defined benefit liabilities, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in other comprehensive income. The Company determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset), taking into account any changes in the net defined benefit liability (asset) during the period as a result of contributions and benefit payments, net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss in curtailment is recognized immediately in profit or loss. The Company recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

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Provisions

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

The risks and uncertainties that inevitably surround many events and circumstances are taken into account in reaching the best estimate of a provision. Where the effect of the time value of money is material, provisions are determined at the present value of the expected future cash flows.

Where some or all of the expenditures required to settle a provision are expected to be reimbursed by another party, the reimbursement shall be recognized when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation. The reimbursement shall be treated as a separate asset.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimates. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision is reversed.

A provision for warranties is recognized when the underlying products are sold. The provision is based on historical warranty.

Regarding provision for construction warranties, warranty period starts from the completion of construction in accordance with construction contracts. If the Company has an obligation for warranties, provision for warranties which are estimated based on historical warranty data are recorded as cost of construction and provision for warranties during the construction period.

A provision for restoration regarding contamination of land is recognized in accordance with the Company's announced Environment Policy and legal requirement as needed.

A provision is used only for expenditures for which the provision was originally recognized.

Emission Rights

The Company accounts for greenhouse gases emission right and the relevant liability as follows pursuant to *the Act on Allocation and Trading of Greenhouse Gas Emission* which became effective in Korea in 2015.

(a) Greenhouse Gases Emission Right

Greenhouse Gases Emission Right consists of emission allowances which are allocated from the government free of charge and those purchased from the market. The cost includes any directly attributable costs incurred during the normal course of business.

Emission rights held for the purpose of performing the obligation are classified as intangible asset and initially measured at cost and subsequently carried at cost less accumulated impairment losses. Emission rights held for short-swing profits are classified as current asset and are measured at fair value with any changes in fair value recognized as profit or loss in the respective reporting period.

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The Company derecognizes an emission right asset when the emission allowance is unusable, disposed or submitted to government when the future economic benefits are no longer expected to be probable.

(b) Emission liability

Emission liability is a present obligation of submitting emission rights to the government with regard to emission of greenhouse gas. Emission liability is recognized when there is a high possibility of outflows of resources in performing the obligation and the costs required to perform the obligation are reliably estimable. Emission liability is an amount of estimated obligations for emission rights to be submitted to the government for the performing period. The emission liability is measured based on the expected quantity of emission for the performing period in excess of emission allowance in possession and the unit price for such emission rights in the market at the end of the reporting period.

Equity instruments

(a) Share capital

Common stock is classified as equity and the incremental costs arising directly attributable to the issuance of common stock less their tax effects are deducted from equity.

If the Company reacquires its own equity instruments, the amount of those instruments ("treasury shares") are presented as a contra equity account. No gain or loss is recognized in profit or loss on the purchase, sale, issuance or cancellation of its own equity instruments. When treasury shares are sold or reissued subsequently, the amount received is recognized as an increase to equity, and the resulting surplus or deficit on the transaction is recorded in capital surplus.

(b) Hybrid Bonds

Debt and equity instruments issued by the Company are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of financial liability and an equity instrument. When the Company has an unconditional right to avoid delivering cash or another financial asset to settle a contractual obligation, the instruments are classified as equity instruments.

Revenue

Revenue from the sale of goods, services provided and the use of assets is measured at the fair value of the consideration received or receivable, net of returns and allowances, trade discounts and volume rebates, which are not significant for all periods presented.

(a) Sale of goods

Revenue from the sale of goods in the ordinary course of activities is measured at the fair value of the consideration received or receivable, net of returns, trade discounts and volume rebates. Revenue is recognized when persuasive evidence exists, usually in the form of an executed sales agreement, that the significant risks and rewards of ownership have been transferred to the buyer, recovery of the consideration is probable, the associated costs and possible return of goods can be estimated reliably, there is no continuing management involvement with the goods, and the amount of revenue can be

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measured reliably. The appropriate timing for transfer of risks and rewards varies depending on the individual terms and conditions of the sales contract. For international sales, this timing depends on the type of international commercial terms of the contract.

(b) Construction contracts

Construction contracts of the Company primarily consist of contracts for the construction of plants and infrastructure facilities, and revenue recognition for different types of contracts is as follows:

When the outcome of a construction contract can be estimated reliably, contract revenue is recognized in profit or loss in proportion to the stage of completion of the contract. The stage of completion of a contract is determined based on the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs. Contract revenue includes the initial amount agreed in the contract plus any variation in contract work, claims and incentive payments, to the extent that it is probable that they will result in revenue and can be measured reliably.

When the outcome of a construction contract cannot be estimated reliably, the revenue is recognized only to the extent of contract costs incurred that it is probable will be recoverable. An expected loss on the construction contract is recognized as an expense immediately.

The Company has construction contracts in which control and the significant risks and rewards of ownership of the residential real estate are transferred to the buyer upon the delivery. Revenue and expenses from development and sale of these residential real estate are recognized when an individual unit of residential real estate is delivered to the buyer.

(c) Services rendered

Revenue from services rendered is recognized in profit or loss in proportion to the stage of completion of the transaction at the reporting date. The stage of completion is assessed by reference to surveys of work performed.

(d) Rental income

Rental income from investment property, net of lease incentives granted, is recognized in profit or loss on a straight-line basis over the term of the lease.

Finance income and finance costs

Finance income comprises interest income on funds invested (including available-for-sale financial assets), dividend income, gains on the disposal of available-for-sale financial assets and changes in the fair value of financial assets at fair value through profit or loss. Interest income is recognized as it accrues in profit or loss, using the effective interest rate method. Dividend income is recognized in profit or loss on the date that the Company's right to receive payment is established.

Finance costs comprise interest expense on borrowings and changes in the fair value of financial assets at fair value through profit or loss. Borrowing costs are recognized in profit or loss using the effective interest rate method.

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Income taxes

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

(a) Current income tax

Current income tax is the expected income tax payable or receivable on the taxable profit or loss for the year, using tax rates enacted or substantively enacted at the end of the reporting period and any adjustment to tax payable in respect of previous years. The taxable profit is different from the accounting profit for the period since the taxable profit is calculated excluding the temporary differences, which will be taxable or deductible in determining taxable profit of future periods, and non-taxable or non-deductible items from the accounting profit.

(b) Deferred income tax

The measurement of deferred income tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

The Company recognizes a deferred income tax liability for all taxable temporary differences associated with investments in subsidiaries, associates, and 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. The Company recognizes a deferred income tax asset for deductible temporary differences arising from investments in subsidiaries, associates and joint ventures, to the extent that it is probable that the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized. However, deferred income tax is not recognized for the following temporary differences: taxable temporary differences arising on the initial recognition of goodwill, or the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting profit or loss nor taxable income.

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

Deferred income tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred income tax liabilities and deferred income tax assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period to recover or settle the carrying amount of its assets and liabilities.

Deferred income tax assets and liabilities are offset only if there is a legally enforceable right to offset the related current income tax liabilities and assets, and they relate to income taxes levied by the same tax authority and they intend to settle current income tax liabilities and assets on a net basis.

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Earnings per share

Management calculates basic earnings per share (“EPS”) data for the Company’s ordinary shares, which is presented at the end of the statement of comprehensive income. Basic EPS is calculated by dividing profit attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held.

Operating segments

An operating segment is a component of the Company that : a) engages in business activities from which it may earn revenues and incur expenditures, including revenues and expenses that relate to transactions with any of the Company’s other components, b) whose operating results are regularly reviewed by the Company’s chief operating decision maker (“CODM”) to make decisions about resources to be allocated to the segment and assess its performance and for which discrete financial information is available. Management has determined that the CODM of the Company is the CEO.

With regard to construction segment, segment profit and loss is determined in the same way that consolidated profit after tax for the period is generally determined under IFRS except that revenues and expenses from the development and sale of certain residential real estate are determined by reference to the stage of completion of the contract activity at the end of the reporting period, while in the consolidated financial statements, they are recognized when an individual unit of residential real estate is delivered to the buyer. No adjustments are made for corporate allocations to segment profit and loss. In addition, segment assets and liabilities are generally measured based on total assets and liabilities in accordance with IFRS without any adjustment for corporate allocations, except that assets and liabilities in connection with the construction and sale of residential real estate are determined by reference to the stage of completion of the contract activity at the end of each period.

For the other segments, segment profit and loss is determined the same way that consolidated net after tax profit for the period is generally determined under IFRS without any adjustment for corporate allocations. The accounting policies used by each segment are consistent with the accounting policies used in the preparation of the consolidated financial statements. Segment assets and liabilities are generally measured based on total assets and liabilities in accordance with IFRS without any adjustment for corporate allocations. Also, segment assets and liabilities are based on the separate financial statements of the entities instead of on consolidated basis. In addition, there are varying levels of transactions amongst the reportable segments. These transactions include sales of property, plant and assets, and rendering of construction service and so on.

Segment results that are reported to the CEO include items directly attributable to a segment and do not include allocated items. Segment capital expenditure is the total cost incurred during the period to acquire property, plant and equipment, and intangible assets other than goodwill.

New standards and interpretations not yet adopted

The following new standards, interpretations and amendments to existing standards have been published but are not mandatory for the Company for annual periods beginning on January 1, 2016, and the Company has not early adopted them.

(a) IFRS No. 9 “Financial Instruments”

IFRS No. 9, published in July 2014, is effective for annual periods beginning on or after January 1, 2018, with earlier adoption permitted. It replaces existing guidance in IAS No. 39

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“Financial Instruments: Recognition and Measurement”. The Company plans to adopt IFRS No. 9 for the year beginning on January 1, 2018.

IFRS No. 9 will generally be applied retrospectively, however the Company plans to take advantage of the exemption allowing it not to restate the comparative information for prior periods with respect to classification and measurement including impairment changes. New hedge accounting requirements will generally be applied prospectively except for certain exemptions including the accounting for the time value of options.

Key features of the new standard, IFRS No. 9, are 1) classification and measurement of financial assets that reflects the business model in which the assets are managed and their cash flow characteristics, 2) impairment methodology that reflects ‘expected credit loss’ (ECL) model for financial assets, and 3) expanded scope of hedged items and hedging instruments which qualify for hedge accounting and changes in assessment method for effect of hedging relationships.

IFRS No. 9 will require the Company to assess the financial impact from application of IFRS No. 9 and revise its accounting processes and internal controls related to financial instruments. Actual impact of adopting IFRS No. 9 will be dependent on the financial instruments the Company holds and economic conditions at that time as well as accounting policy elections and judgment that it will make in the future.

The Company has not initiated any changes related to IFRS No. 9, therefore the Company has not performed an assessment of the impact resulting from the application of IFRS No. 9. The Company will complete the analysis of financial impacts arising from applying this standard in 2017.

Expected qualitative impacts on the consolidated financial statements are generally categorized as follows:

1) Classification and measurement of financial assets

Under IFRS No. 9, financial assets are classified into three principal categories; measured at amortized cost, fair value through other comprehensive income (FVOCI) and fair value through profit or loss (FVTPL). The classification is determined based on the business model in which assets are managed and their cash flow characteristics, as detailed in the below table.

Business model	Contractual cash flows are solely payments of principal and interests	All other cases
To collect contractual cash flows . . .	Amortized cost ^{(*)1}	
Both to collect contractual cash flows and sell financial assets	Fair value through other comprehensive income ^{(*)1}	Fair value through profit or loss ^{(*)2}
For trading, and others	Fair value through profit or loss	

(*1) The Company may irrevocably designate as at fair value through profit or loss to eliminate or significantly reduce an accounting mismatch.

(*2) The Company may irrevocably designate equity investments that is not held for trading as at fair value through other comprehensive income.

The adoption of IFRS No. 9 would potentially increase the proportion of financial assets that are measured at fair value through profit or loss, which may increase volatility in the Company’s profit or loss.

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As of December 31, 2016, the Company had loans and receivables amounting to ₩19,277,709 million, held-to-maturity financial assets amounting to ₩2,470 million, available-for-sale financial assets amounting to ₩2,514,924 million, and financial assets at fair value through profit or loss amounting to ₩147,582 million.

Under IFRS No. 9, a financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at fair value through profit or loss: 1) the asset is held within a business model whose objective is to hold assets to collect contractual cash flows; and 2) the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding. As of December 31, 2016, the Company had loans and receivables which amount to ₩19,277,709 million, and held-to-maturity financial assets which amount to ₩2,470 million, which were measured at amortized costs.

Under IFRS No. 9, a financial asset is measured at fair value through other comprehensive income if it meets both of the following conditions and is not designated as at fair value through profit or loss: 1) the asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and 2) the contractual terms of the financial asset give rise on specified dates to cash flow that are solely payments of principal and interest on the principal amount outstanding. As of December 31, 2016, the Company had debt instruments of ₩49,282 million classified as available-for-sale.

Under IFRS No. 9, on initial recognition of equity investment that is not held for trading, the Company may irrevocably elect to present subsequent changes in fair value in other comprehensive income, and will not reclassify the those items in other comprehensive income to profit or loss subsequently. As of December 31, 2016, the Company had equity investment that is classified as available-for-sale which amounts to ₩2,392,534 million.

2) Classification and measurement of financial liabilities

Under IFRS No. 9, the amount of change in the fair value attributable to the changes in the credit risk of the financial liabilities is presented in other comprehensive income, not in profit or loss, and the other comprehensive income amount will not be reclassified to profit or loss. However, if doing so creates or increase an accounting mismatch, the amount of change in the fair value is recognized in profit or loss.

As a portion of fair value change which was recognized in profit or loss under the existing standard, IAS No. 39, will be presented in other comprehensive income under IFRS No. 9, profit or loss related to valuation of financial liabilities is likely to decrease.

3) Impairment: Financial assets and contract assets

IFRS No. 9 replaces the incurred loss model in the existing standard with a forward-looking expected credit loss model for debt instruments, lease receivables, contractual assets, loan commitments, financial guarantee contracts.

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Under IFRS No. 9, impairment losses are likely to be recognized earlier than using the incurred loss model under the existing guidance in IAS No. 39 as loss allowances will be measured on either of the 12-month or lifetime expected credit loss based on the extent of increase in credit risk since inception as shown in the below table.

Classification ^(*)	Loss allowances
Stage 1 Credit risk has not increased significantly since the initial recognition ^(*)	12-month expected credit loss: Expected credit losses resulted from possible default events within the 12 months after the reporting date
Stage 2 Credit risk has increased significantly since the initial recognition	Lifetime expected credit loss: Expected credit loss resulted from all possible default events over the expected life of a financial instrument
Stage 3 Credit-impaired	

(*1) A loss allowance for lifetime expected credit losses is required for a financial instrument if the credit risk on that financial instrument has increased significantly since initial recognition. It is also required for contract assets or trade receivables that are not, according to IFRS No. 15 “Revenue from Contracts with Customers”, considered to contain a significant financing component. Additionally, the Company can elect an accounting policy of recognizing lifetime expected credit losses for all contract assets and/or all trade receivables, including those that contain a significant financing component.

(*2) If the financial instrument has low credit risk at the reporting date, the Company may assume that the credit risk has not increased significantly since initial recognition.

Under IFRS No. 9, financial assets of which the credit was impaired at the initial recognition, cumulative changes in lifetime expected credit loss since the initial recognition are recognized as loss allowances.

As of December 31, 2016, the Company had financial instruments measured at amortized cost amounting to ₩19,280,179 million (loans and receivables ₩19,277,709 million and held- to-maturity financial assets ₩2,470 million), debt instruments measured at fair value through other comprehensive income as they are classified as available for sale amounting to ₩49,282 million, and has recognized bad debt allowance of loans and receivables of ₩977,771 million as of December 31, 2016.

(b) IFRS No. 15 “Revenue from Contracts with Customers”

IFRS No. 15 “Revenue from Contracts with Customers”, published in May 2014, is effective for annual periods beginning on or after January 1, 2018, with earlier adoption permitted. It replaces existing revenue recognition guidance, including IAS No. 18 “Revenue”, IAS No. 11 “Construction Contracts”, SIC No. 31 “Revenue-Barter transactions involving advertising services”, IFRIC No. 13 “Customer Loyalty Programs”, IFRIC No. 15 “Agreements for the construction of real estate”, and IFRIC No. 18 “Transfers of assets from customers”. The Company shall apply this standard using one of the following two methods; (a) retrospectively to each prior reporting period presented in accordance with IAS No. 8 “Accounting Policies, Changes in Accounting Estimates and Errors” but using the practical expedients for completed contracts- i.e. completed contracts for the earliest prior period presented are not restated; or (b) retrospectively with the cumulative effect of initially applying this standard recognized at the date of initial application. The Company plans to adopt IFRS No. 15 in its consolidated financial statements for the year ending December 31, 2018, however the Company has not determined the transition method.

Existing IFRS standards and interpretations including IAS No. 18 provide revenue recognition guidance by transaction types such as sales of goods, rendering of services,

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interest income, royalty income, dividend income and construction revenue; however, under the new standard, IFRS No. 15, the five-step approach (Step 1: Identify the contract(s) with a customer, Step 2: Identify the performance obligations in the contract, Step 3: Determine the transaction price, Step 4: Allocate the transaction price to the performance obligations in the contract, Step 5: Recognize revenue when the entity satisfied a performance obligation) is applied for all types of contracts or agreements.

The new standard will require the Company to revise its internal controls related to reporting revenue, and these changes are not yet initiated, and the Company has not performed an assessment of the impact resulting from the application of IFRS No. 15. The Company will complete the analysis of financial impacts arising from applying this standard in 2017.

Expected qualitative impacts on the consolidated financial statements are as follows:

1) Progress measurement using input method

Revenue generated from construction contracts for the year ended December 31, 2016 amounts to ₩6,497,723 million which represents approximately 12% of consolidated revenue. The Company enters into certain construction contracts including the purchase and installation of special equipment and proceeds over a period of one year or longer. The Company installs the specialized equipment which is procured from an external manufacturer, and the promised construction service, including the installation of the equipment, is a single performance obligation.

Under IFRS No. 15, if the promised goods and services are not distinct at inception of the contract, the Company is expected to obtain control of the goods before rendering the service related to the goods, the costs to procure the goods are significant relative to the total expected costs to completely satisfy the performance obligation and the Company is provided with the goods from third party and is not significantly involved in designing and manufacturing the goods, the Company adjusts its measure of progress by excluding the costs to procure the goods from both the measure of costs incurred and the transaction price.

2) Variable consideration

Under IFRS No. 15, the Company estimates an amount of variable consideration by using the method the Company expects to better predict the amount of consideration to which it will be entitled. The Company includes an amount of variable consideration in the transaction price only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the return period expires. The Company recognize the amounts received or receivable for which the Company does not expect to be entitled as a refund liability.

3) Disclosure requirements

Under the new standard, the Company is required to disclose more information about its contracts with customers than is currently required under IAS No. 18 and IAS No. 11, including more disaggregated information about revenue and more information about its performance obligations remaining at the reporting date. The Company will disclose the extent of new disclosures required under the new standard upon adoption of IFRS No. 15.

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(c) IFRS No. 16 “Leases”

IFRS No. 16 “Leases”, published in January 2016, replaces the existing guidance in IAS No. 17 “Leases”, IFRIC No. 4 “Determining whether an Arrangement contains a Lease”, SIC No. 15 “Operating Leases-Incentives” and SIC No. 27 “Evaluating the Substance of Transactions Involving the Legal Form of a Lease”. IFRS No. 16 eliminates the classification of leases as either operating leases or finance leases for a lessee. Instead all leases are treated in a similar way to finance leases applying IAS No. 17.

Leases are ‘capitalized’ by recognizing the present value of the lease payments and showing them either as lease assets (right-of-use assets) or together with property, plant and equipment. If lease payments are made over time, a company also recognizes a financial liability representing its obligation to make future lease payments.

As a lessee, the Company can either apply the standard using a: (a) Retrospective approach or (b) Modified retrospective approach with optional practical expedients. The lessee applies the election consistently to all of its leases. The Company has not yet determined which transition approach to apply.

IFRS No. 16 is effective for the accounting periods beginning on January 1, 2019. Early adoption is permitted for companies that also adopt IFRS No. 15. As of December 31, 2016, The Company has not started the evaluation of the impact on its consolidated financial statements resulting from the application of IFRS No. 16.

(d) IAS No. 7 “Statement of Cash Flows”

In accordance with IAS No. 7 “Statement of Cash Flows” amended in January 2016, liabilities related to the cash flows that were classified as a financing activity in the statement of cash flows or will be classified as a financing activity in the future should be disclosed as follows:

- Fluctuations in financing cash flows
- Changes in the acquisition or loss of control of a subsidiary or other business
- Exchange rate effect
- Fair value changes
- Other changes

IAS No. 7 is effective for the accounting periods beginning on January 1, 2017, and the Company is not required to provide comparative information for the prior period.

(e) IAS No. 12 “Income Taxes”

In accordance with IAS No. 12 “Income Taxes” amended in January 2016, In the case of debt instruments measured at fair values, deferred tax accounting treatment is clarified. Temporary difference is calculated from the difference between the carrying amount and taxable base amount of the debt liabilities, regardless of the expected recovery method. When reviewing the feasibility of deferred tax assets, if there is sufficient evidence that it is likely to recover some part of an entity’s assets in excess of the carrying amount, the estimated amount of future taxable income would be included in the estimated future

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taxable income. In addition, future taxable income estimates are calculated as the amount before deducting the deductible (deduction) effect from deductible temporary differences.

IAS No. 12 is effective from accounting periods beginning on January 1, 2017. The Company believes that the effect of the amendments to the consolidated financial statements is not significant.

4. Financial risk management

The Company has exposure to the following risks from its use of financial instruments:

- credit risk
- liquidity risk
- market risk
- capital risk

This note presents information about the Company's exposure to each of the above risks, the Company's objectives, policies and processes for measuring and managing risk, and the Company's management of capital. Further quantitative disclosures are included throughout these consolidated financial statements.

(a) Financial risk management

1) Risk management framework

The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework. The Company's risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Company's activities.

The Company, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

2) Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's receivables from customers and investment securities. In addition, credit risk arises from finance guarantees.

The Company implements a credit risk management policy under which the Company only transacts business with counterparties that have a certain level of credit rate evaluated based on financial condition, historical experience, and other factors. The Company's exposure to credit risk is influenced mainly by the individual characteristics of each customer. The default risk of a nation or an industry in which a customer operates its business does not have a significant influence on credit risk. The Company has established a credit policy under which each new customer is analyzed individually for creditworthiness.

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The Company establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade and other receivables. The main components of this allowance are a specific loss component that relates to individually significant exposures, and a collective loss component established for companies of similar assets in respect of losses that have been incurred but not yet identified. The collective loss allowance is determined based on historical data of payment statistics for similar financial assets. Debt securities are analyzed individually, and an expected loss shall be directly deducted from debt securities.

Credit risk also arises from transactions with financial institutions, and such transactions include transactions of cash and cash equivalents, various deposits, and financial instruments such as derivative contracts. The Company manages its exposure to this credit risk by only entering into transactions with banks that have high international credit ratings. The Company's treasury department authorizes, manages, and oversees new transactions with financial institutions with whom the Company has no previous relationship.

Furthermore, the Company limits its exposure to credit risk of financial guarantee contracts by strictly evaluating their necessity based on internal decision making processes, such as the approval of the board of directors.

3) Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Company's reputation.

The Company's cash flow from business, borrowing or financing is sufficient to meet the cash requirements for the Company's strategic investments. Management believes that the Company is capable of raising funds by borrowing or financing if the Company is not able to generate cash flow requirements from its operations. The Company has committed borrowing facilities from various banks.

4) Market risk

Market risk means that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. The goal of market risk management is optimization of profit and controlling the exposure to market risk within acceptable limits.

① Currency risk

The Company's policy in respect of foreign currency risks is a natural hedge whereby foreign currency income is offset with foreign currency expenditures. The remaining net exposures after the natural hedge have been hedged using derivative contracts such as forward exchange contracts. In addition, the Company's derivative transactions are limited to hedging actual foreign currency transactions and speculative hedging is not permitted. Based on this policy, the

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Company has performed currency risk management specific to various characteristics of different segments. The entities in the steel segment reduces the foreign currency exposure by repayment of foreign currency borrowings subjected to investment in overseas when its maturities come. The entities in the engineering and construction segment have hedged foreign currency risks by using forward exchange contracts. Entities in the trading segment have hedged foreign currency risks by using forward exchange contracts when the foreign currencies received and paid are different.

② Interest rate risk

The Company manages the exposure to interest rate risk by adjusting of borrowing structure ratio between borrowings at fixed interest rates and variable interest rate. The Company monitors interest rate risks regularly in order to avoid exposure to interest rate risk on borrowings at variable interest rate.

③ Other market price risk

Equity price risk arises from listed equity securities among available-for-sale equity securities. Management of the Company measures regularly the fair value of listed equity securities and the risk of variance in future cash flow caused by market price fluctuations. Significant investments are managed separately and all buy and sell decisions are approved by management of the Company.

(b) Management of capital

The fundamental goal of capital management is the maximization of shareholders' value by means of the stable dividend policy and the retirement of treasury shares. The capital structure of the Company consists of equity and net borrowings (after deducting cash and cash equivalents) and current financial instruments from borrowings. The Company applied the same capital risk management strategy that was applied in the previous period.

Net borrowing-to-equity ratio as of December 31, 2015 and 2016 is as follows:

	2015	2016
	(in millions of Won)	
Total borrowings	₩ 25,220,231	22,704,998
Less: Cash and cash equivalents	4,870,185	2,447,619
Net borrowings	20,350,046	20,257,379
Total equity	45,013,201	45,765,269
Net borrowings-to-equity ratio	45.21%	44.26%

5. Cash and Cash Equivalents

Cash and cash equivalents as of December 31, 2015 and 2016 are as follows:

	2015 ^(*)	2016
	(in millions of Won)	
Cash	₩ 2,632	11,960
Demand deposits and checking accounts	1,796,736	1,312,426
Time deposits	2,263,199	254,888
Other cash equivalents ^(*)	807,618	868,345
	₩ 4,870,185	2,447,619

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(*1) Cash and cash equivalents as of December 31, 2015 in the statement of cash flows are different from the amount in the statement of financial position as disclosed above by ₩999 million, as the information disclosed above does not include cash and cash equivalents which were classified as asset groups held for sale as of December 31, 2015 (Note 10).

(*2) Mainly includes money market trust and others.

6. Trade Accounts and Notes Receivable

(a) Trade accounts and notes receivable as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Current		
Trade accounts and notes receivable	₩ 8,951,108	9,320,915
Finance lease receivables	21,042	10,300
Unbilled due from customers for contract work	1,199,497	860,287
Less: Allowance for doubtful accounts	(596,383)	(517,476)
	<u>₩ 9,575,264</u>	<u>9,674,026</u>
Non-current		
Trade accounts and notes receivable	₩ 126,200	80,447
Finance lease receivables	22,758	11,326
Less: Allowance for doubtful accounts	(28,620)	(40,649)
	<u>₩ 120,338</u>	<u>51,124</u>

Trade accounts and notes receivable sold to financial institutions, for which the derecognition conditions were not met, amounted to ₩390,172 million and ₩344,410 million as of December 31, 2015 and 2016, respectively. The fair value of trade accounts and notes receivable approximates the carrying amounts and trade accounts and notes receivable are included in short-term borrowings from financial institutions (Note 17).

(b) Finance lease receivables are as follows:

Customer	Contents	2015	2016
		(in millions of Won)	
Korea Electric Power Corporation	Combined thermal power plant #3~4	₩ 42,536	20,648
KC Chemicals CORP	Machinery and equipment	380	244
Hystech.Co. Ltd.	Machinery and equipment	884	734
		<u>₩ 43,800</u>	<u>21,626</u>

(c) The gross amount and present value of minimum lease payments as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Less than 1 year	₩27,382	13,114
1 year – 5 years	25,643	12,547
Unrealized interest income	(9,225)	(4,035)
Present value of minimum lease payment	<u>₩43,800</u>	<u>21,626</u>

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Notes to the Consolidated Financial Statements, Continued
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7. Other Receivables

Other receivables as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Current		
Short-term loans	₩ 405,281	421,818
Other accounts receivable	1,255,075	1,131,492
Accrued income	136,762	139,618
Deposits	89,444	93,891
Others	20,383	13,606
Less : Allowance for doubtful accounts	(227,066)	(260,683)
	<u>₩ 1,679,879</u>	<u>1,539,742</u>
Non-current		
Long-term loans	₩ 725,968	733,974
Long-term other accounts receivable	142,290	81,938
Accrued income	1,236	1,746
Deposits	141,373	104,217
Less : Allowance for doubtful accounts	(147,609)	(158,963)
	<u>₩ 863,258</u>	<u>762,912</u>

8. Other Financial Assets

Other financial assets as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Current		
Derivatives assets held for trading	₩ 94,603	49,281
Available-for-sale securities (bonds)	17,994	2,952
Current portion of held-to-maturity securities	21,490	422
Short-term financial instruments ^(*1,2)	3,776,300	5,172,256
	<u>₩ 3,910,387</u>	<u>5,224,911</u>
Non-current		
Derivatives assets held for trading	₩ 93,886	98,301
Available-for-sale securities (equity instruments) ^(*3,4)	2,095,206	2,392,534
Available-for-sale securities (bonds)	36,914	46,330
Available-for-sale securities (others)	59,630	73,108
Held-to-maturity securities	1,889	2,048
Long-term financial instruments ^(*2)	53,935	45,371
	<u>₩ 2,341,460</u>	<u>2,657,692</u>

(*1) As of December 31, 2015 and 2016, ₩6,593 million and ₩6,813 million, respectively, are restricted for use in a government project.

(*2) As of December 31, 2015 and 2016, financial instruments amounting to ₩105,195 million and ₩82,008 million, respectively, are restricted for use in financial arrangements, pledge and others.

(*3) During the year ended December 31, 2016, there were objective evidences of impairment for listed equity securities such as Nippon Steel & Sumitomo Metal Corporation and others due to the significant or prolonged decline in the fair value below cost of the shares and for non-listed equity securities such as Troika Foreign Resource Development Fund and others since those carrying amounts significantly exceed those fair values. As a result, an impairment loss of ₩248,404 million was recognized in profit or loss for the year ended December 31, 2016.

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(*4) As of December 31, 2015 and 2016, ₩124,541 million and ₩123,220 million of available-for-sale securities, respectively, have been provided as collateral for borrowings, construction projects and others.

9. Inventories

(a) Inventories as of December 31, 2015 and 2016 are as follows:

	<u>2015</u>	<u>2016</u>
	<u>(in millions of Won)</u>	
Finished goods	₩1,381,018	1,200,344
Merchandise	715,951	851,325
Semi-finished goods	1,390,382	1,552,988
Raw materials	1,868,773	1,939,539
Fuel and materials	810,516	817,397
Construction inventories	1,169,748	1,455,115
Materials-in-transit	1,382,291	1,807,816
Others	79,581	94,535
	<u>8,798,260</u>	<u>9,719,059</u>
Less: Allowance for inventories valuation	(231,378)	(203,164)
	<u>₩8,566,882</u>	<u>9,515,895</u>

(b) The changes of allowance for inventories valuation for the years ended December 31, 2014, 2015 and 2016 were as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
	<u>(in millions of Won)</u>		
Beginning	₩189,282	161,940	231,378
Loss on valuation of inventories	41,713	152,952	152,249
Realization on disposal of inventories	(69,996)	(77,102)	(161,458)
Others	941	(6,412)	(19,005)
Ending	<u>₩161,940</u>	<u>231,378</u>	<u>203,164</u>

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Notes to the Consolidated Financial Statements, Continued

As of December 31, 2014, 2015 and 2016

10. Assets Held for Sale

Details of assets held for sale and related liabilities as of December 31, 2015 and 2016 are as follows:

	2015			2016		
	Controlling company ^(*1)	Subsidiaries ^(*3,4)	Total	Controlling company ^(*1)	Subsidiaries ^(*2,3)	Total
	(in millions of Won)					
Assets						
Cash and cash equivalents . . .	₩ —	999	999	—	—	—
Trade accounts and notes receivable and other receivables	—	7,724	7,724	—	—	—
Property, plant and equipment	25,892	10,383	36,275	764	305,864	306,628
Other assets	—	12,283	12,283	—	5,330	5,330
	<u>₩25,892</u>	<u>31,389</u>	<u>57,281</u>	<u>764</u>	<u>311,194</u>	<u>311,958</u>
Liabilities						
Borrowings	—	26,500	26,500	—	—	—
Other liabilities	—	7,702	7,702	—	—	—
	<u>₩ —</u>	<u>34,202</u>	<u>34,202</u>	<u>—</u>	<u>—</u>	<u>—</u>

(*1) During the year ended December 31, 2015, the Company classified 1 FINEX facilities as assets held for sale amounting to ₩25,892 million. However, during the year ended December 31, 2016, the Company reclassified related facilities to property, plant and equipment as the conditions for classification of the assets held for sale were not met due to the delay of disposal negotiation.

(*2) During the year ended December 31, 2016, Posco e&c Songdo International Building, a subsidiary of the Company, determined to dispose of the office building of POSCO ENGINEERING & CONSTRUCTION CO., LTD. in Songdo and entered into a sales contract with Booyoung Housing Co., Ltd. on September 9, 2016. As a result, the Company classified the accompanying property, plant and equipment amounting to ₩300,000 million as assets held for sale, and recognized impairment loss for assets held for sale of ₩17,943 million.

(*3) Subsidiaries of the Company (POSCO ENERGY CO., LTD., POSCO ICT, POSCO Humans, and POSCO Processing & Service) determined to dispose of certain tangible assets including land and disused facilities and classified them as assets held for sale.

(*4) During the year ended December 31, 2015, the Company determined to dispose of its shares in POSCO LED Co., Ltd., a subsidiary of the Company, to Armitron consortium. The Company classified the accompanying assets and liabilities held for sale. During the year ended December 31, 2016, disposal of accompanying assets and liabilities was completed. As a result, the Company recognized gain on disposal of assets held for sale of ₩19,353 million.

11. Investments in Associates and Joint ventures

(a) Investments in associates and joint ventures as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Investments in associates	₩ 1,875,971	1,595,441
Investments in joint ventures	2,069,362	2,286,948
	<u>₩ 3,945,333</u>	<u>3,882,389</u>

POSCO and Subsidiaries

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(b) Details of investments in associates as of December 31, 2015 and 2016 are as follows:

Company	Number of shares	Ownership (%)	Acquisition cost	Book value	
				2015	2016
(in millions of Won)					
[Domestic]					
EQP POSCO Global NO1 Natural Resources					
PEF	178,713,975,892	29.37	₩178,787	₩ 175,676	175,690
POSCO PLANTEC Co., Ltd. ^{(*)4}	133,711,880	73.94	217,282	171,218	—
SeAH Changwon Integrated Special Steel ^{(*)1}	—	—	—	165,754	—
SNNC	18,130,000	49.00	90,650	111,326	107,859
QSONE Co.,Ltd.	200,000	50.00	84,395	83,919	84,799
Chuncheon Energy Co., Ltd	10,539,989	29.90	52,700	30,420	45,077
Incheon-Gimpo Expressway Co., Ltd. ^{(*)2}	9,032,539	20.04	45,163	39,447	37,372
BLUE OCEAN Private Equity Fund	333	27.52	33,300	35,437	35,752
UITrans LRT Co., Ltd. ^{(*)2}	7,714,380	38.19	38,572	40,903	17,851
Keystone-HYUNDAI SECURITIES NO. 1. Private Equity Fund	13,800,000	40.45	13,800	13,015	13,314
CHUNGJU ENTERPRISE CITY DEVELOPMENT Co.,Ltd ^{(*)2}					
Daesung Steel	108,038	17.54	14,000	14,000	12,302
KoFC POSCO HANWHA KB Shared Growth NO. 2. Private Equity Fund					
KONES, Corp.	3,250,000	41.67	6,893	5,775	5,641
Others (33 companies) ^{(*)2}				33,933	55,061
				<u>947,917</u>	<u>615,159</u>
[Foreign]					
South-East Asia Gas Pipeline Company Ltd.	135,219,000	25.04	150,779	222,269	215,996
AES-VCM Mong Duong Power Company Limited ^{(*)3}					
7623704 Canada Inc.	114,452,000	10.40	124,341	134,034	137,512
Eureka Moly LLC	—	20.00	240,123	87,878	89,601
AMCI (WA) PTY LTD	49	49.00	209,664	72,289	70,501
KOREA LNG LTD.	2,400	20.00	135,205	53,548	63,058
Nickel Mining Company SAS	3,234,698	49.00	157,585	76,445	45,138
NCR LLC	—	29.41	32,348	35,447	36,738
PT. Batutua Tembaga Raya	128,285	24.10	21,824	15,382	22,723
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd					
PT. Wampu Electric Power ^{(*)2}	8,708,400	20.00	10,044	8,855	8,706
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	50	25.00	4,723	7,061	6,840
Others (26 companies) ^{(*)2}				42,264	98,320
				<u>928,054</u>	<u>980,282</u>
				<u>₩1,875,971</u>	<u>1,595,441</u>

(*1) During the year ended December 31, 2016, the Company disposed shares of SeAH Changwon Integrated Special Steel.

(*2) Investments in associates are provided as collateral related to the associates' borrowings amounting to ₩101,360 million and ₩124,963 million as of December 31, 2015 and 2016, respectively.

(*3) Shares of PSC Energy Global Co., Ltd., a subsidiary of the Company, is provided as collateral related to associates' borrowings as of December 31, 2016.

(*4) As of December 31, 2016, there was indication of impairment of shares of POSCO PLANTEC Co., Ltd such as the continuous losses, and, accordingly, impairment test was performed. Recoverable amount was determined based on value-in-use, which was calculated by applying a 14.5% discount rate. As a result, the Company recognized an impairment loss (Share of loss of equity-accounted investees) of ₩116,604 million as the carrying amount was higher than its recoverable amount.

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(c) Details of investments in joint ventures as of December 31, 2015 and 2016 are as follows:

Company	Number of shares	Ownership (%)	Acquisition cost	Book value	
				2015	2016
				(in millions of Won)	
[Domestic]					
POSCO MITSUBISHI CARBON TECHNOLOGY	11,568,000	60.00	₩ 115,680	₩ 104,970	83,113
POSCO ES MATERIALS CO.,LTD (*1)	—	—	—	38,447	—
				<u>143,417</u>	<u>83,113</u>
[Foreign]					
Roy Hill Holdings Pty Ltd (*2)	13,117,972	12.50	1,528,672	1,153,434	1,186,859
POSCO-NPS Niobium LLC	325,050,000	50.00	364,609	381,461	393,570
CSP — Companhia Siderurgica do Pecem	1,108,696,532	20.00	558,821	80,805	330,463
BX STEEL POSCO Cold Rolled Sheet Co., Ltd.	—	25.00	61,961	100,908	97,369
KOBRASCO	2,010,719,185	50.00	32,950	78,364	88,308
DMSA/AMSA (*3)	—	4.00	290,236	105,964	74,935
Others (11 companies)				25,009	32,331
				<u>1,925,945</u>	<u>2,203,835</u>
				<u>₩2,069,362</u>	<u>2,286,948</u>

(*1) During the year ended December 31, 2016, the Company classified POSCO ES MATERIALS CO.,LTD from joint venture to subsidiary, due to the increase of percentage ownership upon issuance of share capital by the investee.

(*2) As of December 31, 2015 and 2016, investments in joint ventures amounting to ₩1,153,434 million and ₩1,186,859 million, respectively, are provided as collateral in relation to borrowings.

(*3) As of December 31, 2015 and 2016, investments in joint ventures amounting to ₩105,964 million and ₩74,935 million, respectively, are provided as collateral for guarantees.

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(d) The movements of investments in associates and joint ventures for the years ended December 31, 2015 and 2016 were as follows:

1) For the year ended December 31, 2015

Company	December 31, 2014 Book value	Acquisition	Dividends	Share of profits (losses)	Other increase (decrease) ^(*)	December 31, 2015 Book value
(in millions of Won)						
[Domestic]						
EQP POSCO Global NO1 Natural Resources PEF	₩ 176,899	—	—	(1,223)	—	175,676
POSCO PLANTEC Co., Ltd.	—	217,282	—	(46,058)	(6)	171,218
SeAH Changwon Integrated Special Steel	—	159,978	—	6,464	(688)	165,754
SNNC	131,671	—	—	(20,566)	221	111,326
QSONE Co., Ltd.	83,849	—	—	70	—	83,919
Chun-cheon Energy Co., Ltd.	—	32,853	—	(2,433)	—	30,420
Incheon-Gimpo Expressway Co., Ltd.	43,045	—	—	(3,910)	312	39,447
BLUE OCEAN Private Equity Fund	31,439	—	—	5,645	(1,647)	35,437
UITrans LRT Co., Ltd.	30,098	9,777	—	1,086	(58)	40,903
Keystone-HYUNDAI SECURITIES NO. 1 Private Equity Fund	—	13,800	—	(451)	(334)	13,015
CHUNGJU ENTERPRISE CITY DEVELOPMENT Co., Ltd.	19,801	—	—	(7,536)	—	12,265
Daesung Steel	—	14,000	—	—	—	14,000
KoFC POSCO HANWHA KB Shared Growth NO. 2 Private Equity Fund	12,268	3,725	—	211	(1,375)	14,829
KONES, Corp.	5,430	—	—	311	34	5,775
POSCO MITSUBISHI CARBON TECHNOLOGY	112,837	—	—	(7,841)	(26)	104,970
POSCO ES MATERIALS CO., LTD	38,021	—	—	440	(14)	38,447
Others (30 companies)	33,511	3,800	—	2,877	(6,255)	33,933
	<u>718,869</u>	<u>455,215</u>	<u>—</u>	<u>(72,914)</u>	<u>(9,836)</u>	<u>1,091,334</u>
[Foreign]						
South-East Asia Gas Pipeline Company Ltd.	172,805	—	(18,602)	54,351	13,715	222,269
AES-VCM Mong Duong Power Company Limited	93,021	23,146	—	29,561	7,543	153,271
7623704 Canada Inc.	117,100	—	(1,775)	10,875	7,834	134,034
Eureka Moly LLC	228,004	—	—	(147,270)	7,144	87,878
AMCI (WA) PTY LTD	88,050	—	—	(11,222)	(4,539)	72,289
KOREA LNG LTD.	72,089	—	(12,195)	12,362	(18,708)	53,548
Nickel Mining Company SAS	107,408	—	—	(25,562)	(5,401)	76,445
NCR LLC	32,598	—	—	(62)	2,911	35,447
PT. Batutua Tembaga Raya	14,653	—	—	—	729	15,382
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	21,032	—	(376)	(1,787)	442	19,311
PT. Wampu Electric Power	7,611	1,015	—	(261)	490	8,855
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	6,969	—	—	(76)	168	7,061
Roy Hill Holdings Pty Ltd	1,268,678	—	—	(61,589)	(53,655)	1,153,434
POSCO-NPS Niobium LLC	357,874	—	(13,177)	12,967	23,797	381,461
CSP - Companhia Siderurgica do Pecem	260,906	—	—	(145,206)	(34,895)	80,805
BX STEEL POSCO Cold Rolled Sheet Co., Ltd.	98,893	—	—	291	1,724	100,908
KOBRASCO	99,787	—	(24,380)	31,124	(28,167)	78,364
DMSA/AMSA	165,094	72,430	—	(137,723)	6,163	105,964
CAML RESOURCES PTY LTD	38,240	—	—	(34,987)	(3,253)	—
Others (33 companies)	90,826	2,839	(5,506)	(18,926)	(1,960)	67,273
	<u>3,341,638</u>	<u>99,430</u>	<u>(76,011)</u>	<u>(433,140)</u>	<u>(77,918)</u>	<u>2,853,999</u>
₩	<u>4,060,507</u>	<u>554,645</u>	<u>(76,011)</u>	<u>(506,054)</u>	<u>(87,754)</u>	<u>3,945,333</u>

(*1) Other increase or decrease represents the changes in investments in associates and joint ventures due to disposals, change in capital adjustments effect from translations of financial statements of foreign investees and others.

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2) For the year ended December 31, 2016

Company	December 31, 2015 Book value	Acquisition	Dividends	Share of profits (losses)	Other increase (decrease) ^(*)	December 31, 2016 Book value
				(in millions of Won)		
[Domestic]						
EQP POSCO Global NO1 Natural Resources PEF	₩ 175,676	222	—	(399)	191	175,690
POSCO PLANTEC Co., Ltd.	171,218	—	—	(171,927)	709	—
SeAH Changwon Integrated Special Steel	165,754	—	—	4,797	(170,551)	—
SNNC	111,326	—	—	(3,417)	(50)	107,859
QSONE Co.,Ltd.	83,919	—	—	880	—	84,799
Chun-cheon Energy Co., Ltd.	30,420	19,832	—	(5,175)	—	45,077
Incheon-Gimpo Expressway Co., Ltd.	39,447	—	—	(2,758)	683	37,372
BLUE OCEAN Private Equity Fund	35,437	—	—	643	(328)	35,752
UITrans LRT Co., Ltd.	40,903	6,817	—	(29,825)	(44)	17,851
Keystone-HYUNDAI SECURITIES NO. 1 Private Equity Fund	13,015	—	—	281	18	13,314
CHUNGJU ENTERPRISE CITY DEVELOPMENT Co.,Ltd	12,265	—	—	286	—	12,551
Daesung Steel	14,000	—	—	(2,272)	574	12,302
KoFC POSCO HANWHA KB Shared Growth NO. 2. Private Equity Fund	14,829	1,875	—	1,186	(6,000)	11,890
KONES, Corp.	5,775	—	—	(256)	122	5,641
POSCO MITSUBISHI CARBON TECHNOLOGY	104,970	—	—	(21,929)	72	83,113
POSCO ES MATERIALS CO.,LTD	38,447	—	—	(2,061)	(36,386)	—
Others (33 companies)	33,933	20,061	(200)	(2,802)	4,069	55,061
	1,091,334	48,807	(200)	(234,748)	(206,921)	698,272
[Foreign]						
South-East Asia Gas Pipeline Company Ltd.	222,269	—	(59,717)	46,855	6,589	215,996
AES-VCM Mong Duong Power Company Limited	153,271	—	—	27,031	(13,161)	167,141
7623704 Canada Inc.	134,034	—	(921)	175	4,224	137,512
Eureka Moly LLC	87,878	—	—	(18)	1,741	89,601
AMCI (WA) PTY LTD	72,289	—	—	(3,358)	1,570	70,501
KOREA LNG LTD.	53,548	—	(6,342)	6,392	9,460	63,058
Nickel Mining Company SAS	76,445	—	—	(31,047)	(260)	45,138
NCR LLC	35,447	—	—	(41)	1,332	36,738
PT. Batutua Tembaga Raya	15,382	7,040	—	—	301	22,723
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	19,311	—	—	(412)	(891)	18,008
PT. Wampu Electric Power	8,855	—	—	(397)	248	8,706
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	7,061	—	—	242	(463)	6,840
Roy Hill Holdings Pty Ltd	1,153,434	—	—	12,643	20,782	1,186,859
POSCO-NPS Niobium LLC	381,461	—	(10,893)	11,499	11,503	393,570
CSP - Companhia Siderurgica do Pecem	80,805	88,930	—	116,694	44,034	330,463
BX STEEL POSCO Cold Rolled Sheet Co., Ltd.	100,908	—	—	258	(3,797)	97,369
KOBRASCO	78,364	—	(29,297)	20,761	18,480	88,308
DMSA/AMSA	105,964	24,624	—	(60,415)	4,762	74,935
Others (37 companies)	67,273	28,993	(4,252)	(791)	39,428	130,651
	2,853,999	149,587	(111,422)	146,071	145,882	3,184,117
	₩ 3,945,333	198,394	(111,622)	(88,677)	(61,039)	3,882,389

(*1) Other increase or decrease represents the changes in investments in associates and joint ventures due to disposals, change in capital adjustments effect from translations of financial statements of foreign investees and others.

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(e) Summarized financial information of associates and joint ventures as of and for the years ended December 31, 2015 and 2016 are as follows:

1) December 31, 2015

Company	Assets	Liabilities	Equity (deficit)	Sales	Net income (loss)
	(in millions of Won)				
[Domestic]					
EQP POSCO Global NO1 Natural Resources PEF	₩ 607,966	1,043	606,923	—	(1,231)
POSCO PLANTEC Co., Ltd.	609,655	725,406	(115,751)	457,180	(330,819)
SeAH Changwon Integrated Special Steel	1,293,143	568,639	724,504	971,557	23,403
SNNC	793,480	551,830	241,650	509,044	(57,156)
QSONE Co.,Ltd.	249,482	81,644	167,838	15,068	140
Chun-cheon Energy Co., Ltd	149,025	42,094	106,931	—	(2,389)
Incheon-Gimpo Expressway Co., Ltd.	648,602	458,137	190,465	—	(1,567)
BLUE OCEAN Private Equity Fund	380,000	244,316	135,684	492,065	24,422
UITrans LRT Co., Ltd.	343,744	267,543	76,201	—	(846)
Keystone-HYUNDAI SECURITIES NO. 1. Private Equity Fund	68,315	31,626	36,689	—	(1,956)
CHUNGJU ENTERPRISE CITY DEVELOPMENT					
Co.,Ltd	154,695	137,471	17,224	21,518	(30,023)
Daesung Steel	163,331	115,475	47,856	13,798	(1,725)
KoFC POSCO HANWHA KB Shared Growth NO. 2. Private Equity Fund	119,747	1,112	118,635	5,012	1,804
KONES, Corp.	3,544	2,114	1,430	5,337	746
POSCO MITSUBISHI CARBON TECHNOLOGY	489,393	315,392	174,001	—	(13,068)
POSCO ES MATERIALS CO.,LTD	84,719	39,381	45,338	29,214	880
[Foreign]					
South-East Asia Gas Pipeline Company Ltd.	2,223,846	1,333,048	890,798	554,927	220,203
7623704 Canada Inc.	1,300,951	7	1,300,944	76,114	118,007
KOREA LNG LTD.	257,773	36	257,737	63,574	61,806
Nickel Mining Company SAS	445,685	238,695	206,990	155,980	(45,748)
PT. Batutua Tembaga Raya	286,761	268,933	17,828	—	—
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	107,874	45,534	62,340	114,994	(5,783)
PT. Wampu Electric Power	201,383	160,159	41,224	17,473	(1,304)
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	65,973	38,336	27,637	67,700	(403)
Roy Hill Holdings Pty Ltd	9,295,492	6,584,536	2,710,956	—	(492,709)
POSCO-NPS Niobium LLC	762,719	—	762,719	—	25,935
CSP - Compania Siderurgica do Pecem	3,839,967	3,319,880	520,087	—	(721,937)
BX STEEL POSCO Cold Rolled Sheet Co., Ltd.	703,408	327,391	376,017	936,590	1,162
KOBRASCO	187,823	31,094	156,729	94,169	62,248
DMSA/AMSA	6,415,380	4,812,244	1,603,136	737,604	(3,308,836)
CAML RESOURCES PTY LTD	136,112	41,768	94,344	146,909	(20,110)

POSCO and Subsidiaries
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2) December 31, 2016

Company	Assets	Liabilities	Equity (deficit)	Sales	Net income (loss)
	(in millions of Won)				
[Domestic]					
EQP POSCO Global NO1 Natural Resources PEF	₩ 597,767	864	596,903	—	(1,349)
POSCO PLANTEC Co., Ltd.	501,659	678,004	(176,345)	361,351	(43,195)
SNNC	725,987	482,429	243,558	527,101	2,022
QSONE Co.,Ltd.	247,385	77,786	169,599	15,961	1,760
Chun-cheon Energy Co., Ltd	547,805	378,613	169,192	—	(3,748)
Incheon-Gimpo Expressway Co., Ltd.	929,539	718,107	211,432	—	(1,910)
BLUE OCEAN Private Equity Fund	357,723	220,895	136,828	456,311	2,335
UITrans LRT Co., Ltd.	400,761	307,625	93,136	—	(822)
Keystone-HYUNDAI SECURITIES NO. 1. Private Equity Fund	119,378	79,946	39,432	197	694
CHUNGJU ENTERPRISE CITY DEVELOPMENT Co.,Ltd ...	136,857	124,666	12,191	19,028	967
Daesung Steel	150,944	112,194	38,750	60,772	(12,955)
KoFC POSCO HANWHA KB Shared Growth NO. 2. Private Equity Fund	96,213	1,094	95,119	14,157	9,561
KONES, Corp.	2,627	1,519	1,108	3,952	(615)
POSCO MITSUBISHI CARBON TECHNOLOGY	448,618	311,070	137,548	53,908	(36,572)
[Foreign]					
South-East Asia Gas Pipeline Company Ltd.	2,171,689	1,305,942	865,747	491,011	187,114
7623704 Canada Inc.	1,334,391	1	1,334,390	—	19,485
KOREA LNG LTD.	303,389	19,704	283,685	33,035	31,962
Nickel Mining Company SAS	491,458	347,194	144,264	145,571	(61,473)
PT. Batutua Tembaga Raya	351,119	332,037	19,082	—	—
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	83,291	24,676	58,615	117,387	(1,216)
PT. Wampu Electric Power	206,052	165,618	40,434	3,405	(1,984)
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	67,905	40,451	27,454	81,260	938
Roy Hill Holdings Pty Ltd	10,962,261	8,059,714	2,902,547	845,243	129,968
POSCO-NPS Niobium LLC	786,937	—	786,937	—	24,719
CSP - Compania Siderurgica do Pecem	5,682,161	4,237,247	1,444,914	226,669	243,151
BX STEEL POSCO Cold Rolled Sheet Co., Ltd.	789,336	427,475	361,861	948,488	1,033
KOBRASCO	178,853	2,236	176,617	72,274	41,522
DMSA/AMSA	6,570,172	4,842,560	1,727,612	579,388	(519,969)

12. Joint Operations

Details of significant joint operations that the Company is participating in as a party to a joint arrangement as of December 31, 2016 are as follows:

Joint operations	Operation	Ownership (%)	Location
Myanmar A-1/A-3 mine	Mine development	51.00	Myanmar
Offshore midstream	Mine development	51.00	Myanmar
Greenhills mine	Mine development	20.00	Canada
Arctos Anthracite coal project	Mine development	50.00	Canada
Mt. Thorley J/V	Mine development	20.00	Australia
POSMAC J/V	Mine development	20.00	Australia
CD J/V	Mine development	5.00	Australia
RUM J/V	Mine development	10.00	Australia

POSCO and Subsidiaries
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13. Investment Property, Net

(a) Investment property as of December 31, 2015 and 2016 are as follows:

	2015			2016		
	Acquisition cost	Accumulated depreciation and impairment loss	Book value	Acquisition cost	Accumulated depreciation and impairment loss	Book value
	(in millions of Won)					
Land	₩ 378,717	(31,838)	346,879	423,910	(31,187)	392,723
Buildings	806,030	(109,504)	696,526	807,657	(136,118)	671,539
Structures	3,971	(2,152)	1,819	3,148	(1,001)	2,147
Construction-in-progress	39,068	—	39,068	51,311	—	51,311
	<u>₩ 1,227,786</u>	<u>(143,494)</u>	<u>1,084,292</u>	<u>1,286,026</u>	<u>(168,306)</u>	<u>1,117,720</u>

As of December 31, 2016, the fair value of investment property is ₩1,629,308 million, among which the Company believed the fair value of its investment property of 3 subsidiaries, including DAESAN (CAMBODIA) Co., Ltd. approximate its book value of ₩67,924 million. Also, the Company used the prior year's fair value for some of the investment property since it is believed that the fair value has not changed significantly.

(b) Changes in the carrying amount of investment property for the years ended December 31, 2015 and 2016 were as follows:

1) For the year ended December 31, 2015

	Beginning	Acquisitions	Business combination	Disposals	Depreciation ^(*)	Others ^(*)	Ending
Land	₩ 415,512	2,665	5,964	(433)	(85)	(76,744)	346,879
Buildings	591,647	49,281	26,750	(909)	(25,391)	55,148	696,526
Structures	2,060	40	—	—	(173)	(108)	1,819
Construction-in-progress	46,373	9,492	—	—	—	(16,797)	39,068
	<u>₩ 1,055,592</u>	<u>61,478</u>	<u>32,714</u>	<u>(1,342)</u>	<u>(25,649)</u>	<u>(38,501)</u>	<u>1,084,292</u>

(*1) Impairment loss on investment property amounting to ₩85 million is included.

(*2) Includes reclassification resulting from changing purpose of use, adjustment of foreign currency translation difference and others.

2) For the year ended December 31, 2016

	Beginning	Acquisitions	Disposals	Depreciation ^(*)	Others ^(*)	Ending
Land	₩ 346,879	24,116	(8,056)	—	29,784	392,723
Buildings	696,526	7,548	(3,339)	(24,043)	(5,153)	671,539
Structures	1,819	1	—	(288)	615	2,147
Construction-in-progress	39,068	13,910	—	—	(1,667)	51,311
	<u>₩ 1,084,292</u>	<u>45,575</u>	<u>(11,395)</u>	<u>(24,331)</u>	<u>23,579</u>	<u>1,117,720</u>

(*1) Impairment loss on investment property amounting to ₩318 million is included.

(*2) Includes reclassification resulting from changing purpose of use, adjustment of foreign currency translation difference and others.

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Notes to the Consolidated Financial Statements, Continued
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14. Property, Plant and Equipment, Net

(a) Property, plant and equipment as of December 31, 2015 and 2016 are as follows:

	2015				2016			
	Acquisition cost	Accumulated depreciation and impairment loss	Government grants	Book value	Acquisition cost	Accumulated depreciation and impairment loss	Government grants	Book value
	(in millions of Won)							
Land	₩ 2,572,807	—	—	2,572,807	2,607,660	(6,452)	—	2,601,208
Buildings	8,982,405	(3,816,242)	(438)	5,165,725	9,180,028	(4,183,974)	(423)	4,995,631
Structures	5,217,953	(2,268,465)	(75)	2,949,413	5,385,365	(2,476,818)	(67)	2,908,480
Machinery and equipment	45,547,591	(24,453,433)	(415)	21,093,743	46,698,254	(26,379,544)	(320)	20,318,390
Vehicles	303,366	(251,315)	(46)	52,005	306,770	(259,986)	(85)	46,699
Tools	372,440	(298,586)	(376)	73,478	385,960	(312,266)	(2,314)	71,380
Furniture and fixtures	590,046	(441,565)	(382)	148,099	609,736	(477,064)	(266)	132,406
Finance lease assets	168,601	(75,805)	—	92,796	248,590	(89,577)	—	159,013
Construction-in-progress	2,379,890	—	(5,101)	2,374,789	2,542,233	—	(5,101)	2,537,132
	₩ 66,135,099	(31,605,411)	(6,833)	34,522,855	67,964,596	(34,185,681)	(8,576)	33,770,339

(b) Changes in the carrying amount of property, plant and equipment for the years ended December 31, 2015 and 2016 were as follows:

1) For the year ended December 31, 2015

	Beginning	Acquisitions	Business combination			Depreciation ^(*)	Others ^(*)	Ending
			Disposals					
	(in millions of Won)							
Land	₩ 2,801,288	47,858	12,520	(30,222)	(1,517)	(257,120)	2,572,807	
Buildings	5,359,324	57,042	56,156	(20,759)	(349,774)	63,736	5,165,725	
Structures	3,030,163	23,149	—	(3,819)	(213,550)	113,470	2,949,413	
Machinery and equipment	21,199,885	239,430	301	(74,445)	(2,244,183)	1,972,755	21,093,743	
Vehicles	56,695	9,735	—	(1,601)	(18,221)	5,397	52,005	
Tools	64,069	25,230	1,714	(1,169)	(29,401)	13,035	73,478	
Furniture and fixtures	143,782	43,697	1,497	(1,502)	(63,754)	24,379	148,099	
Finance lease assets	80,081	598	157	(98)	(9,026)	21,084	92,796	
Construction-in-progress	2,505,908	2,245,729	—	(4,418)	(17,846)	(2,354,584)	2,374,789	
	₩ 35,241,195	2,692,468	72,345	(138,033)	(2,947,272)	(397,848)	34,522,855	

(*) Impairment loss on property, plant and equipment amounting to ₩136,269 million are included.

(*) Represents assets transferred from construction-in-progress to intangible assets and other property, plant and equipment, reclassifications resulting from changing purpose of use, adjustments of foreign currency translation differences and others.

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2) For the year ended December 31, 2016

	Beginning	Acquisitions	Business combination	Disposals	Depreciation ^(*)	Others ^(*)	Ending
	(in millions of Won)						
Land	₩ 2,572,807	8,901	15,687	(16,176)	(6,452)	26,441	2,601,208
Buildings	5,165,725	37,493	277,242	(12,857)	(396,899)	(75,073)	4,995,631
Structures	2,949,413	19,043	—	(1,994)	(216,631)	158,649	2,908,480
Machinery and equipment	21,093,743	193,856	47,021	(36,095)	(2,277,740)	1,297,605	20,318,390
Vehicles	52,005	8,967	88	(1,990)	(18,484)	6,113	46,699
Tools	73,478	17,546	635	(848)	(27,396)	7,965	71,380
Furniture and fixtures	148,099	30,650	32	(4,248)	(51,361)	9,234	132,406
Finance lease assets	92,796	79,556	—	(38)	(13,409)	108	159,013
Construction-in-progress	2,374,789	1,935,339	2,181	(4,255)	—	(1,770,922)	2,537,132
	<u>₩ 34,522,855</u>	<u>2,331,351</u>	<u>342,886</u>	<u>(78,501)</u>	<u>(3,008,372)</u>	<u>(339,880)</u>	<u>33,770,339</u>

(*) Includes impairment loss on property, plant and equipment amounting to ₩196,882 million. During the year ended December 31, 2016, due to the existence of indicators for impairment, such as continuing operating loss on fuel cell business of the POSCO ENERGY CO., LTD, which is included in Other reportable segment, the Company performed impairment test and recognized impairment loss of ₩61,565 million. Recoverable amount was determined based on value-in-use, which was calculated by applying a 14.0% discount rate. The impairment recorded in 2016 also included ₩58,388 million related to POSCO for individual assets based on disposal plans.

(*) Represents assets transferred from construction-in-progress to intangible assets and other property, plant and equipment, reclassifications resulting from changing purpose of use, adjustments of foreign currency translation differences and others.

(c) Borrowing costs capitalized and the capitalized interest rate for the years ended December 31, 2015 and 2016 were as follows:

	2015	2016
	(in millions of Won)	
Weighted average expenditure	₩ 1,733,503	1,070,280
Borrowing costs capitalized	40,990	40,321
Capitalization rate (%)	3.02 ~ 4.24	3.32 ~ 3.82

(d) Property, plant and equipment and investment property pledged as collateral as of December 31, 2015 and 2016 are as follows:

	Collateral right holder	2015	2016
		(in millions of Won)	
Land ^(*)	Korean Development Bank and others	₩ 826,802	925,670
Buildings and structures ^(*)	Korean Development Bank and others	1,446,605	1,734,543
Machinery and equipment	Korean Development Bank and others	4,260,206	4,037,813
Tools	Korean Development Bank	162	—
Construction-in-progress	The Export-Import Bank of Korea	1,000,318	—
		<u>₩7,534,093</u>	<u>6,698,026</u>

(*) Investment property and other assets (land-use right) are included.

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15. Goodwill and Other Intangible Assets, Net

(a) Goodwill and other intangible assets as of December 31, 2015 and 2016 are as follows:

	2015				2016			
	Acquisition cost	Accumulated amortization and impairment	Government grants	Book value	Acquisition cost	Accumulated amortization and impairment	Government grants	Book value
	(in millions of Won)							
Goodwill	₩ 1,660,395	(198,441)	—	1,461,954	1,669,556	(294,425)	—	1,375,131
Intellectual property rights	2,848,990	(181,098)	(806)	2,667,086	2,923,030	(401,156)	(703)	2,521,171
Premium in rental	148,141	(20,192)	—	127,949	139,843	(20,804)	—	119,039
Development expense	337,318	(201,278)	(244)	135,796	376,327	(259,184)	(131)	117,012
Port facilities usage rights	625,991	(361,190)	—	264,801	633,025	(376,408)	—	256,617
Exploration and evaluation assets	181,710	(30,566)	—	151,144	196,124	(33,856)	—	162,268
Customer relationships	857,417	(297,608)	—	559,809	859,643	(345,398)	—	514,245
Power generation permit	539,405	—	—	539,405	539,405	—	—	539,405
Other intangible assets	966,761	(468,934)	(17)	497,810	1,007,871	(524,000)	(30)	483,841
	<u>₩ 8,166,128</u>	<u>(1,759,307)</u>	<u>(1,067)</u>	<u>6,405,754</u>	<u>8,344,824</u>	<u>(2,255,231)</u>	<u>(864)</u>	<u>6,088,729</u>

(b) The changes in carrying amount of goodwill and other intangible assets for the years ended December 31, 2015 and 2016 were as follows:

1) For the year ended December 31, 2015

	Beginning	Acquisitions	Disposals	Amortization	Impairment loss	Others ^{(*)2}	Ending
		(in millions of Won)					
Goodwill	₩ 1,795,144	—	—	—	(99,052)	(234,138)	1,461,954
Intellectual property rights	2,762,679	127,112	(3,921)	(192,660)	(20,725)	(5,399)	2,667,086
Premium in rental ^{(*)1}	130,942	13,530	(10,594)	(171)	(2,413)	(3,345)	127,949
Development expense	168,746	6,749	(1,084)	(53,740)	(3,034)	18,159	135,796
Port facilities usage rights	156,444	—	—	(11,810)	—	120,167	264,801
Exploration and evaluation assets	92,459	61,427	—	—	—	(2,742)	151,144
Customer relationships	641,625	—	—	(51,808)	(28,402)	(1,606)	559,809
Power generation permit	539,405	—	—	—	—	—	539,405
Other intangible assets	597,545	88,105	(488)	(71,394)	(7,531)	(108,427)	497,810
	<u>₩ 6,884,989</u>	<u>296,923</u>	<u>(16,087)</u>	<u>(381,583)</u>	<u>(161,157)</u>	<u>(217,331)</u>	<u>6,405,754</u>

(*1) Premium in rental includes memberships with indefinite useful lives.

(*2) Represents assets transferred from construction-in-progress to intangible assets and assets transferred from property, plant and equipment, adjustments of foreign currency translation difference and others.

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2) For the year ended December 31, 2016

	Beginning	Acquisitions	Disposals	Amortization	Impairment loss	Others ^{(*)2}	Ending
	(in millions of Won)						
Goodwill	₩ 1,461,954	—	—	—	(95,984)	9,161	1,375,131
Intellectual property rights	2,667,086	56,849	(753)	(204,112)	(16,786)	18,887	2,521,171
Premium in rental ^{(*)1}	127,949	1,964	(7,526)	(243)	(1,559)	(1,546)	119,039
Development expense	135,796	4,027	(60)	(61,732)	(298)	39,279	117,012
Port facilities usage rights	264,801	—	—	(15,217)	—	7,033	256,617
Exploration and evaluation assets	151,144	45,524	—	—	(3,290)	(31,110)	162,268
Customer relationships	559,809	—	—	(47,790)	—	2,226	514,245
Power generation permit	539,405	—	—	—	—	—	539,405
Other intangible assets	497,810	52,350	(1,454)	(48,910)	(7,353)	(8,602)	483,841
	₩ 6,405,754	160,714	(9,793)	(378,004)	(125,270)	35,328	6,088,729

(*)1 Premium in rental includes memberships with indefinite useful lives.

(*)2 Represents assets transferred from construction-in-progress to intangible assets and assets transferred from property, plant and equipment, adjustments of foreign currency translation difference and others.

(c) For the purpose of impairment testing, goodwill is allocated to individually operating entities which are determined to be CGUs. The goodwill amounts as of December 31, 2015 and 2016 are as follows:

Reportable segments	Total number of CGUs		CGUs	2015		2016	
	2015	2016		(in millions of Won)		2015	2016
Steel	9	9	POSCO VST CO., LTD.	₩ 36,955	36,955	13,279	13,151
			Others				
Trading	3	3	POSCO DAEWOO Corporation (formerly, Daewoo International Corporation) ^{(*)1}	1,163,922	1,163,922	7,638	8,070
			Others				
E&C	4	4	POSCO Engineering Co., Ltd. ^{(*)2} SANTOS CMI S.A. ^{(*)3}	194,637	111,309	11,795	—
			Others	763	166		
Others	7	6	POSCO ENERGY Co., LTD. Others	26,471	26,471	6,494	15,087
Total	23	22		₩ 1,461,954	1,375,131		

(*)1 Recoverable amounts of POSCO DAEWOO Corporation (formerly, Daewoo International Corporation) are determined based on its value in use. As of December 31, 2016, value in use is estimated by applying 7.6% discount rate and 1.5% terminal growth rate within 5 years, the period for the estimated future cash flows, based on management's business plan. The terminal growth rate does not exceed long-term average growth rate of its industry. No impairment loss on goodwill was recognized during the year ended December 31, 2016 as the recoverable amount exceeded the carrying amount of the CGU.

The estimated recoverable amount of CGU exceeded the carrying amount by ₩69,563 million. Value in use of the CGU was affected by the assumptions such as discount rate and terminal growth used in discount cash flow model. When the discount rate increases by 0.25%, value in use will be decreased by 3.33% and when the terminal growth rate decreases by 0.25%, value in use will be decreased by 0.93%. Management believes that any reasonably possible negative change in the key assumptions on which the recoverable amount is based would result in impairment loss of goodwill.

(*)2 Recoverable amounts of POSCO Engineering CO., Ltd are determined based on its value in use. As of December 31, 2016, value in use is estimated by applying 9.0% discount rate and 1.0% terminal growth rate within 5 years, the period for the

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estimated future cash flows, based on management's business plan. The terminal growth rate does not exceed long-term average growth rate of its industry. Impairment loss on goodwill of ₩83,328 million was recognized for the year ended December 31, 2016 as the recoverable amount calculated by value in use of CGU decreased below the carrying amount of the CGU.

Value in use of the CGU was affected by the assumptions such as discount rate and terminal growth used in discount cash flow model. When the discount rate increases by 0.25%, value in use will be decreased by 3.57% and when the terminal growth rate decreases by 0.25%, value in use will be decreased by 1.90%.

(*3) The Company recognized full impairment loss of ₩11,795 million since recoverable amount of SANTOS CMI S.A., a subsidiary of the Company, decreased below its carrying amount.

16. Other Assets

Other current assets and other non-current assets as of December 31, 2015 and 2016 are as follows:

	<u>2015</u>	<u>2016</u>
	(in millions of Won)	
Current		
Advance payments	₩ 696,839	787,452
Prepaid expenses	107,379	105,102
Others	4,034	1,930
	<u>808,252</u>	<u>894,484</u>
Non-current		
Long-term advance payments	3,467	27,189
Long-term prepaid expenses	403,536	380,678
Others ^(*)	221,997	159,813
	<u>₩ 629,000</u>	<u>567,680</u>

(*1) As of December 31, 2015 and 2016, the Company recognized tax assets amounting to ₩132,489 million and ₩100,693 million, respectively, based on the Company's best estimate of the tax amounts to be refunded when the results of the Company's appeal in connection with the additional income tax payment in prior years' tax audits that were finalized in 2015 and claim for rectification are finalized.

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17. Borrowings

(a) Short-term borrowings and current portion of long-term borrowings as of December 31, 2015 and 2016 are as follows:

	Bank	Issuance date	Maturity date	Interest rate (%)	2015	2016
(in millions of Won)						
Short-term borrowings						
Bank overdrafts	Bank of America and others	January, 2016~ December, 2016	January, 2017~ December, 2017	0.6~4.0 W	129,891	254,036
Short-term borrowings	HSBC and others	January, 2016~ December, 2016	January, 2017~ December, 2017	0.3~10.7	8,285,869	7,725,691
					<u>8,415,760</u>	<u>7,979,727</u>
Current portion of long-term liabilities						
Current portion of long-term borrowings	Export-Import Bank of Korea and others	June, 2003~ September, 2016	January, 2017~ December, 2017	0.5~8.5	1,318,276	1,390,535
Current portion of foreign loan (*1)	NATIXIS	March, 1986	March, 2017	2.0	401	198
Current portion of debentures	Korean Development Bank and others	August, 2009~ March, 2016	March, 2017~ December, 2017	1.3~5.9	2,637,614	825,176
Less: Current portion of discount on debentures issued					(1,019)	(829)
					<u>3,955,272</u>	<u>2,215,080</u>
					<u>W12,371,032</u>	<u>10,194,807</u>

(*1) Korea Development Bank has provided guarantees related to the foreign loan.

(b) Long-term borrowings, excluding current portion as of December 31, 2015 and 2016 are as follows:

	Bank	Issuance date	Maturity date	Interest rate (%)	2015	2016
(in millions of Won)						
Long-term borrowings	Export-Import bank of Korea and others	January, 1983~ September, 2016	March, 2018~ March, 2033	0.4~6.6	W 6,814,753	6,420,612
Less: Present value discount					(76,828)	(55,799)
Foreign loan	—	—	—	—	200	—
Bonds	Korean Development Bank and others	August, 2009~ July, 2016	October, 2018~ July, 2025	1.2~6.3	6,134,132	6,163,896
Less: Discount on debentures issued					(23,058)	(18,518)
					<u>W12,849,199</u>	<u>12,510,191</u>

(c) Property, plant and equipment including investment property, cash equivalents, trade accounts and notes receivable, financial instruments, available-for-sale financial assets, inventories and other assets amounting to ₩6,546,430 million, ₩77,617 million, ₩5,772 million (84 of notes receivable), ₩72,015 million, ₩9,839 million, ₩66,175 million and ₩151,596 million, respectively, are provided as collateral related to short-term borrowings, long-term borrowings and debentures.

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18. Other Payables

Other payables as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Current		
Accounts payable	₩ 983,408	854,623
Accrued expenses	759,598	665,295
Dividend payable	6,453	7,770
Finance lease liabilities	26,876	24,523
Withholdings	352,758	299,448
	₩ 2,129,093	1,851,659
Non-current		
Accounts payable	₩ 22,665	6,823
Accrued expenses	30,221	41,082
Finance lease liabilities	14,409	89,886
Long-term withholdings	67,175	70,768
	₩ 134,470	208,559

19. Other Financial Liabilities

Other financial liabilities as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Current		
Derivatives liabilities	₩ 117,841	85,786
Financial guarantee liabilities	84,276	63,962
	₩ 202,117	149,748
Non-current		
Derivatives liabilities	₩ 37,661	37,110
Financial guarantee liabilities	17,035	44,199
	₩ 54,696	81,309

20. Provisions

(a) Provisions as of December 31, 2015 and 2016 are as follows:

	2015		2016	
	Current	Non-current	Current	Non-current
	(in millions of Won)			
Provision for bonus payments	₩ 42,602	—	42,986	—
Provision for construction warranties	10,656	70,790	10,551	86,158
Provision for legal contingencies and claims ^(*)	—	52,610	4,348	80,498
Provision for the restoration ^(**)	15,569	26,357	10,169	37,962
Others ^(**3,4)	33,493	71,935	46,811	133,121
	₩ 102,320	221,692	114,865	337,739

(*1) The Company recognized probable outflow of resources amounting to ₩32,220 million and ₩30,425 million as provisions in relation to lawsuits against the Company as of December 31, 2015 and 2016, respectively.

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- (*2) Due to contamination of land near the Company's magnesium smelting plant located in Gangneung province and gas treatment plant located in Pohang work, the Company recognized present values of estimated costs for recovery as provisions for restoration as of December 31, 2016. In order to determine the estimated costs, the Company used the assumption that it would use all of technologies and materials available for now to recover the land. In addition, the Company has applied discount rates of 2.49% and 2.37% to assess present value of these costs for recovery of land in Gangneung province and Pohang work, respectively.
- (*3) As of December 31, 2015 and 2016, POSCO ENERGY CO., LTD., a subsidiary of the Company, recognized ₩41,638 million and ₩87,827 million of provisions for warranties, respectively, for the service contract on fuel cell based on its estimate of probable outflow of resources.
- (*4) As of December 31, 2015 and 2016, the amount includes a provision of ₩23,600 million for expected outflow of resources in connection with the performance guarantee for the Hwaseong-Dongtan complexes development project of POSCO ENGINEERING & CONSTRUCTION., LTD.

(b) The following are the key assumptions concerning the future and other key sources of estimation uncertainties at the end of the reporting period.

	Key assumptions for the estimation
Provision for bonus payments	Estimations based on financial performance
Provision for construction warranties	Estimations based on historical warranty data
Provision for legal contingencies and claims	Estimations based on the degree of probability of an unfavorable outcome and the ability to make a sufficient reliable estimate of the amount of loss

(c) Changes in provisions for the years ended December 31, 2015 and 2016 were as follows:

1) For the year ended December 31, 2015

	Beginning	Increase	Utilization	Reversal	Others^(*)	Ending
	(in millions of Won)					
Provision for bonus payments	₩ 49,505	46,420	(49,563)	(1,493)	(2,267)	42,602
Provision for construction warranties	80,348	33,698	(21,166)	(4,822)	(6,612)	81,446
Provision for legal contingencies and claims	50,424	15,998	(2,467)	(4,058)	(7,287)	52,610
Provision for the restoration	74,798	2,293	(35,461)	—	296	41,926
Others	118,194	59,219	(46,994)	(15,425)	(9,566)	105,428
	₩ 373,269	157,628	(155,651)	(25,798)	(25,436)	324,012

(*1) Includes adjustments of foreign currency translation differences and others.

2) For the year ended December 31, 2016

	Beginning	Increase	Utilization	Reversal	Others^(*)	Ending
	(in millions of Won)					
Provision for bonus payments	₩ 42,602	44,106	(42,211)	(272)	(1,239)	42,986
Provision for construction warranties	81,446	33,925	(19,469)	(2,695)	3,502	96,709
Provision for legal contingencies and claims	52,610	45,525	(14,012)	(188)	911	84,846
Provision for the restoration	41,926	31,673	(13,367)	(12,475)	374	48,131
Others	105,428	142,767	(68,143)	(3,086)	2,966	179,932
	₩ 324,012	297,996	(157,202)	(18,716)	6,514	452,604

(*1) Includes adjustments of foreign currency translation differences and others.

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21. Employee Benefits

(a) Defined contribution plans

The expenses related to post-employment benefit plans under defined contribution plans for the years ended December 31, 2014, 2015 and 2016 were as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
	(in millions of Won)		
Expense related to post-employment benefit under defined contribution plans	₩ 23,414	25,224	30,344

(b) Defined benefit plans

1) The amounts recognized in relation to net defined benefit liabilities in the statements of financial position as of December 31, 2015 and 2016 are as follows:

	<u>2015</u>	<u>2016</u>
	(in millions of Won)	
Present value of funded obligations	₩ 1,702,735	1,715,583
Fair value of plan assets ^(*)	(1,532,090)	(1,693,118)
Present value of non-funded obligations	11,380	17,437
Net defined benefit liabilities	<u>₩ 182,025</u>	<u>39,902</u>

(*1) As of December 31, 2016, the Company recognized net defined benefit assets amounting to ₩83,702 million since there are consolidated entities whose fair value of plan assets exceeded the present value of defined benefit obligations.

2) Changes in present value of defined benefit obligations for the years ended December 31, 2015 and 2016 were as follows:

	<u>2015</u>	<u>2016</u>
	(in millions of Won)	
Defined benefit obligation at the beginning of period	₩ 1,718,243	1,714,115
Current service costs	239,508	285,706
Interest costs	47,039	39,286
Remeasurements :	(63,364)	(32,927)
— Gain from change in financial assumptions	(37,367)	(72,910)
— Gain from change in demographic assumptions	(10,017)	(4,140)
— Others	(15,980)	44,123
Benefits paid	(157,983)	(278,278)
Others	(69,328)	5,118
Defined benefit obligation at the end of period	<u>₩ 1,714,115</u>	<u>1,733,020</u>

3) Changes in fair value of plan assets for the years ended December 31, 2015 and 2016 were as follows:

	<u>2015</u>	<u>2016</u>
	(in millions of Won)	
Fair value of plan assets at the beginning of period	₩ 1,427,918	1,532,090
Interest on plan assets	41,145	37,385
Remeasurement of plan assets	(8,515)	(6,963)
Contributions to plan assets ^(*)	243,082	328,671
Benefits paid	(127,808)	(189,817)
Others	(43,732)	(8,248)
Fair value of plan assets at the end of period	<u>₩ 1,532,090</u>	<u>1,693,118</u>

(*1) The Company expects to make an estimated contribution of ₩180,232 million to the defined benefit plan assets in 2017.

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4) The fair value of plan assets as of December 31, 2015 and 2016 are as follows:

	<u>2015</u>	<u>2016</u>
	(in millions of Won)	
Equity instruments	₩ 58,987	56,187
Debt instruments	218,219	411,726
Deposits	1,139,186	1,167,475
Others	115,698	57,730
	<u>₩ 1,532,090</u>	<u>1,693,118</u>

5) The amounts recognized in consolidated statements of comprehensive income for the years ended December 31, 2014, 2015 and 2016 were as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
	(in millions of Won)		
Current service costs	₩ 230,445	239,508	285,706
Net interest costs ^(*)	7,441	5,894	1,901
	<u>₩ 237,886</u>	<u>245,402</u>	<u>287,607</u>

(*) The actual return on plan assets amounted to ₩36,060 million, ₩32,630 million and ₩30,422 million for the years ended December 31, 2014, 2015 and 2016, respectively.

The above expenses by function were as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
	(in millions of Won)		
Cost of sales	₩ 172,668	170,334	161,810
Selling and administrative expenses	64,960	74,210	124,994
Others	258	858	803
	<u>₩ 237,886</u>	<u>245,402</u>	<u>287,607</u>

6) Accumulated actuarial gains (losses), net of tax recognized in other comprehensive income for the years ended December 31, 2014, 2015 and 2016 were as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
	(in millions of Won)		
Beginning	₩ (239,005)	(314,106)	(272,152)
Current actuarial gains (losses)	(75,101)	41,954	20,540
Ending	<u>₩ (314,106)</u>	<u>(272,152)</u>	<u>(251,612)</u>

7) The principal actuarial assumptions as of December 31, 2015 and 2016 are as follows:

	<u>2015</u>	<u>2016</u>
	(%)	
Discount rate	2.19~9.20	2.15~8.59
Expected future increase in salaries ^(*)	1.05~10.00	1.00~10.00

(*) The expected future increase in salaries is based on the average salary increase rate for the past three years.

All assumptions are reviewed at the end of the reporting period. Additionally, the total estimated defined benefit obligation includes actuarial assumptions associated with the long-term characteristics of the defined benefit plan.

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8) Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding other assumptions constant, would have affected the defined benefit obligation by the amounts shown below:

	1% Increase		1% Decrease	
	Amount	Percentage (%)	Amount	Percentage (%)
	(in millions of Won)			
Discount rate	₩ (126,918)	(7.3)	146,710	8.5
Expected future increases in salaries	145,222	8.4	(129,172)	(7.5)

9) As of December 31, 2016 the maturity of the expected benefit payments are as follows:

	Within 1 year	1 year - 5 years	5 years - 10 years	10 years - 20 years	After 20 years	Total
	(in millions of Won)					
Benefits paid	₩ 83,983	456,679	667,805	684,859	483,152	2,376,478

The maturity analysis of the defined benefit obligation was nominal amounts of defined benefit obligations using expected remaining working lives of employees.

22. Other Liabilities

Other liabilities as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Current		
Due to customers for contract work	₩ 767,692	1,031,663
Advances received	1,047,385	864,536
Unearned revenue	11,684	8,702
Withholdings	153,562	186,665
Others	31,129	22,307
	<u>₩ 2,011,452</u>	<u>2,113,873</u>
Non-current		
Advances received	₩ 173,632	418,832
Unearned revenue	20,838	20,013
Others	56,935	40,338
	<u>₩ 251,405</u>	<u>479,183</u>

23. Financial Instruments

(a) Classification of financial instruments

1) Financial assets as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Financial assets at fair value through profit or loss		
Derivatives assets held for trading	₩ 188,489	147,582
Available-for-sale financial assets	2,209,744	2,514,924
Held-to-maturity financial assets	23,379	2,470
Loans and receivables	20,580,438	19,277,709
	<u>₩ 23,002,050</u>	<u>21,942,685</u>

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2) Financial liabilities as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Financial liabilities at fair value through profit or loss		
Derivatives liabilities held for trading	₩ 155,502	122,896
Financial liabilities measured at amortized cost		
Trade accounts and notes payable	3,136,446	4,117,798
Borrowings	25,220,231	22,704,998
Financial guarantee liabilities	101,311	108,161
Others	2,197,463	2,007,114
	30,655,451	28,938,071
	₩ 30,810,953	29,060,967

3) Finance income and costs by category of financial instrument for the years ended December 31, 2014, 2015 and 2016 were as follows:

① December 31, 2014

	Finance income and costs							Other comprehensive income
	Interest income (expense)	Gain and loss on valuation	Gain and loss on foreign currency	Gain and loss on disposal	Impairment loss	Others	Total	
	(in millions of Won)							
Financial assets at fair value through profit or loss	₩ —	72,466	—	256,941	—	—	329,407	—
Available-for-sale financial assets	309	—	—	181,774	(369,723)	47,825	(139,815)	(333,891)
Held-to-maturity financial assets	260	—	—	—	—	(244)	16	—
Loans and receivables	227,685	—	301,623	(20,912)	—	(255)	508,141	—
Financial liabilities at fair value through profit or loss	—	(98,003)	—	(282,638)	—	—	(380,641)	—
Financial liabilities measured at amortized cost	(795,585)	—	(288,513)	(38,594)	—	(19,641)	(1,142,333)	—
	₩ (567,331)	(25,537)	13,110	96,571	(369,723)	27,685	(825,225)	(333,891)

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② December 31, 2015

	Finance income and costs							Other comprehensive loss
	Interest income (expense)	Gain and loss on valuation	Gain and loss on foreign currency	Gain and loss on disposal	Impairment loss	Others	Total	
	(in millions of Won)							
Financial assets at fair value through profit or loss ₩	—	129,949	—	357,715	—	—	487,664	—
Available-for-sale financial assets	1,956	—	—	138,782	(142,781)	183,712	181,669	(187,854)
Held-to-maturity financial assets	456	—	—	—	—	(688)	(232)	—
Loans and receivables	207,781	—	283,030	(15,406)	—	(217)	475,188	—
Financial liabilities at fair value through profit or loss	—	(46,748)	—	(334,340)	—	—	(381,088)	—
Financial liabilities measured at amortized cost	(788,772)	—	(665,583)	—	—	(138,827)	(1,593,182)	—
	<u>₩ (578,579)</u>	<u>83,201</u>	<u>(382,553)</u>	<u>146,751</u>	<u>(142,781)</u>	<u>43,980</u>	<u>(829,981)</u>	<u>(187,854)</u>

③ December 31, 2016

	Finance income and costs							Other comprehensive loss
	Interest income (expense)	Gain and loss on valuation	Gain and loss on foreign currency	Gain and loss on disposal	Impairment loss	Others	Total	
	(in millions of Won)							
Financial assets at fair value through profit or loss ₩	—	57,411	—	310,625	—	—	368,036	—
Available-for-sale financial assets	431	—	—	127,524	(248,404)	41,000	(79,449)	310,608
Held-to-maturity financial assets	266	—	—	—	—	38	304	—
Loans and receivables	181,778	—	140,751	(17,854)	—	(172)	304,503	—
Financial liabilities at fair value through profit or loss	—	(72,976)	—	(332,415)	—	—	(405,391)	—
Financial liabilities measured at amortized cost	(658,726)	—	(283,059)	(61)	—	(28,367)	(970,213)	—
	<u>₩ (476,251)</u>	<u>(15,565)</u>	<u>(142,308)</u>	<u>87,819</u>	<u>(248,404)</u>	<u>12,499</u>	<u>(782,210)</u>	<u>310,608</u>

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(b) Credit risk

1) Credit risk exposure

The carrying amount of financial assets represents the Company's maximum exposure to credit risk. The maximum exposure to credit risk as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Cash and cash equivalents	₩ 4,870,185	2,447,619
Financial assets at fair value through profit or loss	188,489	147,582
Available-for-sale financial assets	55,320	51,649
Held-to-maturity financial assets	23,379	2,470
Loans and other receivables	6,014,651	7,104,940
Trade accounts and notes receivable, net	9,575,264	9,674,026
Long-term trade accounts and notes receivable, net	120,338	51,124
	<u>₩ 20,847,626</u>	<u>19,479,410</u>

The Company provided financial guarantees for the repayment of loans of associates, joint ventures and third parties. As of December 31, 2015 and 2016, the maximum exposure to credit risk related to the financial guarantees amounted to ₩4,129,825 million and ₩2,995,544 million, respectively.

2) Impairment losses on financial assets

① Allowance for doubtful accounts as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Trade accounts and notes receivable	₩ 625,003	558,125
Other accounts receivable	146,031	203,346
Loans	220,966	210,346
Other assets	7,678	5,954
	<u>₩ 999,678</u>	<u>977,771</u>

② Impairment losses on financial assets for the years ended December 31, 2015 and 2016 were as follows:

	2015	2016
	(in millions of Won)	
Bad debt expenses on trade accounts and notes receivable	₩ 189,616	165,150
Other bad debt expenses (*1)	158,071	50,225
Impairment loss on available-for-sale financial assets	142,781	248,404
Impairment loss on held-to-maturity financial assets	1,000	—
Less: Recovery of allowance for other bad debt accounts	(10,452)	(12,658)
Less: Recovery of impairment loss on held-to-maturity financial assets	(312)	(38)
	<u>₩ 480,704</u>	<u>451,083</u>

(*1) Other bad debt expenses are mainly related to other receivables and loans.

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③ The aging and impairment losses of trade accounts and notes receivable as of December 31, 2015 and 2016 are as follows:

	2015		2016	
	Trade accounts and notes receivable	Impairment	Trade accounts and notes receivable	Impairment
	(in millions of Won)			
Not due	₩ 6,819,800	55,993	7,963,491	62,511
Over due less than 1 month	1,843,132	5,084	790,042	27,482
1 month – 3 months	367,663	1,781	205,394	8,955
3 months – 12 months	421,505	37,719	189,605	26,814
Over 12 months	868,505	524,426	1,134,743	432,363
	<u>₩ 10,320,605</u>	<u>625,003</u>	<u>10,283,275</u>	<u>558,125</u>

④ The aging and impairment losses of other receivables as of December 31, 2015 and 2016 are as follows:

	2015		2016	
	Other receivables	Impairment	Other receivables	Impairment
	(in millions of Won)			
Not due	1,921,274	38,866	1,641,924	23,958
Over due less than 1 month	155,762	17,955	197,772	75,207
1 month – 3 months	10,285	302	27,525	1,189
3 months – 12 months	76,571	10,556	82,337	20,300
Over 12 months	395,200	306,996	357,401	298,992
	<u>2,559,092</u>	<u>374,675</u>	<u>2,306,959</u>	<u>419,646</u>

⑤ Changes in the allowance for doubtful accounts for the years ended December 31, 2014, 2015 and 2016 were as follows:

	2014	2015	2016
	(in millions of Won)		
Beginning	₩ 661,651	954,153	999,678
Bad debt expenses	108,933	189,616	165,150
Other bad debt expenses	96,373	147,619	37,567
Others ^(*)	87,196	(291,710)	(224,624)
Ending	<u>₩ 954,153</u>	<u>999,678</u>	<u>977,771</u>

(*) Others for the years ended December 31, 2015 and 2016 included a decrease of ₩199,003 million due to exclusion of POSCO PLANTEC Co., Ltd. from consolidation and write-off of ₩216,657 million, respectively. There were no significant write-off of receivables during 2014 and 2015.

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(c) Liquidity risk

1) Contractual maturities for non-derivative financial liabilities, including estimated interest, are as follows:

	Book value	Contractual cash flow	Within 1 year	1 year - 5 years	After 5 years
	(in millions of Won)				
Trade accounts and notes payable	₩ 4,117,798	4,117,798	4,073,286	44,512	—
Borrowings	22,704,998	25,300,261	10,783,630	11,241,991	3,274,640
Financial guarantee liabilities (*1)	108,161	2,995,544	2,995,544	—	—
Other financial liabilities	2,007,114	2,020,008	1,802,035	217,973	—
	₩ 28,938,071	34,433,611	19,654,495	11,504,476	3,274,640

(*1) For issued financial guarantee contracts, the maximum amount of the guarantee is allocated to the earliest period in which the guarantee could be called.

2) The maturity analysis of derivative financial liabilities is as follows:

	Within 1 year	1 year - 5 years	Total
	(in millions of Won)		
Currency forward	₩ 15,897	9,430	25,327
Currency futures	23,953	5	23,958
Currency swaps	41,933	25,207	67,140
Interest swaps	217	2,468	2,685
Other forwards	3,786	—	3,786
	₩ 85,786	37,110	122,896

(d) Currency risk

1) The Company has exposure to the risk that the fair value or future cash flows of a financial instrument will fluctuate because of the changes in foreign exchange rates. The exposure to currency risk as of December 31, 2015 and 2016 are as follows:

	2015		2016	
	Assets	Liabilities	Assets	Liabilities
	(in millions of Won)			
USD	₩ 5,535,915	7,196,614	5,007,649	6,636,065
EUR	433,686	657,734	463,110	550,235
JPY	64,495	1,036,545	45,975	821,403
Others	181,091	92,881	219,444	286,112

2) As of December 31, 2015 and 2016, provided that functional currency against foreign currencies other than functional currency hypothetically strengthens or weakens by 10%, the changes in gain or loss during the years ended December 31, 2015 and 2016 were as follows:

	2015		2016	
	10% increase	10% decrease	10% increase	10% decrease
	(in millions of Won)			
USD	₩ (166,070)	166,070	(162,842)	162,842
EUR	(22,405)	22,405	(8,713)	8,713
JPY	(97,205)	97,205	(77,543)	77,543

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(e) Interest rate risk

1) The carrying amount of interest-bearing financial instruments as of December 31, 2015 and 2016 are as follows:

	<u>2015</u>	<u>2016</u>
	(in millions of Won)	
Fixed rate		
Financial assets	₩ 9,686,358	8,650,483
Financial liabilities	(13,432,518)	(10,794,724)
	<u>(3,746,160)</u>	<u>(2,144,241)</u>
Variable rate		
Financial liabilities	₩ (11,828,998)	(12,024,683)

2) Sensitivity analysis on the fair value of financial instruments with fixed interest rate

The Company does not account for any fixed rate financial assets and liabilities at fair value through profit or loss, and the Company does not designate derivatives (interest rate swaps) as hedging instruments under fair value hedge accounting model. Therefore a change in interest rates at the reporting date would not affect profit or loss.

3) Sensitivity analysis on the cash flows of financial instruments with variable interest rate

As of December 31, 2015 and 2016, provided that other factors remain the same and the interest rate of borrowings with floating rates increases or decreases by 1%, the changes in interest expense for the years ended December 31, 2015 and 2016 were as follows:

	<u>2015</u>		<u>2016</u>	
	<u>1% increase</u>	<u>1% decrease</u>	<u>1% increase</u>	<u>1% decrease</u>
	(in millions of Won)			
Variable rate financial instruments	₩ (118,290)	118,290	(120,247)	120,247

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(f) Fair value

1) Fair value and book value

The carrying amount and the fair value of financial instruments as of December 31, 2015 and 2016 are as follows:

	2015		2016	
	Book value	Fair value	Book value	Fair value
(in millions of Won)				
Assets measured at fair value				
Available-for-sale financial assets ^(*)	₩ 1,854,784	1,854,784	2,139,687	2,139,687
Derivatives assets held for trading	188,489	188,489	147,582	147,582
	<u>2,043,273</u>	<u>2,043,273</u>	<u>2,287,269</u>	<u>2,287,269</u>
Assets measured at amortized cost ^(*)				
Cash and cash equivalents	4,870,185	4,870,185	2,447,619	2,447,619
Trade accounts and notes receivable, net	9,695,602	9,695,602	9,725,150	9,725,150
Loans and other receivables, net	6,014,651	6,014,651	7,104,940	7,104,940
Held-to-maturity financial assets	23,379	23,379	2,470	2,470
	<u>20,603,817</u>	<u>20,603,817</u>	<u>19,280,179</u>	<u>19,280,179</u>
Liabilities measured at fair value				
Derivatives liabilities held for trading	155,502	155,502	122,896	122,896
Liabilities measured at amortized cost ^(*)				
Trade accounts and notes payable	3,136,446	3,136,446	4,117,798	4,117,798
Borrowings	25,220,231	25,413,577	22,704,998	22,956,571
Financial guarantee liabilities	101,311	101,311	108,161	108,161
Others	2,197,463	2,197,463	2,007,114	2,007,114
	<u>₩ 30,655,451</u>	<u>30,848,797</u>	<u>28,938,071</u>	<u>29,189,644</u>

(*) Available-for-sale financial assets which are not measured at fair value are not included.

(*) The fair value of financial assets and financial liabilities measured at amortized cost is determined at the present value of estimated future cash flows discounted at the current market interest rate. The fair value is calculated for the disclosures in the notes. On the other hand, the Company has not performed fair value measurement for the financial assets and financial liabilities measured at amortized cost except borrowings(fair value hierarchy level 2) since their carrying amounts approximate fair value.

2) The fair values of financial assets and financial liabilities by fair value hierarchy as of December 31, 2015 and 2016 are as follows:

a. December 31, 2015

	Level 1	Level 2	Level 3	Total
	(in millions of Won)			
Financial assets				
Available-for-sale financial assets	₩ 1,458,551	—	396,233	1,854,784
Derivatives assets held for trading	—	110,197	78,292	188,489
	<u>1,458,551</u>	<u>110,197</u>	<u>474,525</u>	<u>2,043,273</u>
Financial liabilities				
Derivatives liabilities held for trading	₩ —	147,384	8,118	155,502

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b. December 31, 2016

	Level 1	Level 2	Level 3	Total
	(in millions of Won)			
Financial assets				
Available-for-sale financial assets	₩ 1,800,943	—	338,744	2,139,687
Derivatives assets held for trading	—	137,236	10,346	147,582
	<u>1,800,943</u>	<u>137,236</u>	<u>349,090</u>	<u>2,287,269</u>
Financial liabilities				
Derivatives liabilities held for trading	₩ —	122,896	—	122,896

3) Financial assets and financial liabilities classified as fair value hierarchy level 2

Fair values of derivatives are measured using the derivatives instrument valuation model such as market approach method and discounted cash flow method. Inputs of the derivatives instrument valuation model include interest rate, exchange rate, spot price of underlying assets, volatility and others. It may change depending on the type of derivatives and the nature of the underlying assets.

4) Financial assets and financial liabilities classified as fair value hierarchy level 3

- ① Value measurement method and significant but not observable inputs for the financial assets classified as fair value hierarchy level 3 as of December 31, 2016 are as follows:

	Fair value	Valuation technique	Inputs (in millions of Won)	Range of inputs	Effect on fair value assessment with unobservable input
Available-for-sale financial assets	₩ 280,478	Discounted cash flow	Growth rate	0% ~ 2.0%	As growth rate increases, fair value increases
			Discount rate	0.5% ~ 11.9%	As discount rate increases, fair value decreases
	16,000	Market comparable companies	Price multiple	1.085 ~ 5.245	As price multiple increases, fair value increases
	42,266	Asset value approach	—	—	—
Derivatives assets held for trading	10,346	Discounted cash flow	Discount rate	8.39%	As discount rate increases, fair value decreases

- ② Sensitivity analysis of financial assets and financial liabilities classified as Level 3 of fair value hierarchy

If other inputs remain constant as of December 31, 2016 and one of the significant but not observable input is changed, the effect on fair value measurement is as follows:

	Input variable	Favorable changes	Unfavorable changes
	(in millions of Won)		
Available-for-sale financial assets	Fluctuation 0.5% of growth rate	₩ 8,809	7,369
	Fluctuation 0.5% of discount rate	28,392	25,380
Derivatives assets held for trading	Fluctuation 0.5% of discount rate	72	71

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- ③ Changes in fair value of financial assets and financial liabilities classified as Level 3 for the years ended December 31, 2015 and 2016 were as follows:

	2015	2016
	(in millions of Won)	
Beginning	₩ 154,905	466,407
Acquisition and others	381,960	47,493
Gain (loss) on valuations of derivatives	48,487	(59,829)
Other comprehensive loss	(13,523)	(38,731)
Impairment loss	(27,211)	(19,111)
Disposal and others	(78,211)	(47,139)
Ending	<u>₩ 466,407</u>	<u>349,090</u>

24. Share Capital and Capital Surplus

- (a) Share capital as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(Share, in Won)	
Authorized shares	200,000,000	200,000,000
Par value	₩ 5,000	5,000
Issued shares ^{(*)1}	87,186,835	87,186,835
Shared capital ^{(*)2}	₩ 482,403,125,000	482,403,125,000

(*)1 As of December 31, 2016, total shares of ADRs of 39,889,560 outstanding in overseas stock market are equivalent to 9,972,390 of common stock.

(*)2 As of December 31, 2016, the difference between the ending balance of common stock and the par value of issued common stock is ₩46,469 million due to retirement of 9,293,790 treasury stocks.

- (b) The changes in issued common stock for the years ended December 31, 2015 and 2016 were as follows:

	2015			2016		
	Issued shares	Treasury shares	Number of outstanding shares	Issued shares	Treasury shares	Number of outstanding shares
	(share)					
Beginning	87,186,835	(7,193,807)	79,993,028	87,186,835	(7,191,187)	79,995,648
Disposal of treasury shares	—	2,620	2,620	—	2,017	2,017
Ending	87,186,835	(7,191,187)	79,995,648	87,186,835	(7,189,170)	79,997,665

- (c) Capital surplus as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Share premium	₩ 463,825	463,825
Gain on disposal of treasury shares	783,756	783,788
Other capital deficit	145,498	159,634
	<u>₩ 1,393,079</u>	<u>1,407,247</u>

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25. Hybrid Bonds

(a) Hybrid bonds classified as equity as of December 31, 2015 and 2016 are as follows:

	<u>Date of issue</u>	<u>Date of maturity</u>	<u>Interest rate (%)</u>	<u>2015</u>	<u>2016</u>
	(in millions of Won)				
Hybrid bond 1-1 ^(*)	2013-06-13	2043-06-13	4.30	₩ 800,000	800,000
Hybrid bond 1-2 ^(*)	2013-06-13	2043-06-13	4.60	200,000	200,000
Issuance cost				(3,081)	(3,081)
				<u>₩ 996,919</u>	<u>996,919</u>

(*1) Details of hybrid bonds as of December 31, 2016 are as follows:

	<u>Hybrid bond 1-1</u>	<u>Hybrid bond 1-2</u>
	(in millions of Won)	
Issue price	800,000	200,000
Maturity date	30 years (The Company has a right to extend the maturity date)	30 years (The Company has a right to extend the maturity date)
Interest rate	Issue date ~ 2018-06-12 : 4.3% Reset every 5 years as follows; · After 5 years : return on government bond (5 years) + 1.3% · After 10 years : additionally +0.25% according to Step-up clauses · After 25 years : additionally +0.75%	Issue date ~ 2023-06-12 : 4.6% Reset every 10 years as follows; · After 10 years : return on government bond (10 years) + 1.4% · After 10 years : additionally +0.25% according to Step-up clauses · After 30 years : additionally +0.75%
Interest payments condition	Quarterly (Optional deferral of interest payment is available to the Company)	Quarterly (Optional deferral of interest payment is available to the Company)
Others	The Company can call the hybrid bond at year 5 and interest payment date afterwards	The Company can call the hybrid bond at year 10 and interest payment date afterwards

The hybrid bond holders' preference in the event of liquidation is higher than the common stock holders, but lower than other creditors. The interest accumulated but not paid on the hybrid bonds as of December 31, 2016 amounts to ₩2,389 million.

(b) POSCO ENERGY Co., Ltd., a subsidiary of the Company, issued hybrid bonds, which are classified as non-controlling interests in the consolidated financial statements. Hybrid bonds as of December 31, 2015 and 2016 are as follows:

	<u>Date of issue</u>	<u>Date of maturity</u>	<u>Interest rate (%)</u>	<u>2015</u>	<u>2016</u>
	(in millions of Won)				
Hybrid bond 1-1 ^(*)	2013-08-29	2043-08-29	4.66	₩ 165,000	165,000
Hybrid bond 1-2 ^(*)	2013-08-29	2043-08-29	4.72	165,000	165,000
Hybrid bond 1-3 ^(*)	2013-08-29	2043-08-29	4.72	30,000	30,000
Hybrid bond 1-4 ^(*)	2013-08-29	2043-08-29	5.21	140,000	140,000
Issuance cost				(1,532)	(1,532)
				<u>₩ 498,468</u>	<u>498,468</u>

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(*1) Details of hybrid bonds of POSCO ENERGY Co., Ltd .as of December 31, 2016 are as follows:

	Hybrid bond 1-1	Hybrid bond 1-2 and 1-3 (in millions of Won)	Hybrid bond 1-4
Issue price	165,000	195,000	140,000
Maturity date	30 years (The Company has a right to extend the maturity date)	30 years (The Company has a right to extend the maturity date)	30 years (The Company has a right to extend the maturity date)
Interest rate	Issue date ~ 2018-08-29 : 4.66% reset every 5 years as follows; · After 5 years : return on government bond (5 years) + 1.39% · After 10 years : additionally +0.25% according to Step-up clauses · After 25 years : additionally +0.75%	Issue date ~ 2018-08-29 : 4.72% reset every 5 years as follows; · After 5 years : return on government bond (5 years) + 1.45% · After 10 years : additionally +0.25% according to Step-up clauses · After 25 years : additionally +0.75%	Issue date ~ 2018-08-29 : 5.21% reset every 10 years as follows; · After 10 years : return on government bond (10 years) + 1.55% · After 10 years : additionally +0.25% according to Step-up clauses · After 30 years : additionally +0.75%
Interest payments condition	Quarterly (Optional deferral of interest payment is available to the Company)	Quarterly (Optional deferral of interest payment is available to the Company)	Quarterly (Optional deferral of interest payment is available to the Company)
Others	The Company can call the hybrid bond at year 5 and interest payment date afterwards	The Company can call the hybrid bond at year 5 and interest payment date afterwards	The Company can call the hybrid bond at year 10 and interest payment date afterwards

The hybrid bond holders' preference in the event of liquidation is higher than the common stock holders, but lower than other creditors. The interest accumulated but not paid on the hybrid bonds as of December 31, 2016 amounts to ₩2,000 million.

26. Reserves

(a) Reserves as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in millions of Won)	
Accumulated comprehensive loss of investments in associates and joint ventures	₩(426,360)	(301,734)
Changes in the unrealized fair value of available-for-sale investments	(38,294)	276,143
Currency translation differences	(109,646)	(99,264)
Others	(20,456)	(19,130)
	<u>₩(594,756)</u>	<u>(143,985)</u>

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(b) Changes in the unrealized fair value of available-for-sale investments for the years ended December 31, 2015 and 2016 were as follows:

	2015	2016
	(in millions of Won)	
Beginning balance	₩ 144,783	(38,294)
Changes in fair value of available-for-sale investments	(236,752)	218,542
Reclassification to profit of loss upon disposal	(45,817)	(88,781)
Impairment of available-for-sale investments	94,487	187,108
Others	5,005	(2,432)
Ending balance	<u>₩ (38,294)</u>	<u>276,143</u>

27. Treasury Shares

Based on the Board of Directors' resolution, the Company holds treasury shares for business purposes including price stabilization. The changes in treasury shares for the years ended December 31, 2015 and 2016 were as follows:

	2015		2016	
	Number of shares	Amount	Number of shares	Amount
	(shares, in millions of Won)			
Beginning	7,193,807	₩1,534,457	7,191,187	₩1,533,898
Disposal of treasury shares	(2,620)	(559)	(2,017)	(430)
Ending	<u>7,191,187</u>	<u>₩1,533,898</u>	<u>7,189,170</u>	<u>₩1,533,468</u>

28. Revenue

Details of revenue for the years ended December 31, 2014, 2015 and 2016 were as follows:

	2014	2015	2016
	(in millions of Won)		
Sales of goods	₩ 53,636,957	47,018,466	43,683,169
Services	2,962,404	2,489,447	2,276,534
Construction revenue	7,797,953	8,546,454	6,497,723
Rental income	18,876	11,757	8,930
Others	342,435	456,144	473,415
	<u>₩ 64,758,625</u>	<u>58,522,268</u>	<u>52,939,771</u>

29. Construction Contracts

(a) Details of in-progress construction contracts as of December 31, 2015 and 2016 are as follows:

	2015	2016
	(in million of Won)	
Aggregate amount of costs incurred	₩ 18,089,275	22,012,241
Add: Recognized profits	1,194,797	1,429,555
Less: Recognized losses	(432,674)	(1,139,165)
Cumulative construction revenue	18,851,398	22,302,631
Less: Progress billing	(18,374,500)	(22,483,968)
Others	(45,093)	9,961
	<u>₩ 431,805</u>	<u>(171,376)</u>

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(b) Details of due from customers for contract work and due to customers for contract work related to construction as of December 31, 2015 and 2016 are as follows:

	<u>2015</u>	<u>2016</u>
	<u>(in million of Won)</u>	
Unbilled due from customers for contract work	₩1,199,497	860,287
Due to customers for contract work	(767,692)	(1,031,663)
	<u>₩ 431,805</u>	<u>(171,376)</u>

(c) Due to the factors causing the variation of costs for the year ended December 31, 2016, the estimated total contract costs have changed. Details of changes in estimated total contract costs and the impact on profit before income taxes for the year ended December 31, 2016 and future periods are as follows:

	<u>Amount</u>
	<u>(in millions of Won)</u>
Changes in estimated total contract costs	₩ 532,801
Changes in profit before income taxes of construction contract:	
- Current period	(790,391)
- Future periods	69,464

The effect on the current and future profit is estimated based on the circumstances that have occurred from the commencement date of the contract to the end of 2016. The estimation is evaluated for the total contract costs and expected total contract revenue as of the end of the period. Such estimate may change in future periods.

(d) Uncertainty of estimates

1) Total contract revenues

Total contract revenues are measured based on contractual amount initially agreed. However, the contract revenues can increase due to additional contract work, claims and incentive payments in the course of construction, or decrease due to penalty when the completion of contract is delayed due to the Company's fault. Therefore, this measurement of contract revenues is affected by the uncertainty of the occurrence of future events.

2) Total contract costs

Construction revenues are recognized based on the percentage of completion, which is measured on the basis of the gross amount incurred to date. Total contract costs are estimated based on estimates of future material costs, labor costs, outsourcing cost and others. There is uncertainty in future estimates due to various internal and external factors such as fluctuation of market, the risk of business partner and the experience of project performance and others. The significant assumptions including uncertainty of the estimate of total contract costs are as follows:

Method of significant assumption

Material cost	Assumption based on recent purchasing price and quoted market price
Labor cost	Assumption based on standard monthly and daily labor cost
Outsourcing cost	Assumption based on the past experience rate of similar project and market price

Management reviews the assumptions used in estimated contract costs at each reporting period end and adjusts them, if necessary.

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30. Selling and Administrative Expenses

(a) Administrative expenses

Administrative expenses for years ended December 31, 2014, 2015 and 2016 were as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
	(in millions of Won)		
Wages and salaries	₩ 781,433	810,851	769,589
Expenses related to post-employment benefits	66,744	87,293	200,956
Other employee benefits	174,131	193,967	176,794
Travel	50,257	48,426	40,828
Depreciation	110,908	105,470	103,442
Amortization	162,312	168,525	139,569
Communication	9,579	12,502	11,186
Electricity expenses	11,746	9,573	7,527
Taxes and public dues	55,647	74,315	78,895
Rental	137,366	119,836	82,005
Repairs	13,924	11,677	11,316
Entertainment	17,633	15,740	13,157
Advertising	104,485	90,698	86,141
Research & development	175,195	135,508	120,608
Service fees	215,974	218,751	201,129
Supplies	10,856	9,855	7,297
Vehicles maintenance	12,685	10,756	10,090
Industry association fee	11,856	12,603	13,468
Conference	17,620	16,053	13,108
Increase to provisions	16,056	14,900	6,532
Bad debt expenses	108,933	189,616	165,150
Others	44,416	38,333	32,753
	<u>₩ 2,309,756</u>	<u>2,395,248</u>	<u>2,291,540</u>

(b) Selling expenses

Selling expenses for the years ended December 31, 2014, 2015 and 2016 were as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
	(in millions of Won)		
Freight and custody expenses	₩ 1,551,705	1,531,906	1,342,009
Operating expenses for distribution center	10,782	11,021	10,315
Sales commissions	66,359	80,165	94,377
Sales advertising	4,615	3,220	5,117
Sales promotion	25,777	22,443	10,670
Sample	3,477	2,576	2,335
Sales insurance premium	39,538	30,682	31,379
Contract cost	49,891	38,425	49,480
Others	7,974	8,518	8,004
	<u>₩ 1,760,118</u>	<u>1,728,956</u>	<u>1,553,686</u>

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31. Research and Development Expenditures Recognized as Expenses

Research and development expenditures recognized as expenses for the years ended December 31, 2014, 2015 and 2016 were as follows:

	2014	2015	2016
	(in millions of Won)		
Selling and administrative expenses	₩ 175,195	135,508	120,608
Cost of sales	353,149	356,173	324,190
	<u>₩ 528,344</u>	<u>491,681</u>	<u>444,798</u>

32. Other Operating Income and Expenses

Details of other operating income and expenses for the years ended December 31, 2014, 2015 and 2016 were as follows:

	2014	2015	2016
	(in millions of Won)		
Other operating income			
Gain on disposals of assets held for sale	₩ 48,232	227,956	23,112
Gain on disposals of investment in subsidiaries, associates and joint ventures	41,258	88,718	23,305
Gain on disposals of property, plant and equipment	15,039	22,730	23,826
Recovery of allowance for other doubtful accounts	—	10,452	12,658
Rental revenues	1,743	1,019	1,771
Gain on insurance proceeds	2,924	14,976	22,400
Others	160,210	183,197	108,064
	<u>₩ 269,406</u>	<u>549,048</u>	<u>215,136</u>
Other operating expenses			
Impairment loss on assets held for sale	₩ (17,205)	(133,547)	(24,890)
Loss on disposals of assets held for sale	(14)	(190,357)	(254)
Loss on disposals of investment in subsidiaries, associates and joint ventures	(2,556)	(18,996)	(22,499)
Loss on disposals of property, plant and equipment	(50,006)	(101,732)	(86,622)
Impairment loss on property, plant and equipment	(64,833)	(136,269)	(196,882)
Impairment loss on goodwill and intangible assets	(55,220)	(161,412)	(127,875)
Other bad debt expenses	(96,373)	(158,071)	(50,225)
Idle tangible asset expenses	(12,214)	(12,773)	(6,437)
Impairment loss on other non-current assets	(38,137)	(12,264)	(9,894)
Increase to provisions	(126,601)	(18,396)	(53,058)
Donations	(69,544)	(62,957)	(43,810)
Others ^(1,2)	(446,971)	(435,524)	(133,274)
	<u>₩ (979,674)</u>	<u>(1,442,298)</u>	<u>(755,720)</u>

(*1) As a result of Korea National Tax Service's periodic audit of tax payments and refunds of the Company, the Company recognized additional tax payments amounting to ₩271,646 million, primarily related to VAT, as other operating expense during the year ended December 31, 2014.

(*2) The Company paid ₩299,037 million in connection with its settlement with Nippon Steel & Sumitomo Metal Corporation for a civil lawsuit regarding improperly acquired trade secrets and patents for the year ended December 31, 2015.

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33. Finance Income and Costs

Details of finance income and costs for the years ended December 31, 2014, 2015 and 2016 were as follows:

	2014	2015	2016
	(in millions of Won)		
Finance income			
Interest income	₩ 228,254	210,193	182,475
Dividend income	47,825	183,712	41,000
Gain on foreign currency transactions	1,022,253	1,025,240	1,032,552
Gain on foreign currency translations	453,471	466,090	377,723
Gain on derivatives transactions	327,738	366,482	316,524
Gain on valuations of derivatives	73,279	155,334	147,111
Gain on disposals of available-for-sale financial assets	236,484	139,136	130,830
Others	7,458	10,886	3,765
	<u>₩ 2,396,762</u>	<u>2,557,073</u>	<u>2,231,980</u>
Finance costs			
Interest expenses	₩ (795,585)	(788,772)	(658,726)
Loss on foreign currency transactions	(1,033,723)	(1,157,161)	(1,147,192)
Loss on foreign currency translations	(428,891)	(716,722)	(405,391)
Loss on derivatives transactions	(353,435)	(343,118)	(338,314)
Loss on valuation of derivatives	(101,330)	(72,133)	(162,676)
Impairment loss on available-for-sale financial assets	(369,723)	(142,781)	(248,404)
Others	(139,300)	(166,367)	(53,487)
	<u>₩ (3,221,987)</u>	<u>(3,387,054)</u>	<u>(3,014,190)</u>

34. Expenses by Nature

Expenses that are recorded by nature as cost of sales, selling and administrative expenses and other operating expenses in the statements of comprehensive income for the years ended December 31, 2014, 2015 and 2016 were as follows (excluding finance costs and income tax expense):

	2014	2015	2016
	(in millions of Won)		
Raw material used, changes in inventories and others	₩ 39,989,853	33,939,108	30,177,732
Employee benefits expenses ^{(*)2}	3,197,902	3,472,295	3,444,276
Outsourced processing cost	9,294,977	8,681,271	7,678,055
Electricity expenses	1,370,390	1,251,546	1,018,429
Depreciation ^{(*)1}	2,894,609	2,836,663	2,835,843
Amortization	343,940	381,583	378,004
Freight and custody expenses	1,551,705	1,531,906	1,342,009
Sales commissions	66,359	80,165	94,377
Loss on disposal of property, plant and equipment	50,006	101,732	86,622
Impairment loss on property, plant and equipment	64,833	136,269	196,882
Impairment loss on goodwill and intangible assets	55,220	161,412	127,875
Increase to provisions	245,470	86,903	189,914
Donations	69,544	62,957	43,810
Other expenses	3,320,225	4,861,126	3,258,583
	<u>₩ 62,515,033</u>	<u>57,584,936</u>	<u>50,872,411</u>

(*)1) Includes depreciation expense of investment property.

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(*2) The details of employee benefits expenses for the years ended December 31, 2014, 2015 and 2016 were as follows:

	2014	2015	2016
	(in millions of Won)		
Wages and salaries	₩ 2,931,553	3,186,237	3,016,488
Expenses related to post-employment benefits	266,349	286,058	427,788
	₩ 3,197,902	3,472,295	3,444,276

35. Income Taxes

(a) Income tax expense for the years ended December 31, 2014, 2015 and 2016 was as follows:

	2014	2015	2016
	(in millions of Won)		
Current income taxes	₩ 790,055	553,041	699,269
Deferred income tax due to temporary differences	(79,719)	(253,860)	(209,706)
Items recorded directly in equity	113,505	(32,621)	(110,019)
Income tax expense	₩ 823,841	266,560	379,544

(b) The following table reconciles the calculated income tax expense based on POSCO's statutory rate (24.2%) to the actual amount of taxes recorded by the Company for the years ended December 31, 2014, 2015 and 2016.

	2014	2015	2016
	(in millions of Won)		
Profit before income tax expense	₩ 1,387,880	150,345	1,411,609
Income tax expense computed at statutory rate	335,405	35,921	341,148
Adjustments:			
Tax credits	(49,615)	(152,139)	(30,124)
Over provision from prior years	(463)	(47,053)	(11,829)
Investment in subsidiaries, associates and joint ventures	371,876	439,575	76,751
Tax effects due to permanent differences	69,998	(26,045)	(9,962)
Adjustments on prior year tax from tax audit	56,257	—	—
Tax effects due to amendments to local income tax law	39,890	—	—
Others	493	16,301	13,560
	488,436	230,639	38,396
Income tax expense	₩ 823,841	266,560	379,544
Effective tax rate (%)	59.36%	177.30%	26.89%

(c) The income taxes credited (charged) directly to equity during the years ended December 31, 2014, 2015 and 2016 were as follows:

	2014	2015	2016
	(in millions of Won)		
Net changes in the unrealized fair value of available-for-sale investment	₩ 105,639	60,077	(100,550)
Loss (gain) on sale of treasury stock	(4,654)	12	(10)
Other capital surplus	—	(86,765)	—
Others	12,520	(5,945)	(9,459)
	₩ 113,505	(32,621)	(110,019)

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(d) The movements in deferred tax assets (liabilities) for the years ended December 31, 2015 and 2016 were as follows:

	2015			2016		
	Beginning	Inc. (Dec.)	Ending	Beginning	Inc. (Dec.)	Ending
	(in millions of Won)					
Deferred income tax due to temporary differences						
Allowance for doubtful accounts	195,735	6,857	202,592	202,592	10,527	213,119
Reserve for technology developments	(259,033)	81,357	(177,676)	(177,676)	85,716	(91,960)
PPE — Depreciation	(6,675)	(8,565)	(15,240)	(15,240)	3,601	(11,639)
Share of profit or loss of equity-accounted investees	(96,693)	51,519	(45,174)	(45,174)	115,433	70,259
Allowance for inventories valuation	1,991	11,382	13,373	13,373	2,278	15,651
PPE — Revaluation	(1,222,599)	(170,902)	(1,393,501)	(1,393,501)	(130,648)	(1,524,149)
Prepaid expenses	17,461	1,719	19,180	19,180	485	19,665
PPE — Impairment loss	21,962	(13,907)	8,055	8,055	(2,760)	5,295
Gain or loss on foreign currency	(69,112)	39,757	(29,355)	(29,355)	23,398	(5,957)
Defined benefit obligations	365,721	(11,546)	354,175	354,175	7,663	361,838
Plan assets	(298,072)	10,233	(287,839)	(287,839)	(28,686)	(316,525)
Provision for construction losses	4,953	(4,341)	612	612	385	997
Provision for construction warranty	20,371	1,233	21,604	21,604	2,718	24,322
Accrued income	(3,691)	(5,291)	(8,982)	(8,982)	(459)	(9,441)
Impairment loss on AFS	172,001	94,473	266,474	266,474	(21,306)	245,168
Difference in acquisition costs of treasury shares	62,139	(23)	62,116	62,116	(17)	62,099
Others	92,155	204,052	296,207	296,207	107,541	403,748
	<u>(1,001,386)</u>	<u>288,007</u>	<u>(713,379)</u>	<u>(713,379)</u>	<u>175,869</u>	<u>(537,510)</u>
Deferred income taxes recognized directly to equity						
Loss (gain) on valuation of available-for-sale investments	(10,034)	60,077	50,043	50,043	(100,550)	(50,507)
Others	67,236	(5,945)	61,291	61,291	(9,459)	51,832
	<u>57,202</u>	<u>54,132</u>	<u>111,334</u>	<u>111,334</u>	<u>(110,009)</u>	<u>1,325</u>
Deferred tax from tax credit						
Tax credit carryforward and others	339,959	(62,698)	277,261	277,261	30,074	307,335
Investments in subsidiaries, associates and joint ventures						
Investments in subsidiaries, associates and joint ventures	(21,627)	3,538	(18,089)	(18,089)	104,219	86,130
	<u>₩ (625,852)</u>	<u>282,979</u>	<u>(342,873)</u>	<u>(342,873)</u>	<u>200,153</u>	<u>(142,720)</u>

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(e) Deferred tax assets and liabilities as of December 31, 2015 and 2016 are as follows:

	2015			2016		
	Assets	Liabilities	Net	Assets	Liabilities	Net
	(in millions of Won)					
Deferred income tax due to temporary differences						
Allowance for doubtful accounts	202,592	—	202,592	213,119	—	213,119
Reserve for technology developments	—	(177,676)	(177,676)	—	(91,960)	(91,960)
PPE — Depreciation	34,575	(49,815)	(15,240)	50,843	(62,482)	(11,639)
Share of profit or loss of equity-accounted investees	52,521	(97,695)	(45,174)	178,538	(108,279)	70,259
Allowance for inventories valuation	13,373	—	13,373	15,651	—	15,651
PPE — Revaluation	—	(1,393,501)	(1,393,501)	—	(1,524,149)	(1,524,149)
Prepaid expenses	19,180	—	19,180	19,665	—	19,665
PPE — Impairment loss	8,159	(104)	8,055	5,397	(102)	5,295
Gain or loss on foreign currency	107,076	(136,431)	(29,355)	99,836	(105,793)	(5,957)
Defined benefit obligations	354,175	—	354,175	361,838	—	361,838
Plan assets	—	(287,839)	(287,839)	—	(316,525)	(316,525)
Provision for construction losses	612	—	612	997	—	997
Provision for construction warranty	21,604	—	21,604	24,322	—	24,322
Accrued income	—	(8,982)	(8,982)	—	(9,441)	(9,441)
Impairment loss on AFS	266,474	—	266,474	245,168	—	245,168
Difference in acquisition costs of treasury shares	62,116	—	62,116	62,099	—	62,099
Others	369,763	(73,556)	296,207	452,425	(48,677)	403,748
	<u>1,512,220</u>	<u>(2,225,599)</u>	<u>(713,379)</u>	<u>1,729,898</u>	<u>(2,267,408)</u>	<u>(537,510)</u>
Deferred income taxes recognized directly to equity						
Loss (gain) on valuation of available-for-sale investments	218,161	(168,118)	50,043	50,245	(100,752)	(50,507)
Others	76,086	(14,795)	61,291	65,532	(13,700)	51,832
	<u>294,247</u>	<u>(182,913)</u>	<u>111,334</u>	<u>115,777</u>	<u>(114,452)</u>	<u>1,325</u>
Deferred tax from tax credit						
Tax credit carryforward and others	277,261	—	277,261	307,335	—	307,335
Investments in subsidiaries, associates and joint ventures						
Investments in subsidiaries, associates and joint ventures	518,326	(536,415)	(18,089)	561,506	(475,376)	86,130
	<u>₩ 2,602,054</u>	<u>(2,944,927)</u>	<u>(342,873)</u>	<u>2,714,516</u>	<u>(2,857,236)</u>	<u>(142,720)</u>

(f) As of December 31, 2016, the Company did not recognize income tax effects associated with deductible temporary differences of ₩4,612,900 million mainly relating to loss of subsidiaries and affiliates because realization is not considered probable. As of December 31, 2016, the Company did not recognize income tax effects associated with taxable temporary differences of ₩3,933,428 million (deferred tax liabilities ₩951,890 million) mainly relating to increase in retained earnings of subsidiaries since it is probable that the temporary difference will not reverse in the foreseeable future.

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36. Earnings per Share

Basic and diluted earnings per share for the years ended December 31, 2014, 2015 and 2016 were as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
	(Won, except per share information)		
Profit attribute to controlling interest	₩ 632,706,233,938	171,493,811,117	1,354,806,734,940
Interests of hybrid bonds	(33,048,799,997)	(33,029,632,499)	(33,225,163,081)
Weighted-average number of common shares outstanding ^(*)	<u>79,801,539</u>	<u>79,993,834</u>	<u>79,996,389</u>
Basic and diluted earnings per share	<u>₩ 7,514</u>	<u>1,731</u>	<u>16,521</u>

(*1) The weighted-average number of common shares used to calculate basic and diluted earnings per share are as follows:

<u>(shares)</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Total number of common shares issued	87,186,835	87,186,835	87,186,835
Weighted-average number of treasury shares	(7,385,296)	(7,193,001)	(7,190,446)
Weighted-average number of common shares outstanding	<u>79,801,539</u>	<u>79,993,834</u>	<u>79,996,389</u>

Since there were no potential shares of common stock which had dilutive effects as of December 31, 2014, 2015 and 2016, diluted earnings per share is equal to basic earnings per share.

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37. Related Party Transactions

(a) Significant transactions between the controlling company and related parties for the years ended December 31, 2014, 2015 and 2016 were as follows:

1) For the year ended December 31, 2014

	Sales and others ^(*1)		Purchase and others ^(*2)			
	Sales	Others	Purchase of material	Purchase of fixed assets	Outsourced processing cost	Others
	(in millions of Won)					
Subsidiaries						
POSCO ENGINEERING & CONSTRUCTION, LTD.	₩ 22,659	16,789	544,202	247,286	3,689	30,852
POSCO Processing & Service	1,075,567	8,649	785,943	—	—	1,681
POSCO COATED & COLOR STEEL Co., Ltd.	444,513	12	—	—	12,313	195
POSCO ICT ^(*3)	929	2,593	356	209,893	26,231	161,173
eNtoB Corporation	—	3	297,119	10,433	137	21,073
POSCO CHEMTECH	532,973	26,537	513,759	5,449	301,149	923
POSCO ENERGY CO., LTD.	177,517	1,230	—	2,263	—	20
POSCO TMC Co., Ltd.	240,318	9	—	—	1,056	1,611
POSCO AST	503,452	5	10,396	—	57,355	2,671
POSHIMETAL Co., Ltd.	11,261	3,660	166,442	—	—	—
POSCO DAEWOO Corporation (formerly, Daewoo International Corporation)	3,558,652	20,652	90,361	—	—	3,857
SeAH Changwon Integrated Special Steel	5,313	201,927	40,124	—	1,939	266
POSCO America Corporation	747,933	2	—	—	—	1,794
POSCO Canada Ltd.	—	—	141,767	—	—	—
POSCO Asia Co., Ltd.	2,167,148	89	169,945	—	10,006	1,969
Qingdao Pohang Stainless Steel Co., Ltd.	79,783	—	—	—	—	19
POSCO JAPAN Co., Ltd.	1,329,947	4	15,165	2,269	3	2,279
POSCO MEXICO S.A. DE C.V.	287,468	929	—	—	—	—
POSCO Maharashtra Steel Private Limited	444,407	6,053	—	—	—	—
Others	980,410	4,149	334,577	66,345	232,682	104,275
	<u>12,610,250</u>	<u>293,292</u>	<u>3,110,156</u>	<u>543,938</u>	<u>646,560</u>	<u>334,658</u>
Associates and joint ventures						
POSCO PLANTEC Co., Ltd. ^(*5)	15,310	64	3,195	119,369	15,777	22,751
SNNC	3,077	5,716	339,991	—	—	5
POSCHROME (PROPRIETARY) LIMITED	—	—	59,241	—	—	—
POSCO-SAMSUNG-Slovakia Processing Center	24,059	—	—	—	—	—
Others ^(*4)	10,785	41,903	3,668	—	—	—
	<u>53,231</u>	<u>47,683</u>	<u>406,095</u>	<u>119,369</u>	<u>15,777</u>	<u>22,756</u>
₩	<u><u>12,663,481</u></u>	<u><u>340,975</u></u>	<u><u>3,516,251</u></u>	<u><u>663,307</u></u>	<u><u>662,337</u></u>	<u><u>357,414</u></u>

(*1) Sales and others mainly consist of sales of steel products to subsidiaries, associates and joint ventures.

(*2) Purchases and others mainly consist of subsidiaries' purchases of construction services and purchases of raw materials to manufacture steel products.

(*3) Others (purchase) mainly consist of service fees related to maintenance and repair of ERP System.

(*4) The Company had made loans of USD 3.85 million to LLP POSUK Titanium, an associate of the Company, during the year ended December 31, 2014.

(*5) It was reclassified from an associate to a subsidiary.

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2) For the year ended December 31, 2015

	Sales and others ^(*1)		Purchase and others ^(*2)			
	Sales	Others	Purchase of material	Purchase of fixed assets	Outsourced processing cost	Others
	(in millions of Won)					
Subsidiaries						
POSCO ENGINEERING & CONSTRUCTION, LTD.	₩ 4,441	145	19	427,760	2,250	37,488
POSCO Processing & Service	1,074,826	24	437,626	—	—	2,281
POSCO COATED & COLOR STEEL Co., Ltd.	380,626	—	—	—	9,359	104
POSCO ICT ^(*3)	1,259	7	—	210,877	29,612	182,745
eNtoB Corporation	—	—	261,989	6,501	130	22,017
POSCO CHEMTECH	436,594	30,343	519,956	9,515	297,183	1,773
POSCO ENERGY CO., LTD.	188,458	1,359	—	—	—	6
POSCO TMC Co., Ltd.	263,242	—	—	—	1,497	1,560
POSCO AST	362,658	15	4,115	—	39,175	1,611
POSHIMETAL Co., Ltd.	10,777	151	145,165	—	—	46
POSCO DAEWOO Corporation (formerly, Daewoo International Corporation)	3,505,187	34,334	46,675	—	—	480
SeAH Changwon Integrated Special Steel ^(*4)	2,811	176,904	8,239	—	515	75
POSCO PLANTEC Co., Ltd. ^(*4)	4,280	33	2,544	125,192	15,135	13,649
POSCO Thainox Public Company Limited	268,576	10	5,147	—	—	34
POSCO America Corporation	624,549	6	—	—	—	725
POSCO Canada Ltd.	—	—	111,243	—	—	—
POSCO Asia Co., Ltd.	1,822,932	960	269,086	—	513	2,273
Qingdao Pohang Stainless Steel Co., Ltd.	118,845	—	—	—	—	220
POSCO JAPAN Co., Ltd.	1,051,910	9,383	25,957	2,278	201	2,754
POSCO MEXICO S.A. DE C.V.	270,184	80	—	—	—	11
PT. KRAKATAU POSCO	—	—	118,888	—	—	—
POSCO Maharashtra Steel Private Limited	421,244	752	—	—	—	31
Others ^(*5)	867,334	14,474	223,393	113,769	212,539	129,506
	<u>11,680,733</u>	<u>268,980</u>	<u>2,180,042</u>	<u>895,892</u>	<u>608,109</u>	<u>399,389</u>
Associates and joint ventures						
SeAH Changwon Integrated Special Steel ^(*4)	6,042	—	3,802	—	419	—
POSCO PLANTEC Co., Ltd. ^(*4)	147	14	1,017	82,338	3,513	4,676
SNNC	4,673	594	422,420	—	—	—
POSCO-SAMSUNG-Slovakia Processing center	26,379	—	—	—	—	—
Others ^(*6,7)	28,841	40,600	51,855	—	—	—
	<u>66,082</u>	<u>41,208</u>	<u>479,094</u>	<u>82,338</u>	<u>3,932</u>	<u>4,676</u>
₩	<u>11,746,815</u>	<u>310,188</u>	<u>2,659,136</u>	<u>978,230</u>	<u>612,041</u>	<u>404,065</u>

(*1) Sales and others mainly consist of sales of steel products to subsidiaries, associates and joint ventures.

(*2) Purchases and others mainly consist of subsidiaries' purchases of construction services and purchases of raw materials to manufacture steel products.

(*3) Others (purchase) mainly consist of service fees related to maintenance and repair of ERP System.

(*4) During the year ended December 31, 2015, it was reclassified from a subsidiary to an associate.

(*5) During the year ended December 31, 2015, the Company borrowed USD 17.42 million from POSCO-Uruguay S.A., a subsidiary of the Company, and the entire amount was repaid as of December 31, 2015.

(*6) During the year ended December 31, 2015, the Company lent USD 60 million to CSP-Compania Siderurgica do Pecem, an associate of the Company, and the entire amount of loan was collected as of December 31, 2015.

(*7) The Company has collected loans of USD 3.85 million from LLP POSUK Titanium, an associate of the Company for the year ended December 31, 2015

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

3) For the year ended December 31, 2016

	Sales and others ^{(*)1}		Purchase and others ^{(*)2}			
	Sales	Others	Purchase of material	Purchase of fixed assets	Outsourced processing cost	Others
	(in millions of Won)					
Subsidiaries ^{(*)3}						
POSCO ENGINEERING & CONSTRUCTION, LTD.	₩ 29,511	16,661	8	183,768	—	24,511
POSCO Processing&Service	1,212,220	5,778	549,803	2,896	22,704	2,445
POSCO COATED & COLOR STEEL Co., Ltd.	326,078	2,560	—	—	12,232	126
POSCO ICT ^{(*)4}	1,224	727	—	219,301	32,456	171,107
eNtoB Corporation	—	5	278,016	9,836	212	19,436
POSCO CHEMTECH	319,164	33,784	502,448	14,847	290,427	5,139
POSCO ENERGY CO., LTD.	187,311	1,382	—	—	—	7
POSCO TMC Co., Ltd. ^{(*)5}	219,489	—	2	—	863	1,177
POSCO AST ^{(*)5}	152,098	1	—	—	19,695	922
POSCO DAEWOO Corporation (formerly, Daewoo International Corporation) ^{(*)6}	3,227,716	34,341	92,203	—	343	—
POSCO Thainox Public Company Limited	237,471	2,915	9,593	—	19	548
POSCO America Corporation	469,543	—	284	—	—	1,103
POSCO Canada Ltd.	275	—	148,528	—	—	—
POSCO Asia Co., Ltd.	1,758,080	1,373	403,174	247	939	3,602
Qingdao Pohang Stainless Steel Co., Ltd.	135,405	—	—	—	—	525
POSCO JAPAN Co., Ltd.	1,112,489	128	23,217	3,744	345	3,841
POSCO-VIETNAM Co., Ltd.	226,063	445	—	—	—	—
POSCO MEXICO S.A. DE C.V.	274,210	462	—	—	—	—
POSCO Maharashtra Steel Private Limited	355,829	2,613	—	—	—	93
POSCO(Suzhou) Automotive Processing Center Co., Ltd.	149,911	—	—	—	—	—
Others	766,263	22,717	207,601	62,202	212,344	145,562
	<u>11,160,350</u>	<u>125,892</u>	<u>2,214,877</u>	<u>496,841</u>	<u>592,579</u>	<u>380,144</u>
Associates and joint ventures ^{(*)3}						
SeAH Changwon Integrated Special Steel	28	—	1,095	—	627	—
POSCO PLANTEC Co., Ltd.	2,245	48	3,533	244,898	16,812	8,146
SNNC	6,004	1,042	487,395	—	—	2
POSCO-SAMSUNG-Slovakia Processing center	44,686	—	—	—	—	—
KOBRASCO	—	29,297	—	—	—	—
Others	26,625	13,122	175,246	—	—	—
	<u>79,588</u>	<u>43,509</u>	<u>667,269</u>	<u>244,898</u>	<u>17,439</u>	<u>8,148</u>
₩	<u>11,239,938</u>	<u>169,401</u>	<u>2,882,146</u>	<u>741,739</u>	<u>610,018</u>	<u>388,292</u>

(*)1 Sales and others mainly consist of sales of steel products to subsidiaries, associates and joint ventures.

(*)2 Purchases and others mainly consist of subsidiaries' purchases of construction services and purchases of raw materials to manufacture steel products.

(*)3 As of December 31, 2016, the Company provided guarantees to related parties (Note 38).

(*)4 Others (purchase) mainly consist of service fees related to maintenance and repair of ERP System.

(*)5 During the year ended December 31, 2016, it was merged into POSCO Processing& Service.

(*)6 During the year ended December 31, 2016, Daewoo International Corporation was renamed POSCO DAEWOO Corporation.

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

(b) The related account balances of significant transactions between the controlling company and related companies as of December 31, 2015 and 2016 are as follows:

1) December 31, 2015

	Receivables			Payables			
	Trade accounts and notes receivable	Others	Total	Trade accounts and notes payable	Accounts payable	Others	Total
	(in millions of Won)						
Subsidiaries							
POSCO ENGINEERING & CONSTRUCTION., LTD.	₩ 508	30,368	30,876	—	42,159	1,002	43,161
POSCO Processing&Service	74,985	175	75,160	10,868	603	—	11,471
POSCO COATED & COLOR STEEL Co., Ltd.	43,669	66	43,735	—	—	1,262	1,262
POSCO ICT	—	6,832	6,832	1,060	94,865	5,880	101,805
eNtoB Corporation	—	—	—	8,683	14,209	12	22,904
POSCO CHEMTECH	32,670	4,500	37,170	54,636	11,398	18,062	84,096
POSCO ENERGY CO., LTD.	18,680	2,585	21,265	—	—	—	—
POSCO TMC Co., Ltd.	63,521	31	63,552	—	180	195	375
POSCO AST	54,844	54	54,898	—	1,915	3,294	5,209
POSHIMETAL Co., Ltd.	707	9	716	—	10,148	—	10,148
POSCO DAEWOO Corporation (formerly, Daewoo International Corporation)	144,970	—	144,970	—	—	—	—
POSCO Thainox Public Company Limited ..	65,152	2	65,154	542	—	—	542
POSCO America Corporation	38,715	—	38,715	—	—	—	—
POSCO Asia Co., Ltd.	299,608	235	299,843	21,198	69	—	21,267
Qingdao Pohang Stainless Steel Co., Ltd. ...	16,689	—	16,689	—	—	—	—
POSCO MEXICO S.A. DE C.V.	94,588	—	94,588	—	—	—	—
POSCO Maharashtra Steel Private Limited	205,390	20	205,410	—	—	—	—
Others	172,019	5,035	177,054	18,208	45,476	23,985	87,669
	<u>1,326,715</u>	<u>49,912</u>	<u>1,376,627</u>	<u>115,195</u>	<u>221,022</u>	<u>53,692</u>	<u>389,909</u>
Associates and joint ventures							
SeAH Changwon Integrated Special Steel	1,201	—	1,201	161	15	—	176
POSCO PLANTEC Co., Ltd.	123	19	142	1,901	46,159	—	48,060
SNNC	298	20	318	639	2	—	641
Others	740	12,200	12,940	—	145	—	145
	<u>2,362</u>	<u>12,239</u>	<u>14,601</u>	<u>2,701</u>	<u>46,321</u>	<u>—</u>	<u>49,022</u>
	<u>₩ 1,329,077</u>	<u>62,151</u>	<u>1,391,228</u>	<u>117,896</u>	<u>267,343</u>	<u>53,692</u>	<u>438,931</u>

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

2) December 31, 2016

	Receivables			Payables			
	Trade accounts and notes receivable	Others	Total	Trade accounts and notes payable	Accounts payable	Others	Total
	(in millions of Won)						
Subsidiaries							
POSCO ENGINEERING & CONSTRUCTION., LTD.	₩ 3	3,359	3,362	—	9,825	515	10,340
POSCO Processing&Service	207,744	178	207,922	1,085	5,367	5,184	11,636
POSCO COATED & COLOR STEEL Co., Ltd.	48,716	324	49,040	—	5	1,600	1,605
POSCO ICT	—	128	128	1,062	89,382	6,074	96,518
eNtoB Corporation	—	—	—	9,948	29,310	15	39,273
POSCO CHEMTECH	27,253	3,868	31,121	54,702	11,870	19,282	85,854
POSCO ENERGY CO., LTD.	18,701	2,012	20,713	—	—	1,425	1,425
POSCO DAEWOO Corporation (formerly, Daewoo International Corporation)	182,700	11,184	193,884	460	183	49	692
POSCO Thainox Public Company Limited ..	62,034	8	62,042	—	224	—	224
POSCO America Corporation	10,008	—	10,008	—	—	—	—
POSCO Asia Co., Ltd.	375,823	7	375,830	25,101	—	—	25,101
Qingdao Pohang Stainless Steel Co., Ltd. ...	25,386	—	25,386	—	5	—	5
POSCO MEXICO S.A. DE C.V.	114,166	—	114,166	—	—	—	—
POSCO Maharashtra Steel Private Limited	208,737	2,512	211,249	—	—	—	—
Others	333,031	2,461	335,492	17,374	46,455	26,974	90,803
	<u>1,614,302</u>	<u>26,041</u>	<u>1,640,343</u>	<u>109,732</u>	<u>192,626</u>	<u>61,118</u>	<u>363,476</u>
Associates and joint ventures							
POSCO PLANTEC Co., Ltd.	30	9	39	2,125	39,647	—	41,772
SNNC	223	26	249	40,201	—	—	40,201
Others	800	1	801	991	17,685	—	18,676
	<u>1,053</u>	<u>36</u>	<u>1,089</u>	<u>43,317</u>	<u>57,332</u>	<u>—</u>	<u>100,649</u>
	<u>₩ 1,615,355</u>	<u>26,077</u>	<u>1,641,432</u>	<u>153,049</u>	<u>249,958</u>	<u>61,118</u>	<u>464,125</u>

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

(c) Significant transactions between the Company, excluding the controlling company, and related companies for the years ended December 31, 2014, 2015 and 2016 were as follows:

1) December 31, 2014

	Sales and others		Purchase and others	
	Sales	Others	Purchase of material	Others
	(in millions of Won)			
Associates and joint ventures				
New Songdo International City Development, LLC	₩ 492,134	227	—	58
SNNC	131,181	441	3,798	3,690
Posco e&c Songdo International Building	6,311	—	—	23,502
POSCO PLANTEC Co., Ltd.	20,614	2	1,758	123,720
VSC POSCO Steel Corporation	4,590	660	14,828	—
USS-POSCO Industries	484,007	—	4,003	—
AN KHANH NEW CITY DEVELOPMENT J.V CO., LTD.	3,793	—	—	—
CSP — Compania Siderurgica do Pecem	1,524,040	—	—	—
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	140,512	103	110,371	—
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	48,863	—	—	—
Zhangjiagang Pohang Refractories Co., Ltd.	909	377	21,395	2,716
Sebang Steel	—	—	39,908	—
SHANGHAI WAIGAOQIAO FREE TRADE ZONE LANSHENG DAEWOO IN'L TRADING CO., LTD.	219,595	—	—	11,542
DMSA/AMSA	31	7,621	—	—
South-East Asia Gas Pipeline Company Ltd.	—	27,305	—	—
Others	214,661	22,607	41,638	5,287
	₩ 3,291,241	59,343	237,699	170,515

2) December 31, 2015

	Sales and others		Purchase and others	
	Sales	Others	Purchase of material	Others
	(in millions of Won)			
Associates and joint ventures				
SeAH Changwon integrated Special Steel	₩ 32,802	—	49,862	1,977
POSCO PLANTEC Co., Ltd.	10,543	—	5,953	6,386
New Songdo International City Development, LLC	420,094	—	—	667
SNNC	32,160	44	6,518	53,260
Posco e&c Songdo International Building	6,278	—	—	25,197
VSC POSCO Steel Corporation	37,416	—	2,395	3
USS-POSCO Industries	353,626	—	1,109	—
CSP — Compania Siderurgica do Pecem	845,979	—	—	—
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	68,300	111	70,236	—
BX STEEL POSCO Cold Rolled Sheet Co., Ltd.	3	—	23,320	—
POS-SEAHSTEELWIRE(TIANJIN) CO., Ltd	9,668	—	—	—
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	30,310	—	4	—
Zhangjiagang Pohang Refractories Co., Ltd.	970	1,248	17,484	2,023
Sebang Steel	—	—	29,007	—
SHANGHAI WAIGAOQIAO FREE TRADE ZONE LANSHENG DAEWOO IN'L TRADING CO., LTD.	214,521	—	3,960	3,190
DMSA/AMSA	800	9,322	241,074	—
South-East Asia Gas Pipeline Company Ltd.	—	47,556	—	—
Others	415,217	17,793	18,518	2,683
	₩ 2,478,687	76,074	469,440	95,386

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

3) December 31, 2016

	Sales and others		Purchase and others	
	Sales	Others	Purchase of material	Others
	(in millions of Won)			
Associates and joint ventures				
SeAH Changwon integrated Special Steel	₩ 16,294	—	22,029	—
POSCO PLANTEC Co., Ltd.	21,659	5	3,335	5,912
New Songdo International City Development, LLC	226,042	—	—	14
SNNC	29,330	—	21,479	9,494
Posco e&c Songdo International Building	4,245	—	—	16,219
Chun-cheon Energy Co., Ltd	288,307	—	—	—
Noeul Green Energy	107,268	—	—	—
Incheon-Gimpo Expressway Co., Ltd.	102,183	—	—	—
VSC POSCO Steel Corporation	43,650	47	479	—
USS-POSCO Industries	287,072	—	1,195	—
CSP — Companhia Siderurgica do Pecem	157,814	—	—	—
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	61,844	—	57,179	—
LLP POSUK Titanium	—	—	14,575	—
BX STEEL POSCO Cold Rolled Sheet Co., Ltd.	—	—	24,365	—
POS-SEAHSTEELWIRE(TIANJIN) CO., Ltd	15,759	—	—	—
PT. Batutua Tembaga Raya	—	—	13,079	—
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	31,711	—	65	—
Zhangjiagang Pohang Refractories Co., Ltd.	250	14	364	2,472
Sebang Steel	—	—	26,276	—
SHANGHAI WAIGAOQIAO FREE TRADE ZONE LANSHENG DAEWOO IN'L TRADING CO., LTD.	157,886	—	3,535	—
DMSA/AMSA	—	—	72,582	—
South-East Asia Gas Pipeline Company Ltd.	—	87,973	—	—
Others	195,139	11,184	16,664	1,801
	<u>₩ 1,746,453</u>	<u>99,223</u>	<u>277,201</u>	<u>35,912</u>

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

(d) The related account balances of significant transactions between the Company, excluding the controlling company, and related companies as of December 31, 2015 and December 31, 2016 are as follows:

1) December 31, 2015

	Receivables (*1)				Payables		
	Trade accounts and notes receivable	Loan	Others	Total	Trade accounts and notes payable	Others	Total
	(in millions of Won)						
Associates and joint ventures							
SeAH Changwon Integrated Special Steel	₩ 8,721	—	—	8,721	3,489	19	3,508
POSCO PLANTEC Co., Ltd.	9,853	—	6	9,859	6,263	8,908	15,171
New Songdo International City Development, LLC	168,646	—	25,964	194,610	—	14	14
Posco e&c Songdo International Building	5,821	—	—	5,821	—	—	—
VSC POSCO Steel Corporation	17,283	—	—	17,283	34	—	34
USS-POSCO Industries	170,170	—	—	170,170	9	—	9
Nickel Mining Company SAS	2,353	17,580	67	20,000	—	—	—
AN KHANH NEW CITY DEVELOPMENT J.V CO., LTD.	63,132	58,600	642	122,374	—	3,982	3,982
CSP — Compania Siderurgica do Pecem	410,005	—	118,112	528,117	—	138,111	138,111
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	9,455	10,782	6	20,243	3,999	—	3,999
PT. Batutua Tembaga Raya	—	36,830	—	36,830	—	—	—
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	8,961	11,720	48	20,729	4	—	4
SHANGHAI WAIGAOQIAO FREE TRADE ZONE LANSHENG DAEWOO IN'L TRADING CO., LTD.	90,195	—	—	90,195	921	—	921
DMSA/AMSA	—	99,854	—	99,854	—	—	—
South-East Asia Gas Pipeline Company Ltd.	—	283,954	—	283,954	—	—	—
Others	192,621	137,202	13,648	343,471	12,591	21,181	33,772
	₩ 1,157,216	656,522	158,493	1,972,231	27,310	172,215	199,525

(*1) As of December 31, 2015, the Company recognizes bad-debt allowance for receivables amounting to ₩25,475 million.

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

2) December 31, 2016

	Receivables ^(*)				Payables		
	Trade accounts and notes receivable	Loan	Others	Total	Trade accounts and notes payable	Others	Total
	(in millions of Won)						
Associates and joint ventures							
POSCO PLANTEC Co., Ltd.	₩ 4,709	—	6	4,715	2,718	8,521	11,239
New Songdo International City Development, LLC	255,822	—	5,725	261,547	—	—	—
Chun-cheon Energy Co., Ltd	12,142	—	—	12,142	—	3,171	3,171
VSC POSCO Steel Corporation	5,265	—	—	5,265	—	—	—
USS-POSCO Industries	583	—	—	583	75	—	75
Nickel Mining Company SAS	133	60,425	116	60,674	—	—	—
AN KHANH NEW CITY DEVELOPMENT J.V CO., LTD.	62,814	60,425	1,643	124,882	—	875	875
CSP — Companhia Siderurgica do Pecem	224,760	—	149,700	374,460	—	109,272	109,272
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	3,279	6,647	6	9,932	1,365	—	1,365
PT. Batutua Tembaga Raya	—	38,120	—	38,120	2,293	—	2,293
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	9,292	8,460	43	17,795	40	—	40
SHANGHAI WAIGAOQIAO FREE TRADE ZONE LANSHENG DAEWOO IN'L TRADING CO., LTD.	100,367	—	—	100,367	—	—	—
DMSA/AMSA	—	90,638	—	90,638	—	—	—
South-East Asia Gas Pipeline Company Ltd.	—	276,605	48	276,653	—	—	—
Others	184,402	142,812	6,593	333,807	4,615	750	5,365
	<u>₩ 863,568</u>	<u>684,132</u>	<u>163,880</u>	<u>1,711,580</u>	<u>11,106</u>	<u>122,589</u>	<u>133,695</u>

(*1) As of December 31, 2016, the Company recognizes bad-debt allowance for receivables amounting to ₩48,891 million.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2014, 2015 and 2016

(e) Significant financial transactions between the Company, excluding the controlling company, and related companies for the years ended December 31, 2015 and 2016 were as follows:

1) December 31, 2015

	Beginning	Lend	Collect	Others ⁽²⁾	Ending
	(in millions of Won)				
Associates and joint ventures					
METAPOLIS Co., Ltd.	₩ 26,000	—	—	—	26,000
DMSA/AMSA ^(*)	140,544	21,653	—	(62,343)	99,854
South-East Asia Gas Pipeline Company Ltd.	295,352	—	(29,885)	18,487	283,954
PT. Batutua Tembaga Raya	34,342	—	—	2,488	36,830
PT. Tanggamus Electric Power	1,733	493	—	133	2,359
PT. Wampu Electric Power	—	4,299	—	155	4,454
VSC POSCO Steel Corporation	2,024	—	(2,024)	—	—
PT. POSMI Steel Indonesia	4,397	—	—	291	4,688
Nickel Mining Company SAS	16,488	—	—	1,092	17,580
POSK(Pinghu) Steel Processing Center Co., Ltd.	10,772	—	(5,543)	514	5,743
AN KHANH NEW CITY DEVELOPMENT J.V CO., LTD.	54,960	—	—	3,640	58,600
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	11,212	—	(1,132)	702	10,782
Hamparan Mulya	3,298	—	—	218	3,516
POS-SEAHSTEELWIRE (TIANJIN) CO., Ltd	4,946	—	—	328	5,274
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	10,992	—	—	728	11,720
AMCI (WA) PTY LTD	78,911	10,262	—	(4,005)	85,168
	<u>₩ 695,971</u>	<u>36,707</u>	<u>(38,584)</u>	<u>(37,572)</u>	<u>656,522</u>

(*1) During the year ended December 31, 2015, loans amounting to ₩72,430 have been converted to shares of DMSA/AMSA, and its amount is included in others.

(*2) Includes adjustments of foreign currency translation differences and others.

2) December 31, 2016

	Beginning	Lend	Collect	Others ^(*)	Ending
	(in millions of Won)				
Associates and joint ventures					
METAPOLIS Co., Ltd.	₩ 26,000	—	(12,730)	—	13,270
Posco e&c Songdo International Building ^(*)	—	298,865	—	(298,865)	—
DMSA/AMSA ^(*)	99,854	11,774	—	(20,990)	90,638
South-East Asia Gas Pipeline Company Ltd.	283,954	27,087	(43,080)	8,644	276,605
PT. Batutua Tembaga Raya	36,830	—	—	1,290	38,120
PT. Tanggamus Electric Power	2,359	1,174	—	73	3,606
PT. Wampu Electric Power	4,454	1,169	—	138	5,761
PT. POSMI Steel Indonesia	4,688	—	—	146	4,834
Nickel Mining Company SAS	17,580	40,594	—	2,251	60,425
POSK(Pinghu) Steel Processing Center Co., Ltd.	5,743	5,683	(11,366)	(60)	—
AN KHANH NEW CITY DEVELOPMENT J.V CO., LTD.	58,600	—	—	1,825	60,425
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	10,782	—	(4,471)	336	6,647
KRAKATAU POS-CHEM DONG-SUH CHEMICAL	—	6,959	—	292	7,251
Hamparan Mulya	3,516	—	—	110	3,626
POS-SEAHSTEELWIRE(TIANJIN) CO., Ltd	5,274	—	—	164	5,438
POSCO SeAH Steel Wire(Nantong) Co., Ltd.	11,720	—	(3,480)	220	8,460
POS-SeAH Steel Wire (Thailand) Co., Ltd.	—	6,959	—	292	7,251
AMCI (WA) PTY LTD	85,168	4,665	—	1,942	91,775
	<u>₩ 656,522</u>	<u>404,929</u>	<u>(75,127)</u>	<u>(302,192)</u>	<u>684,132</u>

(*1) During the year ended December 31, 2016, it was classified as a subsidiary from an associate.

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
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(*2) During the year ended December 31, 2016, loans amounting to ₩24,624 million have been converted to shares of DMSA/AMSA, and its amount is included in others.

(*3) Includes adjustments of foreign currency translation differences and others.

(f) For the years ended December 31, 2014, 2015 and 2016, details of compensation to key management officers were as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
	(in millions of Won)		
Short-term benefits	₩116,961	111,278	90,916
Long-term benefits	17,242	19,513	17,905
Retirement benefits	21,604	21,850	17,870
	<u>₩155,807</u>	<u>152,641</u>	<u>126,691</u>

Key management officers include directors (including non-standing directors), executive officials and fellow officials who have significant influences and responsibilities in the Company's business and operations.

38. Commitments and Contingencies

(a) Contingent liabilities

Contingent liabilities may develop in a way not initially expected. Therefore, management continuously assesses contingent liabilities to determine whether an outflow of resources embodying economic benefits has become probable. If it becomes probable that an outflow of future economic benefits will be required for an item previously dealt with as a contingent liability, a provision is recognized in the financial statements of the period in which the change in probability occurs (except in the extremely rare circumstances where no reliable estimate can be made).

Management makes estimates and assumptions that affect disclosures of commitments and contingencies. All estimates and assumptions are based on the evaluation of current circumstances and appraisals with the supports of internal specialists or external consultants.

Management regularly analyzes current information about these matters and provides for probable contingent losses including the estimate of legal expense to resolve the matters. Internal and external lawyers are used for these assessments. In making the decision regarding the need for a provision, management considers whether the Company has an obligation as a result of a past event, whether it is probable that an outflow or cash or other resources embodying economic benefits will be required to settle the obligation and the ability to make a reliable estimate of the amount of the obligation.

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(b) Details of guarantees

Contingent liabilities on outstanding guarantees provided by the Company as of December 31, 2016 are as follows:

Guarantors	Guarantee beneficiary	Financial institution	Guarantee limit		Guarantee amount		
			Foreign currency	Won equivalent	Foreign currency	Won equivalent	
(in millions of Won)							
[The Company]							
POSCO	POSCO Asia Co., Ltd.	MIZUHO and others	USD	100,000,000	120,850	100,000,000	120,850
	POSCO ASSAN TST STEEL INDUSTRY	SMBC and others	USD	146,527,500	177,078	131,874,750	159,371
	POSCO COATED STEEL (THAILAND) CO., LTD.	The Great&CO Co., Ltd(SPC)	THB	5,501,000,000	184,999	5,501,000,000	184,999
	POSCO Electrical Steel India Private Limited	ING and others	USD	83,784,000	101,253	83,784,000	101,253
	POSCO Maharashtra Steel Private Limited	Export-Import Bank of Korea and others	USD	566,069,000	684,095	353,348,300	427,022
	POSCO MEXICO S.A. DE C.V.	Korea Development Bank and others	USD	344,725,000	416,601	234,725,000	283,664
	POSCO SS-VINA CO., LTD.	Export-Import Bank of Korea and others	USD	354,351,050	428,233	344,413,094	416,224
	POSCO VST CO., LTD.	ANZ and others	USD	65,000,000	78,553	24,375,000	29,458
	POSCO-VIETNAM Co., Ltd.	Export-Import Bank of Korea	USD	196,000,000	236,866	196,000,000	236,866
	PT. KRAKATAU POSCO Zhangjiagang Pohang	Export-Import Bank of Korea and others	USD	1,350,300,000	1,631,841	1,210,963,477	1,463,450
	Stainless Steel Co., Ltd.	Korea Development Bank and others	CNY	1,084,955,000	187,979	1,084,955,000	187,979
POSCO DAEWOO Corporation (formerly, Daewoo International Corporation)	Daewoo Power PNG Ltd.	Export-Import Bank of Korea	USD	54,400,000	65,742	36,000,000	43,506
	POSCO ASSAN TST STEEL INDUSTRY	ING and others	USD	14,652,750	17,708	14,652,750	17,708
	POSCO DAEWOO INDIA PVT., LTD.	Shinhan Bank and others	USD	165,000,000	199,403	137,024,552	165,594
	PT. Bio Inti Agrindo	Export-Import Bank of Korea and others	USD	93,625,000	113,146	93,625,000	113,146
	Daewoo Textile LLC	Export-Import Bank of Korea	USD	8,000,000	9,668	8,000,000	9,668
POSCO ENGINEERING & CONSTRUCTION, LTD.	EPC EQUITIES LLP	SG BANK SEOUL and others	USD	59,000,000	71,302	59,000,000	71,302
	HONG KONG POSCO E&C (CHINA) INVESTMENT Co., Ltd.	Woori Bank and others	USD	147,000,000	177,650	147,000,000	177,650

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Guarantors	Guarantee beneficiary	Financial institution	Guarantee limit		Guarantee amount		
			Foreign currency	Won equivalent	Foreign currency	Won equivalent	
			(in millions of Won)				
	POSCO E&C Vietnam Co., Ltd.	Export-Import Bank of Korea	USD	16,500,000	19,940	16,500,000	19,940
	POSCO ENGINEERING & CONSTRUCTION DO BRAZIL LTDA.	HSBC	USD	100,000,000	120,850	100,000,000	120,850
	SANTOS CMI INC. USA	Citi New York	USD	8,000,000	9,668	8,000,000	9,668
POSCO ICT	SANTOS CMI S.A.	Citi Ecuador	USD	3,000,000	3,626	3,000,000	3,626
	PT.POSCO ICT INDONESIA	POSCO Asia Co., Ltd.	USD	1,800,000	2,175	1,800,000	2,175
POSCO Engineering CO., Ltd	POSCO ENGINEERING (THAILAND) CO., LTD.	HSBC	USD	39,450,863	47,676	39,450,863	47,676
	PT PEN INDONESIA	POSCO Asia Co., Ltd.	USD	5,000,000	6,043	5,000,000	6,043
POSCO M-TECH	PT. POSCO MTECH INDONESIA	POSCO Asia Co., Ltd.	USD	12,500,000	15,106	12,500,000	15,106
POSCO CHEMTECH	PT.Krakatau Posco Chemtech Calcination	Hana Bank	USD	33,600,000	40,606	24,470,588	29,573
POSCO Processing & Service	POSCO Canada Ltd.	Korea Development Bank	USD	8,114,925	9,807	7,728,500	9,340
	POSCO Gulf SFC LLC	Hana Bank and others	USD	45,700,000	55,228	43,650,000	52,751
	Pos-Sea Pte Ltd	Woori Bank and others	USD	20,000,000	24,170	3,900,000	4,713
POSCO Japan Co., Ltd.	POSCO Japan PC CO., LTD	Higo Bank and others	JPY	593,200,000	6,151	593,200,000	6,151
POSCO Coated & Color Steel Co., Ltd.	Myanmar POSCO C&C Company, Limited.	POSCO Asia Co., Ltd. And others	USD	13,986,947	16,903	13,986,947	16,903
POSCO ENERGY CO., LTD.	PT. Krakatau Posco Energy	Export-Import Bank of Korea and others	USD	193,900,000	234,328	153,560,430	185,578
[Associates and joint ventures]							
POSCO	CSP — Compania Siderurgica do Pecem	Export-Import Bank of Korea and others	USD	420,000,000	507,572	420,000,000	507,572
	LLP POSUK Titanium	BNDES Kookmin Bank	BRL	464,060,000	172,389	461,494,142	171,436
	LLP POSUK Titanium	Kookmin Bank	USD	15,000,000	18,128	15,000,000	18,128
POSCO DAEWOO Corporation (formerly, Daewoo International Corporation)	GLOBAL KOMSCO Daewoo LLC	Industrial & Commercial Bank of China and others	USD	9,187,500	11,103	8,225,000	9,940
POSCO ENGINEERING & CONSTRUCTION., LTD.	New Songdo International City Development, LLC	Others	KRW	340,000	340,000	310,500	310,500

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Guarantors	Guarantee beneficiary	Financial institution	Guarantee limit		Guarantee amount		
			Foreign currency	Won equivalent	Foreign currency	Won equivalent	
(in millions of Won)							
POSCO ICT	INCHEON GIMPO EXPRESSWAY CO., LTD	Korea Development Bank	KRW	100,000	100,000	100,000	100,000
	UITRANS CORPORATION	Kookmin Bank	KRW	76,000	76,000	76,000	76,000
POSCO CHEMTECH	KRAKATAU POS-CHEM DONG-SUH CHEMICAL	Hana Bank	USD	5,883,750	7,111	2,774,489	3,353
	PT.INDONESIA POS CHEMTECH CHOSUN Ref	Hana Bank	USD	3,900,000	4,713	3,900,000	4,713
[Others]							
POSCO DAEWOO Corporation (formerly, Daewoo International Corporation)	Ambatovy Project Investments Limited and others	Export-Import Bank of Korea	USD	87,272,727	105,469	44,620,083	53,923
POSCO ENGINEERING & CONSTRUCTION, LTD.	Ecocity CO., LTD and others	Others	KRW	990,350	990,350	364,031	364,031
	THE GALE INVESTMENTS COMPANY, L.L.C.	Woori Bank	USD	50,000,000	60,425	50,000,000	60,425
POSCO ICT	Hyochun CO., LTD	Daegu Bank and others	KRW	39,575	39,575	39,575	39,575
	SMS Energy and others	Hana Bank and others	KRW	123,880	123,880	101,124	101,124
	BLT Enterprise and others	Kyobo Life Insurance Co., Ltd and others	KRW	1,163,585	1,163,585	1,163,585	1,163,585
POSCO Engineering CO., Ltd	SAMJIN SOLAR ENERGY and others	Hana Bank and others	KRW	10,511	10,511	3,532	3,532
POSCO AUSTRALIA PTY LTD	Department of Trade and Investment (NSW Government)	Woori Bank and others	AUD	8,277,336	7,218	8,277,336	7,218
POSCO(Suzhou) Automotive Processing Center Co., Ltd.	POS INFRA AUTO	Korea Development Bank	USD	405,000	489	405,000	489
			USD	4,841,636,012	5,851,125	4,153,257,823	5,019,217
			KRW	2,843,901	2,843,901	2,158,347	2,158,347
			CNY	1,084,955,000	187,979	1,084,955,000	187,979
			THB	5,501,000,000	184,999	5,501,000,000	184,999
			JPY	593,200,000	6,151	593,200,000	6,151
			AUD	8,277,336	7,218	8,277,336	7,218
			BRL	464,060,000	172,389	461,494,142	171,436

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(c) POSCO ENGINEERING & CONSTRUCTION CO., LTD. has provided the completion guarantees for Samsung C&T Corporation amounting to ₩605,508 million while Samsung C&T Corporation has provided the construction guarantees or payment guarantees on customers' borrowings on behalf of POSCO ENGINEERING & CONSTRUCTION CO., LTD. amounting to ₩303,789 million as of December 31, 2016.

(d) Other commitments

Details of other commitments of the Company as of December 31, 2016, are as follows:

POSCO	<p>POSCO entered into long-term contracts to purchase iron ore, coal, nickel and others. The contracts of iron ore and coal generally have terms of more than three years and the contracts of nickel have terms of more than one year. These contracts provide for periodic price adjustments based on the market price. As of December 31, 2016, 144 million tons of iron ore and 22 million tons of coal remained to be purchased under such long-term contracts.</p> <p>POSCO entered into an agreement with Tangguh Liquefied Natural Gas (LNG) Consortium in Indonesia to purchase 550 thousand tons of LNG annually for 20 years commencing in August 2005. The purchase price is subject to change, based on changes of the monthly standard oil price (JCC) and with a price ceiling.</p> <p>As of December 31, 2016, the Company entered into commitments with Korea National Oil Corporation for long-term foreign currency borrowings, which enables the Company to borrow up to the amount of USD 6.49 million. The borrowings are related to the Company's the exploration of gas hydrates in Western Fergana-Chinabad. The repayment of the borrowings depends on the success of the projects. The Company is not liable for the repayment of full or part of the amount borrowed if the respective projects fail. The Company has agreed to pay a certain portion of its profits under certain conditions, as defined by the borrowing agreements. As of December 31, 2016, the ending balance of the borrowing amounts to USD 4.09 million.</p> <p>POSCO has provided a supplemental funding agreement, as the largest shareholder, as requested from the creditors, including Norddeutsche Landesbank, for seamless funding to POSCO ENERGY Co., Ltd. under construction of new power plant.</p>
POSCO ENGINEERING & CONSTRUCTION., LTD. ...	<p>As of December 31, 2016, POSCO ENGINEERING & CONSTRUCTION., LTD. has comprehensive loan agreements of up to ₩213.5 billion and USD 218 million with Woori Bank. Also, POSCO ENGINEERING & CONSTRUCTION., LTD. has bank overdraft agreements of up to ₩20 billion with Woori Bank. Comprehensive loan agreements include bank overdraft up to ₩20 billion of loans on checking account during the day with Woori Bank.</p>
POSCO ICT	<p>As of December 31, 2016, in relation to contract enforcement, POSCO ICT was provided with ₩137,237 million and ₩50,483 million guaranties from Korea Software Financial Cooperative and Seoul Guarantee Insurance, respectively.</p>

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(e) Litigation in progress

As of December 31, 2016, litigations in progress that POSCO and certain subsidiaries are defendants in legal actions arising from the normal course of business are as follows:

Company	Legal actions	Claim amount	Korean Won equivalent	Description
(In millions of Won, in thousands of foreign currencies)				
POSCO	37	KRW 123,858	123,858	Lawsuit on claim for employee right and others ^(*)
	2	USD 1,783	2,155	Arbitration on trading and other
POSCO DAEWOO Corporation (formerly, Daewoo International Corporation)	1	EUR 2,667	3,381	Lawsuit on claim for payment
	2	INR 4,469,396	79,511	Lawsuit on claim for payment on guarantees ^(*)
	10	KRW 5,802	5,802	Lawsuit on claim for payment and others
	3	USD 15,644	18,906	Lawsuit on claim for damages and others ^(*)
	1	CAD 79,000	70,683	Lawsuit on claim for damages
	1	PKR 124,775	1,314	Lawsuit on claim for damages
POSCO ENGINEERING & CONSTRUCTION., LTD.	69	KRW 185,225	185,225	Arbitration on construction costs allocation and others
POSCO Processing & Service	5	KRW 7,800	7,800	Revoking of fraudulent act and others ^(*)
POSCO Engineering CO., Ltd	18	KRW 107,441	107,441	Lawsuit on claim for damages and others ^(*)
	4	THB 206,207	6,599	Arbitration on damages and others
	1	GHS 84	20	Lawsuit on ownership and payment on usage
POSCO ICT	12	KRW 13,869	13,869	Lawsuit on claim for damages and others
POSCO M-TECH	3	KRW 4,467	4,467	Lawsuit on claim for damages and others
POSCO ENERGY CO., LTD.	2	KRW 5,202	5,202	Lawsuit on claim for damages and revocation of electricity supply contract and others
POSCO E&C CHINA CO., LTD.	4	CNY 4,159	721	Lawsuit on claim for payment of reserve for construction warranty and others
	1	KRW 3,305	3,305	Lawsuit on claim for payment on construction
POSPower Co., Ltd.	1	KRW 9,668	9,668	Lawsuit on claim for payment on service contract ^(*)
POSCO TNPC Otomotiv Celik San. Ve Tic. A.S	6	TRY 31	11	Lawsuit on claim for unfair dismissal and others
POSCO CHEMTECH	1	KRW 657	657	Lawsuit on claim for payment on construction ^(*)
PT. KRAKATAU POSCO	1	IDR 74,548,384	6,694	Lawsuit on claim for payment on construction
POSCO ENGINEERING & CONSTRUCTION DO BRAZIL LTDA.	101	BRL 102,752	38,153	Lawsuit on claim for damages and others ^(*)
POSCO Humans	2	KRW 95	95	Lawsuit on claim for debt collection and others
POSCO(Dalian) IT Center Development Co., Ltd.	7	CNY 9,440	1,636	Lawsuit over contract dispute dealing apartment and others
Brazil Sao Paulo Steel Processing Center	3	BRL 1,264	469	Lawsuit on claim for payment on construction and others
POSCO A&C	2	KRW 911	911	Lawsuit on claim for payment on service contract and others
eNtoB Corporation	1	KRW 5	5	Lawsuit on claim for payment
POSCO-Poland Wroclaw Processing Center Sp. z o. o.	1	PLN 3	1	Lawsuit on claim for payment
Posco e&c Songdo International Building	3	KRW 313	313	Lawsuit on affirmation of the non-existence of general meeting of stockholders and others

(*)1 The Company made a reliable estimate in 73 lawsuits by considering the possibility and amount of outflow of resources and recognized ₩30,425 million as provision for legal contingencies and claims.

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For all the other lawsuits and claims, management does not believe the Company has any present obligations and therefore, the Company has not recognized any provisions as of December 31, 2016 for the matters.

39. Cash Flows from Operating Activities

Adjustments for operating cash flows for the years ended December 31, 2014, 2015 and 2016 were as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
	(in millions of Won)		
Trade accounts and notes receivable	₩ (97,703)	1,586,113	273,419
Other receivables	(27,601)	259,741	191,591
Inventories	(1,130,138)	2,456,068	(889,998)
Other current assets	242,170	42,131	(287,377)
Other non-current assets	(53,225)	72,826	33,584
Trade accounts and notes payable	(385,914)	(894,129)	769,337
Other payables	271,117	39,811	(179,174)
Other current liabilities	(20,930)	(457,947)	2,490
Provisions	(63,884)	(119,172)	(124,884)
Payments severance benefits	(160,792)	(157,983)	(278,278)
Plan assets	(164,515)	(115,274)	(138,854)
Other non-current liabilities	(262,367)	72,267	223,574
	<u>₩(1,853,782)</u>	<u>2,784,452</u>	<u>(404,570)</u>

40. Non-Cash Transactions

Significant non-cash investing and financing transactions for the years ended December 31, 2014, 2015 and 2016 were as follows:

	<u>2014</u>	<u>2015</u>	<u>2016</u>
	(in millions of Won)		
Increase in borrowings due to guarantee provided to associate	₩—	—	298,865
Exchange of investments in available-for-sale securities	—	295,398	—

41. Operating Segments and Geographic Information

(a) The Company's operating businesses are organized based on the nature of markets and customers. The Company has four reportable operating segments — steel, construction, trading and others. The steel segment includes production of steel products and revenue of such products. The construction segment includes planning, designing and construction of industrial plants, civil engineering projects and commercial and residential buildings, both in Korea and overseas. The trading segment consists of exporting and importing a wide range of steel products and raw materials that are both obtained from and supplied to POSCO, as well as between other suppliers and purchasers in Korea and overseas. Other segments include power generation, liquefied natural gas production, network and system integration and logistics. The policies of classification and measurement on operating segments were the same for all periods presented.

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(b) Information about reportable segments as of and for the years ended December 31, 2014, 2015 and 2016 was as follows:

1) As of and for the year ended December 31, 2014

	Steel	Trading	Construction	Others	Total
	(in millions of Won)				
External revenues	₩ 31,841,748	21,165,806	8,119,207	3,971,684	65,098,445
Internal revenues	17,755,182	10,095,123	2,184,519	3,094,647	33,129,471
Including inter segment revenue	10,159,110	5,180,926	1,679,443	2,920,354	19,939,833
Total revenues	49,596,930	31,260,929	10,303,726	7,066,331	98,227,916
Interest income	148,288	47,905	27,297	18,694	242,184
Interest expenses	(524,735)	(92,855)	(61,954)	(127,843)	(807,387)
Depreciation and amortization	(2,779,723)	(121,163)	(52,268)	(331,444)	(3,284,598)
Impairment loss on property, plant and equipment and others	(137,708)	(35,131)	756	(50,085)	(222,168)
Impairment loss on available-for-sale financial assets	(352,830)	(1,097)	(24,588)	(14,444)	(392,959)
Share of profit or loss of investment in associates and JVs	(217,491)	(29,263)	(53,226)	(23,559)	(323,539)
Income tax expense	(691,030)	(114,587)	(45,147)	(21,415)	(872,179)
Segment profit	857,148	181,243	13,085	8,536	1,060,012
Segment assets	74,138,707	13,597,301	10,396,691	10,742,877	108,875,576
Investment in associates	18,227,743	1,076,373	1,091,402	1,154,187	21,549,705
Acquisition of non-current assets	2,348,979	399,273	701,019	906,685	4,355,956
Segment liabilities	23,750,464	10,384,329	6,345,852	6,139,971	46,620,616

2) As of and for the year ended December 31, 2015

	Steel	Trading	Construction	Others	Total
	(in millions of Won)				
External revenues	₩ 28,292,824	18,315,487	8,515,780	3,068,254	58,192,345
Internal revenues	16,543,951	8,692,020	1,352,067	2,691,361	29,279,399
Including inter segment revenue	9,146,808	4,480,744	1,090,193	2,571,219	17,288,964
Total revenues	44,836,775	27,007,507	9,867,847	5,759,615	87,471,744
Interest income	139,821	55,630	27,134	16,173	238,758
Interest expenses	(560,767)	(76,672)	(91,742)	(141,095)	(870,276)
Depreciation and amortization	(2,782,680)	(166,814)	(50,605)	(282,817)	(3,282,916)
Impairment loss on property, plant and equipment and others	(243,828)	(17,281)	(28,345)	(22,979)	(312,433)
Impairment loss on available-for-sale financial assets	(151,503)	(1,410)	(47,616)	(40,261)	(240,790)
Share of profit or loss of investment in associates and JVs	(562,133)	(212,535)	(25,223)	(22,618)	(822,509)
Income tax expense	(390,000)	(4,772)	(30,615)	(18,718)	(444,105)
Segment profit (loss)	181,495	38,843	(275,651)	(65,570)	(120,883)
Segment assets	70,102,972	12,160,406	9,997,683	10,962,594	103,223,655
Investment in associates	17,457,391	1,097,971	1,076,024	1,186,307	20,817,693
Acquisition of non-current assets	2,102,674	303,753	276,863	345,971	3,029,261
Segment liabilities	21,078,613	8,953,410	5,716,550	6,472,925	42,221,498

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3) As of and for the year ended December 31, 2016

	Steel	Trading	Construction	Others	Total
	(in millions of Won)				
External revenues	₩ 26,844,154	16,774,078	6,768,348	2,696,933	53,083,513
Internal revenues	16,062,016	9,646,026	713,703	2,379,945	28,801,690
Including inter segment revenue	8,992,783	5,296,847	557,526	2,285,128	17,132,284
Total revenues	42,906,170	26,420,104	7,482,051	5,076,878	81,885,203
Interest income	126,210	40,424	65,256	13,564	245,454
Interest expenses	(459,345)	(70,841)	(102,292)	(126,523)	(759,001)
Depreciation and amortization	(2,788,535)	(165,863)	(57,719)	(264,299)	(3,276,416)
Impairment loss on property, plant and equipment and others	(99,165)	(45,995)	(9,426)	(88,696)	(243,282)
Impairment loss on available-for-sale financial assets	(225,225)	(28,988)	(35,331)	(24,902)	(314,446)
Share of profit or loss of investment in associates and JVs	(211,084)	(53,586)	(283,833)	(6,369)	(554,872)
Income tax expense	(495,874)	(18,629)	107,520	(56,026)	(463,009)
Segment profit (loss)	1,511,383	53,244	(1,403,712)	(25,889)	135,026
Segment assets	69,914,939	13,580,179	9,501,046	8,529,600	101,525,764
Investment in associates	16,109,360	1,100,973	795,445	1,200,295	19,206,073
Acquisition of non-current assets	2,334,842	249,597	25,533	191,715	2,801,687
Segment liabilities	20,292,764	10,134,170	6,780,380	4,709,689	41,917,003

(c) Reconciliations of total segment revenues, profit or loss, assets and liabilities, and other significant items to their respective consolidated financial statement line items are as follows:

1) Revenues

	2014	2015	2016
	(in millions of Won)		
Total revenue for reportable segments	₩ 98,227,916	87,471,744	81,885,203
Elimination of inter-segment revenue	(33,129,471)	(29,279,399)	(28,801,690)
Basis difference ^(c2)	(339,820)	329,923	(143,742)
	<u>₩ 64,758,625</u>	<u>58,522,268</u>	<u>52,939,771</u>

2) Profit

	2014	2015	2016
	(in millions of Won)		
Total profit (loss) for reportable segments	₩ 1,060,012	(120,883)	135,026
Goodwill and corporate FV adjustments	(122,015)	(95,150)	(123,110)
Elimination of inter-segment profits	(381,338)	119,852	1,036,253
Income tax expense	821,485	276,939	384,685
Basis difference ^(c2)	9,736	(30,413)	(21,245)
Profit before income tax expense	<u>₩ 1,387,880</u>	<u>150,345</u>	<u>1,411,609</u>

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

3) Assets

	2015	2016
	(in millions of Won)	
Total assets for reportable segments ^(*)	₩ 103,223,655	101,525,764
Equity-accounted investees	(16,872,523)	(15,322,271)
Goodwill and corporate FV adjustments	3,390,277	3,750,915
Elimination of inter-segment assets	(9,332,650)	(10,191,413)
Basis difference ⁽²⁾	339,211	374,619
	₩ 80,747,970	80,137,614

(*1) As segment assets and liabilities are determined based on separate financial statements, for subsidiaries which are in a different segment from that of its immediate parent company, their carrying amount in separate financial statements is eliminated upon consolidation. In addition, adjustments are made to adjust the amount of investment in associates and joint ventures from the amount reflected in segment assets to that determined using equity method in consolidated financial statements.

4) Liabilities

	2015	2016
	(in millions of Won)	
Total liabilities for reportable segments	₩ 42,221,498	41,917,003
Corporate FV adjustments	321,793	442,178
Elimination of inter-segment liabilities	(7,204,754)	(8,434,580)
Basis difference ⁽²⁾	396,232	447,744
	₩ 35,734,769	34,372,345

5) Other significant items

a) December 31, 2014

	Total segment	Corporate FV adjustments	Elimination of inter-segment transactions	Basis difference ⁽²⁾	Consolidated
	(in millions of Won)				
Interest income	₩ 242,184	—	(13,930)	—	228,254
Interest expenses	(807,387)	(45,668)	57,470	—	(795,585)
Depreciation and amortization	(3,284,598)	(111,263)	157,312	—	(3,238,549)
Share of profit or loss of investment in associates	(323,539)	—	23,646	—	(299,893)
Income tax expense	(872,179)	33,473	17,221	(2,356)	(823,841)
Impairment loss on property, plant and equipment and others	(222,168)	—	47,838	—	(174,330)
Impairment loss on available-for-sale financial assets	(392,959)	—	23,236	—	(369,723)
	₩(5,660,646)	(123,458)	312,793	(2,356)	(5,473,667)

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

b) December 31, 2015

	Total segment	Corporate FV adjustments	Elimination of inter-segment transactions	Basis difference ^{(*)2}	Consolidated
	(in millions of Won)				
Interest income	₩ 238,758	—	(28,565)	—	210,193
Interest expenses	(870,276)	1,282	80,222	—	(788,772)
Depreciation and amortization	(3,282,916)	(117,595)	182,265	—	(3,218,246)
Share of profit or loss of investment in associates	(822,509)	—	316,455	—	(506,054)
Income tax expense	(444,105)	24,294	142,872	10,379	(266,560)
Impairment loss on property, plant and equipment and others	(312,433)	—	(142,234)	—	(454,667)
Impairment loss on available-for-sale financial assets	(240,790)	—	98,009	—	(142,781)
	<u>₩(5,734,271)</u>	<u>(92,019)</u>	<u>649,024</u>	<u>10,379</u>	<u>(5,166,887)</u>

c) December 31, 2016

	Total segment	Corporate FV adjustments	Elimination of inter-segment transactions	Basis difference ^{(*)2}	Consolidated
	(in millions of Won)				
Interest income	₩ 245,454	—	(62,979)	—	182,475
Interest expenses	(759,001)	(807)	101,082	—	(658,726)
Depreciation and amortization	(3,276,416)	(104,949)	167,518	—	(3,213,847)
Share of profit or loss of investment in associates	(554,872)	(38,732)	504,927	—	(88,677)
Income tax expense	(463,009)	21,945	56,379	5,141	(379,544)
Impairment loss on property, plant and equipment and others	(243,282)	—	(125,657)	—	(368,939)
Impairment loss on available-for-sale financial assets	(314,446)	—	66,042	—	(248,404)
	<u>₩(5,365,572)</u>	<u>(122,543)</u>	<u>707,312</u>	<u>5,141</u>	<u>(4,775,662)</u>

(*)2 Basis difference is related to the difference in recognizing revenue and expenses in connection with development and sale of certain residential real estate between the report reviewed by the CEO and the consolidated financial statements.

(d) Revenue by geographic area for years ended December 31, 2014, 2015 and 2016 was as follows:

	2014	2015	2016
	(in millions of Won)		
Domestic	₩45,805,167	39,268,907	34,883,941
Japan	2,047,686	1,934,808	1,892,022
China	6,319,101	5,756,867	5,908,046
Asia-other	5,055,373	5,888,045	5,649,843
North America	2,199,418	1,921,039	1,899,291
Others	3,671,700	3,422,679	2,850,370
	<u>65,098,445</u>	<u>58,192,345</u>	<u>53,083,513</u>
Basis difference	(339,820)	329,923	(143,742)
	<u>₩64,758,625</u>	<u>58,522,268</u>	<u>52,939,771</u>

In presenting information on the basis of geography, segment revenue is based on the geographical location of customers.

POSCO and Subsidiaries
Notes to the Consolidated Financial Statements, Continued
As of December 31, 2014, 2015 and 2016

(e) Non-current assets by geographic area as of December 31, 2015 and 2016 are as follows:

	<u>2015</u>	<u>2016</u>
	<u>(in millions of Won)</u>	
Domestic	₩32,693,800	31,772,641
Japan	174,979	187,266
China	1,631,863	1,451,405
Asia-other	5,969,215	6,163,388
North America	152,935	168,800
Others	1,390,109	1,233,288
	<u>₩42,012,901</u>	<u>40,976,788</u>

Non-current assets by geographic area include investment property, property, plant and equipment, goodwill and other intangible assets.

(f) There are no customers whose revenue is 10% or more of consolidated revenue.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

POSCO

(Registrant)

/s/ Kwon, Oh-Joon

Name: Kwon, Oh-Joon

Title: Chief Executive Officer and
Representative Director

Date: April 27, 2017

Exhibit Index

- 1.1 — Articles of incorporation of POSCO (English translation)
- 2.1 — Form of Common Stock Certificate (including English translation) (incorporated by reference to Exhibit 4.3 to the Registrant's Registration Statement No. 33-81554)*
- 2.2 — Form of Deposit Agreement (including Form of American Depositary Receipts) (incorporated by reference to the Registrant's Registration Statement (File No. 333-189473) on Form F-6)*
- 8.1 — List of consolidated subsidiaries
- 12.1 — Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 12.2 — Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
- 13.1 — Certification pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

* Filed previously

This English language translation of the Articles of Incorporation has been prepared solely for reference purposes. In the event of any conflict between the Korean language version and this English language version, the Korean language version shall prevail.

ARTICLES OF INCORPORATION

Adopted on	March 6, 1968		
Amended on	July 10, 1968	February 20, 1969	March 20, 1969
	June 16, 1969	February 7, 1970	February 6, 1971
	November 23, 1971	February 4, 1972	November 29, 1972
	February 12, 1973	February 5, 1974	February 8, 1975
	February 6, 1976	February 8, 1977	February 25, 1978
	February 24, 1979	February 28, 1981	February 23, 1982
	February 18, 1984	February 5, 1985	February 26, 1986
	March 7, 1987	February 27, 1988	March 15, 1989
	March 6, 1990	March 14, 1991	March 7, 1992
	October 13, 1992	March 8, 1993	April 15, 1994
	March 15, 1995	March 15, 1996	March 14, 1997
	March 17, 1998	August 20, 1998	March 16, 1999
	March 17, 2000	March 16, 2001	March 15, 2002
	March 14, 2003	March 12, 2004	February 24, 2006
February 23, 2007	February 27, 2009	February 26, 2010	
February 25, 2011	March 16, 2012	March 11, 2016	

CHAPTER I. GENERAL PROVISIONS

Article 1. Company Name

The name of the Company in Korean shall be “**Chusik Hoesa POSCO**” and in English, “**POSCO**”

Article 2. Purpose

The purpose of the Company is to engage in the following business activities:

1. To manufacture, market, promote, sell and distribute iron, steel and rolled products;
2. To engage in harbor loading and unloading, transportation and warehousing businesses;
3. To engage in the management of professional athletic organizations;
4. To engage in the supply of LNG and power generation as well as in the distribution business thereof and in the resources development business;
5. To engage in leasing of real estate and distribution businesses;
6. To engage in the supply of district heating business;
7. To engage in marine transportation, processing and sales of minerals within or outside of Korea;
8. To engage in educational service and other services related to business;
9. To engage in manufacture, process and sale of non-ferrous metal;

10. To engage in technology license sales and engineering business; and
11. To engage in all other conducts, activities or businesses which are related, directly or indirectly, to the attainment and continuation of the foregoing purposes.

Article 3. Location of the Head Office and Branch Offices

The head office of the Company shall be located at Pohang-si, Kyung-sangbuk-do, the Republic of Korea (“Korea”). Branch offices may be established elsewhere by resolution of the Board of Directors of the Company.

Article 4. Notices

Public notices by the Company shall be disclosed on the website of the Company (<http://www.posco.com>). When such online disclosure is made impracticable due to online system error or any other electronic technical failure, public notices by the Company shall be disclosed in the Seoul Shinmun, the Maeil Shinmun and the Kwangju Ilbo, daily newspapers published in Seoul, Daegu Metropolitan City and Kwangju Metropolitan City, respectively.

CHAPTER II. SHARES

Article 5. Total Number of Authorized Shares

The total number of shares which the Company is authorized to issue (“Authorized Shares”) is two hundred million (200,000,000) shares.

Article 6. Face Value, Types of Shares and Share Certificates

The types of shares to be issued by the Company shall be registered common shares and registered preferred shares, having a face value of 5,000 Won per share.

Share certificates shall be issued by the Company in denominations of one (1), five (5), ten (10), fifty (50), one hundred (100), five hundred (500), one thousand (1,000) and ten thousand (10,000) shares as the shareholders may request.

Article 7. Number and Contents of Preferred Shares

(1) Preferred shares to be issued by the Company shall be non-voting, and the number thereof shall not exceed the limit prescribed in the mandatory provisions of the applicable laws or regulations.

(2) The dividends on non-voting preferred shares shall be no less than nine percent (9%) per annum of the par value and the rate thereof shall be determined by the Board of Directors at the time of issuance.

(3) Notwithstanding Paragraph (2), a dividend on preferred shares shall not be required to be declared in case the amount available for dividend is less than the aggregate amount of the minimum dividend.

Article 8. Shares to be Issued at the Time of Incorporation

The Company shall issue forty thousand (40,000) shares at the time of incorporation.

Article 9. No Issuance of Share Certificates

If a shareholder does not desire to receive share certificates representing the whole or part of the shares owned by him, no share certificates representing such shares shall be issued by the Company.

Article 9-2. Electronic Registration of Shares

(1) The Company, by the resolutions of the Board of Directors, may elect to adopt the system that allows shareholders electronically register its shares on the electronic registrar on the designated electronic registration system instead of issuing certificates representing its shares.

(2) The Board of Directors shall determine the standard operation policy necessary for the Company’s adoption of the electronic securities system.

Article 10. Pre-emptive Rights

(1) Except as otherwise provided by Paragraphs (2) through (4) of this Article 10 and the mandatory provisions of the applicable laws or regulations, in case of the issuance of new shares, the shareholders of the Company shall have the right to subscribe for such newly issued shares in proportion to the number of shares held by each of them; provided, however, that the Company may, by resolution of the Board of Directors, allocate preferred shares to holders of preferred shares in proportion to the number of shares held by each of them.

(2) The Board of Directors may allocate new shares to persons other than the shareholders by a resolution of the Board of Directors in the following cases. If the Company issues new shares to persons other than the shareholders of the Company pursuant to this Article 10, the Company shall notify the shareholders or make public two (2) weeks in advance of the date of subscription of the new shares detailing the type, number, issue price, date of subscription and the manner of subscription of the newly issued shares in accordance with the Korean Commercial Code.

1. If the Company issues new shares by a public offering or has underwriters underwrite new shares by a public offering in accordance with the applicable legislation;
2. If the Company allocates new shares to the members of the Company’s Employee Stock Ownership Association in accordance with the applicable legislation;
3. If the Company issues new shares for the issuance of depositary receipts in accordance with the applicable legislation;
4. If the Company issues new shares through offering to the public investors by the resolutions of the Board of Directors in accordance with the applicable legislation;
5. If the Company issues new shares to the existing creditors in order to convert the debt into capital;
6. If the Company issues new shares to the domestic and/or foreign entities in accordance with a joint venture agreement, strategic affiliation or technology license and transfer agreement executed by and between the Company and such entities for the management purposes; and
7. If the Company issues new shares to the domestic and/or foreign financial institutions in order to finance the Company in the emergent cases.

(3) Any shares unsubscribed after the exercise of pre-emptive rights by shareholders who are entitled to them or any fractional shares remaining after the allocation of new shares may be disposed of by a resolution of the Board of Directors according to the applicable laws or regulations.

(4) Notwithstanding the provisions of Paragraphs (2) through (3) of this Article 10, new shares may be allocated to persons other than the existing shareholders by a special resolution passed at a General Meeting of Shareholders when it is deemed necessary for attaining the purposes of the Company such as introduction of new technology and financial restructuring.

(5) In case the Company issues new shares by a rights offering, bonus issue or stock dividend, such shares will be deemed to have been issued at the end of the fiscal year immediately preceding the fiscal year during which the shares are issued.

Article 11. Offering to Public Investors, etc.

(1) The Company may issue new shares constituting not more than ten-hundredths (10/100) of the total issued shares of the Company through offering to public investors by the resolution of the Board of Directors in accordance with applicable legislations.

(2) In event that the Company issues new shares in accordance with the resolution of the Board of Directors due to the reasons set forth in Items 5 through 7 of Paragraph (2) of Article 10, the total face amount of new shares shall not exceed one hundred billion (100,000,000,000) Won.

(3) The type, number and the issue price of the shares to be issued by the manner as set forth in Paragraphs (1) and (2) shall be determined by the resolution of the Board of Directors; provided that the issue price of the new shares must be no less than the price as set forth in applicable legislations.

Article 12. (Deleted)

Article 13. Registration and Alteration of an Entry in the Register of Shareholders

(1) The Company shall, by resolution of the Board of Directors, appoint an agent to attend to the registration of transfer of shares and bonds and creation of pledges thereon, the indication of trust assets, the re-issuance of share certificates and any other matters relating thereto. Specific procedures therefor shall be in accordance with applicable laws and regulations relating to such matters and the rules the agent may set forth.

(2) Shareholders and registered pledgees who reside in foreign countries shall appoint and report the place where, and an agent to whom, notices will be given in Korea.

Article 13-2. Register of Shareholders by Electronic Means

In accordance with the Korean Commercial Code, the Company may make entries in the Register of Shareholders by electronic means.

Article 14. Fees

The Company may, by resolution of the Board of Directors, charge, or have the register agent charge, a fee for services it renders in connection with any of the matters set forth in Article 13 above, or for any services related to shareholder inspection of the Company's financial statements or other documents, and for providing any copies thereof.

Article 15. Record Date and Suspension of Alterations of Entries in the Register of Shareholders

(1) The Company shall suspend entries of alterations, registration or cancellation of pledges over shares and indication of trust assets and cancellation thereof in the Register of Shareholders of a period commencing on January 1 and ending on January 15 of each year.

(2) The record date of the Register of Shareholders shall be December 31 of each year, and such shareholders listed on the Register of Shareholders as of the record date shall be entitled to exercise their rights thereof at the General Meetings of Shareholders.

(3) The Company may, by resolution of the Board of Directors or by resolution of a committee as authorized by the Board of Directors, suspend the entry of a change as to the matters contained in the Register of Shareholders for a specified period of time or set a record date when deemed necessary and for the purpose of convening an Extraordinary General Meeting of Shareholders; provided, however, that the period of suspension shall not exceed three (3) months and two (2) weeks prior notice of suspension or fixing of a record date has been given to the shareholders. The Board of Directors or such authorized committee may, when deemed necessary, both suspend the entry of a change in the Register of Shareholders and set a record date.

CHAPTER III. BONDS

Article 16. Issuance of Bonds

The Company may issue bonds by a resolution of the Board of Directors

Article 17. Issuance of Convertible Bonds

(1) The Company may issue convertible bonds in the aggregate face amount not exceeding two trillion (2,000,000,000,000) Won to persons other than the shareholders in the following cases:

1. If the Company issues convertible bonds by public offering.
2. If the Company enters into a joint venture agreement, strategic alliance or technical license and transfer agreement, when it is deemed necessary, and issues convertible bonds to any domestic or international corporation accordingly.
3. If the Company issues convertible bonds to a domestic or international financial institution to provide urgently needed funds.

(2) Convertible bonds mentioned in Paragraph (1) may, by resolution of the Board of Directors, be issued with their conversion rights limited to a certain portion of their face amount.

(3) Upon conversion from the aggregate face amount of convertible bonds, common shares may be issued up to one trillion three hundred billion (1,300,000,000,000) Won and preferred shares may be issued up to seven hundred billion (700,000,000,000) Won, and the conversion price, which shall not be less than the par value of the shares, shall be determined by resolution of the Board of Directors at the time of issuance of the convertible bonds.

(4) The conversion period shall be the period commencing from the date of issuance of the convertible bonds and ending on the date immediately preceding the date of redemption of the convertible bonds. The conversion period may be adjusted by a resolution of the Board of Directors; provided, that the conversion period shall in any event fall within the period mentioned above.

(5) The provisions of Article 10, Paragraph (5) shall apply *mutatis mutandis* to the payment of dividends on the shares issued upon conversion and the payment of interest on the convertible bonds.

Article 17-2. Issuance of Bonds with Warrants

(1) The Company may issue bonds with warrants to persons other than its shareholders to the extent that the aggregate par value of the bonds with warrants do not exceed two trillion (2,000,000,000,000) Won, in case of the events prescribed in Paragraph (1) of Article 17 above.

(2) The amount with respect to which the pre-emptive rights may be exercised shall be determined by resolution of the Board of Directors; provided, that such amount shall not in any event exceed the aggregate face amount of bonds with warrants.

(3) Upon exercise of the warrants, from the aggregate face amount of bonds with warrants, common shares may be issued up to one trillion three hundred billion (1,300,000,000,000) Won and preferred shares may be issued up to seven hundred billion (700,000,000,000) Won, and the issue price, which shall not be less than the face value of the shares, shall be determined by resolution of the Board of Directors at the time of issuance of bonds with warrants.

(4) The period during which the pre-emptive rights may be exercised shall be the period commencing from the date of issuance of bonds with warrants and ending on the date immediately preceding the date of redemption of bonds with warrants. The period during which the pre-emptive rights may be exercised may be adjusted by resolution of the Board of Directors; provided, that such period shall in any event fall within the period mentioned above.

(5) The provisions of Article 10, Paragraph (5) shall apply, *mutatis mutandis*, to the payment of dividends on the new shares issued upon exercise of the pre-emptive rights.

Article 18. Electronic Registration of Bonds

When the Company issues the bonds, instead of issuing certificates representing the bonds, the Company may electronically register its bonds on the electronic registrar of a designated electronic registration system by a resolution of the Board of Directors or by the decision of the Representative Director of the Company (in case the Board of Directors delegates an authority to issue the bonds to the Representative Director).

Article 18-2. Provisions Applicable *mutatis mutandis* to the Issuance of Bonds

Articles 13 and 14 of these Articles of Incorporation shall apply *mutatis mutandis* to the issuance of bonds.

CHAPTER IV. GENERAL MEETING OF SHAREHOLDERS

Article 19. Convening of General Meeting of Shareholders

(1) An Ordinary General Meeting of Shareholders shall be held within three (3) months after the end of each fiscal year, and an Extraordinary General Meetings of Shareholders may be convened at any time in compliance with a resolution of the Board of Directors and applicable laws or regulations.

(2) Shareholders may act only with respect to matters set forth in a written notice at a General Meeting of Shareholders.

(3) General Meeting of Shareholders shall be held in Seoul, Korea or at location of the Company's head office.

(4) A General Meeting of Shareholders shall be convened by the Chairman of the Company or by the President or Vice President of the Company acting under the Chairman's authorization.

Article 20. Notices

(1) Written notice of each General Meeting of Shareholders of the Company shall state the date, time, venue and the agenda for which the meeting has been called. The written notice shall be delivered to all shareholders by postal mail or by e-mail transmission at least two weeks prior to the date set for such General Meeting of Shareholders.

(2) Written notice of a General Meeting of Shareholders to be given to shareholders holding one-hundredth (1/100) or less of the total number of issued shares entitled to vote may be substituted by notices made at least twice in each of the Seoul Shinmun published in Seoul, the Maeil Shinmun published in Daegu Metropolitan City and the Kwangju Ilbo published in Kwangju Metropolitan City two weeks prior to the date set for such Meeting, or by notices to be posted on an electronic disclosure database system maintained by the Financial Supervisory Service or the Korea Exchange two weeks prior to the date set for such General Meeting of Shareholders.

Article 21. Presiding Officer

The Chairman and the Representative Director shall preside at the General Meetings of Shareholders. In the absence of the Chairman, the President and the Vice President among Inside Directors shall act as chairman in accordance with their order of authority.

Article 22. Authority of the Presiding Officer

The presiding officer at a General Meeting of Shareholders may order any person to cease making any statements or to leave the meeting or that statements made by such person be stricken from the record if the

presiding officer determines that such person is deliberately preventing deliberations or is disturbing the order of the proceedings at the meeting. A person so ordered shall comply with the presiding officer's instructions.

Article 23. Vote by Proxy

(1) Any shareholder entitled to vote at a General Meeting of Shareholders shall have the right to vote by proxy.

(2) A proxy can be only given to a shareholder of the company, and the proxy shall submit a document evidencing the power of representation to the company before the opening of the General Meeting of Shareholders. In case of a corporate entity shareholder, any of its officers or employees may act as a proxy.

Article 24. Quorum and Requisite for Resolutions

(1) Except as otherwise provided in these Articles of Incorporation or by applicable laws or regulations, all resolutions passed at a General Meeting of Shareholders shall be adopted by the affirmative vote of a majority of the voting shares of the shareholders present, which shall represent at least one-fourth (1/4) of the voting shares of the Company then issued and outstanding.

(2) In the following cases, the resolutions of a General Meeting of Shareholders shall be adopted by the affirmative vote of at least two-thirds (2/3) of the voting shares of the shareholders present and by the affirmative vote of at least one-third (1/3) of the voting shares of the total issued and outstanding shares:

1. Amendment of the Articles of Incorporation;
2. Transfer of all or any important part of the business;
3. Execution, amendment or rescission of a contract for leasing the whole of the business, for entrustment of management, or for sharing with another person all profits and losses in relation to the business or of a similar contract;
4. Acquisition of all or part of business of any other company, which may have a great influence upon the business of the Company;
5. Merger or consolidation of the Company (excluding a small scale merger or consolidation);
6. Matters required to be approved by the General Meeting of Shareholders, which have material effects on the company's assets, as determined by the Board of Directors; and
7. Any other matter for which such vote is required by Korean laws and regulations.

Article 25. Exercise of Voting Right in Writing

(1) Any shareholder is entitled to exercise its voting rights at a General Meeting of Shareholders in writing without being present at such General Meeting of Shareholders.

(2) In connection with Paragraph (1) above, the Company shall attach the document necessary for the shareholder's exercise of its voting rights in writing and any reference documents to the written notice for convening a General Meeting of Shareholders.

(3) A shareholder, who intends to exercise its voting rights in writing, shall fill in the document referred to in Paragraph (2) above and submit such document to the Company one (1) day prior to the date of the relevant General Meeting of Shareholders.

Article 26. Minutes of General Meeting of Shareholders

The substance of the course of the proceedings of a General Meeting of Shareholders and the results thereof shall be recorded in the minutes which shall bear the names and seals or signatures thereon of the presiding officer and of the Directors present at the meeting, and shall be preserved in the archives of the Company.

CHAPTER V. BOARD OF DIRECTORS

Article 27. Number of the Directors

The total number of Directors of the Company shall be at least three (3) but no more than twelve (12) Directors, among which the Outside Directors shall constitute the majority of the total number of the Directors.

Article 28. Election of the Directors and Representative Directors

(1) The Directors shall be elected at the General Meeting of Shareholders.

(2) By resolution of the Board of Directors, a number of Representative Directors may be appointed from among Inside Directors. On recommendation of the Chairman, the Board of Directors may grant an Inside Director the position of President, Executive Vice President, Senior Managing Director and Managing Director.

(3) If Directors are appointed by a cumulative voting, the Inside Directors and the Independent Outside Directors are separately considered, and then, the cumulative voting shall apply to each group.

Article 29. Appointment of the Chairman and the Representative Director

(1) By resolution of the Board of Directors, the Chairman and the Representative Director shall be elected from among the Inside Directors after his qualification is approved by the CEO Candidate Recommendation Committee.

(2) In the event a candidate for the position of Inside Director is nominated as the Chairman and the Representative Director candidate and approved by the CEO Candidate Recommendation Committee, the Board of Directors shall recommend the name of one (1) The Chairman and the Representative Director candidate at the General Meetings of Shareholders. Where the Chairman and the Representative Director candidate is appointed as an Inside Director at General Meetings of Shareholders, the Board of Directors shall appoint the Chairman and the Representative Director candidate as the Chairman and the Representative Director.

(3) Details concerning the composition and operation of the CEO Candidate Recommendation Committee shall be determined by the Board of Directors.

Article 29-2. Recommendation of Inside Director Candidate other than the Chairman and the Representative Director

A candidate for Inside Director other than the Chairman and the Representative Director shall be recommended by the Board of Directors after his qualification is approved by the Director Candidate Recommendation Committee as prescribed in Paragraph (1) of Article 45.

Article 29-3. Qualification for Inside Director Candidate

(1) An Inside Director shall be a person capable of managing the Company, who has working experience as an officer or employee of the Company or sufficient experience in the related business area.

(2) A person (i) who retired prior to the completion of the full term of office due to gross negligence or unsound management, (ii) who was sentenced to imprisonment or a heavier penalty and for whom five years have not passed since the termination thereof or exemption therefrom or (iii) who is serving a suspended sentence or who was sentenced to a stay of execution and for whom two years have not passed since the expiration of the period of stay of execution cannot be an Inside Director of the Company.

Article 30. Recommendation of Candidate for Outside Directors

(1) A candidate for Outside Director shall be recommended by the Director Candidate Recommendation Committee as prescribed in Paragraph (1) of Article 45. Such candidates shall be among those qualified persons as prescribed in Article 31.

(2) A shareholder holding voting shares of the Company may recommend a candidate for Outside Director to the Director Candidate Recommendation Committee by the exercise of the shareholder proposal right under the applicable legislation.

(3) The Director Candidate Recommendation Committee shall determine the details regarding recommendation for, and evaluation on qualification of, candidates for Outside Director.

Article 31. Qualification for Candidate for Outside Directors

An Outside Director must have sufficient and professional knowledge or experience in the areas of industry, finance, education, law, accounting and public administration and also must be qualified under the relevant laws.

Article 32. Duties of Representative Director

(1) Each Representative Director shall represent the Company, execute matters determined by the Board of Directors, control all affairs of the Company and provide all Directors with the updated information regarding the recent status of management and the Company.

(2) The Representative Directors and Directors shall carry on the administration of the affairs of the Company in accordance with the duties assigned to them by the Chairman.

Article 33. Duties of Directors

(1) The Directors, as the prudent manager, shall faithfully perform their duties for the Company such as attending the meeting of the Board of Directors, etc. in accordance with the laws and the Articles of Incorporation.

(2) If a Director finds any matter that may inflict any material loss to the Company, he shall immediately report it to the Audit Committee.

Article 34. Term of Directors

The term of office of the Directors shall be within three (3) years; provided, however, that the term of office for Directors shall be extended until the close of an Ordinary General Meeting of Shareholders which is to be held with respect to the fiscal year which is the last to end during their terms in office.

Article 35. By-Election

(1) In the event of any of the absence or inability to perform the duties as a Director, an Extraordinary General Meeting of Shareholders shall be convened to fill the vacancy. However, in the case the number of remaining Directors satisfies the legal requirement and such vacancy does not cause any difficulties in the operation of the business, the appointment through by-election may be suspended, or postponed until the holding of the next Ordinary General Meeting of Shareholders.

(2) In the event that the number of Outside Directors is less than a majority of total number of Directors due to death or resignation of Outside Directors or for any other reason, Outside Directors shall be elected to fill the vacancy at the General Meeting of Shareholders to be held first after such cause so as for the number of Outside Directors to constitute a majority of total number of Directors.

Article 36. Remuneration of Directors

(1) The limit of the salaries and performance incentives of the Directors shall be determined by resolution of the General Meeting of Shareholders. The Board of Directors shall determine the detailed operation standards thereof.

(2) Any severance allowance paid to the Inside Directors shall be in accordance with Severance Allowance Regulations for Directors as approved by shareholders at the General Meeting of Shareholders.

(3) The Company may pay to Outside Directors for expenses incurred during performance of services as required of Outside Directors.

Article 37. Indemnification of Directors

The Company shall indemnify, to the extent permitted by the Korean Commercial Code, the Directors from and against all expenses, losses or liabilities incurred in connection with defending any action, claim or proceeding to protect the interest of the Company, except for in case of the Directors' willful misconduct or negligence with respect to their duties.

Article 38. Authority of the Board of Directors

(1) The Board of Directors shall have the power to take actions in respect of all such acts and things put on the agenda by any of the Directors relating to important matters regarding the administration of the Company or as are required by laws or regulations or by these Articles of Incorporation.

(2) The Board of Directors may delegate its powers to the Special Committees as prescribed in Paragraph (1) of Article 45 in accordance with the Korean laws and regulations and these Articles of Incorporation.

Article 39. Constitution and Convocation of Meeting of the Board of Directors

(1) The Board of Directors shall consist of all the Directors.

(2) The Presiding Director of the Board of Directors may convene all Meetings of the Board of Directors. Any other Director who wishes to convene a Meeting of the Board of Directors shall make his request to the Presiding Director of the Board of Directors and the Presiding Director shall convene the Meeting. If the Presiding Director of the Board of Directors fails to convene the Meeting without justifiable reasons, other Directors may convene such Meeting.

(3) Written or oral notice of each Meeting of the Board of Directors shall be given at least one day prior to the scheduled meeting date to each of the Directors. No notice shall, however, be required for a regular Meeting of the Board of Directors or if all of the Directors consent thereto.

(4) The Board of Directors may allow the Directors to attend, and vote at, the meeting of the Board of Directors by tele-conferencing, instead of attending and voting in person at such meeting. In such case, a Director participating in the Board Meeting by such arrangement shall be considered to be present at the Meeting of the Board of Directors.

Article 40. Presiding Director of the Board of Directors

(1) The Presiding Director of the Board of Directors shall be appointed by the resolution of the Board of Directors among Outside Directors.

(2) The term of office of the Presiding Director shall be one (1) year, and the Presiding Director shall not be reappointed to the office.

(3) In the event that the Presiding Director cannot preside at a Meeting of the Board of Directors, Outside Director in order of seniority (if the seniority is the same, the oldest has the priority) shall take his place as presiding Director.

Article 41. Adoption of Resolutions of the Board of Directors

(1) The Majority of Directors shall constitute a quorum for a Meeting of the Board of Directors. All actions and resolutions taken at a Meeting of the Board of Directors shall be adopted by the affirmative vote of a

majority of the Directors present. Notwithstanding the foregoing, the adoption of a resolution by the Board of Directors with respect to the election of the Chairman and the Representative Director candidate may be separately decided by the Board of Directors whose quorum shall not exceed the affirmative vote of two-thirds (2/3) of all of the Directors.

(2) A Director having a special interest with respect to the resolution shall not exercise his voting right.

Article 42. Formalities of the Board of Directors

Directors shall set the agenda for each Meeting and make proposals for resolution thereat. If any Director plans to make proposals at the Meeting of the Board of Directors, he shall submit a written summary thereof to the Presiding Director of the Board of Directors and the Chairman and Representative Director in advance.

Article 43. Matters of Urgency

The Chairman and Representative Director may act upon matters of urgency without resolution of the Board of Directors by obtaining prior consent of more than two-thirds (2/3) of other Directors. A Meeting of the Board of Directors for the next term shall be convened to deliberate on and ratify the actions so taken.

Article 44. Minutes of the Meeting of the Board of Directors

With respect to the proceedings of the Meetings of the Board of Directors, the minutes should be made. The agenda, the substances of course, and the results of the proceedings of the Meetings of the Board of Directors, the name of objecting director and the reasons of objection shall be recorded in the minutes which shall bear the names and seals or the signatures thereon of the Directors present at the Meeting.

Article 45. Special Committees

(1) The Company shall have special committees under the control of the Board of Directors as follows:

1. Director Candidate Recommendation Committee;
2. Evaluation and Compensation Committee;
3. Finance and Operation Committee;
4. Executive Management Committee;
5. Audit Committee; and
6. Related Party Transactions Committee.

(2) Except as otherwise provided by any relevant laws, authority, constitution and operation of the special committee shall be determined by a resolution of the Board of Directors.

(3) Matters regarding composition and duties of the Audit Committee shall be determined in accordance with Chapter VI.

Article 46. Unregistered Officers

(1) The Company shall have Unregistered Officers to execute the matters resolved by the Board of Directors and the matters important to the management of the Company.

(2) The Unregistered Officers shall be appointed by the Representative Director and C.E.O.; provided, however, that the appointment of the Unregistered Officers to the important positions that the Board of Directors decides shall require the approval of the Board of Directors.

(3) The Unregistered Officers are President, Senior Executive Vice Presidents, Senior Managing Directors and Managing Directors, and the salaries and performance incentives payable to such Unregistered Officers shall be determined by the Board of Directors or by the Representative Director and C.E.O., to the extent the Representative Director and C.E.O. has been delegated such authority by the Board of Directors. Any severance allowance shall be distributed in accordance with the standards for the President, Senior Executive Vice Presidents, Senior Managing Directors and Managing Directors pursuant to the Directors Severance Allowance Regulations as approved by the General Meeting of Shareholders.

(4) The allocation of work among the Unregistered Officers shall be decided by the Representative Director and C.E.O..

(5) The term of office of the Unregistered Officers shall not be more than two (2) years; provided, however, that the proviso of Article 34 may apply *mutatis mutandis* to the Unregistered Officers.

Article 47. Consultant and Part-time Officer

The Company may have consultants and part-time officers who will be treated as Officers of the Company if it is required for the business.

CHAPTER VI. Audit Committee

Article 48. Constitution and Appointment of Members of Audit Committee

(1) The Audit Committee of the Company shall consist of three (3) or more Directors. All of the members shall be elected from among the Outside Directors.

(2) A member of the Audit Committee shall be appointed or dismissed at the General Meeting of Shareholders. When appointing a member of the Audit Committee, a shareholder holding more than three percent (3%) of the Company's issued and outstanding shares shall not be entitled to exercise his voting rights for that excess portion.

(3) In the event that the number of the Audit Committee does not satisfy the requirement referred to in Paragraph (1) due to the death or resignation of members or any other reasons, the members shall be elected to fill the vacancy at the General Meeting of Shareholders to be held first after such cause so as for the number of members to satisfy the requirement referred to in Paragraph (1).

(4) The chairman of the Audit Committee shall be elected by a resolution of the Audit Committee.

Article 49. Duties of Audit Committee

(1) The Audit Committee shall examine the accounting and financial records of the Company.

(2) The Audit Committee may request to convene an Extraordinary General Meeting of Shareholders by submitting a written request specifying the agenda of the meeting and the reason for the meeting.

(3) If deemed necessary, the Audit Committee may request to convene a Board Meeting by submitting a written request specifying the agenda of a meeting and the reason for a meeting to the Presiding Director.

(4) The Audit Committee may directly convene a Board Meeting if a meeting has not been convened immediately on the request of the Audit Committee in accordance with Paragraph (3) of this Article.

(5) If it is required for management purpose, the Audit Committee may demand a subsidiary to make a report on the business. In such case, if the subsidiary fails to make an immediate report, or it is required to confirm the contents of such report, the Audit Committee may investigate the business and assets of the subsidiary.

(6) The Audit Committee shall prepare an audit report on the Company's financial statements and shall report thereof to the General Meeting of Shareholders.

(7) The Audit Committee shall record the course of the proceedings of their meetings and the results thereof in the minutes and shall record the procedure of the inspection and the results thereof in the inspection book, on which the name and seal of the members shall be affixed or which shall be signed by such members.

(8) The Audit Committee may receive advice from outside professionals when necessary, for which the Company shall cover any expenses therefrom.

Article 50. Quorum and Adoption of Resolutions

Article 41 shall apply, *mutatis mutandis*, to the quorum and adoption of resolution of the Audit Committee.

Article 51. Appointment of External Auditor

An External Auditor of the Company pursuant to the Act on External Audit of Stock Companies shall be appointed by the approval of the Audit Committee. The details of the aforesaid appointment shall be reported to the shareholders at the Ordinary General Meeting of Shareholders for the fiscal year during which such appointment was or shall be made known to the shareholders in accordance with relevant laws and regulations.

CHAPTER VII. ACCOUNTING

Article 52. Fiscal Year

The fiscal year of the Company shall commence on each January 1 and shall end on December 31 of the same year.

Article 53. Submission, Approval and Publication of Financial Statements

(1) After the end of each fiscal year, the Representative Directors shall prepare and submit, with the Board of Directors' approval therefor, to the Audit Committee at least six (6) weeks before the date set for an Ordinary General Meeting of Shareholders, the following documents with its supplementary schedules:

1. A balance sheet;
2. A profit and loss statement;
3. Documents designated by the Presidential Decree and decided by the Board of Directors;
4. A consolidated financial statement; and
5. A business report for the pertinent fiscal year:

(2) Upon receiving the documents specified under Paragraph (1) above, the Audit Committee shall prepare and submit an auditor's report to the Representative Director one (1) week before the date of each Ordinary General Meeting of Shareholders.

(3) The Representative Directors shall make available for inspection for five (5) years at the head office and copies thereof for three (3) years at branch offices, the documents prescribed under Items 1 through 4 of Paragraph (1) of this Article and the auditor's report of the Company beginning from one (1) week before the date of each Ordinary General Meeting of Shareholders.

(4) The Representative Director shall submit and seek approval of the documents prescribed under Items 1 through 4 of Paragraph (1) of this Article at an Ordinary General Meeting of Shareholders. The Representative Directors shall report a business report to an Ordinary General Meeting of Shareholders.

(5) The Representative Director shall make public the balance sheet, without delay, after an Ordinary General Meeting of Shareholders has approved the documents described in Paragraph (4).

Article 54. (Deleted)

Article 55. Disposition of Retained Earnings

Retained earnings for any fiscal year shall be disposed in the following order, but it may be appropriated for purposes other than those listed below if approved by a General Meeting of Shareholders:

1. Legal reserves (required to be more than one-tenth of cash dividends paid for the pertinent fiscal year);
2. Other statutory reserves;
3. Dividends to shareholders;
4. Merits bonuses for retiring Directors;
5. Discretionary reserves;
6. Average dividend reserves and other dispositions; and
7. Retained earnings carried forward to next fiscal year.

Article 56. Dividends

(1) Dividends may be paid in cash, shares, or any other form of property

(2) In the case of stock dividends, the Company may issue different types of shares to the shareholders by resolution of the General Meeting of Shareholders.

(3) The Company may pay quarterly dividends in cash by a resolution of the Board of Directors each fiscal year. In such case, the record date for the distribution of quarterly dividends shall be the last day of March, June and September. The dividends should be paid within 20 days from the resolution above.

(4) Dividends referred to in Paragraphs (1) and (3) shall be paid to the shareholders and registered pledgees whose names appear in the shareholders' register of the Company as of the last day of each fiscal year or the record date for the distribution of quarterly dividends.

Article 57. Cancellation of Treasury Stocks

The Company, by a resolution of the Board of Directors, may repurchase and cancel its outstanding shares following the methods set forth in the applicable laws or regulations.

ADDENDA (March 11, 2016)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 48th fiscal year.

ADDENDA (March 16, 2012)

Article 27 of the Articles of Incorporation shall be effective from the date the Ordinary General Meeting of Shareholders for the 44th fiscal year approves such Article while the other amended Articles shall be effective from April 15, 2012.

ADDENDA (February 25, 2011)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 43rd fiscal year.

ADDENDA (February 26, 2010)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 42nd fiscal year.

ADDENDA (February 27, 2009)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 41st fiscal year.

ADDENDA (February 23, 2007)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 39th fiscal year.

ADDENDA (February 24, 2006)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 38th fiscal year.

ADDENDA (March 12, 2004)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 36th fiscal year.

ADDENDA (March 14, 2003)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 35th fiscal year.

ADDENDA (March 15, 2002)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 34th fiscal year.

ADDENDA (March 16, 2001)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 33rd fiscal year.

ADDENDA (March 17, 2000)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 32nd fiscal year.

ADDENDA (March 16, 1999)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 31st fiscal year.

ADDENDA (August 20, 1998)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Extraordinary General Meeting of Shareholders for the 31st fiscal year.

ADDENDA (March 17, 1998)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 30th fiscal year.

ADDENDA (March 14, 1997)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 29th fiscal year.

ADDENDA (March 15, 1996)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 28th fiscal year.

ADDENDA (March 15, 1995)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 27th fiscal year.

ADDENDA (April 15, 1994)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Extraordinary General Meeting of Shareholders for the 27th fiscal year.

ADDENDA (March 8, 1993)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 25th fiscal year.

ADDENDA (October 13, 1992)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Extraordinary General Meeting of Shareholders for the 25th fiscal year.

ADDENDA (March 7, 1992)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 24th fiscal year.

ADDENDA (March 14, 1991)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 23rd fiscal year.

ADDENDA (March 6, 1990)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 22nd fiscal year.

ADDENDA (March 15, 1989)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 21st fiscal year.

ADDENDA (February 27, 1988)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 20th fiscal year.

ADDENDA (March 7, 1987)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 19th fiscal year.

ADDENDA (February 26, 1986)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 18th fiscal year.

ADDENDA (February 5, 1985)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 17th fiscal year.

ADDENDA (February 18, 1984)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 16th fiscal year.

ADDENDA (February 23, 1982)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 14th fiscal year.

ADDENDA (February 28, 1981)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 13th fiscal year.

ADDENDA (February 24, 1979)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 11th fiscal year.

ADDENDA (February 25, 1978)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 10th fiscal year.

ADDENDA (February 8, 1977)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 9th fiscal year.

ADDENDA (February 6, 1976)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 8th fiscal year.

ADDENDA (February 8, 1975)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 7th fiscal year.

ADDENDA (February 5, 1974)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 6th fiscal year.

ADDENDA (February 12, 1973)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 5th fiscal year.

ADDENDA (November 29, 1972)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Extraordinary General Meeting of Shareholders for the 5th fiscal year.

ADDENDA (February 4, 1972)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 4th fiscal year.

ADDENDA (November 23, 1971)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Extraordinary General Meeting of Shareholders for the 4th fiscal year.

ADDENDA (February 6, 1971)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 3rd fiscal year.

ADDENDA (February 7, 1970)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 2nd fiscal year.

ADDENDA (June 16, 1969)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Extraordinary General Meeting of Shareholders for the 2nd fiscal year.

ADDENDA (March 20, 1969)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Extraordinary General Meeting of Shareholders for the 2nd fiscal year.

ADDENDA (February 20, 1969)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Ordinary General Meeting of Shareholders for the 1st fiscal year.

ADDENDA (July 10, 1968)

The amended Articles of Incorporation shall be effective from the date on which they are approved by the resolution at the Extraordinary General Meeting of Shareholders for the 1st fiscal year.

ADDENDA (March 6, 1968)

The Articles of Incorporation shall be effective from March 6, 1968.

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LIST OF CONSOLIDATED SUBSIDIARIES

For a list of POSCO's consolidated subsidiaries as of December 31, 2016 and their jurisdiction of incorporation, please see Note 1(b) of Notes to Consolidated Financial Statements contained in POSCO's annual report on Form 20-F for fiscal year 2016.

CERTIFICATION

I, Kwon, Oh-Joon, certify that:

1. I have reviewed this annual report on Form 20-F of POSCO;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 27, 2017

/s/ Kwon, Oh-Joon

Kwon, Oh-Joon
Chief Executive Officer and
Representative Director

CERTIFICATION

I, Choi, Jeong-Woo, certify that:

1. I have reviewed this annual report on Form 20-F of POSCO;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and
5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 27, 2017

/s/ Choi, Jeong-Woo
Choi, Jeong-Woo
President and
Chief Financial and Planning Officer

CERTIFICATION

**Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
(Subsection (a) and (b) of Section 1350, Chapter 63 of Title 18, United States Code)**

Pursuant to section 906 of the Sarbanes-Oxley Act of 2002 (subsection (a) and (b) of section 1350, chapter 63 of title 18, United States Code), the undersigned officer of POSCO, a corporation organized under the laws of the Republic of Korea (the "Company"), does hereby certify, to such officer's knowledge, that:

The annual report on Form 20-F for the year ended December 31, 2016 (the "Form 20-F") fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in the Form 20-F fairly presents, in all material respects, the financial condition and results of operation of the Company.

/s/ Kwon, Oh-Joon

Kwon, Oh-Joon
Chief Executive Officer and
Representative Director

Date: April 27, 2017

/s/ Choi, Jeong-Woo

Choi, Jeong-Woo
President and
Chief Financial and Planning Officer

Date: April 27, 2017

A signed original of this written statement required by Section 906 of the Sarbanes-Oxley Act of 2002 has been provided to POSCO and will be retained by POSCO and furnished to the Securities and Exchange Commission or its staff upon request.

