FAIRFAX FINANCIAL HOLDINGS LTD/ CAN Form 6-K September 09, 2009

FORM 6-K

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Report of Foreign Private Issuer

Pursuant to Rule 13a-16 or 15d-16

of the Securities Exchange Act of 1934

For the month of September 2009

Commission File Number: 033-71976

FAIRFAX FINANCIAL HOLDINGS LIMITED (Translation of registrant's name into English)

95 Wellington Street West Suite 800 Toronto, Ontario Canada M5J 2N7

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F _____ Form 40-F ___ X ___

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): _____

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): _____

Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes ____ No __X___

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82-_N/A____

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

By: /s/ Paul Rivett Name: Paul Rivett Title: Vice President

Dated: September 9, 2009

Exhibit Index

Exhibit Description

- Ex-99.1 News Release dated September 8, 2009 titled Fairfax to Raise \$1 Billion in Equity Offering
- Ex-99.2 News Release dated September 8, 2009 titled Fairfax Confirms Sales of \$1 Billion in Equity Offering

ZE="1"> 1.10

Actual crude steel and stainless steel output (million tons)

1.16 1.16 1.16

Capacity utilization rate $(\%)^{(1)}$

105.2% 105.4% 105.3%

(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,			
	2016	2017	2018	
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)	2.91	2.92	3.01	
Capacity utilization rate $(\%)^{(1)}$	97.0%	97.4%	100.3%	

(1) Calculated by dividing actual crude steel output by the actual crude steel production 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,		
	2016	2017	2018
Crude steel production capacity as of end of the year (million tons per year)	1.10	1.10	1.10
Actual crude steel output (million tons)	0.64	0.91	0.97
Capacity utilization rate (%) ⁽¹⁾	58.0%	82.3%	87.7%

(1) Calculated by dividing actual crude steel output by the actual crude steel production capacity for the relevant period as determined by us. **Item 4A.** *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, a 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 International. POSCO International 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, manufacturing of various industrial materials and network and system integration. See Note 40 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 2017, unit sales prices in Won for each of our principal product lines of steel products produced by us and directly sold to external customers increased. The weighted average unit price for such products increased by 21.3% from 2016 to 2017, despite an appreciation in the average value of the Won against the Dollar in 2017 that decreased our export prices in Won terms. The average exchange rate of the Won against the Dollar, as announced by Seoul Money Brokerage Services, Ltd., appreciated from Won 1,160.5 to US\$1.00 in 2016 to Won 1,130.8 to US\$1.00 in 2017.

The unit sales price of hot rolled products, which accounted for 25.9% of total sales volume of the principal steel products produced by us and directly sold to external customers, increased by 29.2% in 2017. The unit sales price of wire rods, which accounted for 7.8% of total sales volume of such products, increased by 26.2% in 2017. The unit sales price of cold rolled products, which accounted for 37.5% of total sales volume of such products, increased by 25.7% in 2017. The unit sales price of stainless steel products, which accounted for 9.6% of total sales volume of such products, increased by 15.0% in 2017. The unit sales price of silicon steel products, which accounted for 2.9% of total sales volume of such products, increased by 9.7% in 2017. The unit sales price of plates, which accounted for 16.3% of total sales volume of such products, increased by 9.7% in 2017. The unit sales price of plates, which accounted for 16.3% of total sales volume of such products, increased by 8.4% in 2017.

In 2018, unit sales prices in Won for each of our principal product lines of steel products produced by us and directly sold to external customers, other than silicon steel products, increased. The weighted average unit price for such products increased by 3.3% from 2017 to 2018, despite an appreciation in the average value of the Won against the Dollar in 2018 that decreased our export prices in Won terms. The average exchange rate of the Won against the Dollar, as announced by Seoul Money Brokerage Services, Ltd., appreciated from Won 1,130.8 to US\$1.00 in 2017 to Won 1,100.3 to US\$1.00 in 2018.

The unit sales price of plates, which accounted for 15.8% of total sales volume of the principal steel products produced by us and directly sold to external customers, increased by 14.8% in 2018. The unit sales price of hot rolled products, which accounted for 26.0% of total sales volume of such products, increased by 5.2% in 2018. The unit sales price of wire rods, which accounted for 39.2% of total sales volume of such products, increased by 2.8% in 2018. The unit sales price of cold rolled products, which accounted for 9.1% of total sales volume of such products, increased by 2.8% in 2018. The unit sales price of stainless steel products, which accounted for 9.1% of total sales volume of such products, increased by 0.8% in 2018. On the other hand, the unit sales price of silicon steel products, which accounted for 2.8% of total sales volume of such products, unit sales price of silicon steel products, which accounted for 2.8% of total sales volume of such products, increased by 2.9% in 2018.

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

	For	the Year Ended December 3	31,
Products	2016	2017	2018
	(1	in thousands of Won per ton))
Cold rolled products	666	837	861
Hot rolled products	507	655	689
Stainless steel products	2,003	2,304	2,322
Plates	582	631	724
Wire rods	638	806	845
Silicon steel sheets	1,065	1,169	1,135
Average ⁽¹⁾	745	904	934

(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,			
	2016	2016 2017		
		(Percentage of net sales)		
Cost of sales	87.4%	86.3%	87.7%	
Selling and administrative expenses	7.3	6.2	3.7	
Gross margin	12.6	13.7	12.3	
Operating profit margin	4.3	7.0	6.2	

Our operating profit margin increased from 4.3% in 2016 to 7.0% in 2017, but decreased to 6.2% in 2018 as discussed below.

We are closely monitoring changes in market conditions and we implemented the following measures in recent years to improve our profit margins:

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;

pursuing synergies among member companies of the POSCO Group through corporate restructurings; 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		er 31,
	2016	2017	2018
Crude steel and stainless steel production capacity (million tons per year)	47.6	47.6	47.6
POSCO	42.4	42.4	42.4
Zhangjiagang Pohang Stainless Steel Co., Ltd.	1.1	1.1	1.1
PT. Krakatau POSCO	3.0	3.0	3.0
POSCO SS VINA Co., Ltd.	1.1	1.1	1.1
Actual crude steel and stainless steel output (million tons)	42.2	42.2	42.9
POSCO	37.5	37.2	37.7
Zhangjiagang Pohang Stainless Steel Co., Ltd.	1.2	1.2	1.2
PT. Krakatau POSCO	2.9	2.9	3.0
POSCO SS VINA Co., Ltd.	0.6	0.9	1.0
Capacity utilization rate (%)	88.7%	88.7%	90.1%
POSCO	88.5%	87.8%	89.0%
Zhangjiagang Pohang Stainless Steel Co., Ltd.	105.2%	105.4%	105.3%
PT. Krakatau POSCO	97.0%	97.4%	100.3%
POSCO SS VINA Co., Ltd.	58.0%	82.3%	87.7%
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 2018, 61.6% 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 foreign-currency denominated 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.

The overall net impact from fluctuations of the Won against major currencies is difficult to estimate and varies from year to year. 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 International 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 International 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 International 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. 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.

Inflation

Inflation in Korea, which was 1.0% in 2016, 1.9% in 2017 and 1.5% in 2018, 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 often require us to make difficult, subjective and 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, 2018, the percentage of allowance for doubtful accounts to trade accounts and notes receivable and other receivables was 7.12%. Our allowance for doubtful accounts decreased by 16.2%, or Won 178 billion, from Won 1,094 billion as of December 31, 2017 to Won 917 billion as of December 31, 2018. See Note 23 of Notes to Consolidated Financial Statements.

Lifetime expected credit losses are expected credit losses from any default that may occur over the expected life of a financial instrument. 12-month expected credit losses are portions of lifetime

expected credit losses that result from defaults that may occur within the 12 months after the reporting date. The expected life of a financial instrument is the entire contractual period over which we are exposed to credit risk. Expected credit losses are probability-weighted estimates of credit losses. Credit losses are measured as the present value of all cash shortfalls, such as the difference between cash flows specified under contracts and cash flows that we expect to receive.

The actual average annual uncollected percentage rate of accounts receivables resulting in write-offs for the three years in the period ended December 31, 2018 was 1.14%. 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 selfect 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 1%, then the estimated fair values would have decreased by approximately 10% in total. In addition, if the revenue growth rate assumptions

were decreased by 1% in the cash flow models, then the estimated fair values would have decreased by approximately 13% in total.

We recognized impairment losses on available-for-sale financial assets of Won 248 billion in 2016 and Won 123 billion in 2017, but we did not recognize any such impairment loss in 2018 due to our adoption of IFRS 9 Financial Instruments, effective as of January 1, 2018, which classifies available-for-sale financial assets as financial assets at fair value through other comprehensive income. See Notes 2 and 33 of Notes to Consolidated Financial Statements.

Our estimates and assumptions used to evaluate impairment of investments are made taking into consideration our assessment of the latest information available. 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 less costs to sell) and its value in use. When the book value of long-lived asset exceeds the recoverable amount 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 amount and the resulting impairment loss is charged to current operations. Such recoverable amount 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, 2018, we recognized impairment loss on property, plant and equipment amounting to Won 810 billion in 2018, which related primarily to our synthetic natural gas production facility in Gwangyang due to our discontinuation of such business that we had launched in 2011, which was adversely impacted by a decline in the market price of LNG. In addition, we recognized impairment loss on industrial property rights of Won 78 billion related to our investment in Hume Coal Pty Limited, a coal mining company in Australia, as well as impairment loss on property, plant and equipment of Won 54 billion in 2018 in connection with the restructuring of our fuel cell business.

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 amount 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 amount 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, 2018, for the applicable cash generating units, we estimated a discount rate of 4.6% to 10.4% and a revenue growth rate of 0.6% to 2.0%. 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. 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 4.2% to 4.9% in total. If the estimated revenue growth rate were decreased by 1%, then the estimated recoverable amount would have decreased by 1.9% to 8.5% 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 2.72% to 3.71% 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 1.49% to 1.76% in total. Based on an impairment test as of December 31, 2018, we recognized impairment loss on goodwill of Won 158 billion incurred by POSCO International and Won 66 billion incurred by POSCO E&C in connection with decreases in value-in-use of such entities, as well as impairment of industrial property rights of Won 78 billion related to our investment in Hume Coal Pty Limited, a coal mining company in Australia. 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 the cash-generating groups, 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 92.9% to 116.1% of the inventory cost amount. 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 2016, 2017 and 2018. The valuation losses of inventories recognized within cost of goods sold were Won 152 billion in 2016, Won 79 billion in 2017 and Won 142 billion in 2018.

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, 2018, the book value of our investments in associates and joint ventures was Won 3,650 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 post-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 value in use 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 Recognized by the Input Method

POSCO E&C, our consolidated subsidiary, engages in various construction activities, including construction of industrial plants and civil engineering projects, and revenue recognition is different based on types of contracts. We recognize revenue over time when (i) our customers receive the benefits from our construction activities simultaneously with our performance of such activities, (ii) our

construction activities create or improve an asset when such asset is under the customer s control or (iii) our construction activities do not provide alternative benefits to us and we have an enforceable right to payment for performance completed to date.

In the case of construction contracts where we construct plants or other similar structures, our customers control the assets as they are being constructed. Under such contracts, we perform construction of the projects according to the customers on-going specifications, and if a contract is terminated by the customer, we are entitled to reimbursement of all costs incurred to date, including a reasonable margin. When the revenue and costs of a contract can be reliably estimated, we recognize such estimated revenue and costs based on the progress of construction as of the end of the reporting period. The percentage of completion is determined based on the proportion that contract costs incurred for work performed to date bear to the estimated total contract costs. If the revenue and costs of a contract cannot be reliably estimated, revenue is recognized only to the extent the recovery of contract costs are probable. If the total contract cost is likely to exceed the total contract revenue, expected losses are immediately recognized as costs.

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 2018, the estimated total contract costs were changed. Details of changes in estimated total contract costs and the impact on profit before income taxes for 2018 and future periods are as follows:

	Amount
	(In millions of Won)
Changes in estimated total contract costs	427,812
Changes in profit before income taxes of construction contracts:	
Current period	(38,720)
Future periods	69 428

Future periods

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 2018. 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 mount 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 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 future pay inflation rates were decreased by 1%, then the estimated future pay inflation rates were decreased by 1%, then the estimated future pay inflation rates were decreased by 1%, then the estimated future pay inflation rates were decreased by 1%, then the estimated future pay inflation rates were decreased by 1%, then the estimated provision for severance benefits would have decreased by 1% then the estimated future pay inflation rates were decreased by 1%, then the estimated provision for severance benefits would have decreased by 1% then the estimated provision for severance benefits as of December 31, 2018.

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. 16 Leases

IFRS No. 16 Leases replaces existing guidance regarding leases, including 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 introduces a single accounting model that requires a lessee to recognize lease related assets and liabilities in the financial statements. A lessee is required to recognize as an asset its right to use the underlying leased asset and recognize as a liability its obligation to make lease payments. The lessee may elect not to apply the standard to short-term lease with a term of 12 months or less or low value assets. Accounting treatment for a lessor is similar to the existing standard which classifies leases into finance and operating leases.

We will apply IFRS No. 16 Leases beginning on January 1, 2019. Based on information currently available, we estimate that we will recognize right-of-use assets and lease liabilities of Won 619 billion as of January 1, 2019, which is the present value of the lease payments of Won 856 billion that are not paid at the date of initial application for the assets currently used as operating leases.

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.

K-IFRS differs in certain respects from IFRS as issued by the IASB in the 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 or loss in our consolidated statements of comprehensive income prepared in accordance with K-IFRS, for each of the years, taking into account such differences:

	For the Year Ended December		er 31.
	2016	2017	2018
	(In	millions of Won)	
Operating profit under IFRS as issued by the IASB	2,282,496	4,196,121	4,041,827
Additions:			
Impairment loss on other receivables	37,567	98,177	63,092
Impairment loss on assets held for sale	24,890		50,829
Loss on disposals of investments in subsidiaries, associates and joint ventures	22,499	19,985	5,226
Loss on disposals of property, plant and equipment	86,622	151,343	117,614
Impairment loss on property, plant and equipment	196,882	117,231	1,004,704
Impairment loss on investment property	318		51,461
Loss on disposals of investment property	21	1,966	9,154
Impairment loss on intangible assets	127,875	167,995	337,519
Increase to provisions	53,058	33,964	134,632
Loss on valuation of firm commitment		43,164	66,281
Donations	43,810	51,424	52,074
Idle tangible asset expenses	6,437	10,490	9,257
Others	143,083	93,814	175,711
	743.062	789,553	2,077,554
Deductions:		,	, ,
Gain on disposals of assets held for sale	(23,112)	(1,180)	(27, 171)
Gain on disposals of investment in subsidiaries, associates and joint ventures	(23,305)	(81,794)	(45,241)
Gain on disposals of property, plant and equipment	(23,826)	(32,145)	(53,139)
Gain on disposals of intangible assets	(671)	(23,391)	(117,139)
Gain on valuation of firm commitment		(56,301)	(39,028)
Gain on insurance proceeds	(22,400)	(5,878)	(14,034)
Others	(109,164)	(247,792)	(227,834)
			()))
	(202.478)	(110 101)	(522 596)
	(202,478)	(448,481)	(523,586)
Revenue recognition related to development and sale of real estate	143,742	468,233	(176,859)
Cost of sales recognition related to development and sale of real estate	(122,497)	(383,592)	123,664
Operating profit under K-IFRS	2,844,325	4,621,834	5,542,600
	7- 7	,- ,	- ,- ,
Nationana (lass) we der IEDC as issued hat the IACD	1.032.065	2.909.311	1 022 296
Net income (loss) under IFRS as issued by the IASB Adjustments related to development and sale of real estate:	1,032,065	2,909,511	1,932,386
Revenue	143,742	468,233	(176,859)
Cost of sales	(122,497)	(383,592)	(176,859)
Income tax			123,004
	(5,141)	(20,483)	12,073
Net income (loss) under K-IFRS	1,048,169	2,973,469	1,892,064

Operating Results 2017 Compared to 2018

The following table presents our statement of comprehensive income information and changes therein for 2017 and 2018.

	For the Year Ende	d December 31.	Chang 2017 versu	
	2017	2018	Amount	%
		(In billions of	Won)	
Revenue	60,187	65,155	4,968	8.3%
Cost of sales	51,916	57,129	5,123	10.0
Gross profit	8,271	8,026	(246)	(3.0)
Selling and administrative expenses:	- / -			
Impairment loss on trade accounts and notes receivable	174	75	(99)	(56.9)
Other administrative expenses	2,003	1,986	(17)	(0.9)
Selling expenses	1,557	369	(1,188)	(76.3)
Other operating income and expenses:				
Impairment loss on other receivables	98	63	(35)	(35.7)
Other operating income	448	524	75	16.7
Other operating expenses	691	2,014	1,323	191.4
Operating profit	4,196	4,042	(154)	(3.7)
Share of profit of equity-accounted investees, net	11	113	102	968.6
Finance income	2,373	1,706	(667)	(28.1)
Finance costs	2,484	2,244	(240)	(9.7)
Profit before income tax	4,095	3,616	(479)	(11.7)
Income tax expense	1,186	1,684	498	42.0
·				
Profit	2,909	1,932	(977)	(33.6)
Profit for the period attributable to owners of the controlling company	2,756	1,712	(1,044)	(37.9)
Profit for the period attributable to non-controlling interests	153	220	67	44.0

Revenue

The following table presents our revenue by segment and changes therein for 2017 and 2018.

	For the Year End	ed December 31,	Chang 2017 versu	is 2018
	2017	2018	Amount	%
		(In billions of	f Won)	
Steel Segment:	20.220	22.250	0.100	= 0.0
External revenue	30,230	32,358	2,128	7.0%
Internal revenue	17,381	18,063	682	3.9
Total revenue from Steel Segment	47,611	50,421	2,810	5.9
Trading Segment:				
External revenue	20,802	22,408	1,606	7.7%
Internal revenue	14,076	15,911	1,835	13.0
Total revenue from Trading Segment	34,878	38,319	3,441	9.9
Construction Segment:				
External revenue	6,887	6,769	(117)	(1.7)
Internal revenue	399	551	152	38.2
Total revenue from Construction Segment	7,286	7,321	35	0.5
Others Segment:				
External revenue	2,736	3,443	707	25.8
Internal revenue	2,549	2,755	207	8.1
Total revenue from Others Segment	5,285	6,198	913	17.3
Total revenue prior to consolidation adjustments and basis difference	95,060	102,259	7,199	7.6
Consolidation adjustments	(24,405)	(27.291)	(2, 876)	8.4
Consolidation adjustments	(34,405)	(37,281) 177	(2,876) 645	8.4 N.A. ⁽²⁾
Basis difference adjustments ⁽¹⁾	(468)	1//	043	N.A. (2)
Revenue	60,187	65,155	4,968	8.3%

(1) Basis difference adjustments are 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 40 of Notes to Consolidated Financial Statements.

(2) N.A. means not applicable.

Our revenue increased by 8.3%, or Won 4,968 billion, from Won 60,187 billion in 2017 to Won 65,155 billion in 2018 due to increases in external revenues from the Steel Segment, the Trading Segment and the Others Segment, which were offset in part by a decrease in external revenue 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 and basis difference adjustments, increased by 7.0%, or Won 2,128 billion, from Won 30,230 billion in 2017 to Won 32,358 billion in 2018 due to 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), as well as an increase in the average unit sales price per ton of the principal steel products produced by us and directly sold to external customers. The overall sales volume of the principal steel products produced by us and directly sold to external customers increased by 4.4% from 30.0 million tons in 2017 to 31.4 million tons in 2018, while the weighted average unit sales price per ton of the principal steel products produced by us and directly sold to external customers increased by 3.3% from Won 903,897 per ton in 2017 to Won 933,990 per ton in 2018. Such factors were principally attributable to the following:

The sales volume of each of our major product categories, other than wire rods and stainless steel products, increased from 2017 to 2018. The sales volume of cold rolled products, hot rolled products, silicon steel products and plates produced by us and directly sold to external customers increased by 9.1%, 4.7%, 1.7% and 1.2%, respectively, from 2017 to 2018. On the other hand, the sales volume of wire rods and stainless steel products produced by us and directly sold to external customers decreased by 4.6% and 0.8%, respectively, from 2017 to 2018. For a discussion of changes in sales volume of each of our principal product lines, see Item 4.B. Business Overview Major Products.

The unit sales prices in Won of each of our major product categories, other than silicon steel products, increased from 2017 to 2018. The unit sales prices in Won of plates, hot rolled products, wire rods, cold rolled products and stainless steel products produced by us and directly sold to external customers increased by 14.8%, 5.2%, 4.9%, 2.8% and 0.8%, respectively, from 2017 to 2018. On the other hand, the unit sales price in Won of silicon steel products produced by us and directly sold to external customers decreased by 2.9% from 2017 to 2018. 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.

Total revenue from the Steel Segment, which includes internal revenue from inter-company transactions, increased by 5.9%, or Won 2,810 billion, from Won 47,611 billion in 2017 to Won 50,421 billion in 2018 as internal revenue from inter-company transactions increased by 3.9%, or Won 682 billion, from Won 17,381 billion in 2017 to Won 18,063 billion in 2018.

Trading Segment. External revenue from the Trading Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation and basis difference adjustments, increased by 7.7%, or Won 1,606 billion, from Won 20,802 billion in 2017 to Won 22,408 billion in 2018 primarily due to an increase in third-country trades by POSCO International and our other trading subsidiaries from 2017 to 2018, reflecting an increase in trading of agricultural products and steel slabs, as well as the recognition of the sales of POSCO P&S s steel product sales business under the Trading Segment commencing March 2017 following the transfer of such business to POSCO International.

Total revenue from the Trading Segment, which includes internal revenue from inter-company transactions, increased by 9.9%, or Won 3,441 billion, from Won 34,878 billion in 2017 to Won 38,319 billion in 2018 as internal revenue from inter-company transactions increased by 13.0%, or Won 1,835 billion, from Won 14,076 billion in 2017 to Won 15,911 billion in 2018.

Construction Segment. External revenue from the Construction Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation and basis difference adjustments, decreased by 1.7%, or Won 117 billion, from Won 6,887 billion in 2017 to Won 6,769 billion in 2018 primarily due to a decrease in POSCO E&C s construction activities in Brazil following the completion of construction of CSP-Companhia Siderurgia do Pecem steel plant complex in 2017.

Total revenue from the Construction Segment, which includes internal revenue from inter-company transactions, increased by 0.5%, or Won 35 billion, from Won 7,286 billion in 2017 to Won 7,321 billion in 2018 as internal revenue from inter-company transactions increased by 38.2%, or Won 152 billion, from Won 399 billion in 2017 to Won 551 billion in 2018. Such increase in internal revenue reflected an increase in the amount of construction activities for member companies of the POSCO Group in 2018 compared to 2017, which was partially offset by a decrease in external revenue as discussed above.

Others Segment. The Others Segment primarily includes power generation, LNG logistics, manufacturing of various industrial materials and information technology service. External revenue from the Others Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation and basis difference adjustments, increased by 25.8%, or Won 707 billion, from Won 2,736 billion in 2017 to Won 3,443 billion in 2018 primarily due to increases in revenue of POSCO Energy Corporation and POSCO Chemical Co., Ltd.

Total revenue from the Others Segment, which includes internal revenue from inter-company transactions, increased by 17.3%, or Won 913 billion, from Won 5,285 billion in 2017 to Won 6,198 billion in 2018 as internal revenue from inter-company transactions increased by 8.1% or Won 207 billion, from Won 2,549 billion in 2017 to Won 2,755 billion in 2018. Such increase primarily reflected an increase in inter-company sales of coal coking by-products from POSCO Chemical Co., Ltd. to POSCO.

Cost of Sales

Our cost of sales increased by 10.0%, or Won 5,213 billion, from Won 51,916 billion in 2017 to Won 57,129 billion in 2018. The increase in cost of sales was primarily due to increases in the average price in Won terms of key raw materials that were used to manufacture our finished goods sold as well as in our sales volume of steel products. Following our adoption of IFRS No. 15 Revenue from Contracts with Customers starting on January 1, 2018, we also began classifying a substantial majority of our freight and custody expenses as cost of sales, which had all been recognized as selling expenses in 2017. We recognized Won 1,415 billion as freight and custody expenses in 2018, of which we recognized Won 1,230 billion as cost of sales and Won 185 billion as selling expenses.

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 2017 and 2018.

	For the Year Ende	d December 31,	Chang 2017 versus	
	2017	2018	Amount	%
		(In billions of	Won)	
Steel Segment	41,479	44,377	2,898	7.0%
Trading Segment	33,388	37,202	3,814	11.4
Construction Segment	6,598	6,651	53	0.8
Others Segment	4,636	5,603	967	20.9
Consolidation adjustments	(33,802)	(36,828)	(3,026)	9.0
Basis difference adjustments ⁽¹⁾	(383)	124	507	N.A. ⁽²⁾
Cost of sales	51,916	57,129	5,213	10.0%

(1) Basis difference adjustments are 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 40 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 and basis difference adjustments, increased by 7.0%, or Won 2,898 billion, from Won 41,479 billion in 2017 to Won 44,377 billion in 2018 primarily due to increases in our sales volume of the principal steel products produced by us and sold to external and internal customers and in the average price in Won terms of key raw materials that were used to manufacture our finished goods sold, as well as our classification of Won 919 billion of freight and custody expenses of the Steel Segment as cost of sales (instead of selling expenses) following our adoption of IFRS 15 starting in 2018.

Trading Segment. The cost of sales of our Trading Segment, prior to consolidation and basis difference adjustments, increased by 11.4%, or Won 3,814 billion, from Won 33,388 billion in 2017 to Won 37,202 billion in 2018 primarily due to an increase in the volume of export and import products sold, as well as our classification of Won 307 billion of freight and custody expenses of the Trading Segment as cost of sales (instead of selling expenses) following our adoption of IFRS 15 starting in 2018.

Construction Segment. The cost of sales of our Construction Segment, prior to consolidation and basis difference adjustments, increased by 0.8%, or Won 53 billion, from Won 6,598 billion in 2017 to Won 6,651 billion in 2018 in line with an increase in the amount of construction activities described above.

Others Segment. The cost of sales of our Others Segment, prior to consolidation and basis difference adjustments, increased by 20.9%, or Won 967 billion, from Won 4,636 billion in 2017 to Won 5,603 billion in 2018 primarily due to increases in the average price in Won terms of key raw materials used by POSCO Energy Corporation.

Gross Profit

Our gross profit decreased by 3.0%, or Won 246 billion, from Won 8,271 billion in 2017 to Won 8,026 billion in 2018 due to decreases in gross profit of each of our four segments, particularly from the Trading Segment. Our gross margin decreased from 13.7% in 2017 to 12.3% in 2018.

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 2017 and 2018.

		Chang	ges
For the Year Ended December 31,		2017 versu	ıs 2018
2017	2018	Amount	%
	(In billions o	f Won)	
6,132	6,044	(88)	(1.4)%
1,490	1,117	(374)	(25.1)
688	669	(18)	(2.6)
649	595	(54)	(8.3)
(603)	(453)	150	(24.8)
(85)	53	138	N.A. ⁽²⁾
8,271	8,026	(246)	(3.0)
	December 2017 6,132 1,490 688 649 (603) (85)	December 31, 2017 2018 (In billions o 6,132 6,044 1,490 1,117 688 669 649 595 (603) (453) (85) 53	For the Year Ended December 31, 2017 versu 2017 2018 Amount (In billions of Won) (In billions of Won) 6,132 6,044 (88) 1,490 1,117 (374) 688 669 (18) 649 595 (54) (603) (453) 150 (85) 53 138

(1) Basis difference adjustments are 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 40 of Notes to Consolidated Financial Statements.

(2) N.A. means not applicable.

Steel Segment. The gross profit of our Steel Segment, prior to consolidation and basis difference adjustments, decreased by 1.4%, or Won 88 billion, from Won 6,132 billion in 2017 to Won 6,044 billion in 2018 primarily due to our classification of Won 919 billion of freight and custody expenses of the Steel Segment as cost of sales (instead of selling expenses) following our adoption of IFRS 15 starting in 2018, which was largely offset by the impact from our external revenue from the Steel Segment increasing at a greater rate than its cost of sales (excluding freight and custody expenses), prior to consolidation and basis difference adjustments, as discussed above. Due to such factors, the gross margin of our Steel Segment, which is gross profit as a percentage of total revenue prior to consolidation and basis difference adjustments, decreased from 12.9% in 2017 to 12.0% in 2018.

Trading Segment. The gross profit of our Trading Segment, prior to consolidation and basis difference adjustments, decreased by 25.1%, or Won 374 billion, from Won 1,490 billion in 2017 to Won 1,117 billion in 2018 primarily due to a decrease in trading margins resulting from our classification of Won 307 billion of freight and custody expenses of the Trading Segment as cost of sales (instead of selling expenses) following our adoption of IFRS 15 starting in 2018. The gross margin of our Trading Segment, prior to consolidation and basis difference adjustments, decreased from 4.3% in 2017 to 2.9% in 2018.

Construction Segment. The gross profit of our Construction Segment, prior to consolidation and basis difference adjustments, decreased by 2.6%, or Won 18 billion, from Won 688 billion in 2017 to Won 669 billion in 2018 primarily due to a decrease in POSCO E&C s construction activities overseas as well as a decrease in its participation of construction projects with higher margins in 2018. The gross margin of our Construction Segment, prior to consolidation and basis difference adjustments, decreased from 9.4% in 2017 to 9.1% in 2018.

Others Segment. The gross profit of our Others Segment, prior to consolidation and basis difference adjustments, decreased by 8.3%, or Won 54 billion, from Won 649 billion in 2017 to Won 595 billion in 2018 primarily due to a decrease in gross profit of POSCO Energy Corporation. The gross margin of our Others Segment, prior to consolidation and basis difference adjustments, decreased from 12.3% in 2017 to 9.6% in 2018.

Selling and Administrative Expenses

The following table presents a breakdown of our selling and administrative expenses and changes therein for 2017 and 2018.

	For the Year Endo	ed December 31.	Chang 2017 versu	
	2017	2018	Amount	%
		(In billions of	f Won)	
Impairment loss on trade accounts and notes receivable	174	75	(99)	(56.9)%
Freight and custody expenses	1,337	185	(1,152)	(86.2)%
Sales commissions	116	79	(37)	(31.8)
Sales promotion	12	14	1	11.1
Sales insurance premium	37	37	1	1.9
Contract cost	23	17	(6)	(26.3)
Others	32	37	5	15.7
Total selling expenses	1,557	369	(1,188)	(76.3)
Wages and salaries	775	813	39	5.0%
Expenses related to post-employment benefits	79	73	(5)	(6.8)
Other employee benefits	160	176	16	10.2
Depreciation	97	101	4	4.1
Amortization	146	112	(34)	(23.2)
Taxes and public dues	73	72	(1)	(9.6)
Rental	70	70	(0)	(0.7)
Advertising	120	107	(13)	(10.7)
Research and development	126	108	(17)	(13.9)
Service fees	193	166	(27)	(14.2)
Others	164	186	22	13.4
Total other administrative expenses	2,003	1,986	(17)	(0.9)
Total selling and administrative expenses	3,734	2,430	(1,304)	(34.9)

Our selling and administrative expenses decreased by 34.9%, or Won 1,304 billion, from Won 3,734 billion in 2017 to Won 2,430 billion in 2018 primarily due to our classification of a substantial majority of our freight and custody expenses as cost of sales starting in 2018 (as compared to the entire amount as selling expenses in 2017), as well as decreases in impairment loss on trade accounts and notes receivable, sales commissions, amortization expenses and service fees, which were partially offset by an increase in wages and salaries. Such factors were principally attributable to the following:

Our freight and custody expenses decreased by 86.2%, or Won 1,152 billion, from Won 1,337 billion in 2017 to Won 185 billion in 2018 primarily due to our classification of Won 1,230 billion of freight and custody expenses as cost of sales starting in 2018.

Our impairment loss on trade accounts and notes receivable decreased by 56.9%, or Won 99 billion, from Won 174 billion in 2017 to Won 75 billion in 2018 primarily due to a decrease in impairment loss on trade accounts and notes receivable of POSCO International.

Our sales commissions decreased by 31.8%, or Won 37 billion, from Won 116 billion in 2017 to Won 79 billion in 2018 primarily due to a large one-time sales commission in 2017 that did not reoccur in 2018, as well as an increase in transactions without sales commissions.

Our amortization expenses decreased by 23.2%, or Won 34 billion, from Won 146 billion in 2017 to Won 112 billion in 2018 primarily due to a decrease in amortization of intangible assets related to upgrading of our information technology infrastructure.

Our wages and salaries increased by 5.0%, or Won 39 billion, From Won 775 billion in 2017 to Won 813 billion in 2018 primarily due to an increase in employee incentive bonuses.

Other Operating Income and Expenses

The following table presents our impairment loss on other receivables and changes therein for 2017 and 2018.

			Chang	jes
	For the Year Ended December 31,		2017 versus 2018	
	2017	2018	Amount	%
	(In billions of Won)			
Impairment loss on other receivables	98	63	(35)	(35.7)%
Our impairment loss on other receivables decreased by 35.7%, or W	on 35 billion, from	Won 98 billion in 20	17 to Won 63 billion	in 2018. In

2017, our impairment loss on other receivables related primarily to joint venture projects of POSCO E&C. In 2018, our impairment loss on other receivables related primarily to uncollectible loans made by POSCO E&C to PT. POSCO E&C Indonesia.

The following table presents a breakdown of our other operating income and changes therein for 2017 and 2018.

			Cha	anges
	For the Year Ended December 31,		2017 versus 2018	
	2017	2018	Amount	%
	(In billions of Won)			
Gain on disposal of assets held for sale	1	27	26	2,202.6%
Gain on disposal of investments in subsidiaries, associates and joint ventures	82	45	(37)	(44.7)
Gain on disposal of property, plant and equipment	32	53	21	65.3
Gain on disposal of intangible assets	23	117	94	400.8
Gain on valuation of firm commitment	56	39	(17)	(30.7)
Gain on insurance proceeds	6	14	8	138.8
Others	248	228	(20)	(8.1)
Total other operating income	448	524	75	16.7

Our other operating income increased by 16.7%, or Won 75 billion, from Won 448 billion in 2017 to Won 524 billion in 2018 primarily due to increases in gain on disposal of intangible assets, gain on disposal of assets held for sale and gain on disposal of property, plant and equipment, which were partially offset by a decrease in gain on disposal of investments in subsidiaries, associates and joint ventures. Such factors were principally attributable to the following:

Our gain on disposal of intangible assets increased significantly, by Won 94 billion, from Won 23 billion in 2017 to Won 117 billion in 2018 primarily due to an increase in gain from disposal of our carbon credits.

Our gain on disposal of assets held for sale increased significantly, by Won 26 billion, from Won 1 billion in 2017 to Won 27 billion in 2018 primarily due to the disposal of assets of POSPower Co., Ltd. in 2018, compared to no such gain from our disposal of assets held for sale in 2017.

Our gain on disposal of property, plant and equipment increased by 65.3%, or Won 21 billion, from Won 32 billion in 2017 to Won 53 billion in 2018 primarily due to an increase in gains from sales of corporate housing units to employees.

Our gain on disposal of investments in subsidiaries, associates and joint ventures decreased by 44.7%, or Won 37 billion, from Won 82 billion in 2017 to Won 45 billion in 2018 primarily due to a decrease in disposition of our interests in some of our

subsidiaries and associates as part of our reorganization efforts.

The following table presents a breakdown of our other operating expenses and changes therein for 2017 and 2018.

			Char	iges
	For the Year Ended December 31,		2017	2010
			2017 versus 2018	
	2017	2018	Amount	%
	(In billions of Won)			
Impairment losses on assets held for sale		51	51	N.A. ⁽¹⁾ %
Loss on disposal of investments in subsidiaries, associates and joint ventures	20	5	(15)	(73.9)
Loss on disposal of property, plant and equipment	151	118	(34)	(22.3)
Impairment losses on property, plant and equipment	117	1,005	887	757.0
Loss on disposals of investment property	2	9	7	365.6
Impairment losses on investment property		51	51	N.A. ⁽¹⁾
Impairment losses on intangible assets	168	338	170	100.9
Increase to provisions	34	135	101	296.4
Loss on valuation of firm commitment	43	66	23	53.6
Donations	51	52	1	1.3
Idle tangible assets expenses	10	9	(1)	(11.8)
Others	94	176	82	87.3
Total other operating expenses	691	2,014	1,323	191.4
Donations Idle tangible assets expenses Others	51 10 94	52 9 176	1 (1) 82	1.3 (11.8) 87.3

(1) N.A. means not applicable.

Our other operating expenses increased by 191.4%, or Won 1,323 billion, from Won 691 billion in 2017 to Won 2,014 billion in 2018 primarily due to increases in impairment losses on property, plant and equipment, impairment losses on intangible assets and increase to provisions, which were partially offset by a decrease in loss on disposal of property, plant and equipment. Such factors were principally attributable to the following:

Our impairment losses on property, plant and equipment increased significantly, by Won 887 billion, from Won 117 billion in 2017 to Won 1,005 billion in 2018. In 2017, our impairment losses on property, plant and equipment related primarily to SkyCube operated by Suncheon Eco Trans Co., Ltd. as well as disposal plans regarding certain assets. In 2018, we recognized impairment losses on property, plant and equipment of Won 810 billion related to our synthetic natural gas production facility in Gwangyang due to our discontinuation of such business, as well as impairment losses of Won 54 billion related to the operating loss of POSCO Energy Corporation s fuel cell business.

Our impairment losses on intangible assets increased significantly, by Won 170 billion, from Won 168 billion in 2017 to Won 338 billion in 2018. In 2017, our impairment losses on intangible assets related primarily to losses of POSCO Engineering, which merged into POSCO E&C. In 2018, our impairment losses on intangible assets related primarily to impairment losses on goodwill of Won 158 billion incurred by POSCO International and Won 66 billion incurred by POSCO E&C in connection with a decrease in value-in-use of such entities due to reduced expected cash flow arising from the uncertain global economic climate, as well as impairment of industrial property rights of Won 78 billion related to our investment in Hume Coal Pty Limited, a coal mining company in Australia.

Our increase to provisions increased significantly, by Won 101 billion, from Won 34 billion in 2017 to Won 135 billion in 2018 primarily due to an increase in provisions related to our synthetic natural gas production facility in Gwangyang due to our discontinuation of such business in 2018.

Our loss on disposal of property, plant and equipment decreased by 22.3%, or Won 34 billion, from Won 151 billion in 2017 to Won 118 billion in 2018. In 2017, our loss on disposal of property, plant and equipment related primarily to our blast furnace upgrading

project at Pohang Works. In 2018, our loss on disposal of property, plant and equipment related primarily to rationalization of the LNG plants at Gwangyang Works.

Operating Profit

Due to the factors described above, our operating profit decreased by 3.7%, or Won 154 billion, from Won 4,196 billion in 2017 to Won 4,042 billion in 2018. Our operating margin decreased from 7.0% in 2017 to 6.2% in 2018.

Share of Profit (Loss) of Equity-Accounted Investees

Our share of profit of equity-accounted investees increased significantly, by Won 102 billion, from Won 11 billion in 2017 to Won 113 billion in 2018. In 2017, we recognized a net gain for our proportionate share of equity-accounted investees of Won 11 billion primarily due to our share of gains of KOBRASCO (Won 56 billion), Roy Hill Holdings Pty Ltd. (Won 46 billion), South-East Asia Gas Pipeline Company Ltd. (Won 43 billion) and POSCO Mitsubishi Carbon Technology Ltd. (Won 28 billion), which were partially offset by our share of loss of CSP-Compania Siderurgica do Pecem (Won 148 billion). In 2018, we recognized a net gain for our proportionate share of equity-accounted investees of Won 113 billion primarily due to our share of gains of KOBRASCO (Won 75 billion), POSCO Mitsubishi Carbon Technology Ltd. (Won 59 billion) and AES-VCM Mong Duong Power Company Limited (Won 30 billion), which were partially offset by our share of loss of CSP-Compania Siderurgica do Pecem (Won 110 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 2017 and 2018.

	For the Year Ended December 31,		Changes 2017 versus 2018	
	2017	2018	Amount	%
	(In billions of Won)			
Interest income	212	337	125	58.7%
Dividend income	93	63	(30)	(31.9)
Gain on foreign currency transactions	786	716	(70)	(8.9)
Gain on foreign currency translations	564	212	(352)	(62.3)
Gain on derivatives transactions	211	248	37	17.5
Gain on valuation of derivatives	65	97	32	49.8
Gain on disposals of available-for-sale financial assets	426		(426)	(100.0)
Gain on valuations of financial assets at fair value through profit or loss		16	16	N.A. ⁽¹⁾
Others	16	16	(0)	(1.6)
Total finance income	2,373	1,706	(667)	(28.1)
Interest expenses	653	741	88	13.5%
Loss on foreign currency transactions	757	811	54	7.2
Loss on foreign currency translations	423	322	(101)	(23.9)
Loss on derivatives transactions	236	209	(28)	(11.6)
Loss on valuation of derivatives	226	41	(186)	(82.0)
Impairment losses on available-for-sale financial assets	123		(123)	(100.0)
Loss on valuations of financial assets at fair value through profit or loss		59	59	N.A. ⁽¹⁾
Others	66	62	(4)	(6.1)
Total finance costs	2,484	2,244	(240)	(9.7)

(1) N.A. means not applicable.

We recognized a net gain on foreign currency translations of Won 141 billion in 2017 compared to a net loss on foreign currency translations of Won 109 billion in 2018, and we recorded a net gain on foreign currency transactions of Won 29 billion in 2017 compared to a net loss on foreign currency transactions of Won 95 billion in 2018, as the Won appreciated against the Dollar in 2017 but depreciated in 2018. In terms of the market average exchange rates announced by Seoul Money Brokerage Services, Ltd., the Won appreciated from Won 1,208.5 to US\$1.00 as of December 31, 2016 to Won 1,071.4 to US\$1.00 as of December 31, 2017 but depreciated to Won 1,118.1 to US\$1.00 as of December 31, 2018. Against such fluctuations, we recognized a net loss on valuations of derivatives of Won 26 billion in 2017 compared to a net gain on valuations of derivatives of Won 36 billion in 2018, as well as a net loss on transactions of Won 26 billion in 2017 compared to a net gain on transactions of derivatives of Won 39 billion in 2018.

We recognized a gain on disposals of available-for-sale financial assets of Won 426 billion in 2017 related primarily to disposals of our interests in Hyundai Heavy Industries Co., Ltd. and KB Financial Group Inc., compared to no such gain in 2018.

Our interest income increased by 58.7%, or Won 125 billion, from Won 212 billion in 2017 to Won 337 billion in 2018 primarily due to an increase in interest-earning financial assets, as well as a general increase in interest rates in Korea in 2018.

We recognized impairment losses on available-for-sale financial assets of Won 123 billion in 2017 related primarily to a significant and prolonged decline in the fair value of shares of Congonhas Minèrios S.A. below cost, compared to no such impairment loss in 2018.

Profit before Income Taxes

Due to the factors described above, our profit before income taxes decreased by 11.7%, or Won 479 billion, from Won 4,095 billion in 2017 to Won 3,616 billion in 2018.

The following table presents our profit and loss by segment, prior to adjusting for goodwill and corporate fair-value adjustments, elimination of inter-segment profits, income tax expense and basis difference, and changes therein for 2017 and 2018.

	For the Year Ended	l December 31,	Chan 2017 vers	0
	2017	2018	Amount	%
		(In billions of W	'on)	
Steel Segment	2,791	1,268	(1,523)	(54.6)%
Trading Segment	113	49	(63)	(56.3)
Construction Segment	25	0	(24)	(99.0)
Others Segment	233	14	(219)	(94.2)
Goodwill and corporate fair value adjustments	(84)	(78)	7	(7.8)
Elimination of inter-segment profits	(103)	638	741	N.A. ⁽¹⁾
Income tax expense	1,206	1,671	465	38.5
Basis difference adjustments ⁽²⁾	(85)	53	137	N.A. ⁽¹⁾
Profit before income taxes	4,095	3,616	(479)	(11.7)

(1) N.A. means not applicable.

⁽²⁾ Basis difference adjustments are 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 40 of Notes to Consolidated Financial Statements.

Income Tax Expense

Our income tax expense increased by 42.0%, or Won 498 billion, from Won 1,186 billion in 2017 to Won 1,684 billion in 2018. Our effective tax rate increased from 29.0% in 2017 to 46.6% in 2018 primarily due to the following:

an increase in income tax expenses from Won 28 billion in 2017 to Won 272 billion in 2018 (that resulted in an increase in effective tax rate of 6.8%) in connection with non-deductible impairment losses on property, plant and equipment we recognized on our synthetic natural gas production facility in Gwangyang in 2018.

a tax effect of Won 130 billion in 2018 in connection with the reconciliation of discrepancies in the interpretation of certain tax laws between the tax authority and us (that resulted in an increase in effective tax rate of 3.6%) compared to no such effect in 2017. See Note 35 of Notes to Consolidated Financial Statements.

Profit

Due to the factors described above, our profit decreased by 33.6%, or Won 977 billion, from Won 2,909 billion in 2017 to Won 1,932 billion in 2018.

Operating Results 2016 Compared to 2017

The following table presents our statement of comprehensive income information and changes therein for 2016 and 2017.

	For the Year Ended December 31,		Chan 2016 vers	0
	2016	2017	Amount	%
		(In billions of	Won)	
Revenue	52,940	60,187	7,247	13.7%
Cost of sales	46,271	51,916	5,645	12.2
Gross profit	6,668	8,271	1,603	24.0
Administrative expenses	2,292	2,177	(115)	(5.0)
Selling expenses	1,554	1,557	3	0.2
Other operating income	215	451	236	109.7
Other operating expenses	756	792	36	4.8
Operating profit	2,282	4,196	1,914	83.8
Share of gain (loss) of equity-accounted investees	(89)	11	100	N.A. ⁽¹⁾
Finance income	2,232	2,373	141	6.3
Finance costs	3,014	2,484	(530)	(17.6)
Profit before income tax	1,412	4,096	2,683	190.1
Income tax expense	380	1,186	806	212.4
	1.022	2 000	1.077	101.0
Profit (loss)	1,032	2,909	1,877	181.9
Profit for the period attributable to owners of the controlling company	1,355	2,756	1,401	103.4
Loss for the period attributable to non-controlling interests	(323)	153	476	N.A. ⁽¹⁾

(1) N.A. means not applicable.

Revenue

The following table presents our revenue by segment and changes therein for 2016 and 2017.

	For the Year Ended December 31,		Chang 2016 versu	
	2016	2017	Amount	%
		(In billions of V	Won)	
Steel Segment:				
External revenue	26,844	30,230	3,386	12.6%
Internal revenue	16,062	17,381	1,319	8.2
Total revenue from Steel Segment	42,906	47,611	4,705	11.0
Trading Segment:				
External revenue	16,774	20,802	4,028	24.0
Internal revenue	9,646	14,076	4,430	45.9
Total revenue from Trading Segment	26,420	34,878	8,458	32.0
Construction Segment:				
External revenue	6,768	6,887	119	1.7
Internal revenue	714	399	(315)	(44.1)
Total revenue from Construction Segment	7,482	7,286	(196)	(2.6)
Others Segment:				
External revenue	2,697	2,736	39	1.4
Internal revenue	2,380	2,549	169	7.1
Total revenue from Others Segment	5,077	5,285	208	4.1
Total revenue prior to consolidation adjustments and basis difference	81,885	95,060	13,175	16.1
Consolidation adjustments	(28,802)	(34,405)	(5,603)	19.5
Basis difference ⁽¹⁾	(144)	(468)	(324)	225.7
Revenue	52,940	60,187	7,247	13.7%

(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 40 of Notes to Consolidated Financial Statements.

Our revenue increased by 13.7%, or Won 7,247 billion, from Won 52,940 billion in 2016 to Won 60,187 billion in 2017 due to increases 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, increased by 12.6%, or Won 3,386 billion, from Won 26,844 billion in 2016 to Won 30,230 billion in 2017 due to an increase 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 a decrease 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 for the principal steel products produced by us and directly sold to external customers (including miscellaneous steel products produced by us and directly sold to external customers increased by 21.3% from Won 745,476 per ton in 2016 to Won 903,897

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

per ton in 2017, while the overall sales volume of the principal steel products produced by us and directly sold to external customers decreased by 8.6% from 32.9 million tons in 2016 to 30.0 million tons in 2017. Such factors were principally attributable to the following:

The unit sales prices in Won of each of our major product categories increased from 2016 to 2017. Hot rolled products, wire rods, cold rolled products, stainless steel products, silicon steel sheets and plates produced by us and directly sold to external customers increased by

29.2%, 26.2%, 25.7%, 15.0%, 9.7% and 8.4%, respectively, from 2016 to 2017. 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, other than plates, decreased from 2016 to 2017, primarily due to the recognition of the sales volume of POSCO P&S, our former subsidiary that primarily engaged in sales of steel products produced by us, under the Trading Segment commencing March 2017 following the transfer of such business to POSCO International and, to a lesser extent, a reduction in our production due to facility revamping and rationalization of certain products, hot rolled products and stainless steel products produced by us and directly sold to external customers decreased by 15.1%, 14.7%, 11.3%, 9.8% and 5.1%, respectively, from 2016 to 2017. On the other hand, the sales volume of plates increased by 3.1% from 2016 to 2017. 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, increased by 11.0%, or Won 4,705 billion, from Won 42,906 billion in 2016 to Won 47,611 billion in 2017 as internal revenue from inter-company transactions increased by 8.2%, or Won 1,319 billion, from Won 16,062 billion in 2016 to Won 17,381 billion in 2017. Such increase primarily reflected, in addition to factors discussed above, an increase in the average unit sales price of the steel products sold to POSCO International.

Trading Segment. External revenue from the Trading Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation, increased by 24.0%, or Won 4,028 billion, from Won 16,774 billion in 2016 to Won 20,802 billion in 2017 primarily due to the recognition of the sales of POSCO P&S s steel product sales business under the Trading Segment commencing March 2017 following the transfer of such business to POSCO International, as well as an increase in third-country trades by POSCO International and our other trading subsidiaries from 2016 to 2017, reflecting an increase in sales of slabs produced by CSP (Compania Siderurgica do Pecem) and PT. Krakatau POSCO as well as an increase in trading of petrochemical products.

Total revenue from the Trading Segment, which includes internal revenue from inter-company transactions, increased by 32.0%, or Won 8,458 billion, from Won 26,420 billion in 2016 to Won 34,878 billion in 2017 as internal revenue from inter-company transactions increased by 45.9%, or Won 4,430 billion, from Won 9,646 billion in 2016 to Won 14,076 billion in 2017 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, increased by 1.7%, or Won 119 billion, from Won 6,768 billion in 2016 to Won 6,887 billion in 2017 primarily due to a general increase in POSCO E&C s construction activities reflecting favorable market conditions in the domestic construction industry as well as an increase 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 2.6%, or Won 196 billion, from Won 7,482 billion in 2016 to Won 7,286 billion in 2017 as internal revenue from inter-company transactions decreased by 44.1%, or Won 315 billion, from Won 714 billion in 2016 to Won 399 billion in 2017. Such decrease in internal revenue reflected a decrease in the amount of construction activities for member companies of the POSCO Group in 2017 compared to 2016.

Others Segment. The Others Segment primarily includes power generation, coal chemistry and carbon materials production and information technology service. External revenue from the Others

Segment, which does not include internal revenue from inter-company transactions that are eliminated during consolidation, increased by 1.4%, or Won 39 billion, from Won 2,697 billion in 2016 to Won 2,736 billion in 2017 primarily due to an increase in the unit price and sales volume of coal chemistry products of POSCO Chemical Co., Ltd.

Total revenue from the Others Segment, which includes internal revenue from inter-company transactions, increased by 4.1%, or Won 208 billion, from Won 5,077 billion in 2016 to Won 5,285 billion in 2017 as internal revenue from inter-company transactions increased by 7.1% or Won 169 billion, from Won 2,380 billion in 2016 to Won 2,549 billion in 2017. Such increase primarily reflected an increase in inter-company sales related to replacement of control systems at Pohang Works by POSCO ICT Co., Ltd.

Cost of Sales

Our cost of sales increased by 12.2%, or Won 5,644 billion, from Won 46,271 billion in 2016 to Won 51,916 billion in 2017. The increase in cost of sales was primarily due to increases in the average price in Won terms of key raw materials that were used to manufacture our finished goods sold, which were partially offset by a decrease 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 2016 and 2017.

	For the Year Ender	l December 31,	Chang 2016 versu	,
	2016	2017	Amount	%
		(In billions of	f Won)	
Steel Segment	37,437	41,479	4,042	10.8%
Trading Segment	25,090	33,388	8,298	33.1
Construction Segment	7,564	6,598	(966)	(12.8)
Others Segment	4,507	4,636	129	2.9
Consolidation adjustments	(28,204)	(33,802)	(5,598)	19.8
Basis difference ⁽¹⁾	(123)	(383)	(261)	211.4
Cost of sales	46,271	51,916	5,644	12.2%

(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 40 of Notes to Consolidated Financial Statements.

Steel Segment. The cost of sales of our Steel Segment, prior to consolidation adjustments, increased by 10.8%, or Won 4,042 billion, from Won 37,437 billion in 2016 to Won 41,479 billion in 2017 primarily due to increases 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 a decrease 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, increased by 33.1%, or Won 8,298 billion, from Won 25,090 billion in 2016 to Won 33,388 billion in 2017 primarily due to the recognition of the cost of sales of POSCO P&S s steel product sales business under the Trading Segment commencing March 2017 following the transfer of such business to POSCO International as well as an increase in cost of export and import products sold.

Construction Segment. The cost of sales of our Construction Segment, prior to consolidation adjustments, decreased by 12.8%, or Won 966 billion, from Won 7,564 billion in 2016 to Won 6,598 billion in 2017, reflecting the recognition of additional costs related to certain EPC projects abroad in 2016 compared to no such costs in 2017.

Others Segment. The cost of sales of our Others Segment, prior to consolidation adjustments, increased by 2.9%, or Won 129 billion, from Won 4,507 billion in 2016 to Won 4,636 billion in 2017 primarily due to increases in the average price in Won terms of key raw materials used by POSCO Chemical Co., Ltd. to produce coal chemistry products.

Gross Profit

Our gross profit increased by 24.0%, or Won 1,603 billion, from Won 6,668 billion in 2016 to Won 8,271 billion in 2017 primarily due to increases in gross profit of each of our four segments. Our gross margin increased from 12.6% in 2016 to 13.7% in 2017.

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 2016 and 2017.

			Chang	ges
		For the Year Ended December 31,		ıs 2017
	2016	2017	Amount	%
		(In billions	of Won)	
Steel Segment	5,469	6,132	663	12.1%
Trading Segment	1,330	1,490	160	12.0
Construction Segment	(82)	688	770	N.A. ⁽²⁾
Others Segment	570	649	79	13.9
Consolidation adjustments	(598)	(603)	(5)	0.9
Basis difference ⁽¹⁾	(21)	(85)	(64)	298.4
Gross profit	6,668	8,271	1,603	24.0%

- (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 40 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 12.1%, or Won 663 billion, from Won 5,469 billion in 2016 to Won 6,132 billion in 2017 primarily due to an increase in the average unit sales price per ton of the principal steel products produced by us and sold to external and internal customers, which were partially offset by an increase 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 a decrease 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, increased from 12.7% in 2016 to 12.9% in 2017, as we focused our production and marketing efforts on selling higher margin, higher value added premium products in 2017.

Trading Segment. The gross profit of our Trading Segment, prior to consolidation adjustments, increased by 12.0%, or Won 160 billion, from Won 1,330 billion in 2016 to Won 1,490 billion in 2017, primarily due to the recognition of the cost of sales of POSCO P&S s steel product sales business under the Trading Segment commencing March 2017 following the transfer of such business to POSCO International as well as an increase in gross profit of the Myanmar gas fields, which were partially offset by a decrease in trading margins resulting from weaker demand and falling prices for export and import products. The gross margin of our Trading Segment, prior to consolidation adjustments, decreased from 5.0% in 2016 to 4.3% in 2017.

Construction Segment. Our Construction Segment recorded gross loss of Won 82 billion in 2016 compared to gross profit of Won 688 billion in 2017, and the gross margin, prior to consolidation

adjustments, improved from (1.1)% in 2016 to 9.4% in 2017, primarily due to our engagement in higher-margin construction activities in 2017 reflecting more favorable market conditions in the domestic residential construction industry as well as an increase in demand for EPC projects in Korea and abroad. In comparison, we recognized losses incurred in connection with overseas construction projects in 2016, in particular a loss of Won 157 billion 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.

Others Segment. The gross profit of our Others Segment, prior to consolidation adjustments, increased by 13.9%, or Won 79 billion, from Won 570 billion in 2016 to Won 649 billion in 2017 primarily due to an increase in gross profits of POSCO Chemical Co., Ltd. and POSCO Energy Corporation. The gross margin of our Others Segment increased from 11.2% in 2016 to 12.3% in 2017.

Selling and Administrative Expenses

The following table presents a breakdown of our selling and administrative expenses and changes therein for 2016 and 2017.

	For the Year Ende	For the Year Ended December 31,		ges 1s 2017
	2016	2017	Amount	%
		(In billions of	Won)	
Freight and custody expenses	1,342	1,337	(5)	(0.4)%
Sales commissions	94	116	22	22.8
Sales promotion	11	12	1	16.3
Sales insurance premium	31	37	6	16.5
Contract cost	49	23	(26)	(53.4)
Others	26	32	6	25.6
Total selling expenses	1,554	1,557	3	0.2
	1,001	1,007	U	0.2
Wages and salaries	770	775	5	0.7%
Expenses related to post-employment benefits	201	79	(122)	(60.9)
Other employee benefits	177	160	(17)	(9.5)
Depreciation	103	97	(6)	(6.0)
Amortization	140	146	6	4.8
Taxes and public dues	79	73	(6)	(7.7)
Rental	82	70	(12)	(14.7)
Advertising	86	120	34	39.0
Research and development	121	126	5	4.3
Service fees	201	193	(8)	(3.8)
Bad debt expenses	165	174	9	5.2
Others	167	164	(3)	(1.7)
Total administrative expenses	2,292	2,177	(115)	(5.0)
Total selling and administrative expenses	3,845	3,734	(111)	(2.9)

Our selling and administrative expenses decreased by 2.9%, or Won 111 billion, from Won 3,845 billion in 2016 to Won 3,734 billion in 2017 primarily due to decreases in expenses related to post-employment benefits, contract cost, other employment benefits and rental expenses, which were partially offset by increases in advertising expenses and sales commissions. Such factors were principally attributable to the following:

Our expenses related to post-employment benefits decreased by 60.9%, or Won 122 billion, from Won 201 billion in 2016 to Won 79 billion in 2017 primarily due to expenses related to the early retirement programs of POSCO E&C and POSCO Engineering Co., Ltd. in 2016 compared to no such programs in 2017.

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

Our contract cost decreased by 53.4%, or Won 26 billion, from Won 49 billion in 2016 to Won 23 billion in 2017 primarily due to a decrease in cost related to unsuccessful project bids.

Our other employment benefits decreased by 9.5%, or Won 17 billion, from Won 177 billion in 2016 to Won 160 billion in 2017 primarily due to a decrease in employee incentive bonuses in 2017.

Our rental expenses decreased by 14.7%, or Won 12 billion, from Won 82 billion in 2016 to Won 70 billion in 2017 primarily due to decreases in costs related to vehicle leases and leases related to information technology infrastructure.

Our advertising expenses increased by 39.0%, or Won 34 billion, from Won 86 billion in 2016 to Won 120 billion in 2017 primarily due to an increase in our general advertising activities related to our sponsorship of the 2018 PyeongChang Olympic Games.

Our sales commissions increased by 22.8%, or Won 22 billion, from Won 94 billion in 2016 to Won 116 billion in 2017 primarily reflecting a general increase in commissions related to increased sales revenue. *Other Operating Income and Expenses*

The following table presents a breakdown of our other operating income and changes therein for 2016 and 2017.

	For the Year Ended December 31,		Char 2016 vers	0
	2016	2017	Amount	%
		(In billions of	Won)	
Gain on disposal of assets held for sale	23	1	(22)	(94.9)%
Gain on disposal of investments in subsidiaries, associates and joint				
ventures	23	82	59	251.0
Gain on disposal of property, plant and equipment	24	32	8	34.9
Gain on disposal of intangible assets	1	23	22	3,386.0
Recovery of allowance for other doubtful accounts	13	3	(10)	(78.3)
Gain on valuation of firm commitment		56	56	N.A. ⁽¹⁾
Gain on insurance proceeds	22	6	(16)	(73.8)
Others	109	248	138	127.0
Total other operating income	215	451	236	109.7

(1) N.A. means not applicable.

Our other operating income increased by 109.7%, or Won 236 billion, from Won 215 billion in 2016 to Won 451 billion in 2017 primarily due to our recognition of a tax refund of Won 133 billion in 2017 as well as increases in gain on disposal of investments in subsidiaries, associates and joint ventures and gain on valuation of firm commitment, which were partially offset by a decrease in gain on disposal of assets held for sale. Such factors were principally attributable to the following:

In 2017, we recognized a tax refund of Won 133 billion, which we categorized in others, related to a successful appeal of a tax audit, compared to no such refund in 2016.

Our gain on disposal of investments in subsidiaries, associates and joint ventures increased by 251.0%, or Won 59 billion, from Won 23 billion in 2016 to Won 82 billion in 2017 primarily due to an increase in disposition of our interests in some of our

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

subsidiaries and associates as part of our reorganization efforts.

We recognized gain on valuation of firm commitment of Won 56 billion in 2017 compared to no such gain in 2016, reflecting our decision to adopt hedge accounting starting in 2017, pursuant to which gain on valuation of firm commitment contracts is recognized.

Our gain on disposal of assets held for sale decreased by 94.9%, or Won 22 billion, from Won 23 billion in 2016 to Won 1 billion in 2017. We recognized a gain of Won 23 billion on

disposal of assets held for sale in 2016 primarily from the disposal of our 80.0% interest in POSCO LED Co., Ltd., compared to no gain of such magnitude from our disposal of assets held for sale in 2017.

The following table presents a breakdown of our other operating expenses and changes therein for 2016 and 2017.

			Cha	nges	
	For the Ye	ar Ended			
	Decemb	oer 31,	2016 ver	2016 versus 2017	
	2016	2017	Amount	%	
		(In billion	s of Won)		
Impairment losses on assets held for sale	25		(25)	(100.0)%	
Loss on disposal of investments in subsidiaries, associates and joint ventures	22	20	2	(11.2)	
Loss on disposal of property, plant and equipment	87	151	64	74.7	
Impairment losses on property, plant and equipment	197	117	(80)	(40.5)	
Impairment losses on goodwill and intangible assets	128	168	40	31.4	
Other bad debt expenses	50	101	51	100.9	
Loss on valuation of firm commitment		43	43	N.A. ⁽¹⁾	
Idle tangible assets expenses	6	10	4	63.0	
Increase to provisions	53	34	(19)	(36.0)	
Donations	44	51	7	17.4	
Others	144	97	(48)	(33.2)	
Total other operating expenses	756	792	36	4.8	

(1) N.A. means not applicable.

Our other operating expenses increased by 4.8%, or Won 36 billion, from Won 756 billion in 2016 to Won 792 billion in 2017, primarily due to increases in our loss on disposal of property, plant and equipment, other bad debt expenses, loss on valuation of firm commitment and impairment losses on goodwill and intangible assets, which were partially offset by a decrease in impairment losses on property, plant and equipment and impairment losses on assets held for sale. Such factors were principally attributable to the following:

Our loss on disposal of property, plant and equipment increased by 74.7%, or Won 64 billion, from Won 87 billion in 2016 to Won 151 billion in 2017 primarily due to our blast furnace upgrading project at Pohang Works.

Our other bad debt expenses increased by 100.9%, or Won 51 billion, from Won 50 billion in 2016 to Won 101 billion in 2017. In 2016, our other bad debt expenses related primarily to financing of the Dongtan Metapolis project of POSCO E&C. In 2017, our bad debt expenses related primarily to joint venture projects of POSCO E&C.

We recognized loss on valuation of firm commitment of Won 43 billion in 2017 compared to no such loss in 2016, reflecting our decision to adopt hedge accounting starting in 2017, pursuant to which loss on valuation of firm commitment contracts is recognized.

Our impairment losses on goodwill and intangible assets increased by 31.4%, or Won 40 billion, from Won 128 billion in 2016 to Won 168 billion in 2017. In 2016, our impairment losses on goodwill and intangible assets related primarily to impairment losses on goodwill of Won 83 billion relating to POSCO Engineering Co., Ltd. In addition, we recognized full impairment losses of Won 12 billion relating to SANTOS CMI S.A. In 2017, our impairment losses on goodwill and intangible assets related primarily to losses of POSCO Engineering, which merged into POSCO E&C.

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

Our impairment losses on property, plant and equipment decreased by 40.5%, or Won 80 billion, from Won 197 billion in 2016 to Won 117 billion in 2017. In 2016, we

recognized impairment losses on property, plant and equipment of Won 62 billion related to continuing operating loss of the fuel cell business of POSCO Energy. In addition, we recorded Won 58 billion of impairment losses in 2016 related to disposal plans of certain assets. In 2017, our impairment losses on property, plant and equipment related primarily to SkyCube operated by Suncheon Eco Trans Co., Ltd. as well as disposal plans regarding certain assets.

We recognized impairment losses on assets held for sale of Won 25 billion in 2016 related primarily to a decrease in value of a building in Songdo, compared to no impairment losses on assets held for sale in 2017.

Operating Profit

Due to the factors described above, our operating profit increased by 83.8%, or Won 1,914 billion, from Won 2,282 billion in 2016 to Won 4,196 billion in 2017. Our operating margin increased from 4.3% in 2016 to 7.0% in 2017.

Share of Profit (Loss) of Equity-Accounted Investees

We recorded a net loss for our proportionate share of equity-accounted investees of Won 89 billion in 2016 compared to a net gain for our proportionate share of equity-accounted investees of Won 11 billion in 2017. 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). In 2017, we recognized a net gain for our proportionate share of equity-accounted investees of Won 11 billion primarily due to our share of gains of KOBRASCO (Won 56 billion), Roy Hill Holdings Pty Ltd. (Won 46 billion), South-East Asia Gas Pipeline Company Ltd. (Won 43 billion) and POSCO Mitsubishi Carbon Technology Ltd. (Won 28 billion), which were partially offset by our share of loss of CSP-Compania Siderurgica do Pecem (Won 148 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 2016 and 2017.

	For the Year Ended December 31,		Chan 2016 vers	
	2016	2017 (In billions of V	Amount	%
Interest income	182	212	30	16.4%
Dividend income	41	93	52	126.7
Gain on foreign currency transactions	1,033	786	(247)	(23.9)
Gain on foreign currency translations	378	564	186	49.3
Gain on derivatives transactions	317	211	(106)	(33.4)
Gain on valuation of derivatives	147	65	(82)	(56.0)
Gain on disposals of available-for-sale financial assets	131	426	295	225.4
Others	4	16	13	337.6
Total finance income	2,232	2,373	141	6.3
Interest expenses	659	653	(6)	(0.9)%
Loss on foreign currency transactions	1,147	757	(391)	(34.0)
Loss on foreign currency translations	405	423	17	4.3
Loss on derivatives transactions	338	236	(102)	(30.2)
Loss on valuation of derivatives	163	226	64	39.2
Impairment losses on available-for-sale financial assets	248	123	(125)	(50.4)
Others	53	66	12	22.7
Total finance costs	3,014	2,484	(530)	(17.6)

We recognized a net loss on foreign currency translations of Won 28 billion in 2016 compared to a net gain on foreign currency translations of Won 141 billion in 2017, and we recorded a net loss on foreign currency transactions of Won 115 billion in 2016 compared to a net gain on foreign currency transactions of Won 29 billion in 2017, as the Won depreciated against the Dollar in 2016 but appreciated in 2017. In terms of the market average exchange rates announced by Seoul Money Brokerage Services, Ltd., the Won depreciated from Won 1,172.0 to US\$1.00 as of December 31, 2015 to Won 1,208.5 to US\$1.00 as of December 31, 2016 but appreciated to Won 1,071.4 to US\$1.00 as of December 31, 2017. Against such fluctuations, our net loss on valuation of derivatives increased by 939.2%, or Won 146 billion, from Won 16 billion in 2016 to Won 26 billion in 2017.

Our gain on disposal of available-for-sale financial assets increased by 225.4%, or Won 295 billion, from Won 131 billion in 2016 to Won 426 billion in 2017. In 2016, our gain on disposals of available-for-sale financial assets related primarily to disposals of our interests in Hana Financial Group Inc. and Shinhan Financial Group Co., Ltd. In 2017, our gain on disposal of available-for-sale financial assets related primarily to disposals of our interests in Hyundai Heavy Industries Co., Ltd. and KB Financial Group Inc.

Our impairment losses on available-for-sale financial assets decreased by 50.4%, or Won 125 billion, from Won 248 billion in 2016 to Won 123 billion in 2017. In 2016, our impairment loss related primarily to a significant and prolonged decline in the fair value of shares of Nippon Steel & Sumitomo Metal Corporation below cost. In 2017, our impairment loss related primarily to a significant and prolonged decline in the fair value of shares of Congonhas Minèrios S.A. below cost.

Our dividend income increased by 126.7%, or Won 52 billion, from Won 41 billion in 2016 to Won 93 billion in 2017 primarily due to increases in dividends from Nippon Steel & Sumitomo Metal Corporation and KB Financial Group Inc.

Our interest income increased by 16.4%, or Won 30 billion, from Won 182 billion in 2016 to Won 212 billion in 2017 primarily due to a general increase in interest rates in Korea in 2017.

Profit before Income Taxes

Due to the factors described above, our profit before income taxes increased by 190.1%, or Won 2,683 billion, from Won 1,412 billion in 2016 to Won 4,095 billion in 2017.

The following table presents our profit and loss by segment, prior to adjusting for goodwill and corporate fair-value adjustments, elimination of inter-segment profits, income tax expense and basis difference, and changes therein for 2016 and 2017.

			Chan	ges	
	For the Year Ended December 31,		2016 vers	2016 versus 2017	
	2016	2017	Amount	w 2017 %	
		(In billions of	Won)		
Steel Segment	1,511	2,791	1,279	84.7%	
Trading Segment	53	113	59	111.6	
Construction Segment	(1,404)	25	1,428	N.A. ⁽¹⁾	
Others Segment	(26)	233	259	N.A. (1)	
Goodwill and corporate fair value adjustments	(123)	(84)	39	N.A. ⁽¹⁾	
Elimination of inter-segment profits	1,036	(103)	(1,139)	N.A. (1)	
Income tax expense	385	1,206	822	213.6	
Basis difference ⁽²⁾	(21)	(85)	(63)	298.4	
Profit before income taxes	1,412	4,095	2,683	190.1	

(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 40 of Notes to Consolidated Financial Statements.

Income Tax Expense

Our income tax expense increased by 212.4%, or Won 806 billion, from Won 380 billion in 2016 to Won 1,186 billion in 2017. Our effective tax rate increased from 26.9% in 2016 to 29.0% in 2017 primarily due to the effect of tax rate change of Won 176 billion in 2017 (that resulted in an increase in effective tax rate of 4.3%). In 2017, the Government announced a revision of tax law which includes new highest corporate income tax rate of 25% for taxable income in excess of Won 300 billion from fiscal year 2018 compared to 22% prior to such change. Such impact was offset in part by a decrease in tax related to investments in subsidiaries, associates and joint ventures from Won 77 billion in 2016 to Won 55 billion in 2017 (that resulted in a decrease in effective tax rate of 4.1%). See Note 35 of Notes to Consolidated Financial Statements.

Profit

Due to the factors described above, our profit increased by 181.9%, or Won 1,877 billion, from Won 1,032 billion in 2016 to Won 2,909 billion in 2017.

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,		
	2016	2017	2018
	(In	billions of Won)	
Net cash provided by operating activities	5,269	5,607	5,870
Net cash used in investing activities	(3,755)	(3,818)	(2,648)
Net cash used in financing activities	(3,951)	(1,566)	(3,195)
Effect of exchange rate fluctuations on cash held	13	(59)	5
Cash and cash equivalents at beginning of period	4,871	2,448	2,613
Cash and cash equivalents at end of period	2,448	2,613	2,644
Net increase (decrease) in cash and cash equivalents	(2,424)	165	31
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 3,755 billion in 2016, Won 3,818 billion in 2017 and Won 2,648 billion in 2018. These amounts included acquisition of property, plant and equipment of Won 2,324 billion in 2016, Won 2,288 billion in 2017 and Won 2,136 billion in 2018. We plan to spend approximately Won 6.1 trillion in capital expenditures in 2019, 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 acquisitions of short-term financial instruments of Won 1,401 billion in 2016, Won 1,697 billion in 2017 and Won 1,068 billion in 2018. We also had net acquisition of available-for-sale investments of Won 48 billion in 2016, net disposals of available-for-sale investments of Won 941 billion in 2018.

In our financing activities, we used cash of Won 4,275 billion in 2016, Won 3,136 billion in 2017 and Won 3,136 billion in 2018 for repayments of borrowings. We paid dividends on common stock in the amount of Won 709 billion in 2016, Won 863 billion in 2017 and Won 724 billion in 2018.

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, 2018.

	Payments Due by Period				
	Total	Less than 1 Year	1 to 3 Years (In billions of Won	4 to 5 Years	More than 5 Years
Long-term debt obligations ^(a)	13,118	2,842	6,519	2,858	899
Interest payments on long-term debt (b)	1,787	656	838	237	56
Capital lease obligations	101	10	43	42	6
Operating lease obligations	8,561	1,437	2,365	1,520	3,239
Purchase obligations (c)	21,660	9,501	6,342	3,436	2,381
Long-term shipping service contract	18,930	2,479	4,443	3,804	8,204
Accrued severance benefits (d)	2,968	110	327	408	2,123
Total	67,125	17,035	20,877	12,305	16,908

(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, 2018, a portion of our long-term debt carried variable interest rates. We used the interest rate in effect as of December 31, 2018 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, 2018, 100 million tons of iron ore and 14 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, 2018 in calculating the iron ore, coal and LNG purchase obligations described above for the periods indicated.
- (d) Represents, as of December 31, 2018, 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 6.4%, or Won 338 billion, from Won 5,269 billion in 2016 to Won 5,607 billion in 2017. Our gross cash flow from our sales activities increased as discussed above. In addition, our cost of sales decreased as a percentage of sales revenue from 87.4% in 2016 to 86.2% in 2017, further enhancing our net cash provided by operating activities. However, our outstanding notes payable and our subsidiaries outstanding notes payable decreased in 2017, which in turn negatively impacted our net cash provided by operating activities.

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

Our net cash provided by operating activities increased by 4.7%, or Won 263 billion, from Won 5,607 billion in 2017 to Won 5,870 billion in 2018. Our gross cash flow from our sales activities

increased as discussed above. In addition, our outstanding trade accounts and notes payable increased in 2018, as we lengthened payment terms of some of our key suppliers, which further enhanced our net cash provided by operating activities. However, our inventory of raw materials and materials-in-transit increased in 2018, which in turn negatively impacted our cash provided by operating activities.

We had net repayments of borrowings, after adjusting for proceeds from borrowings, of Won 2,286 billion in 2016, Won 1,410 billion in 2017 and Won 374 billion in 2018. We had net repayment of short-term borrowings, after deducting for proceeds of short-term borrowings, of Won 886 billion in 2016, net proceeds of short-term borrowings, after deducting for repayment of short-term borrowings, of Won 558 billion in 2017, and net repayment of short-term borrowings, after deducting for proceeds of short-term borrowings, of Won 558 billion in 2017, and net repayment of short-term borrowings, after deducting for proceeds of short-term borrowings, of Won 855 billion in 2018. Long-term borrowings, excluding current installments, were Won 12,510 billion as of December 31, 2016, Won 9,789 billion as of December 31, 2017 and Won 9,920 billion as of December 31, 2018. Total short-term borrowings and current installments of long-term borrowings were Won 10,195 billion as of December 31, 2016, Won 11,275 billion as of December 31, 2017 and Won 10,290 billion as of December 31, 2018. Outstanding hybrid bonds were Won 997 billion as of December 31, 2016 and 2017 and Won 199 billion as of December 31, 2018. 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 44.26% as of December 31, 2016, 38.99% as of December 31, 2017 and 37.64% as of December 31, 2018.

We periodically increase our short-term borrowings and adjust our long-term debt financing levels depending on changes in our capital requirements. From time to time, we also generate cash 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 10,711 billion as of December 31, 2016, Won 12,354 billion as of December 31, 2017 and Won 14,721 billion as of December 31, 2018. Our holdings of cash and cash equivalents (which do not include cash and cash equivalents categorized under assets held for sale) were Won 2,448 billion as of December 31, 2016, Won 2,613 billion as of December 31, 2017 and Won 2,644 billion as of December 31, 2018. See Notes 5 and 10 of Notes to Consolidated Financial Statements. Our holding of other receivables and other short-term financial assets were Won 6,765 billion as of December 31, 2016, Won 8,682 billion as of December 31, 2017 and Won 9,467 billion as of December 31, 2018. As of December 31, 2018, approximately 18% 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 1,375 billion as of December 31, 2018, 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 2,324 billion in 2016, Won 2,288 billion in 2017 and Won 2,136 billion in 2018. We plan to spend approximately Won 6.1 trillion in capital expenditures in 2019, 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, improvements in the efficiency of older facilities in order to reduce operating costs and construction and expansion of facilities related to our non-steel businesses. The following table sets out the major items of our capital expenditures as of December 31, 2018:

Project	Expected Completion Date	Total Cost of Project (In bil	Estimated Remaining Cost of Completion as of December 31, 2018 lions of Won)
Rationalization of furnace no. 3 at Gwangyang Works and construction of facilities			
for removing nitrogen oxide during iron ore processing at Pohang Works	December 2021	2,155	1,683
Construction of by-product gas plant at Pohang Works and expansion of			
hyper-strength steel manufacturing facilities at Gwangyang Works	November 2021	506	400
Construction of anode materials production facilities	May 2019	135	67
Additional major capital expenditure projects that we plan to start in 2019 incl	lude the following.		

Additional major capital expenditure projects that we plan to start in 2019 include the following:

Project	Expected Spending in 2019	Expected Spending in 2020	Expected Spending in 2021 (In billions of Won)	Total
Rationalization and upgrading of facilities at Gwangyang Works and Pohang				
Works related to periodic maintenance and improvement of steel products	146	950	823	1,919
Rationalization and upgrading of facilities at Gwangyang Works and Pohang				
Works related to improvement of steel products	48	54	462	564
Construction and expansion of cathode materials production facilities	21	122		143
Itom 5 C. Research and Development Patents and Licenses Etc.				

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, 2018, POSCO Technical Research Laboratories employed 950 personnel, including 516 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.

Our research and development program has filed approximately 44,000 industrial rights applications relating to steel-making technology, approximately 15,000 of which were registered as of December 31, 2018, 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, 2017 and 2018, 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 and Management Committee) after the committee reviews such candidates qualifications. Pursuant to the Korean Commercial Act and our articles of incorporation, any shareholder holding our outstanding shares with voting rights may suggest candidates for Outside Directors to the Director Candidate Recommendation and Management Committee.

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

the Director Candidate Recommendation and Management Committee;

the Evaluation and Compensation Committee;

the Finance and Related Party Transactions Committee;

the Executive Management Committee; and

the Audit 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

As of March 31, 2019, our Inside Directors are:

Name	Position	Responsibilities and Division	Years as Director	Age	Expiration of Term of Office
Choi, Jeong-Woo	Chief Executive Officer and Representative Director		1	61	March 2021
Chang, In-Hwa	President and Representative Director	Head of Steel Business Unit	2	63	March 2020
Chon, Jung-Son	Senior Executive Vice President	Head of Corporate Strategy & Planning Division	1	56	March 2020
Kim, Hag-Dong	Senior Executive Vice President	Head of Production Division	0	59	March 2020
Jeong, Tak	Senior Executive Vice President	Head of Marketing Division	0	59	March 2020

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 FSCMA.

Name	Position	Principal Occupation	Years as Director	Age	Expiration of Term of Office
Kim, Shin-Bae	Chairman	Former Vice Chairman, SK Group	2	64	March 2022
Kim, Joo-Hyun	Director	President, the Financial News	4	66	March 2021
Bahk, Byong-Won	Director	Former Chairman, Korea Employers Federation	4	66	March 2021
Chung, Moon-Ki	Director	Professor of Accounting, Sungkyunkwan University	2	59	March 2022
Chang, Seung-Wha	Director	Professor of Law, Seoul National University	1	55	March 2020
Kim, Sung-Jin	Director	Former Minister, Ministry of Oceans and Fisheries	1	69	March 2021
Pahk, Hee-Jae	Director	Professor of Mechanical Engineering, Seoul National University	0	57	March 2022

The term of office of the Directors elected in March 2019 is up to three 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 as of March 31, 2019:

Name	Position	Responsibility and Division	Age
Oh, Gyu-Seok	Senior Executive Vice President	Head of New Growth Business Unit	55
Oh, Hyoung-Soo	Senior Executive Vice President	Head of Pohang Works	58

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

Kim, Jhi-Yong	Senior Executive Vice President	President, PT Krakatau POSCO Co., Ltd.	56
Han, Sung-Hee	Senior Executive Vice President	Head of Management Support Division	57

Name	Position	Responsibility and Division	Age
Choi, Joo	Senior Executive Vice President	Head of Technical Research Laboratories	59
Yoo, Byeong-Og	Senior Executive Vice President	Head of Purchasing and Investment Division	56
Lee, Si-Woo	Senior Executive Vice President	Head of Gwangyang Works	58
Lee, Duk-Lak	Executive Vice President	Head of Technology Strategy Office	58
Kim, Gyo-Sung	Executive Vice President	Head of Automotive Steel Research Lab	57
Lee, Sung-Wook	Executive Vice President	Head of Legal Affairs Office	54
Yang, Weon-Jun	Executive Vice President	Head of Corporate Citizenship Office	53
Bae, Jae-Tak	Executive Vice President	Head of Stainless Steel Marketing Office	54
Lim, Seung-Kyu	Executive Vice President	Head of Finance Office	55
Choo, Se-Don	Executive Vice President	Head of Steel Solution Research Lab	57
Jung, Duk-Kyoon	Executive Vice President	Head of Information Planning Office	56
Choi, In-Suk	Executive Vice President	Deputy Head of Pohang Works (Administration)	55
Lee, Ju-Tae	Executive Vice President	Head of Corporate Strategy Office	54
Yun, Yang-Su	Executive Vice President	Head of Automotive Materials Marketing Office	55
Kim, Soon-Ki	Executive Vice President	Head of Labor and Cooperation Office	54
Lee, Jeon-Hyeok	Executive Vice President	Head of Global Infra Business Management Office	55
Kim, Bok-Tae	Executive Vice President	Head of Sales and Production Coordination Office	56
Chun, Sung-Lae	Executive Vice President	Head of Hot Rolled Steel & Wire Rod Marketing Office	55
Kim, Jeoung-Su	Executive Vice President	Deputy Head of Gwangyang Works (Administration)	55
Kim, Kwang-Moo	Executive Vice President	Head of Steel Business Planning & Coordination Office	54
Kim, Kyung-Han	Executive Vice President	Head of International Trade Office	53
Jung, Hae-Seong	Senior Vice President	Head of Raw Materials Office II	54
Park, Hyeon	Senior Vice President	Head of LiB Materials Business Office	51
Kim, Min-Chul	Senior Vice President	Head of Investment Planning & Engineering Office	56
Lee, Jae-Yeol	Senior Vice President	Head of Administration Support & External Relations Office	57
Lee, Jean-Su	Senior Vice President	Head of Surface Treatment Department, Gwangyang Works	55
Kim, Young-Joong	Senior Vice President	Head of Marketing Strategy Office	53
Choi, Hyeon-Soo	Senior Vice President	Head of Europe Office	59
Kim, Ki-Soo	Senior Vice President	Head of Process and Engineering Research Lab	53
Choi, Yong-Jun	Senior Vice President	Deputy Head of Pohang Works (Hot and Cold Rolling)	54
Song, Yong-Sam	Senior Vice President	Head of Electrical and Electronic Materials Marketing Office	55
Lee, Yu-Kyung	Senior Vice President	Head of Plant, Equipment and Materials Procurement Office	51
Lee, Hee-Geun	Senior Vice President	Deputy Head of Pohang Works (Iron and Steel Making)	56
Lee, Ju-Hyeob	Senior Vice President	Deputy Head of Pohang Works (Stainless Steel Production)	54
An, Geun-Sik	Senior Vice President	Head of Global Quality & Service Management Office	57
Lee, Kyung-Sub	Senior Vice President	Head of Investment Strategy Office	53
Jung, Bum-Su	Senior Vice President	Deputy Head of Gwangyang Works (Maintenance)	54
Nam, Jae-Bok	Senior Vice President	Giga Steel Commercialization TF Team Leader, Gwangyang Works	57
Hong, Sam-Young	Senior Vice President	Deputy Head of Gwangyang Works (Hot and Cold Rolling)	57
Lee, Sang-Ho	Senior Vice President	Head of Production Division, PT Krakatau POSCO Co., Ltd.	54
Kim, Sang-Gyun	Senior Vice President	Head of Construction Steel Materials Marketing Office	54
Lee, Baik-Hee	Senior Vice President	Deputy Head of Gwangyang Works (Iron and Steel Making)	54

Name	Position	Responsibility and Division	Age
Ahn, Sang-Bog	Senior Vice President	Head of Steel Product Research Lab	56
Han, Soo-Ho	Senior Vice President	PT KP Downstream Construction Cooperation TF Team Leader	57
Choi, Young	Senior Vice President	Head of Communication Office	50
Lee, Cheol-Ho	Senior Vice President	Head of Labor and Management Development Group	53
Yoon, Chang-Woo	Senior Vice President	Head of Marketing Division, PT Krakatau POSCO Co., Ltd.	54
Jeong, Dae-Hyung	Senior Vice President	Head of Business Assessment Office	50
Yang, Byeong-Ho	Senior Vice President	Head of Human Resources and Corporate Culture Office	52
Kim, Sang-Chul	Senior Vice President	Head of Energy and Shipbuilding Materials Marketing Office	51
Cho, Ju-Ik	Senior Vice President	Head of New Growth Planning Office	53
Kim, Yong-Soo	Senior Vice President	Head of Human Resources Management Office	53
Oh, Kyung-Shik	Senior Vice President	PosMC Technology Development TF Team Leader, Pohang Works	60
Kim, Kyeong-Chan	Senior Vice President	Head of Steel Business Planning & Coordination Group	49
Choi, Jong-Kyo	Senior Vice President	High Manganese Steel Solutions TF Team Leader	57
Chung, Kyung-Jin	Senior Vice President	Head of Corporate Audit Office	53
Song, Chi-Young	Senior Vice President	Deputy Head of Pohang Works (Safety and Environment)	54
Choun, Si-Youl	Senior Vice President	Head of Steel Production Strategy Office	53
Kang, Sung-Wook	Senior Vice President	Head of Raw Materials Office I	53
Lee, Chan-Gi	Senior Vice President	Deputy Head of Pohang Works (Maintenance)	55
Lee, Chang-Hyun	Senior Vice President	Deputy Head of Gwangyang Works (Safety and Environment)	57
Park, Sung-Jin	Senior Vice President	Head of Industry-Academy-Research Cooperation Office	51

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 2018, the aggregate compensation paid and accrued to all Directors and executive officers was approximately Won 48 billion and the aggregate amount set aside or accrued by us to provide pension and retirement benefits to such persons was Won 12 billion.

Among those who received total annual compensation exceeding Won 500 million in 2018, the highest-paid five individuals were as follows:

Name	Position	Total Compensation in 2018	Long-term Incentive Compensation for Payment Subsequent to 2018 (In millions of Won)
Kwon, Oh-Joon	Former Chief Executive Officer and Representative Director	5,068	436
Choi, Jeong-Woo	Chief Executive Officer and Representative Director	1,822	284
Ahn, Dong-Il	Former Senior Executive Vice President	1,581	302
Oh, In-Hwan	President and Representative Director	1,252	266
Kim, Jung-Sik	Former Executive Vice President	1,207	247

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 and Management Committee

The Director Candidate Recommendation and Management Committee is composed of three Outside Directors, Bahk, Byong-Won, Kim, Joo-Hyun and Pahk, Hee-Jae, and one Inside Director, Chon, Jung-Son. The Director Candidate Recommendation and Management Committee reviews the qualifications of potential candidates and proposes nominees to serve on our board of directors as an Outside Director. It also reviews operational matters of our board of directors. Any shareholder holding our outstanding shares with voting rights may suggest candidates for Outside Directors to the Director Candidate Recommendation and Management Committee.

Evaluation and Compensation Committee

The Evaluation and Compensation Committee is composed of four Outside Directors, Chang, Seung-Wha, Kim, Shin-Bae, Chung, Moon-Ki and Kim, Sung-Jin. 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 Related Party Transactions Committee

The Finance and Related Party Transactions Committee is composed of three Outside Directors, Kim, Joo-Hyun, Kim, Sung-Jin and Pahk, Hee-Jae and one Inside Director, 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. It also reviews related party and other internal transactions and ensures compliance with the Monopoly Regulation and Fair Trade Act.

Executive Management Committee

The Executive Management Committee is composed of five Inside Directors, Choi, Jeong-Woo, Chang, In-Hwa, Chon, Jung-Son, Kim, Hag-Dong and Jeong, Tak. 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 Chung, Moon-Ki, Bahk, Byong-Won and Chang, Seung-Wha.

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.

Item 6.D. Employees

As of December 31, 2018, we had 33,784 employees, including 16,634 persons employed by our subsidiaries. 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 32,287 employees, including 15,232 persons employed by our subsidiaries, as of December 31, 2017, and 31,768 employees, including 15,184 persons employed by our subsidiaries, as of December 31, 2016.

We consider our relations with our work force to be satisfactory. 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 negotiations between the management and the majority labor union. A limited number of our employees are members of the Federation of Korean Metal Workers Trade Unions or the Korean Metal Workers Union. The Federation of Korean Metal Workers Trade Unions currently negotiates the terms of employment with the management.

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, 2018, our employees owned, through our employee stock ownership association, approximately 1.69% of our common stock in their employee accounts.

Item 6.E. Share Ownership

The persons who are currently our Directors or executive officers held, as a group, 16,565 common shares as of March 31, 2019, 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.

	Number of
	Common Shares
Kim, Hag-Dong	960
Choi, Jeong-Woo	911
Chang, In-Hwa	889
Choi, Joo	796
Kim, Soon-Ki	707
Jeong, Tak	699
Kim, Gyo-Sung	685
Yoo, Byeong-Og	649
Lee, Si-Woo	566
Song, Chi-Young	500
Jung, Bum-Su	483
Yang, Weon Jun	476
Lee, Duk-Lak	474
Jung, Hae-Seong	450
Choo, Se-Don	405
Park, Hyeon	403
Lim, Seung-Kyu	392
Kim, Jhi-Yong	385
Kim, Min-Chul	380
Lee, Cheol-Ho	379
Lee, Yu-Kyung	377
Han, Soo-Ho	359
Lee, Ju-Tae	323
Lee, Jae-Yeol	298
Oh, Hyoung-Soo	273
Choi, In-Suk	269
Chon, Jung-Son	262
Kim, Jeoung-Su	243
Kim, Bok-Tae	238
Chun, Sung-Lae	227
Choi, Jong-Kyo	224
Lee, Baik-Hee	214
Choi, Young	205
An, Geun-Sik	200
Kim, Sang-Gyun	180
Han, Sung-Hee	174
Bae, Jae-Tak	126
Yun, Yang-Su	112
Lee, Jeon-Hyeok	89
Kang, Sung-Wook	83
Kim, Ki-Soo	79
Kim, Kwang-Moo	73
Lee, Chan-Gi	73
Song, Yong-Sam	60
Lee, Jean-Su	53
Lee, Kyung-Sub	31
Choun, Si-Youl	31
Choi, Yong-Jun	27
Choi, Hyeon-Soo	25
Kim, Yong-Soo	12
Jung, Duk-Kyoon	10
Nam, Jae-Bok	10
Hong, Sam-Young	10
Tong, Sum Toung	10

Lee, Sang-Ho	4
Lee, Sang-Ho Oh, Kyung-Shik	2
Total	16,565

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, 2018.

	Number of Shares	
Shareholders	Owned	Percentage
National Pension Service	9,342,192	10.72%
BlackRock Fund Advisors and subsidiaries (1)	4,549,553	5.22
Nippon Steel & Sumitomo Metal Corporation ⁽¹⁾	2,894,712	3.32
GIC Private Limited	2,016,887	2.31
KB Financial Group Inc. and subsidiaries	2,001,820	2.30
Directors and executive officers as a group	16,565	0.02
Public ⁽¹⁾	59,179,403	67.88
POSCO (held in the form of treasury stock)	7,185,703	8.24
Total issued shares of common stock	87,186,835	100.00%

(1) Includes ADRs.

As of December 31, 2018, there were 9,215,072 shares of common stock outstanding in the form of ADRs, representing 10.57% 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, 2016, 2017 and 2018, 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-130.

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

Table of Contents

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

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 2013, 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, as well as two corrective orders on us 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 the Won 89.3 billion fine imposed on us, which was subsequently appealed by the Korea Fair Trade Commission to the Supreme Court of Korea. In November 2016, the Supreme Court of Korea vacated the Seoul High Court s ruling and remanded the proceeding in November 2016. In February 2019, the Seoul High Court revoked the fine and one of the two corrective orders initially imposed on us, which was subsequently appealed by both us and the Korea Fair Trade Commission. 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 Daewoo International Corporation (currently, POSCO International), Daewoo Motors India Ltd., Daewoo Corporation and Daewoo Construction & Engineering Co., Ltd. in the India Delhi Mumbai Court, regarding its loans to Daewoo Motors India Ltd. guaranteed by Daewoo Co., Ltd. (predecessor of POSCO International). The total claim amount is 4.46 billion Indian Rupees, and POSCO International recorded provision of Won 21 billion relating to its portion of the guarantee alleged by Industrial Development Bank of India. Daewoo International Corporation challenged the jurisdiction of the court in 2003. The outcome of such lawsuits remains uncertain and POSCO International s provision is classified as a non-current liability as of December 31, 2018.

In January 2019, the Financial Supervisory Service initiated a review and investigation of POSCO E&C s annual report and related financial statements for the year ended December 31, 2015, which is currently ongoing. We cannot predict the outcome of this review and investigation, and there can be no assurance that such review and investigation will not result in imposition of penalties or corrective actions on POSCO E&C or us by the Financial Supervisory Service.

In March 2019, affiliates of Gale Investments Company, LLC, a former joint venture partner of POSCO E&C in the urban planning and development project in Songdo International City in Incheon (the Songdo Project), filed a claim in the United States District Court for the Southern District of New York and filed a request for arbitration pursuant to the rules of the International Court of Arbitration of the International Chamber of Commerce against POSCO E&C, claiming POSCO E&C wrongfully seized and sold certain properties of the claimants. In December 2013, POSCO E&C and one of the claimants entered into a series of loan facility agreements with several lenders to finance the Songdo Project, with their respective stakes in the joint venture pledged as collateral. The loan facility agreements entitled POSCO E&C to certain subrogation rights related to guaranteeing the obligations of the claimant to repay the principal amounts of the loans. In 2017, upon default of certain series of the loans, POSCO E&C exercised such subrogation rights, claimed the pledged assets of the claimant and sold such assets. The claimants are seeking damages of approximately Won 2,400 billion allegedly resulting from POSCO E&C s purported wrongful seizure and sale of such properties as well as alleged overcharges made by POSCO E&C while serving as the construction contractor for the Songdo Project. POSCO E&C believes that its actions were legally permissible and plans to vigorously defend against the claims made by the claimants.

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, 2018. Of these shares and as of such date, 80,001,132 shares were outstanding and 7,185,703 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.

	Annual Dividend per		Average Total
	Common Stock to	Interim Dividend per	Dividend per
Year	Public	Common Stock	Common Stock
		(In Won)	
2014	6,000	2,000	8,000
2015	6,000	2,000	8,000
2016	5,750	2,250	8,000
2017	3,500	4,500	8,000
2018	5,000	5,000	10,000

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

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 KRX KOSPI Market since June 1988 under the identifying code 005490.

ADSs

Our common stock is also listed on the New York Stock Exchange in the form of ADSs. The ADSs have been issued by Citibank, N.A. as ADR depositary 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, 2018, 36,860,288 ADSs representing 9,215,072 common shares were outstanding, representing 10.6% of total issued shares of common stock.

Item 9.B. Plan of Distribution

Not applicable

Item 9.C. Markets

See Item 9.A. Offering and Listing Details.

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, 2018, 87,186,835 Common Shares were issued, of which 7,185,703 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

Under Article 2 of our articles of incorporation, the primary purpose of POSCO is to engage in, among others: manufacturing, marketing, promoting, selling and distributing iron, steel and rolled products; harbor loading and unloading, transportation and warehousing businesses; power generation and distribution as well as resources development; technology license sales and engineering businesses; and any other activities that are related, directly or indirectly, to the attainment and continuation of the foregoing.

The following 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.

Board of Directors

Under our articles of incorporation and the Commercial Code, any director who has a special interest in a proposal or a resolution is prohibited from voting on such proposal or resolution at the meeting of the board of directors. Any resolution of the board of directors must be approved by an affirmative majority vote of the directors present at the meeting of the board of directors. The compensation for directors, including severance benefits, is paid within the limitation approved by the annual general meeting of shareholders.

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. In addition, we may declare quarterly dividends pursuant to a board resolution each fiscal year to the eligible shareholders recorded as of the end of March, June and September of the relevant fiscal year. We may distribute the annual dividend in cash, Shares or other form of property. However, we may distribute the quarterly dividend only in cash. A dividend of Shares must be distributed at par value and may not exceed one-half of the annual and quarterly dividends declared each fiscal year in the aggregate. We have no obligation to pay any dividend unclaimed for five years from the payment date.

Under the Commercial Code, we may pay dividends 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 dividends, and (iv) unrealized profits determined in the Presidential Decree to the Commercial Code. We may not pay dividends unless we have set aside as earned surplus reserve an amount equal to at least 10% of the cash portion of dividends 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 times and, unless otherwise provided in the Commercial Code or our articles of incorporation, 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 and other applicable regulations;

issued to members of our employee stock ownership association pursuant to the FSCMA and other applicable regulations;

represented by depositary receipts pursuant to the FSCMA and other applicable regulations and other applicable regulations;

issued in a general public offering pursuant to a board resolution in accordance with the FSCMA and other applicable regulations, 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 entities pursuant to a joint venture agreement, strategic coalition or technology license or transfer 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, 2018, our employees owned, through our employee stock ownership association, approximately 1.69% 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, court approval or other applicable laws and regulations, 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;

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

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 10% (or more) 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 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 month period before the date of the adoption of the relevant resolution and (3) the weighted average of the daily Share 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

We maintain the register of our shareholders electronically through Kookmin Bank, our transfer agent. Kookmin Bank performs electronic registration of our Shares, manages the electronic register of our shareholders and oversees other matters related to our Shares.

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 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

⁹¹

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 websites of the Financial Services Commission and the Korea Exchange.

Transfer of Shares

Under the Commercial Code, the transfer of Shares is effected by electronic registration of such transfer. 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 Economy 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 Economy and Finance may (i) 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), (ii) impose an obligation to deposit, safe-keep or sell precious metal or any other means of payment to The Bank of Korea, a foreign exchange stabilization fund or certain other governmental agencies or financial companies or (iii) require Korean creditors to collect debts owned by non-Korean debtors and deposit them in their bank accounts in Korea; 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 its currency policies, exchange rate policies or other macroeconomic policies, the Ministry of Economy 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 or 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 Economy 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 a listed company s 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 of such listed company 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 by Presidential Decrees 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 Equity Securities for which the reporting requirements were violated.

In addition to the reporting requirements described above, any person whose direct or beneficial ownership of a listed company s voting stock accounts for 10% or more of the total issued and outstanding voting stock (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 his or her ownership interest subsequent to the report must be reported to the Securities and Futures Commission and the Korea Exchange within five business days. 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, exchange right under exchangeable 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 shares of a public service corporation for which the ceiling on aggregate acquisition by foreigners, as explained below, has been reached or exceeded with certain exceptions;

acquisition of shares by direct investment as defined in the Foreign Investment Promotion Law or disposal of such shares;

disposal of shares pursuant to the exercise of appraisal rights of dissenting shareholders;

acquisition or disposal of shares in connection with a tender offer;

acquisition of underlying shares by a foreign depositary in connection with the issuance of depositary 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. For over-the-counter transactions between foreign investors outside the KRX KOSPI Market or the KRX KOSDAQ Market involving shares of a public service corporation for which the limit on aggregate foreign ownership has been reached or exceeded, an investment broker licensed in Korea must act as an intermediary. Odd-lot trading of shares outside the KRX KOSPI Market or the KRX KOSDAQ Market must involve an investment dealer licensed in Korea. Foreign investors are prohibited from engaging in margin trading by borrowing shares from investment brokers or investment dealers with respect to shares that are subject to foreign ownership limitation.

The Investment Rules require a foreign investor who wishes to invest in or dispose of 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 or disposal; 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.

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

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 depositary issuing depositary 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 shares of certain public service corporations 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 Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a dealing, brokerage or collective investment license (including domestic branches of foreign financial investment companies) 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 owned by a foreign investor 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 (including domestic branches of foreign financial investment companies), 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 service corporations are subject to a 40% ceiling on the acquisition of shares by foreigners in the aggregate. Designated public service corporations may set a ceiling on the acquisition of shares by a single foreign investor according to its articles of incorporation. Furthermore, an investment by a foreign investor of not less than 10% of the outstanding shares with voting rights, or in the amount of not less than Won 100 million, of a Korean company is defined as a foreign direct investment under the Foreign Investment Promotion Law, which is, in general, subject to 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. Changes in ownership of a Korean company by a foreign direct investor, as well as changes in certain aspects of the foreign direct investment (including changes in the foreign direct investor s name, address or business), are also subject to reporting requirements.



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 may enter into foreign exchange transactions on a limited basis, such as conversion of foreign currency funds and Won funds, either as counterparty to or on behalf of 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. While it is the payer which is required to withhold the tax, Korean law generally entitles the person who was subject to the withholding of Korean tax to recover from the Government any part of the Korean tax withheld, upon providing evidence that it was entitled to have tax withheld at a lower rate, if certain conditions are met.

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 a tax resident of 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 transfere 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, Australia, 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.

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. 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.

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 10% or more of the combined voting power or value of all of our classes of 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

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

otherwise subject to U.S. federal income tax on a net income basis with respect to income from the shares 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 depositary 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 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 2017 or 2018 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 2019 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. 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 website 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 22 billion and net loss on valuation of derivatives of Won 16 billion in 2016, net loss on valuation of derivatives of Won 162 billion and net loss on derivatives transactions of Won 26 billion in 2017 and net gain on valuation of derivatives of Won 56 billion and net gain on derivatives transactions of Won 39 billion in 2018.

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 liabilities relate primarily to 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 International 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 International 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 International 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,					
	20	16	2017		2018		
	Increase	Decrease	Increase (In billior	Decrease is of Won)	Increase	Decrease	
US Dollars	(163)	163	(173)	173	(204)	204	
Japanese Yen	(78)	78	(54)	54	(29)	29	
Euro	(9)	9	10	(10)	15	(15)	
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 th	For the Years Ended December 31,			
	2016	2017	2018		
		(In billions of Won)			
Increase or decrease in annual profit and net equity	120	100	85		
A reduction of interest rates also increases the fair value of our debt north	lie which is mimorily of a fixed	interest noture From	times to times		

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, 2018 which are sensitive to exchange rates and/or interest rates. The information is presented in Won, which is our reporting currency.

					Μ	aturities				
							Decemb 201	/	Decemb 201	,
								Fair		Fair
	2019	2020	2021	2022	2023	Thereafter	Total	Value	Total	Value
				(In	billions of	f Won except ra	ates)			
Local currency:										
Fixed rate	2,426	736	1,871	254	150	270	5,707	5,620	5,983	5,882
Average weighted rate (1)	2.78%	2.87%	3.15%	2.68%	2.79%	2.98%	2.92%		3.12%	
Variable rate	333	32	68	11	60	8	512	511	1,062	1,062
Average weighted rate (1)	2.82%	2.53%	2.22%	3.26%	3.49%	1.83%	2.80%		2.98%	
Sub-total	2,759	768	1,939	265	210	278	6,219	6,131	7,045	6,944
Foreign currency, principally Dollars and Yen:										
Fixed rate	3,052	1,011	1,180	1	658	124	6,026	5,944	5,157	5,016
Average weighted rate (1)	2.87%	3.86%	3.92%	1.34%	3.98%	2.51%	3.33%		3.05%	
Variable rate	3,748	525	852	4	475	2,360	7,964	7,966	8,861	8,871
Average weighted rate (1)	2.54%	4.19%	4.53%	5.11%	3.09%	8.98%	4.80%		4.33%	
Sub-total	6,800	1,536	2,032	5	1,133	2,484	13,990	13,910	14,018	13,887
Total	9,559	2,304	3,971	270	1,343	2,762	20,209	20,041	21,063	20,831

(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 depositary 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 depositary:

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

The depositary 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 depositary 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 depositary sends invoices to the applicable record date ADS holders. In the case of ADSs held in brokerage and custodian accounts (via the Korea Securities Depositary, or KSD), the depositary 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 depositary.

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

Table of Contents

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

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 depositary. Holders of our ADSs will receive prior notice of such changes.

Fees and Payments from the Depositary to Us

In 2018, we received approximately \$1.5 million from the depositary 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 depositary 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, 2018. 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, 2018 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, 2018.

c. Report of the Independent Registered Public Accounting Firm

The report of our independent registered public accounting firm, KPMG Samjong Accounting Corp. (KPMG), on the effectiveness of our internal control over financial reporting as of December 31, 2018 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 determined that 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 Ethics, applies to our chief executive officer and chief financial officer, as well as to our directors, other officers and employees. Our Code of Ethics is available on our website at *http://www.posco.com*. If we amend the provisions of our Code of Ethics 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 website 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 registered public accounting firm, KPMG, in 2017 and 2018:

		Year Ended nber 31,
	2017	2018
	(In millio	ons of Won)
Audit fees	5,480	6,019
Audit-related fees		167
Tax fees	805	841
Other fees	684	989
Total fees	6,969	8,016

Audit fees in 2017 and 2018 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.

Audit-related fees in 2018 as set forth in the above table are fees billed by KPMG for issuing comfort letters in connection with our securities offering.

Tax fees in 2017 and 2018 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 2017 and 2018 as set forth in the above table are fees billed by KPMG in connection with statutory audits unrelated to the audit of our annual financial statements.

Audit Committee Pre-Approval Policies and Procedures

Under our Audit Committee s pre-approval policies and procedures, all audit and non-audit services to be provided to us by an independent registered public accounting firm must be pre-approved by our Audit Committee. Our Audit Committee does not pre-approve any audit and non-audit services that are prohibited from being provided to us by an independent registered public accounting firm under the rules of SEC and applicable law.

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, 2018:

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

Director Independence

Listed companies must have a majority of independent directors

POSCO s Corporate Governance Practice

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.

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 eight Outside Directors.

Nomination/Corporate Governance Committee

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. We have not established a separate nomination corporate governance committee. However, we maintain a Director Candidate Recommendation and Management Committee composed of three Outside Directors and one Inside Director.

NYSE Corporate Governance Standards

Compensation Committee

A compensation committee of independent directors is required. The committee must have a charter that addresses the purpose, 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.

Shareholder Approval of Equity Offerings

Listed companies must allow its shareholders to exercise their voting rights with respect to equity offerings that do not qualify as public offerings for cash, and offerings of equity of related parties.

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

We maintain an Evaluation and Compensation Committee composed of four Outside Directors.

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. Matters related to the Employee Stock Ownership Program are not subject to shareholders approval under Korean law.

Our board of directors is generally authorized to issue new shares, subject to certain limitations as provided by our articles of incorporation.

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 *http://www.posco.com*.

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

PART III

Item 17. Financial Statements

Not applicable

Item 18. Financial Statements

	Page
Report of Independent Registered Public Accounting Firm	F-2
Report of Independent Registered Public Accounting Firm on Internal Control over Financial Reporting	F-3
Consolidated Financial Statements	
Consolidated Statements of Financial Position	F-5
Consolidated Statements of Comprehensive Income	F-7
Consolidated Statements of Changes in Equity	F-8
Consolidated Statements of Cash Flows	F-11
Notes to the Consolidated Financial Statements	F-13
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. 33-81554)* (P)
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
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed previously(P) Paper filing

Table of Contents

	Page
Report of Independent Registered Public Accounting Firm	F-2
<u>Report of Independent Registered Public Accounting Firm on Internal Control over Financial</u>	
Reporting	F-3
Consolidated Financial Statements	
Consolidated Statements of Financial Position	F-5
Consolidated Statements of Comprehensive Income	F-7
Consolidated Statements of Changes in Equity	F-8
Consolidated Statements of Cash Flows	F-11
Notes to the Consolidated Financial Statements	F-13

F-1

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors

POSCO:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of financial position of POSCO and subsidiaries (the Company) as of December 31, 2017 and 2018 and the related consolidated statements of comprehensive income, changes in equity and cash flows for each of the years in the three-year period ended December 31, 2018 and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2018 and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2018 and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2018, 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) (PCAOB), the Company s internal control over financial reporting as of December 31, 2018, 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 30, 2019 expressed an unqualified opinion on the effectiveness of the Company s internal control over financial reporting.

Change in Accounting Policies

As discussed in Note 2 to the consolidated financial statements, the Company has changed its methods of accounting for revenue recognition and financial instruments in 2018 due to the adoption of IFRS No. 15 Revenue from Contracts with Customers and IFRS No. 9 Financial Instruments .

Basis for Opinion

These consolidated financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. 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, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG Samjong Accounting Corp.

We have served as the Company s auditor since 2008.

Seoul, Korea

April 30, 2019

Report of Independent Registered Public Accounting Firm

on Internal Control over Financial Reporting

To the Shareholders and Board of Directors

POSCO:

Opinion on Internal Control over Financial Reporting

We have audited POSCO and subsidiaries (the Company) internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, 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) (PCAOB), the consolidated statements of financial position of the Company as of December 31, 2017 and 2018, the related consolidated statements of comprehensive income, changes in equity and cash flows for each of the years in the three-year period ended December 31, 2018 and the related notes (collectively, the consolidated financial statements), and our report dated April 30, 2019 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company 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 the Company s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. 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 of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and 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.

Definition and Limitations of Internal Control over Financial Reporting

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.

/s/ KPMG Samjong Accounting Corp.

Seoul, Korea

April 30, 2019

POSCO and Subsidiaries

Consolidated Statements of Financial Position

As of December 31, 2017 and 2018

	Notes	December 31, 2017 (in millions of Won)	December 31, 2018
Assets			
Cash and cash equivalents	4,5,23	2,612,530	2,643,865
Trade accounts and notes receivable, net	6,17,23,29,37	8,824,563	9,130,204
Other receivables, net	7,23,37	1,636,006	1,385,629
Other short-term financial assets	8,23	7,045,880	8,081,096
Inventories	9	10,793,781	12,153,303
Current income tax assets	35	38,489	51,557
Assets held for sale	10	71,768	21,854
Other current assets	16	821,242	684,464
Total current assets		31,844,259	34,151,972
Long-term trade accounts and notes receivable, net	6,23	731,570	427,125
Other receivables, net	7,23,37	879,176	863,240
Other long-term financial assets	8,23	1,911,684	1,647,898
Investments in associates and joint ventures	11	3,557,932	3,650,003
Investment property, net	13	1,064,914	928,615
Property, plant and equipment, net	14,32	31,883,535	30,018,273
Intangible assets, net	15,32	5,952,269	5,170,825
Defined benefit assets, net	21	8,224	1,489
Deferred tax assets	35	1,463,055	1,408,787
Other non-current assets	16	489,011	508,764
Total non-current assets		47,941,370	44,625,019
Total assets		79,785,629	78,776,991

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries

Consolidated Statements of Financial Position, Continued

As of December 31, 2017 and 2018

	Notes	December 31, 2017 (in millions of Wo	December 31, 2018 on)
Liabilities			
Trade accounts and notes payable	23,37	3,465,146	4,006,135
Short-term borrowings and current installments of long-term			
borrowings	4,17,23	11,274,516	10,289,619
Other payables	18,23	1,753,461	1,720,097
Other short-term financial liabilities	19,23,37	129,812	77,800
Current income tax liabilities	35	515,538	948,166
Provisions	20	110,946	298,453
Other current liabilities	22,29	2,240,919	2,090,307
Total current liabilities		19,490,338	19,430,577
Long-term trade accounts and notes payable	23,37	12,532	29,825
Long-term borrowings, excluding current installments	4,17,23	9,789,141	9,919,651
Other payables	18,23	147,750	148,868
Other long-term financial liabilities	19,23	114,105	64,162
Defined benefit liabilities, net	21	137,193	140,933
Deferred tax liabilities	35	1,904,242	1,688,893
Long-term provisions	20	477,172	431,036
Other non-current liabilities	22	386,431	250,432
Total non-current liabilities		12,968,566	12,673,800
Total liabilities		32,458,904	32,104,377
Equity			
Share capital	24	482,403	482,403
Capital surplus	24	1,422,021	1,420,007
Hybrid bonds	25	996,919	199,384
Reserves	26	(682,556)	(1,404,368)
Treasury shares	27	(1,533,054)	(1,532,728)
Retained earnings		42,974,658	44,160,659

Edgar Filing:	: FAIRFAX FINANCIAL	. HOLDINGS LTD,	/ CAN - Form 6-K

Equity attributable to owners of the controlling company Non-controlling interests	25	43,660,391 3,666,334	43,325,357 3,347,257
Total equity		47,326,725	46,672,614
Total liabilities and equity		79,785,629	78,776,991

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries

Consolidated Statements of Comprehensive Income

For the years ended December 31, 2016, 2017 and 2018

	Notes	2016	2017	2018
		ns of Won, excep	-	
Revenue	28,29,37	52,939,771	60,186,867	65,154,636
Cost of sales	29,31,34,37	(46,271,465)	(51,915,597)	(57,129,060)
Gross profit		6,668,306	8,271,270	8,025,576
Selling and administrative expenses	30,34			
Impairment loss on trade accounts and notes				
receivable	23	(165,150)	(173,694)	(74,781)
Other administrative expenses	31	(2,126,390)	(2,003,106)	(1,985,755)
Selling expenses		(1,553,686)	(1,557,277)	(369,245)
Other operating income and expenses	32,37			
Impairment loss on other receivables	23	(37,567)	(98,177)	(63,092)
Other operating income		202,478	448,481	523,586
Other operating expenses	34	(705,495)	(691,376)	(2,014,462)
Operating profit		2,282,496	4,196,121	4,041,827
Share of profit (loss) of equity-accounted investees,				
net	11	(88,677)	10,540	112,635
Finance income and costs	23,33			
Finance income		2,231,980	2,372,667	1,705,970
Finance costs		(3,014,190)	(2,484,277)	(2,244,416)
Profit before income taxes		1,411,609	4,095,051	3,616,016
	35			
Income tax expense	33	(379,544)	(1,185,740)	(1,683,630)
Profit				
Other comprehensive income (loss)		1,032,065	2,909,311	1,932,386
Items that will not be reclassified subsequently to				
profit or loss:				
Remeasurements of defined benefit plans	21	20,540	(47,543)	(173,489)
Net changes in fair value of equity investments at				
fair value through other comprehensive income				(149,188)
Items that are or may be reclassified subsequently to				
profit or loss :				
		134,590	(217,388)	(62,732)

Capital adjustment arising from investments in equity-method investees				
Net changes in unrealized fair value of				
available-for-sale investments	23	310,608	(31,389)	
Foreign currency translation differences		(11,491)	(264,695)	(42,908)
Gain or losses on valuation of derivatives	23		(143)	(212)
Other comprehensive income (loss), net of tax		454,247	(561,158)	(428,529)
Total comprehensive income		1,486,312	2,348,153	1,503,857
Profit attributable to :				
Owners of the controlling company		1,354,807	2,756,230	1,711,902
Non-controlling interests		(322,742)	153,081	220,484
Profit		1,032,065	2,909,311	1,932,386
Total comprehensive income attributable to :				
Owners of the controlling company		1,814,030	2,184,402	1,292,785
Non-controlling interests		(327,718)	163,751	211,072
Total comprehensive income		1,486,312	2,348,153	1,503,857
Basic and diluted earnings per share (in Won) See accompanying notes to the consolidated financial state	36 <i>ments</i> .	16,521	34,040	21,177

POSCO and Subsidiaries

Consolidated Statements of Changes in Equity

For the years ended December 31, 2016, 2017 and 2018

Attributable to owners of the controlling company												
	Share capital	Capital surplus	Hybrid bonds	Reserves	Treasury shares (in millions of	Retained earnings f Won)	N Subtotal	on-controlling interests	g Total			
lance as of nuary 1, 2016 mprehensive	482,403	1,393,079	996,919	(594,756)	(1,533,898)	40,461,496	41,205,243	3,807,958	45,013,20			
come (loss):												
ofit (loss)						1,354,807	1,354,807	(322,742)	1,032,063			
her mprehensive come (loss)												
measurements defined benefit						0.505	0 202	10 550	20.54			
ns, net of tax pital justment sing from vestments in uity-accounted vestees, net of						9,787	9,787	10,753	20,54			
				124,626			124,626	9,964	134,59			
et changes in e unrealized r value of ailable-for-sale vestments, net												
tax				314,428			314,428	(3,820)	310,60			
reign currency nslation ferences, net tax				10,382			10,382	(21,873)	(11,49			
tal												
mprehensive come (loss)				449,436		1,364,594	1,814,030	(327,718)	1,486,312			

Table of Contents

ansactions th owners of e controlling mpany, cognized rectly in uity:									
ar-end									
vidends						(479,974)	(479,974)	(50,333)	(530,30
erim dividends						(179,992)	(179,992)		(179,992
anges in osidiaries								49,250	49,250
anges in mership erests in									
bsidiaries		8,650					8,650	(16,544)	(7,894
erest of hybrid nds						(43,832)	(43,832)	(24,253)	(68,08:
sposal of						(10,00-)	(10,00-)	(21,200)	(00,00
asury shares		32			430		462		462
hers		5,486		1,335		3,420	10,241	(7,919)	2,322
tal insactions th owners of e controlling mpany		14,168		1,335	430	(700,378)	(684,445)	(49,799)	(734,244
lance as of									
cember 31, 16	482,403	1,407,247	996,919	(143,985)	(1,533,468)	41,125,712	42,334,828	3,430,441	45,765,269

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries

Consolidated Statements of Changes in Equity, Continued

For the years ended December 31, 2016, 2017 and 2018

				owners of th	e controlling			;	
	Share capital	Capital surplus	Hybrid bonds	Reserves	Treasury shares (in millions o	Retained earnings of Won)	N Subtotal	on-controlling interests	g Total
alance as of anuary 1, 2017	482,403	1,407,247	996,919	(143,985)	(1,533,468)	41,125,712	42,334,828	3,430,441	45,765,269
omprehensive come:									
rofit						2,756,230	2,756,230	153,081	2,909,311
ther omprehensive come (loss)									
emeasurements f defined benefit						(28.042)	(29.042)	(0.500)	(17 5 4 7
ans, net of tax apital ljustment ising from vestments in quity-accounted vestees, net of						(38,043)	(38,043)	(9,500)	(47,543
x et changes in e unrealized ir value of vailable-for-sale vestments, net				(214,794)			(214,794)	(2,594)	(217,388
f tax				(45,953)			(45,953)	14,564	(31,389
oreign currency anslation fferences, net									
f tax ain or losses on aluation of erivatives, net of				(272,902)			(272,902)	8,207	(264,695
X				(136)			(136)	(7)	(143

otal omprehensive come				(533,785)		2,718,187	2,184,402	163,751	2,348,153
ransactions ith owners of e controlling ompany, ecognized irectly in quity:									
ear-end vidends						(459,987)	(459,987)	(42,909)	(502,896
iterim dividends						(459,987)	(359,993)	(+2,707)	(359,993
hanges in Ibsidiaries						(,)	(,)	(7,151)	(7,151
hanges in wnership terests in		16 205					16 207	147.400	
bsidiaries		16,287					16,287	147,420	163,707
terest of hybrid						(43,600)	(43,600)	(24,187)	(67,787
isposal of		126			414		540		540
easury shares thers		(1,639)		(4,786)	414	(5,661)	(12,086)	(1,031)	(13,117
otal ansactions ith owners of e controlling ompany		14,774		(4,786)	414	(869,241)	(858,839)	72,142	(786,697
alance as of ecember 31,	492 402		006 010						
017	482,403	1,422,021	996,919	(682,556)	(1,533,054)	42,974,658	43,660,391	3,666,334	47,326,725

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries

Consolidated Statements of Changes in Equity, Continued

For the years ended December 31, 2016, 2017 and 2018

	Attributable to owners of the controlling company											
	Share	Capital	Hybrid		Treasury	Retained		on-controlling	-			
	capital	surplus	bonds	Reserves	shares in millions of V	earnings Won)	Subtotal	interests	Total			
ance as of				(1		won)						
uary 1, 2018	482,403	1,422,021	996,919	(682,556)	(1,533,054)	42,974,658	43,660,391	3,666,334	47,326,7			
ustment on al application FRS No. 15, of tax						(70,906)	(70,906)	(58,977)	(129,8			
ustment on al application FRS No. 9,												
of tax				(498,517)		447,067	(51,450)	(34,754)	(86,2			
usted ince as of	492 402	1 422 021	006 010	(1.101.072)	(1,522,054)	42 250 910	42 528 025	2 572 (02	47,110,0			
uary 1, 2018	482,403	1,422,021	996,919	(1,181,073)	(1,533,054)	43,350,819	43,538,035	3,572,603	47,110,6			
nprehensive ome:												
it						1,711,902	1,711,902	220,484	1,932,3			
er prehensive me (loss)												
easurements efined benefit s, net of tax						(145,488)	(145,488)	(28,001)	(173,4			
ital stment ng from stments in ty-accounted stees, net of												
				(76,587)			(76,587)	13,855	(62,7			
changes in value of				(104,293)		(46,883)	(151,176)	1,988	(149,1			

1									
ty stments at									
value through r									
prehensive me, net of tax									
slation rences, net									
ıx				(45,650)			(45,650)	2,742	(42,9
n or losses on ation of vatives, net of								4	
				(216)			(216)	4	(2
al prehensive me				(226,746)		1,519,531	1,292,785	211,072	1,503,8
me				(220,740)		1,319,331	1,292,703	211,072	1,505,6
nsactions 1 owners of controlling pany,									
pany, gnized ctly in ity:									
r-end								(51.040)	(224.0
dends rim dividends						(279,999) (400,003)	(279,999) (400,003)	(54,240)	(334,2 (400,0
nges in						(,	(, , , , , , , , , , , , , , , , , , ,		
sidiaries nges in								(2,092)	(2,0
ership rests in									
idiaries ayment of		(1,497)					(1,497)	(654)	(2,1
rid bonds		(2,769)	(797,535)				(800,304)	(359,018)	(1,159,3
rest of hybrid ds						(24,443)	(24,443)	(18,448)	(42,8
oosal of						(27,773)		(10,++0)	(+2,0
sury shares		133 2,119		3,451	326	(5.246)	459 324	(1.066)	4
ers		2,117		3,431		(5,246)	324	(1,966)	(1,6
al isactions i owners of controlling									
pany		(2,014)	(797,535)	3,451	326	(709,691)	(1,505,463)	(436,418)	(1,941,8
ance as of ember 31,	482,403	1,420,007	199,384	(1,404,368)	(1,532,728)	44,160,659	43,325,357	3,347,257	46,672,6

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries

Consolidated Statements of Cash Flows

For the years ended December 31, 2016, 2017 and 2018

	Notes	2016	2017 (in millions of Won)	2018
Cash flows from operating activities				
Profit		1,032,065	2,909,311	1,932,386
Adjustments for:				
Depreciation		2,835,843	2,887,646	2,911,048
Amortization		378,004	409,774	356,581
Finance income		(882,905)	(1,376,324)	(737,745)
Finance costs		1,501,953	1,440,282	1,168,225
Income tax expense		379,544	1,185,740	1,683,630
Gain on disposal of property, plant and equipment		(23,826)	(32,145)	(53,139)
Loss on disposal of property, plant and equipment		86,622	151,343	117,614
Impairment losses on property, plant and equipment		196,882	117,231	1,004,704
Gain on disposal of investments in subsidiaries,				
associates and joint ventures		(23,305)	(81,794)	(45,241)
Loss on disposal of investments in subsidiaries,				
associates and joint ventures		22,499	19,985	5,226
Share of loss (profit) of equity-accounted investees		88,677	(10,540)	(112,635)
Expenses related to post-employment benefits		333,139	199,926	216,489
Increase to provisions		189,914	215,383	240,146
Impairment loss on trade and other receivables		202,717	271,871	137,873
Loss on valuation of inventories		152,249	78,560	141,799
Gain on disposal of intangible assets		(671)	(22,391)	(117,139)
Impairment losses on goodwill and intangible assets		127,875	167,995	337,519
Gain on disposal of assets held for sale		(23,112)	(1,180)	(27,171)
Impairment losses on assets held for sale		24,890		50,829
Others, net		8,804	(10,093)	77,945
		5,575,793	5,611,269	7,356,558
Changes in operating assets and liabilities	39	(404,570)	(1,841,633)	(2,105,726)
Interest received		206,839	244,980	352,337
Interest paid		(691,264)	(735,735)	(750,410)
Dividends received		152,559	225,514	224,410
Income taxes paid		(602,004)	(806,396)	(1,139,830)

Net cash provided by operating activities	5,269,418	5,607,310	5,869,725
-------------------------------------------	-----------	-----------	-----------

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries

Consolidated Statements of Cash Flows, Continued

For the years ended December 31, 2016, 2017 and 2018

	Notes	2016 (ir	2017 n millions of Won)	2018
Cash flows from investing activities				
Acquisitions of short-term financial instruments		(18,578,809)	(20,843,530)	(32,173,134)
Proceeds from disposal of short-term financial				
instruments		17,177,409	19,146,634	31,105,544
Increase in loans		(603,332)	(1,055,895)	(627,783)
Collection of loans		557,064	667,045	941,962
Acquisitions of securities				(321,916)
Acquisitions of available-for-sale investments		(328,151)	(66,278)	
Proceeds from disposal of securities				221,646
Proceeds from disposal of available-for-sale				
investments		280,066	1,006,856	
Acquisitions of investments in associates and joint				
ventures		(173,769)	(60,277)	(47,355)
Proceeds from disposal of investments in associates				
and joint ventures		7,914	74,881	88,852
Acquisitions of property, plant and equipment		(2,324,112)	(2,287,580)	(2,135,550)
Proceeds from disposal of property, plant and				
equipment		44,330	39,183	90,412
Acquisitions of investment property		(45,735)	(69,169)	(44,106)
Proceeds from disposal of investment property		11,624	5,771	70,817
Acquisitions of intangible assets		(138,181)	(343,423)	(447,616)
Proceeds from disposal of intangible assets		8,672	28,502	77,654
Proceeds from disposal of assets held for sale		305,813	203,958	93,338
Increase in cash from (payment for) acquisition of				
business, net of cash acquired		4,503	(174,165)	
Cash received (decrease in cash) from disposal of				
business, net of cash transferred		21,223	(53,008)	447,917
Others, net		18,844	(37,379)	11,348
Net cash used in investing activities		(3,754,627)	(3,817,874)	(2,647,970)
Cash flows from financing activities				
Proceeds from borrowings		1,988,665	1,725,983	2,762,446
Repayment of borrowings		(4,274,895)	(3,136,016)	(3,136,308)

Proceeds from (repayment of) short-term				
borrowings, net		(885,861)	558,083	(854,554)
Payment of cash dividends		(708,970)	(863,450)	(723,934)
Payment of interest of hybrid bonds		(68,097)	(67,783)	(46,166)
Repayment of hybrid bonds				(1,160,000)
Capital contribution from non-controlling interests and proceeds from disposal of subsidiary while				
maintaining control		24,704	266,219	5,808
Capital deduction from non-controlling interests and				
additional acquisition of interests in subsidiaries		(11,301)	(26,288)	(3,823)
Others, net		(15,212)	(22,276)	(38,517)
Net cash used in financing activities	39	(3,950,967)	(1,565,528)	(3,195,048)
Effect of exchange rate fluctuation on cash held		12,611	(58,997)	4,628
Net increase (decrease) in cash and cash equivalents		(2,423,565)	164,911	31,335
Cash and cash equivalents at beginning of the period	5	4,871,184	2,447,619	2,612,530
Cash and cash equivalents at end of the period	5	2,447,619	2,612,530	2,643,865

See accompanying notes to the consolidated financial statements.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements

As of December 31, 2016, 2017 and 2018

1. General Information

General information about POSCO, its 36 domestic subsidiaries including POSCO ENGINEERING & CONSTRUCTION CO., LTD., 136 foreign subsidiaries including POSCO America Corporation (collectively the Company) and its 126 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 since June 10, 1988. POSCO owns and operates two steel plants (Pohang and Gwangyang) and one office in Korea and it also operates internationally through six of its overseas liaison offices.

As of December 31, 2018, POSCO s shareholders are as follows:

Shareholder s name	Number of shares	Ownership (%)
National Pension Service	9,342,192	10.72
BlackRock Fund Advisors ^(*1,2,3)	4,549,553	5.22
Nippon Steel & Sumitomo Metal Corporation ^(*1)	2,894,712	3.32
GIC Private Limited	2,016,887	2.31
KB Financial Group Inc. and subsidiaries ^(*2)	2,001,820	2.30
Others	66,381,671	76.13
	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 and others.

(*3)The number of shares held by the shareholder based on the information in the status report of large-scale shareholders filed with Korea Exchange on October 4, 2018.

As of December 31, 2018, 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, 2016, 2017 and 2018

(b) Consolidated subsidiaries

Details of consolidated subsidiaries as of December 31, 2017 and 2018 are as follows:

	Principal	Decem	ıber 31, 2		hip (%) Decen	2018		
	operations	POSCOSul	bsidiaries	s Total	POSCOSu	bsidiaries	s Total	Region
[Domestic]								
POSCO								
ENGINEERING &								
CONSTRUCTION.,	Engineering and				73 00			
CO., LTD.	construction	52.80		52.80	52.80		52.80	Pohang
POSCO Processing &	Steel sales and							
Service	trading	93.95	0.45	94.40	93.95	0.45	94.40	Seoul
POSCO COATED &								
COLOR STEEL Co.,	Coated steel							
Ltd.	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	Economic research							
Institute	and consulting	100.00		100.00	100.00		100.00	Seoul
POSMATE	Business facility							
	maintenance	83.83	16.17	100.00	59.80	40.20	100.00	Seoul
POSCO A&C	Architecture and							
	consulting	100.00		100.00	100.00		100.00	Seoul
POSCO Venture	Investment in							
Capital Co., Ltd.	venture companies	95.00		95.00	95.00		95.00	Pohang
eNtoB Corporation	Electronic							C
1	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.,	Transporting and							
Ltd.	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	Generation of							~ .
CO., LTD.	electricity	89.02		89.02	89.02		89.02	Seoul
POSCO NIPPON	Steel byproduct							
STEEL RHF JOINT	manufacturing and	7 0.00		7 0.00	7 0.00		- 0.00	D 1
VENTURE.CO., Ltd.	sales	70.00		70.00	70.00		70.00	Pohang
MegaAsset Co., Ltd.	Real estate rental		100.00	100.00		100.00	100.00	T 1
Future Creation Fund	and sales		100.00	100.00		100.00	100.00	Incheon
	Investment in							
Postech Early Stage account	venture companies		40.00	40.00		40.00	40.00	Seoul
POSCO WOMAN S	Investment in		40.00	40.00		40.00	40.00	Seoui
FUND	venture companies		40.00	40.00		40.00	40.00	Seoul
SPH Co, Ltd.	House		10.00	10.00		10.00	10.00	Secur
5111 00, 200	manufacturing and							
	management		100.00	100.00		100.00	100.00	Incheon
Posco Group	Education service							
University	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	-		50.00	50.00		50.00	50.00	Pohang
2015 POSCO New	Investment in							
technology II Fund	venture companies		25.00	25.00		25.00	25.00	Pohang
Posco e&c Songdo	Non-residential							
International Building	building rental		100.00	100.00		100.00	100.00	Seoul
POSCO ES	Secondary and							
MATERIALS CO.,	storage battery				00.00		00.00	a .
Ltd.	manufacturing	75.32		75.32	90.00		90.00	Gumi

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

	Principal	Ownership (%) December 31, 2017 December 31, 2018						
	operations	POSCOSu				ubsidiaries		Region
[Domestic]								
POSCO Research &	Intellectual Property							
Technology	Services and	100.00		100.00	100.00		100.00	G 1
Decesaria	consulting Refuse derived fuel	100.00		100.00	100.00		100.00	Seoul
Poscoene	and power							
	generation		100.00	100.00		100.00	100.00	Seoul
POSCO Humans	Construction	90.30	100.00	90.30	90.30	100.00	90.30	Pohang
Mapo Hibroad		,		,	,			8
Parking Co., Ltd.	Construction		71.00	71.00		71.00	71.00	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	70.00		70.00	70.00		70.00	D
DOSCO Esmily	generation Investment in	70.00		70.00	70.00		70.00	Busan
POSCO Family Strategy Fund	venture companies	69.91	30.09	100.00	69.91	30.09	100.00	Pohang
POSCO DAEWOO	Trading, energy &	07.71	50.07	100.00	07.71	50.07	100.00	Tonang
Corporation	resource							
- I	development							
	*							
	and others	62.90	0.04	62.94	62.90	0.04	62.94	Seoul
Pohang Scrap								
Recycling	a . 1 1							
Distribution Center	Steel processing and		51.00	51.00		51.00	51.00	Datasa
Co., Ltd.	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	Train manufacturing		100.00	100.00		100.00	100.00	Tonang
Co., Ltd	and management	100.00		100.00	100.00		100.00	Suncheon
Songdo Development						100.00	100.00	Incheon
PMC (Project	agency							
Management								

Company) LLC.								
POSPower Co.,	Generation of							
Ltd. ^(*1)	electricity		100.00	100.00				Samcheok
POCA STEM Co.,	Stem cell medicine							
Ltd.	development		100.00	100.00				Seoul
Kyobo Securities								
Bond Plus 6M								
Professional Private								
Equity Trust W-2	Private equity trust	97.47		97.47				Seoul
Mirae Asset Smart Q								
Sigma 2.0								
Professional Private								
Equity Trust	Private equity trust	99.01		99.01				Seoul
Kyobo Securities								
Bond Plus 6M								
Professional Private								
Equity Trust W-5	Private equity trust		99.67	99.67				Seoul
[Foreign]								
POSCO America								
Corporation	Steel trading	99.45	0.55	100.00	99.45	0.55	100.00	USA
POSCO	Raw material							
AUSTRALIA PTY	sales & mine							
LTD	development	100.00		100.00	100.00		100.00	Australia
POSCO Canada Ltd.	Coal sales		100.00	100.00		100.00	100.00	Canada
POSCAN Elkview	Coal sales		100.00	100.00		100.00	100.00	Canada
POSCO Asia Co.,	Steel and raw							
Ltd.	material trading	100.00		100.00	100.00		100.00	China
POSCO-CTPC Co.,	Steel manufacturing							
Ltd.	and sales	56.60	43.40	100.00	61.91	38.09	100.00	China
POSCO E&C	Steel structure							
Vietnam Co., Ltd.	manufacturing and		100.00	100.00		100.00	100.00	X 7 . .
	sales		100.00	100.00		100.00	100.00	Vietnam

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

	Principal	Decer	nber 31, 2		ship (%) Decer	nber 31, 2	018	
[Fourier]	operations	POSCOSu	ıbsidiaries	Total	POSCOS	ıbsidiaries	Total	Region
[Foreign] Zhangjiagang Pohang	Stainless steel							
Stainless Steel	manufacturing and							
Co., Ltd.	sales	58.60	23.88	82.48	58.60	23.88	82.48	China
POSCO(Guangdong)	Plating steel sheet							
Coated Steel Co., Ltd.	manufacturing and							
	sales	87.04	10.04	97.08	87.04	10.04	97.08	China
POSCO (Thailand)	Steel							
Company Limited	manufacturing and sales	88.58	11.42	100.00	88.58	11.42	100.00	Thailand
Myanmar POSCO	Zinc relief	00.30	11.42	100.00	00.30	11.42	100.00	Thananu
Steel Co., Ltd	manufacturing and							
Steel Co., Lta	sales	70.00		70.00	70.00		70.00	Myanmar
POSCO-MKPC SDN	Steel							,
BHD	manufacturing and							
	sales	44.69	25.31	70.00	44.69	25.31	70.00	Malaysia
Qingdao Pohang	Stainless steel							
Stainless Steel Co.,	manufacturing and							
Ltd.	sales	70.00	30.00	100.00	70.00	30.00	100.00	China
POSCO(Suzhou)	Steel							
Automotive Processing	sales	90.00	10.00	100.00	90.00	10.00	100.00	China
Center Co., Ltd. POSCO-China	Steel	90.00	10.00	100.00	90.00	10.00	100.00	China
Qingdao Processing	manufacturing and							
Center Co., Ltd.	sales		100.00	100.00		100.00	100.00	China
POS-ORE PTY LTD	Iron ore sales and							
	sales		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	100.05	100.00	100.00	100.0-	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 and sales	99.99		99.99	99.99		99.99	India
POSCO-India Pune Processing Center. Pvt. Ltd.	sales	65.00		65.00	65.00		65.00	India
POSCO Japan PC CO., LTD	manufacturing and sales		86.12	86.12		86.12	86.12	Japan
POSCO-CFPC Co., Ltd.	Steel manufacturing and sales	39.60	60.40	100.00	39.60	60.40	100.00	China
POSCO E&C CHINA Co., Ltd.	Civil engineering and construction		100.00	100.00		100.00	100.00	China
POSCO MPPC S.A. de C.V.	manufacturing and	21.02	75.00	06.01	21.02	75.00	06.01	
Zhangjigang Pohang	sales Loading and	21.02	75.29	96.31	21.02	75.29	96.31	Mexico
Port Co., Ltd. POSCO-VIETNAM	unloading service Steel		100.00	100.00		100.00	100.00	China
Co., Ltd.	manufacturing and sales	100.00		100.00	100.00		100.00	Vietnam
POSCO MEXICO S.A. DE C.V.	Automotive steel sheet manufacturing and							
	sales	84.84	15.16	100.00	83.28	14.88	98.16	Mexico
POSCO-Poland	Steel							
Wroclaw Processing Center Sp. z o. o.	manufacturing and sales	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 DAEWOO WAIGAIQIAO SHANGHAI CO.,	Intermediary trade & bonded warehouse							
LTD	operation		100.00	100.00		100.00	100.00	China
PT. Bio Inti Agrindo	Forest resources development		85.00	85.00		85.00	85.00	Indonesia

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

	Principal operations	Decer POSCOSu	nber 31, 2 Ibsidiaries	017		mber 31, 2 ubsidiaries		Region
[Foreign]	1							
POSCO ENGINEERING								
AND CONSTRUCTION								
AUSTRALIA	Iron ore							
(POSCO E&C	development and							
AUSTRALIA) PTY LTD	sales		100.00	100.00		100.00	100.00	Australia
POSCO-TISCO (JILIN)	Steel							
PROCESSING CENTER	manufacturing							
Co., Ltd.	and sales	50.00	10.00	60.00	50.00	10.00	60.00	China
POSCO Thainox Public	STS cold-rolled							
Company Limited	steel							
	manufacturing							
	and sales	84.88		84.88	84.66		84.66	Thailand
Hunchun Posco Hyundai	.		00.00	00.00		00.00	00.00	C 1 ·
Logistics	Logistics		80.00	80.00		80.00	80.00	China
POSCO DAEWOO			100.00	100.00		100.00	100.00	X 7 . 4
VIETNAM CO., LTD	Trading business		100.00	100.00		100.00	100.00	Vietnam
POSCO(Chongqing)	Steel							
Automotive Processing Center Co., Ltd.	manufacturing and sales	90.00	10.00	100.00	90.00	10.00	100.00	China
SUZHOU POSCO-CORE	Component	90.00	10.00	100.00	90.00	10.00	100.00	China
TECHNOLOGY CO.,	manufacturing							
LTD.	and sales		100.00	100.00		100.00	100.00	China
PT.Krakatau Posco	Quicklime		100.00	100.00		100.00	100.00	Ciina
Chemtech Calcination	manufacturing							
Chemiteen Calematon	and sales		80.00	80.00		80.00	80.00	Indonesia
POSCO AFRICA	und sures		00.00	00.00		00.00	00.00	maonesia
(PROPRIETARY)	Mine							South
LIMITED	development	100.00		100.00	100.00		100.00	Africa
POSCO ICT BRASIL	IT service and							
	engineering		100.00	100.00		100.00	100.00	Brazil
LA-SRDC	Scrap							
	manufacturing		100.00	100.00		100.00	100.00	USA
	Ŭ							

POSCO Center Beijing	Real estate development, rental and management		100.00	100.00		100.00	100.00	China
POSCO AMERICA	C							
COMERCIALIZADORA	Human resource							
S DE RL DE CV	service		100.00	100.00		100.00	100.00	Mexico
POSCO(Guangdong)	Steel							
Automotive Steel Co., Ltd.	-	00.64	10.00	00 (1	00 (1	10.00	00 (1	<u></u>
DOCCO Malania CDN	and sales	83.64	10.00	93.64	83.64	10.00	93.64	China
POSCO-Malaysia SDN. BHD.	Steel							
ыр.	manufacturing and sales	81.79	13.63	95.42	81.79	13.63	95.42	Malaysia
PT KRAKATAU BLUE	Wastewater	01.79	15.05	9J. 4 2	01.79	15.05	95.42	wiałay sia
WATER	treatment							
TTT DIC	facilities							
	operation and							
	maintenance		67.00	67.00		67.00	67.00	Indonesia
POSCO DAEWOO								
MYANMAR								
CORPORATION								
LIMITED	Trading business		100.00	100.00		100.00	100.00	Myanmar
POSCO-Italy Processing	Stainless steel							
Center	sheet							
	manufacturing and sales	90.00	10.00	00.00	00.00	10.00	00.00	T4 - 1
POSCO DAEWOO E&P	Crude oil and	80.00	10.00	90.00	80.00	10.00	90.00	Italy
CANADA	natural gas							
CORPORATION	mining		100.00	100.00		100.00	100.00	Canada
Myanmar POSCO C&C	Steel		100.00	100.00		100.00	100.00	Canada
Company, Limited.	manufacturing							
· · · · · · · · · · · · · · · · · · ·	and sales		70.00	70.00		70.00	70.00	Myanmar
			_			-	-	5

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

		Ownership (%) December 31, 2017 December 31, 2018					2018	
	Principal operations							Region
[Foreign]								0
POSCO ICT	IT service and electric							
VIETNAM	control engineering		100.00	100.00		100.00	100.00	Vietnam
Daewoo Global								
Development. Pte.,								
Ltd	Real estate development		81.51	81.51		81.51	81.51	Myanmar
Myanmar POSCO								
Engineering &								
Construction	Construction and							
Company, Limited.	engineering service		100.00	100.00		100.00	100.00	Myanmar
POS-Minerals	Mine development							
Corporation	management and sales		100.00	100.00		100.00	100.00	USA
POSCO(Wuhu)								
Automotive								
Processing Center	Steel manufacturing and							
Co., Ltd.	sales	68.57	31.43	100.00	68.57	31.43	100.00	China
POSCO								
Engineering and								
Construction India	Civil engineering and							
Private Limited	construction		100.00	100.00		100.00	100.00	India
POSCO COATED								
STEEL								
(THAILAND) CO.,	Automotive steel sheet							
LTD.	manufacturing and sales	100.00		100.00	100.00		100.00	Thailand
Daewoo Amara								
Company Limited	Real estate development		85.00	85.00		85.00	85.00	Myanmar
Daewoo Power and								
Infra (PTY) Limited	Electricity		100.00	100.00		100.00	100.00	South Africa
POSMATE-CHINA	Business facility							
CO., LTD	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
		56.75	10.00	66.75	56.75	10.00	66.75	Mexico

POSCO-Mexico Villagran Wire-rod Processing Center	Steel manufacturing and sales							
POSCO ChengDu Processing Center	Steel manufacturing and sales	33.00	10.00	43.00	33.00	10.00	43.00	China
POSCO SUZHOU PROCESSING								
CENTER CO., LTD.	Steel manufacturing and sales	30.00	70.00	100.00	30.00	70.00	100.00	China
POSCO E&C SMART S DE RL	Civil engineering and							
DE CV	construction		100.00	100.00		100.00	100.00	Mexico
POSCO Philippine Manila Processing	Staal manufacturing and							
Center, Inc.	Steel manufacturing and sales		100.00	100.00		100.00	100.00	Philippines
POSCO E&C	sales		100.00	100.00		100.00	100.00	1 mippines
HOLDINGS CO.,								
Ltd.	Holding company		100.00	100.00		100.00	100.00	Thailand
POSCO E&C								
(THAILAND) CO.,								
Ltd.	engineering		100.00	100.00		100.00	100.00	Thailand
Daewoo Power								Papua New
PNG Ltd.	Electricity production		100.00	100.00		100.00	100.00	Guinea
PT.Krakatau Posco	Conial automation		100.00	100.00		100.00	100.00	Indonesia
Social Enterprise Ventanas	Social enterprise		100.00	100.00		100.00	100.00	Indonesia
Philippines								
Construction Inc	Construction		100.00	100.00		100.00	100.00	Philippines
POSCO E&C	Construction and		100100	100100		100100	100100	1
Mongolia	engineering service		100.00	100.00		100.00	100.00	Mongolia
POSCO Gulf SFC	0 0							-
	Steel manufacturing and							United Arab

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

	Principal	Ownership (%) December 31, 2017 December 31, 2018						
	operations	POSCOSu				,		Region
[Foreign]								
SANPU TRADING	Raw material							
Co., Ltd.	trading		70.04	70.04		70.04	70.04	China
Zhangjiagang BLZ	~							
Pohang International	Steel Intermediate		100.00	100.00		100.00	100.00	C1 ·
Trading	trade		100.00	100.00		100.00	100.00	China
POSCO RU Limited	Trade and business	100.00		100.00	100.00		100.00	Dunain
Liability Company Golden Lace	development	100.00		100.00	100.00		100.00	Russia
DAEWOO Company								
Limited	Rice processing		60.00	60.00		60.00	60.00	Myanmar
POSCO ICT - China	IT service and DVR		00.00	00.00		00.00	00.00	iviyanna
	business		100.00	100.00		100.00	100.00	China
Pos-Sea Pte Ltd	Steel Intermediate							
	trade		100.00	100.00		100.00	100.00	Singapore
POSCO Europe Steel	Logistics & Steel							
Distribution Center	sales	50.00	20.00	70.00	50.00	20.00	70.00	Slovenia
POSCO								
ENGINEERING								
(THAILAND)	Construction and		100.00	100.00		100.00	100.00	m i ii i
CO., LTD.	engineering service		100.00	100.00		100.00	100.00	Thailand
POSCO VST CO.,	Stainless steel sheet							
LTD.	manufacturing and							
	manufacturing and sales	95.65		95.65	95.65		95.65	Vietnam
POSCO DAEWOO	Sales	95.05		95.05	95.05		95.05	v ictitalii
UKRAINE LLC	Grain sales		100.00	100.00		100.00	100.00	Ukraine
Zhangjiagang Pohang	Refractory materials		100.00	100.00		100.00	100.00	Chiume
Refractories Co., Ltd.	sales & furnace							
	maintenance		51.00	51.00		51.00	51.00	China
POSCO Maharashtra	Steel manufacturing							
Steel Private Limited	and sales	100.00		100.00	100.00		100.00	India
		93.34	1.98	95.32	93.34	1.98	95.32	India

POSCO INDIA HOLDINGS PRIVATE LIMITED	Steel manufacturing and sales							
POSCO TNPC								
Otomotiv Celik San.	Steel manufacturing							
Ve Tic. A.S	and sales	100.00		100.00	100.00		100.00	Turkey
POSCO VIETNAM	Steel manufacturing							
HOLDINGS CO., LTD	and sales	83.54	5.29	88.83	83.54	5.29	88.83	Vietnam
POSCO(Liaoning)								
Automotive Processing	e e							
Center Co., Ltd.	and sales	90.00	10.00	100.00	90.00	10.00	100.00	China
POSCO-Indonesia	~							
Jakarta Processing	Steel manufacturing	6 7 0 0	• • • • •	~~~~	(, , , , , , , , , ,	• • • • •	~ ~ ~ ~	.
Center	and sales	65.00	20.00	85.00	65.00	20.00	85.00	Indonesia
PT.MRI	Mine development	65.00		65.00	65.00		65.00	Indonesia
POSCO TMC INDIA	Steel manufacturing		100.00	100.00		100.00	100.00	T 11
PRIVATE LIMITED	and sales		100.00	100.00		100.00	100.00	India
POSCO-AAPC	Steel manufacturing		07.00	07.00		07.00	07.00	
	and sales		97.80	97.80		97.80	97.80	USA
POSCO(Yantai)	Ctaal manufaaturin a							
Automotive Processing	and sales	90.00	10.00	100.00	90.00	10.00	100.00	China
Center Co., Ltd. POSCO India Steel	and sales	90.00	10.00	100.00	90.00	10.00	100.00	China
Distribution Center								
Private Ltd.	Staal logistics		100.00	100.00		100.00	100.00	India
POSCO China Dalian	Steel logistics		100.00	100.00		100.00	100.00	muia
Plate Processing	Plate manufacturing							
Center Co., Ltd.	and sales	80.00	10.00	90.00	79.52	11.70	91.22	China
POSCO-South Asia	and sales	00.00	10.00	70.00	17.52	11.70	1.22	Ciina
Company Limited	Steel sales	100.00		100.00	100.00		100.00	Thailand
Company Linned	51001 50105	100.00		100.00	100.00		100.00	mananu

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

	Principal	Decen	nber 31, 20		ship (%) Decer	nber 31, 20	018	
	operations	POSCOSu			POSCOS	,		Region
[Foreign]								
POSCO SS VINA	Steel							
Co., Ltd	manufacturing and							
	sales	100.00		100.00	100.00		100.00	Vietnam
PT.POSCO ICT INDONESIA	IT service and							
INDONESIA	electric control		66.99	66.99		66.99	66.99	Indonesia
POSCO NCR Coal	engineering		00.99	00.99		00.99	00.99	Indonesia
Ltd.	Coal sales		100.00	100.00		100.00	100.00	Canada
POSCO WA PTY	Iron ore sales &		100.00	100.00		100.00	100.00	Cunudu
LTD	mine development	100.00		100.00	100.00		100.00	Australia
POSCO AUSTRALIA	-							
GP PTY LIMITED	development		100.00	100.00		100.00	100.00	Australia
POSCO DAEWOO								Papua
POWER (PNGPOM)								
LTD.	Electricity							New
	production		100.00	100.00		100.00	100.00	Guinea
PT. KRAKATAU	Electricity							
POSCO ENERGY	production construction and							
	operation		90.00	90.00		90.00	90.00	Indonesia
POSCO DAEWOO	operation		20.00	70.00		20.00	70.00	muonesia
AMERICA CORP.	Trading business		100.00	100.00		100.00	100.00	USA
POSCO DAEWOO	0							
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	Tradia a base		100.00	100.00		100.00	100.00	C:
PTE LTD. POSCO DAEWOO	Trading business		100.00	100.00		100.00	100.00	Singapore
ITALIA S.R.L.	Trading business		100.00	100.00		100.00	100.00	Italy
1171LIII ().IX.L.	Trading Susiness		100.00	100.00		100.00	100.00	itury

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.	Resource							
LTD.	development		100.00	100.00		100.00	100.00	Australia
POSCO MAURITIUS	Coal development		100.00	100.00		100.00	100.00	
LIMITED	and sales		100.00	100.00		100.00	100.00	Mauritius
PT. KRAKATAU	Steel							
POSCO	manufacturing and	70.00		70.00	70.00		70.00	T
POSCO DAEWOO	sales	/0.00		70.00	70.00		70.00	Indonesia
MEXICO S.A. de C.V.	Trading business		100.00	100.00		100.00	100.00	Mexico
Daewoo International	Trading business		100.00	100.00		100.00	100.00	MEXICO
Guangzhou Corp.	Trading business		100.00	100.00		100.00	100.00	China
POSCO DAEWOO	frading business		100.00	100.00		100.00	100.00	Cillia
MALAYSIA SDN								
BHD	Trading business		100.00	100.00		100.00	100.00	Malaysia
PT.POSCO			100100	100100		100100	100100	1.1414 514
INDONESIA INTI	Mine development	99.99		99.99	99.99		99.99	Indonesia
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
POSCO(Dalian) IT	Real estate							
Center Development	development and							
Co., Ltd.	investment		100.00	100.00		100.00	100.00	China

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

			mber 31,	2017		nber 31,		
[Foreign]	Principal operations	POSCOu	ibsidiarie	sTotal	POSCOU	ibsidiarie	es Total	Region
PT. POSCO E&C	Civil engineering and							
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
Brazil Sao Paulo								
Steel Processing								
Center	Steel manufacturing and sales		76.00	76.00		76.00	76.00	Brazil
DAESAN								
(CAMBODIA)	Real estate development and		100.00	100.00		100.00	100.00	
Co., Ltd.	investment		100.00	100.00		100.00	100.00	Cambodia
POSCO								
ENGINEERING & CONSTRUCTION								
DO BRAZIL								
LTDA.	Construction		100.00	100.00		100.00	100.00	Brazil
POSCO ASSAN	construction		100.00	100.00		100.00	100.00	Diuzii
TST STEEL								
INDUSTRY	Steel manufacturing and sales	60.00	10.00	70.00	60.00	10.00	70.00	Turkey
HONG KONG	C							5
POSCO E&C								
(CHINA)								
INVESTMENT	Real estate development and							
Co., Ltd.	investment		100.00	100.00		100.00	100.00	Hongkong
POS-LT Pty Ltd	Lithium mining investment					100.00	100.00	Australia
POSCO								
SINGAPORE LNG								
TRADING PTE.							100.00	~ .
LTD.	LNG trading				50.00	50.00	100.00	Singapore
ZHEJIANG								
POSCO-HUAYOU	Anodo motorial monufacturing				100.00		100.00	China
ESM CO., LTD	Anode material manufacturing				100.00		100.00	Argentina
					100.00		100.00	Argentina

POSCO Argentina S.A.U.	Mineral exploration/manufacturing/sales				
POSCO RUS LLC	Trading and business				
	development	90.00	10.00	100.00	Russia
POSCO-CDSFC	Steel structure manufacturing	50.20	49.80	100.00	China
POSCO MESDC	-				
S.A. DE C.V.	Logistics & Steel sales		56.80	56.80	Mexico
KIS Devonian					
Canada Corporation	Petroleum gas extraction		100.00	100.00	Canada
POSCO E&C	Civil engineering and				
VENEZUELA C.A.	construction		100.00	100.00	Venezuela
PT PEN					
INDONESIA	Construction		100.00	100.00	Indonesia
POSCO					
Engineering and	Civil engineering and				
Construction UZ	construction		100.00	100.00	Uzbekistan

(*1) Reclassified to associate from subsidiary during the year ended December 31, 2018.

The equity of controlling company increased by 16,288 million (POSCO DAEWOO Corporation, POSMATE and others) and decreased by 1,497 million (POSCO Gulf SFC LLC and others) in 2017 and 2018, 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 2016, 2017 and 2018 amounted to 75,830 million, 70,087 million and 100,862 million, respectively.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

As of December 31, 2018, 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.

(c) Details of non-controlling interest as of and for the years ended December 31, 2016, 2017 and 2018 are as follows:

1) December 31, 2016

	POSCO DAEWOO	PT. KRAKATAU		POSCO GINEERING NSTRUCTIO			
	Corporation	POSCO (CHEMTECH	CO., LTD. millions of W	CO., LTD.	Others	Total
Current assets Non-current	4,038,313	460,376	397,370	5,163,436	713,039	9,696,140	20,468,674
assets Current liabilities	4,510,085 (3,662,811)	3,304,292 (1,120,077)	243,401 (109,016)	1,710,398 (3,284,090)	3,038,665 (937,668)	7,749,277 (9,669,053)	20,556,118 (18,782,715)
Non-current liabilities Equity	(1,681,182) 3,204,405	(2,337,612) 306,979	(2,337) 529,418	(855,791) 2,733,953	(2,172,226) 641,810	(2,856,498) 4,919,866	(9,905,646) 12,336,431
Non-controlling interests Sales		92,094 1,244,711	211,767 1,076,455	1,290,450 5,352,395	514,200 1,657,890	945,962 23,251,563	4,326,223 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	(35,054)	,	(42,021)	(102,939)	(1,047)	(253,206)	(443,071)

Table of Contents

activities 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		67	1				
cash held Net increase	10	67	1	760		1,687	2,525
(decrease) in cash and cash	(15,520)	640	(17 701)	(240,114)	(10,102)	(1.021)	(202.000)
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, 2016, 2017 and 2018

2) December 31, 2017

	POSCO DAEWOO	PT. KRAKATAU		POSCO GINEERING NSTRUCTIO			
	Corporation	POSCO C	HEMTECH	,	CO., LTD.	Others	Total
Current assets	4,483,544	557,041	441,325	millions of W 4,878,251	on) 1,054,538	8,579,813	19,994,512
Non-current assets	4,590,394	2,771,504	316,724	2,444,616	2,859,824	6,676,559	19,659,621
Current liabilities	(4,221,443)	(1,237,255)	(145,649)	(3,896,680)	(785,462)	(8,313,902)	(18,600,391)
Non-current liabilities	(1,549,013)	(1,933,247)	(970)	(833,403)	(2,200,065)	(2,048,454)	(8,565,152)
Equity	3,303,482	158,043	611,430	2,592,784	928,835	4,894,016	12,488,590
Non-controlling interests	1,224,303	47,413	244,572	1,223,816	762,390	974,941	4,477,435
Sales Profit (loss) for	20,891,526	1,635,837	1,163,918	5,794,532	1,578,026	23,547,072	54,610,911
the period	115,321	(117,729)	101,019	169,011	70,795	258,053	596,470
Profit (loss) attributable to non-controlling interests	42,739	(35,318)	40,408	79,775	7,770	39,605	174,979
Cash flows from operating activities	128,875	(27,817)	20,042	(84,840)	30,295	140,418	206,973
Cash flows from investing		(5.500)	(10, (00))	(171.004)		((2) (21)	(2.10,002)
activities Cash flows from financing activities (before	(86,365) (19,295)	(5,502) 31,782	(18,699) 8	(171,924) 150,801	(2,792) 220,317	(63,621) (38,090)	(348,903) 345,523

Table of Contents

dividends to non-controlling interest)							
Dividend to							
non-controlling							
interest	(22,597)		(7,088)		(24,183)	(12,777)	(66,645)
Effect of exchange rate fluctuation on cash held	(459)	(147)	(6)	(3,541)		(15,532)	(19,685)
Net increase (decrease) in cash and cash	(+37)	(147)	(0)	(3,341)		(15,552)	(17,005)
equivalents	159	(1,684)	(5,743)	(109,504)	223,637	10,398	117,263

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

3) December 31, 2018

	POSCO	PT.		POSCO GINEERING			
	DAEWOO Corporation	KRAKATAU POSCO C	POSCOCO	NSTRUCTIO	NENERGY CO., LTD.	Others	Total
	Corporation	10500 0		millions of W	,	Others	Total
Current assets	5,311,596	615,491	416,284	4,100,967	825,241	9,137,798	20,407,377
Non-current							
assets	4,363,490	2,730,865	460,905	1,911,844	2,767,203	5,493,324	17,727,631
Current							
liabilities	(4,724,056)	(1,368,498)	(140,268)	(3,007,029)	(1,197,845)	(8,026,474)	(18,464,170)
Non-current							
liabilities	(1,563,107)	(1,754,797)	(10,767)	(608,089)	(1,445,288)	(1,925,084)	(7,307,132)
Equity	3,387,923	223,061	726,154	2,397,693	949,311	4,679,564	12,363,706
Non-controlling	1,255,728	66,918	290,461	1 121 722	335,203	020 506	4,009,549
interests Sales	23,314,595	1,871,634	1,340,984	1,131,733 6,799,292	1,841,187	929,506 24,721,939	4,009,549 59,889,631
Profit (loss) for	25,514,595	1,0/1,034	1,340,964	0,799,292	1,041,107	24,721,939	39,009,031
the period	113,196	54,257	142,918	290,131	(73,948)	(56,151)	470,403
Profit (loss)	115,190	51,257	112,910	290,191	(75,710)	(50,151)	170,105
attributable to							
non-controlling							
interests	41,956	16,277	57,167	136,944	(8,116)	(101,156)	143,072
Cash flows						× · · ·	
from operating							
activities	(61,173)	89,131	29,865	207,729	16,211	14,869	296,632
Cash flows							
from investing							
activities	(12,780)	(6,432)	(15,801)	272,230	35,460	(13,199)	259,478
Cash flows from financing	99,496	(82,295)		(400,499)	(71,378)	(16,094)	(470,770)
activities							
(before							

Table of Contents

dividends to non-controlling interest)							
Dividend to							
non-controlling							
interest	(22,862)		(8,270)		(19,813)	(6,906)	(57,851)
Effect of exchange rate fluctuation on	907	21	(17)	1 257		1.(22	2 750
cash held	807	21	(17)	1,257		1,682	3,750
Net increase (decrease) in cash and cash							
equivalents	3,488	425	5,777	80,717	(39,520)	(19,648)	31,239

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(d) Details of associates and joint ventures

1) Associates

Details of associates as of December 31, 2017 and 2018 are as follows:

Investee	Category of business	Owners 2017	hip (%) 2018	Region
[Domestic]				
New Songdo International City Development,				
LLC	Real estate rental	29.90	29.90	Seoul
Gale International Korea, LLC	Real estate rental	29.90	29.90	Seoul
SNNC	Raw material manufacturing			
	and sales	49.00	49.00	Gwangyang
KONES, Corp.	Technical service	41.67	41.67	Gyeongju
CHUNGJU ENTERPRISE CITY				
DEVELOPMENT Co., Ltd	Real estate development	29.53	29.53	Chungju
DAEHO GLOBAL MANAGEMENT CO.,				
LTD.	Investment advisory service	35.82	35.82	Pohang
Mokpo Deayang Industrial Corporation	Real estate development and			
	rental	27.40	27.40	Mokpo
Gunggi Green Energy (*1)	Electricity generation	19.00	19.00	Hwaseong
Pohang Special Welding Co., Ltd.	Welding material and tools			
	manufacturing and sales	50.00	50.00	Pohang
KoFC POSCO HANWHA KB Shared Growth				
NO. 2. Private Equity Fund (*1)	Investment in new technologies	12.50	12.50	Seoul
EQP POSCO Global NO1 Natural Resources				
Private Equity Fund	Investment in new technologies	31.14	31.27	Seoul
KC Chemicals CORP. ^(*1)	Machinery manufacturing	19.00	19.00	Hwaseong
Garolim Tidal Power Plant Co., Ltd	Tidal power plant construction			
	and management	32.13	32.13	Seosan
POSTECH Social Enterprise Fund (*1)	Investment in new technologies	9.17	9.17	Seoul
QSONE Co., Ltd.	Real estate rental and facility			
	management	50.00	50.00	Seoul

Keystone NO. 1 Private Equity FundPrivate equity financial40.4540.45SeoulNoeul Green Energy (*1)Electricity generation10.0010.00SeoulPosco-IDV Growth Ladder IP Fund (*1)Investment in new technologies17.8617.86SeoulDaesung Steel (*1)Steel sales17.5417.54BusanPohang E&E Co., LTDInvestment in waste energy30.0030.00PohangPOSCO Energy Valley FundInvestment in new technologies20.0020.00Pohang2016 PoscoPlutus New technology FundInvestment in new technologies25.1725.17SeoulHyundai Invest Guggenheim CLO QualifiedInvestment in new technologies38.4738.47SeoulPoscoPlutus Bio Fund (*1)Investment in new technologies11.9711.97SeoulPosco Agri-Food Export FundInvestment in new technologies30.0030.00SeoulPoscoPlutus Project Fund (*1)Investment in new technologies30.0030.00SeoulPoscoPlutus Project Fund (*1)Investment in new technologies11.9111.91SeoulPoscoPlutus Project Fund (*1)Investment in new technologies30.0030.00SeoulPoscoPlutus Project Fund (*1)Investment in new technologies30.0030.00SeoulPoscoPlutus Project 2nd Project Fund (*1)Investment in new technologies30.0030.00Seoul	Chun-cheon Energy Co., Ltd	Electricity generation	45.67	45.67	Chuncheon
Noeul Green Energy (*1)Electricity generation10.0010.00SeoulPosco-IDV Growth Ladder IP Fund (*1)Investment in new technologies17.8617.86SeoulDaesung Steel (*1)Steel sales17.5417.54BusanPohang E&E Co., LTDInvestment in waste energy30.0030.00PohangPOSCO Energy Valley FundInvestment in new technologies20.0020.00Pohang2016 PoscoPlutus New technology FundInvestment in new technologies25.1725.17SeoulHyundai Invest Guggenheim CLO QualifiedInvestment in new technologies38.4738.47SeoulPoscoPlutus Bio Fund (*1)Investment in new technologies11.9711.97SeoulPoscoPlutus Project Fund (*1)Investment in new technologies30.0030.00SeoulPoscoPlutus Project Fund (*1)Investment in new technologies30.0030.00SeoulPoscoPlutus Project 2nd Project Fund (*1)Investment in new technologies0.610.61Seoul			40.45	40.45	Seoul
Posco-IDV Growth Ladder IP Fund (*1)Investment in new technologies17.8617.86SeoulDaesung Steel (*1)Steel sales17.5417.54BusanPohang E&E Co., LTDInvestment in waste energy30.0030.00PohangPOSCO Energy Valley FundInvestment in new technologies20.0020.00Pohang2016 PoscoPlutus New technology FundInvestment in new technologies25.1725.17SeoulHyundai Invest Guggenheim CLO QualifiedInvestment in new technologies38.4738.47SeoulPoscoPlutus Bio Fund (*1)Investment in new technologies11.9711.97SeoulPosco Agri-Food Export Fund (*1)Investment in new technologies30.0030.00SeoulPoscoPlutus Project 2nd Project Fund (*1)Investment in new technologies0.610.61Seoul			10.00	10.00	Seoul
Pohang E&E Co., LTDInvestment in waste energy30.0030.00PohangPOSCO Energy Valley FundInvestment in new technologies20.0020.00Pohang2016 PoscoPlutus New technology FundInvestment in new technologies25.1725.17SeoulHyundai Invest Guggenheim CLO QualifiedInvestment in new technologies38.4738.47SeoulPrivate Special Asset Trust No.2Investment in new technologies31.9711.97SeoulPoscoPlutus Bio Fund (*1)Investment in new technologies11.9111.91SeoulPosco Agri-Food Export FundInvestment in new technologies30.0030.00SeoulPoscoPlutus Project 2nd Project Fund (*1)Investment in new technologies0.610.61Seoul		• •	17.86	17.86	Seoul
POSCO Energy Valley FundInvestment in new technologies20.0020.00Pohang2016 PoscoPlutus New technology FundInvestment in new technologies25.1725.17SeoulHyundai Invest Guggenheim CLO QualifiedInvestment in new technologies38.4738.47SeoulPrivate Special Asset Trust No.2Investment in new technologies11.9711.97SeoulPoscoPlutus Bio Fund (*1)Investment in new technologies11.9111.91SeoulPosco Agri-Food Export FundInvestment in new technologies30.0030.00SeoulPoscoPlutus Project 2nd Project Fund (*1)Investment in new technologies0.610.61Seoul	Daesung Steel ^(*1)	Steel sales	17.54	17.54	Busan
2016 PoscoPlutus New technology Fund Hyundai Invest Guggenheim CLO QualifiedInvestment in new technologies25.1725.17SeoulPrivate Special Asset Trust No.2Investment in new technologies38.4738.47SeoulPoscoPlutus Bio Fund (*1)Investment in new technologies11.9711.97SeoulPoscoPlutus Project Fund (*1)Investment in new technologies11.9111.91SeoulPosco Agri-Food Export FundInvestment in new technologies30.0030.00SeoulPoscoPlutus Project 2nd Project Fund (*1)Investment in new technologies0.610.61Seoul	Pohang E&E Co., LTD	Investment in waste energy	30.00	30.00	Pohang
Hyundai Invest Guggenheim CLO QualifiedPrivate Special Asset Trust No.2Investment in new technologies38.4738.47SeoulPoscoPlutus Bio Fund (*1)Investment in new technologies11.9711.97SeoulPoscoPlutus Project Fund (*1)Investment in new technologies11.9111.91SeoulPosco Agri-Food Export FundInvestment in new technologies30.0030.00SeoulPoscoPlutus Project 2nd Project Fund (*1)Investment in new technologies0.610.61Seoul	POSCO Energy Valley Fund	Investment in new technologies	20.00	20.00	Pohang
Private Special Asset Trust No.2Investment in new technologies38.4738.47SeoulPoscoPlutus Bio Fund (*1)Investment in new technologies11.9711.97SeoulPoscoPlutus Project Fund (*1)Investment in new technologies11.9111.91SeoulPosco Agri-Food Export FundInvestment in new technologies30.0030.00SeoulPoscoPlutus Project 2nd Project Fund (*1)Investment in new technologies0.610.61Seoul	2016 PoscoPlutus New technology Fund	Investment in new technologies	25.17	25.17	Seoul
PoscoPlutus Bio Fund (*1)Investment in new technologies11.9711.97SeoulPoscoPlutus Project Fund (*1)Investment in new technologies11.9111.91SeoulPosco Agri-Food Export FundInvestment in new technologies30.0030.00SeoulPoscoPlutus Project 2nd Project Fund (*1)Investment in new technologies0.610.61Seoul	Hyundai Invest Guggenheim CLO Qualified				
PoscoPlutus Project Fund (*1)Investment in new technologies11.9111.91SeoulPosco Agri-Food Export FundInvestment in new technologies30.0030.00SeoulPoscoPlutus Project 2nd Project Fund (*1)Investment in new technologies0.610.61Seoul	Private Special Asset Trust No.2	Investment in new technologies	38.47	38.47	Seoul
Posco Agri-Food Export FundInvestment in new technologies30.00SeoulPoscoPlutus Project 2nd Project Fund (*1)Investment in new technologies0.610.61Seoul	PoscoPlutus Bio Fund (*1)	Investment in new technologies	11.97	11.97	Seoul
PoscoPlutus Project 2nd Project Fund (*1)Investment in new technologies0.610.61Seoul	PoscoPlutus Project Fund (*1)	Investment in new technologies	11.91	11.91	Seoul
	Posco Agri-Food Export Fund	Investment in new technologies	30.00	30.00	Seoul
	PoscoPlutus Project 2nd Project Fund (*1)	Investment in new technologies	0.61	0.61	Seoul
Posco Culture Contents Fund Investment in new technologies 31.67 31.67 Seoul	Posco Culture Contents Fund	Investment in new technologies	31.67	31.67	Seoul
PCC_Centroid 1st Fund Investment in new technologies 24.10 24.10 Seoul	PCC_Centroid 1st Fund	Investment in new technologies	24.10	24.10	Seoul
PCC Amberstone Private Equity Fund 1 ^(*1) Investment in new technologies 9.71 8.80 Seoul	PCC Amberstone Private Equity Fund 1 ^(*1)	Investment in new technologies	9.71	8.80	Seoul
UITrans LRT Co., Ltd. Transporting 38.19 Seoul	UITrans LRT Co., Ltd.	Transporting	38.19	38.19	Seoul
POSCO Advanced Technical Staff Fund ^(*1) Investment in new technologies 15.87 15.87 Seoul	POSCO Advanced Technical Staff Fund (*1)	Investment in new technologies	15.87	15.87	Seoul
POSCO 4th Industrial Revolution Fund (*1)Investment in new technologies20.0019.05Seoul	POSCO 4th Industrial Revolution Fund (*1)	Investment in new technologies	20.00	19.05	Seoul
Clean Gimpo Co., Ltd. Construction 29.58 29.58 Gimpo	Clean Gimpo Co., Ltd.	Construction	29.58	29.58	Gimpo
Incheon-Gimpo Expressway Co., Ltd. ^(*1) Construction 18.26 18.26 Anyang	Incheon-Gimpo Expressway Co., Ltd. (*1)	Construction	18.26	18.26	Anyang
Pureun Tongyeong Enviro Co., Ltd.Sewerage treatment20.4020.40Tongyeong	Pureun Tongyeong Enviro Co., Ltd.	Sewerage treatment	20.40	20.40	Tongyeong
Pure Gimpo Co., Ltd.Construction28.7928.79Seoul	Pure Gimpo Co., Ltd.	Construction	28.79	28.79	Seoul
POSCO PLANTEC Co., Ltd. (*2)Construction of industrial plant73.9473.94Ulsan	POSCO PLANTEC Co., Ltd. (*2)	Construction of industrial plant	73.94	73.94	Ulsan
Postech Early Stage Fund (*1)Investment in new technologies10.0010.00Pohang	Postech Early Stage Fund (*1)	Investment in new technologies	10.00	10.00	Pohang
Posgreen Co., Ltd. (*1)Lime and plaster manufacturing19.0019.00Gwangyang	Posgreen Co., Ltd. ^(*1)	Lime and plaster manufacturing	19.00	19.00	Gwangyang

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

Investee	Category of business	Owners 2017	hip (%) 2018	Region
[Domestic]				8
Clean Iksan Co., Ltd.	Construction	23.50	23.50	Iksan
Innovalley Co., Ltd.	Real estate development	28.77	28.77	Yongin
Applied Science Corp.	Machinery manufacturing	23.87	22.89	Paju
Pohang Techno Valley PFV Corporation (*3)	Real estate development, supply			
	and rental	57.39	57.39	Pohang
BLUE OCEAN Private Equity Fund	Private equity financial	27.52	27.52	Seoul
Western Inland highway CO., LTD. (*4)	Construction		27.50	Incheon
Metropolitan Outer Ring Expressway co., ltd. (*4)	Investment in Expressway		47.58	Incheon
IT ENGINEERING CO., LTD. (*1,4)	Vehicle engineering		10.84	Seoul
PCC Bio 1ST Fund (*1,4)	Investment in new technologies		13.46	Seoul
INNOPOLIS Job Creation Fund II (*1,4)	Investment in new technologies		6.43	Seoul
POSPower Co., Ltd. ^(*5)	Generation of electricity		34.00	Samcheok
INKOTECH, INC. ^(*1,4)	Electricity generation and sales		10.00	Seoul
PCC Social Enterprise Fund II (*1,4)	Investment in venture			
	companies		16.67	Seoul
PCC Amberstone Private Equity Fund II (*1,4)	Private equity trust		19.70	Seoul
Synapse Fund ^(*1,4)	6		16.26	Seoul
NEXTRAIN Co., Ltd (*4)	Service maintenance and			
	management		32.00	Incheon
TK CHEMICAL CORPORATION (*1,4)	Chemical		8.80	Daegu
Hanil-Daewoo Cement Co., Ltd. (*1,4)	Cement		15.00	Incheon
Pohang Techno Valley AMC ^(*6)	Construction	29.50		Pohang
[Foreign]		7 0.00	50.00	¥ 71 .
VSC POSCO Steel Corporation	Steel processing and sales	50.00	50.00	Vietnam
POSCHROME (PROPRIETARY) LIMITED	Raw material manufacturing and sales	50.00	50.00	South Africa
CAML RESOURCES PTY LTD	Raw material manufacturing			
	and sales	33.34	33.34	Australia
Nickel Mining Company SAS	Raw material manufacturing	49.00	49.00	New
	and sales			Caledonia
PT. Wampu Electric Power	Construction and civil			
	engineering	20.00	20.00	Indonesia
	Steel processing and sales	20.00	20.00	China

POSK (Pinghu) Steel Processing Center Co., Ltd.

Ltd.				
PT.INDONESIA POS CHEMTECH CHOSUN	Refractory manufacturing and			
Ref	sales	30.19	30.19	Indonesia
NS-Thainox Auto Co., Ltd.	Steel manufacturing and sales	49.00	49.00	Vietnam
Zhongyue POSCO (Qinhuangdao) Tinplate	Tinplate manufacturing and			
Industrial Co., Ltd	sales	34.00	34.00	China
PT. Tanggamus Electric Power ^(*1)	Construction and civil			
	engineering	17.50	17.50	Indonesia
LLP POSUK Titanium	Titanium manufacturing and			
	sales	36.83	36.83	Kazakhstan
LI3 ENERGY INC	Resource development	26.06	26.06	Peru
IMFA ALLOYS FINLEASE LTD	Raw material manufacturing			
	and sales	24.00	24.00	India
KRAKATAU POS-CHEM DONG-SUH CHEMICAL (*1)	Chemical by-product			
	manufacturing and sales	19.00	19.00	Indonesia
7623704 Canada Inc. ^(*1)	Investments management	10.40	10.40	Canada
Hamparan Mulya	Resource development	45.00	45.00	Indonesia
POS-SEAH STEEL WIRE (TIANJIN) CO., Ltd.	Steel manufacturing and sales	25.00	25.00	China
Eureka Moly LLC	Raw material manufacturing			
	and sales	20.00	20.00	USA
PT. Batutua Tembaga Raya	Raw material manufacturing			
	and sales	22.00	22.00	Indonesia
KIRIN VIETNAM CO., LTD (*1)	Panel manufacturing	19.00	19.00	Vietnam
POSCO SeAH Steel Wire (Nantong) Co., Ltd.	Steel processing and sales	25.00	25.00	China
POS-SeAH Steel Wire (Thailand) Co., Ltd.	Steel manufacturing and sales	25.00	25.00	Thailand
Jupiter Mines Limited ^(*1)	Resource development	17.06	6.93	Australia
SAMHWAN VINA CO., LTD ^(*1)	Steel manufacturing and sales	19.00	19.00	Vietnam
JB CLARK HILLS	Construction	25.00	25.00	Philippines
Saudi-Korean Company for Maintenance				Saudi
Properties Management LLC (*1)	Building management	19.00	19.00	Arabia
Sebang Steel	Scrap sales	49.00	49.00	Japan

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

		Ownership (%)		
Investee	Category of business	2017	2018	Region
[Foreign]				
NCR LLC	Coal sales	29.41	29.41	Canada
AMCI (WA) PTY LTD	Iron ore sales & mine			
	development	49.00	49.00	Australia
SHANGHAI LANSHENG DAEWOO CORP.	Trading	49.00	49.00	China
SHANGHAI WAIGAOQIAO FREE TRADE	-			
ZONE LANSHENG DAEWOO IN L TRADING				
CO., LTD.	Trading	49.00	49.00	China
General Medicines Company Ltd.	Medicine manufacturing and			
	sales	33.00	33.00	Sudan
KOREA LNG LTD.	Gas production and sales	20.00	20.00	England
AES-VCM Mong Duong Power Company	-			-
Limited	Electricity generation	30.00	30.00	Vietnam
KG Power(M) SDN. BHD	Resource development	20.00	20.00	Malaysia
South-East Asia Gas Pipeline Company Ltd.	Pipeline construction and			
	management	25.04	25.04	Myanmar
GLOBAL KOMSCO Daewoo LLC	Cotton celluloid manufacturing			
	and sales	35.00	35.00	Uzbekistan
POSCO-Poggenamp Electrical Steel Pvt. Ltd.	Steel processing and sales	26.00	26.00	India
Qingdao Pohang DGENX Stainless SteelPipeCo.,	· · ·			
Ltd ^(*4)	Exhaust meter manufacturing		40.00	China
SHINPOONG DAEWOO PHARMA VIETNAM	C			
CO., LTD ^(*1,4)	Medicine production		3.42	Vietnam
ERAE Automotive Systems Mexico, S. DE R.L.	Automobile parts			
DE C.V (*1,4)	manufacturing		7.65	Mexico

(*1) Considering the composition of board of directors, the Company is able to exercise significant influence even though the Company s percentage of ownership is below 20%.

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 associate.

- (*3) Considering the composition of board of directors, the Company does not have control and classified its shares as investment in an associate, even though the Company s percentage of ownership is over 50%.
- (*4) These associates were newly established or acquired in 2018.
- (*5) Reclassified to associate from subsidiary during the year ended December 31, 2018.

(*6) Excluded from associates due to liquidation during the year ended December 31, 2018.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

2) Joint ventures

Details of joint ventures as of December 31, 2017 and 2018 are as follows:

		Ownership (%)		
Investee	Category of business	2017	2018	Region
[Domestic]				
POSCO MITSUBISHI CARBON				
TECHNOLOGY	Steel processing and sales	60.00	60.00	Gwangyang
POSCO-SGI Falcon Pharmaceutic Bio Secondary				
Fund 1	Investment in new technologies	24.55	24.55	Seoul
POSCO-KB Shipbuilding Restructuring Fund	Investment in new technologies	18.75	18.75	Seoul
POSCO-NSC Venture Fund	Investment in new technologies	16.67	16.67	Seoul
PoscoPlutus Project 3rd Project fund	Investment in new technologies	5.96	5.96	Seoul
PCC Bio 2nd Fund ^(*1)	Investment in new technologies		19.72	Seoul
PCC Material 3rd Fund ^(*1)	Investment in new technologies		2.38	Seoul
PCC L&K IST FUND (*2)	Investment in new technologies	10.00		Seoul
[Foreign]				
KOBRASCO	Steel materials manufacturing			
	and sales	50.00	50.00	Brazil
USS-POSCO Industries	Cold-rolled steel manufacturing			
	and sales	50.00	50.00	USA
PT. POSMI Steel Indonesia	Steel processing and sales	36.69	36.69	Indonesia
United Spiral Pipe, LLC	Material manufacturing and sales	35.00	35.00	USA
CSP Compania 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
POSCO-SAMSUNG-Slovakia Processing Center	Steel processing and sales	30.00	30.00	Slovakia
VNS-DAEWOO Co., Ltd.	Steel scrap processing and sales	40.00	50.00	Vietnam
YULCHON MEXICO S.A. DE C.V.	Tube for automobile			
	manufacturing	19.00	19.00	Mexico
Hyunson Engineering & Construction HYENCO	Construction	4.90	4.89	Algeria
POSCO E&C Saudi Arabia	Civil engineering and	40.00	40.00	Saudi
	construction			Arabia

Pos-Austem Suzhou Automotive Co., Ltd	Automotive parts manufacturing	19.90	19.90	China
POS-InfraAuto (Suzhou) Co., Ltd	Automotive parts manufacturing	16.20	16.20	China
POS-AUSTEM YANTAI AUTOMOTIVE CO.,				
LTD	Automotive parts manufacturing	11.10	11.10	China
POS-AUSTEM WUHAN AUTOMOTIVE CO.,				
LTD	Automotive parts manufacturing	13.00	13.00	China
Kwanika Copper Corporation	Energy & resource development	35.00	35.00	Canada
DMSA/AMSA	Energy & resource development	4.00	4.00	Madagascar
Roy Hill Holdings Pty Ltd	Energy & resource development	12.50	12.50	Australia
POSCO-NPS Niobium LLC	Mine development	50.00	50.00	USA
Korea Siberia Wood CJSC (*3)	Forest resource development	50.00		Russia

(*1) These joint ventures were newly established in 2018.

(*2)Excluded from joint ventures due to liquidation during the year ended December 31, 2018.

(*3)Excluded from joint ventures due to the disposal of shares during the year ended December 31, 2018.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(e) Newly included subsidiaries

Consolidated subsidiaries acquired or newly established during the year ended December 31, 2018 are as follows:

Company	Date of addition	Ownership (%)	Reason
POS-LT PTY LTD	March 2018	100.00	New establishment
POSCO SINGAPORE LNG TRADING PTE.			
LTD.	June 2018	100.00	New establishment
ZHEJIANG POSCO-HUAYOU ESM CO.,			
LTD	June 2018	100.00	New establishment
POSCO Argentina S.A.U.	October 2018	100.00	New establishment
Songdo Development PMC (Project			
Management Company) LLC.	October 2018	100.00	New establishment
(f) Excluded subsidiaries			

Subsidiaries that were excluded from consolidation during the year ended December 31, 2018 are as follows:

Company	Date of exclusion	Reason
KIS Devonian Canada Corporation	February 2018	Merged into POSCO DAEWOO E&P CANADA CORPORATION
POSCO-CDSFC	February 2018	Merged into POSCO China Dalian Plate Processing Center Co., Ltd.
POCA STEM Co., Ltd.	March 2018	Liquidation
POSCO E&C VENEZUELA C.A.	March 2018	Liquidation
PT PEN INDONESIA	March 2018	Merged into PT. POSCO E&C INDONESIA
Kyobo Securities Bond Plus 6M		
Professional Private Equity Trust W-2	April 2018	Disposal
Mirae Asset Smart Q Sigma 2.0		
Professional Private Equity Trust	May 2018	Disposal
Kyobo Securities Bond Plus 6M		
Professional Private Equity Trust W-5	May 2018	Disposal
POSCO RUS LLC	May 2018	Liquidation

POSPower Co., Ltd.	July 2018	Reclassification to an associate upon loss of control due to a decline in ownership
POSCO MESDC S.A. DE C.V.	August 2018	Merged into POSCO MEXICO S.A. DE C.V.
POSCO Engineering and Construction	-	-
UZ	November 2018	Liquidation

2. 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 7, 2019.

In 2018, the Company adopted IFRS No. 15 Revenue from Contracts with Customers and IFRS No. 9 Financial Instruments for the first time. Changes to significant accounting policies are described in Note 2 Changes in Accounting Policies .

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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 measured at fair value
- (b) Financial instruments measured at fair value through profit or loss
- (c) Financial instruments measured at fair value through other comprehensive income
- (d) Financial instruments at fair value through profit or loss
- (e) Available-for-sale financial assets measured at fair value
- (f) Defined benefit liabilities 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 11 Investments in associates and joint ventures

Note 12 Joint operations

Note 25 Hybrid bonds

(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 14 Property, plant and equipment, net

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

- Note 15 Goodwill and other intangible assets, net
- Note 20 Provisions
- Note 21 Employee benefits
- Note 23 Financial instruments
- Note 29 Revenue contract balances
- 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

Table of Contents

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 Changes in Accounting Policies

The Company has initially adopted IFRS No. 15 Revenue from Contracts with Customers and IFRS No. 9 Financial Instruments from January 1, 2018. The other accounting standards adopted from January 1, 2018 had no significant effect on the Company s consolidated financial statements.

<u>Table of Contents</u> POSCO and Subsidiaries Notes to the Consolidated Financial Statements, Continued As of December 31, 2016, 2017 and 2018

The effect of initially applying IFRS No. 15 and IFRS No. 9 is mainly attributable to the following:

identify the shipping services included in certain sales contracts as a separate performance obligation

determine separate construction contracts such as design, purchase and construction services which are highly dependent or correlated as a single performance obligation

estimate variable consideration such as sales discount and price adjustments based on performance

change in the method of revenue recognition from service contracts without enforceable right to payment for performance completed

change in percentage of completion due to excessive use of materials

recognize as an expense immediately of prepaid contract cost unless those costs are explicitly chargeable to the customers regardless of whether the contract is obtained

change in classification and subsequent measurement of financial assets

change in timing of recognition of impairment loss on financial assets

(a) IFRS No. 15 Revenue from Contracts with Customers

IFRS No. 15 Revenue from Contracts with Customers provides a unified five-step model for determining the timing, measurement and recognition of revenue. It replaced previous 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 applied the modified retrospective approach by recognizing the cumulative impact of initially applying the revenue standard as of January 1, 2018, the date of initial application, and the Company also decided to apply the practical expedients as allowed by IFRS No. 15 by applying the new standard only to those contracts that are not considered as completed contracts at the date of initial application. Accordingly, the Company did not restate the financial statements for comparative periods.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

The following table summarizes the impact, net of tax, of transition to IFRS No. 15 on retained earnings and non-controlling interests as of January 1, 2018.

	Retained earnings (in millio	Non-controlling interests ons of Won)
Shipping services included in the sales contract	(949)	(156)
Separate construction contract determined to be a single performance		
obligation	452	628
Variable consideration for sales discounts and price adjustments based		
on performance	(2,613)	172
Change in revenue recognition method for contracts without		
enforceable right to payment	(1,189)	(1,115)
Change in percentage of completion due to excessive use of materials	(2,855)	(1,512)
Recognize prepaid contract cost as an expense	(63,753)	(56,993)
	(70,907)	(58,976)

The details of new significant accounting policies and impacts of the adoption of IFRS No. 15 are as follows:

1) Identification of performance obligations

The Company holds certain contracts for sales of manufactured product and merchandise which include transport service. When applying IFRS No. 15, sales of manufactured products or merchandise and delivery of products (i.e. shipping service) are identified as separate performance obligations in the contracts with customers. For transactions for which the shipping terms are on shipment basis and the customer pays shipping costs, the two performance obligations are separately accounted for because delivery of products is performed after the control over the products is transferred to the customer. The transaction price allocated to the performance obligation of delivery service is recognized when the obligation of delivery of the product is completed.

The Company identified shipping service included in the sales contract as a separate performance obligation that will be satisfied over the promised service period. This change in relevant accounting policy resulted in decreases in revenue and cost of sales, increases in other current assets and contract liabilities and decrease in other payables as of

Table of Contents

and for the year ended December 31, 2018.

In addition, the Company presented costs incurred in the shipping services in cost of sales from January 1, 2018, which were previously presented in selling and administrative expenses.

Certain construction contracts of the Company include design, purchase and construction services through separate service contracts. According to IFRS No. 15, if service or goods provided by the Company are highly dependent or correlated, the Company should identify them as a single performance obligation regardless of the number of contracts made.

The Company considered these service contracts as a combined single obligation and identified as a single performance obligation. This change in accounting policy resulted

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

in decreases in revenue and contract assets as of and for the year ended December 31, 2018.

2) Variable consideration

Under IFRS No. 15, the Company estimates the amount of variable consideration by using the expected value which the Company expects to better predict the amount of consideration. The Company recognizes revenue with transaction price including variable consideration 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 refund period has lapsed.

In certain sales arrangements, unit price is subject to adjustment due to quality issues of products. A certain percentage of sales discount is also provided in case customers make payment before the settlement due date. In addition, certain service contracts are subject to compensation payment if the Company fails to achieve a promised level of obligation.

The Company changed its accounting treatment regarding variable consideration in accordance with IFRS No. 15. This change in relevant accounting policy resulted in decrease in revenue and increase in contract liabilities as of and for the year ended December 31, 2018.

3) Performance obligation satisfied over time

In accordance with IFRS No. 15, revenue is recognized over time by measuring progress only if the Company s performance does not create an asset with an alternative use to the Company and the Company has an enforceable right to payment for performance completed to date.

The Company has determined that it has no enforceable right to payment for performance completed to date for certain service contracts. This change in relevant accounting policy resulted in increases in revenue and cost of sales and increases in inventories, contract assets and contract liabilities as of and for the year ended December 31, 2018.

According to IFRS No. 15, the effects of any inputs that do not depict the transfer of control of goods or services to the customer such as the costs of wasted materials, labor or other resources to fulfill the contract that were not reflected in the price of the contract should be excluded from calculating percentage of completion. This change in relevant accounting policy resulted in increase in revenue and decreases in contract assets and liabilities as of and for the year ended December 31, 2018.

4) Incremental costs of obtaining a contract

In accordance with IFRS No. 15, the Company recognizes as an asset the incremental costs of obtaining a contract with a customer if the Company expects to recover those costs, and costs that are recognized as assets are amortized over the period that the related goods or services are transferred to the customer.

Certain costs incurred in construction segment such as costs to obtain a contract that would have been incurred regardless of whether the contract was obtained is

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

recognized as an expense immediately, unless those costs are explicitly chargeable to the customer regardless of whether the contract is obtained. Such costs have been previously capitalized if it is probable the related contracts will be entered into. This change in relevant accounting policy resulted in decrease in cost of sales, increases in revenue, selling and administrative expenses and finance costs, decreases in contract assets, other current assets and contract liabilities and increase in provisions as of and for the year ended December 31, 2018.

5) Impact of changes in accounting policies

The effects of adoption of IFRS No. 15 to the Company s consolidated statements of financial position and consolidated statements of comprehensive income as of and for the year ended December 31, 2018 are as follows. There is no material impact on the Company s consolidated statement of cash flows for the year ended December 31, 2018.

	As reported	Adjustments of IFRS No. 15 (in millions of Won)	Amounts without IFRS No. 15
Consolidated financial statements of financial			
position			
Current assets	34,151,972	193,400	34,345,372
Trade accounts and notes receivable	9,130,204	86,293	9,216,497
Inventories	12,153,303	6,584	12,159,887
Other current assets	684,464	100,523	784,987
Non-current assets	44,625,019	(41,589)	44,583,430
Deferred tax assets	1,408,787	(41,589)	1,367,198
Current liabilities	19,430,577	21,605	19,452,182
Others payables	1,720,097	17,809	1,737,906
Current income tax liabilities	948,166	(640)	947,526
Provisions	298,453	(28,748)	269,705
Other current liabilities	2,090,307	33,184	2,123,491
Retained earnings	44,160,659	68,182	44,228,841
Non-controlling interests	3,347,257	62,024	3,409,281
Consolidated statements of comprehensive income			
Revenue	65,154,636	135	65,154,771

Cost of sales	(57,129,060)	1,206,973	(55,922,087)
Selling and administrative expenses	(2,429,781)	(1,204,764)	(3,634,545)
Finance costs	(2,244,416)	178	(2,244,238)
Profit before income taxes	3,616,016	2,522	3,618,538
Income tax expense	(1,683,630)	(2,198)	(1,685,828)
Profit	1,932,386	324	1,932,710

(b) IFRS No. 9 Financial Instruments

IFRS No. 9 Financial Instruments regulates requirements for measurement and recognition of certain contracts in relation to trading financial assets and liabilities or nonfinancial items. It replaced existing guidance in IAS No. 39 Financial Instruments: Recognition and Measurement .

The Company applied retrospectively the standard with exemptions where an entity is not required to restate the comparative information for prior periods in relation to classification and measurement (including impairment) changes. The Company recognized the cumulative effect resulting from initial application of IFRS No. 9 as reserves, retained earnings and non-controlling interests of the Company at the date of initial application.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

The following table summarizes the impact, net of tax, of transition to IFRS No. 9 on reserves, retained earnings and non-controlling interests as of January 1, 2018.

	Reserves	Retained earnings (in millions of V	Non-controlling interests Won)
Classification to fair value through profit or loss in securities and select to fair value through other comprehensive income in equity securities ^(*1)	(498,517)	498,517	
Recognition of expected credit losses		(51,450)	(34,754)
	(498,517)	447,067	(34,754)

(*1)Includes a decrease in reserve (capital adjustment arising from investments in equity-accounted investees) of 76,992 million and an increase in retained earnings of 76,992 million related to selection to fair value through

other comprehensive income in equity securities of associates and joint ventures. The details of new significant accounting policies and the nature and effect of the changes to previous accounting policies are set out below.

1) Classification and measurement of financial assets and financial liabilities IFRS No. 9 contains three principal classification categories for financial assets: measured at amortized cost, at fair value through other comprehensive income and at fair value through profit or loss. The classification of financial assets under IFRS No. 9 is generally based on the business model in which a financial asset is managed and its contractual cash flow characteristics. Under IFRS No. 9, derivatives embedded in contracts where the host is a financial asset in the scope of the standard are never separated. Instead, the hybrid financial instrument as a whole is assessed for classification.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

As of January 1, 2018, the date of initial application, measurement categories and carrying amounts of financial assets in accordance with IAS No. 39 Financial Instruments: Recognition and Measurement and IFRS No. 9 Financial Instruments are as follows:

	Original classification under IAS No. 39	Original carrying amounts under IAS No. 39	New classification under IFRS No. 9	New carrying amounts under IFRS No. 9	
	(in millions of Won)				
Derivative assets	Financial assets at fair value through profit or loss Hedging instrument	65,051 3,239	Fair value through profit or loss Hedging instrument	65,051 3,239	
Cash and cash equivalents	Loans and receivables	2,612,530	Amortized cost	2,612,530	
Trade accounts and notes receivable ^(*1) Other receivables ^(*1) Equity securities ^(*2)	Loans and receivables Loans and receivables Available-for-sale financial assets	8,901,867 2,195,466 1,421,295	Amortized cost Fair value through profit or loss Amortized cost Fair value through profit or loss	8,799,161 1,898 2,188,820 17,812	
			Fair value through other comprehensive income	1,403,483	
Debt securities ^(*2)	Available-for-sale financial assets	190,579	Fair value through profit or loss Fair value through other comprehensive	188,276	
	Held-to-maturity		income	2,303	
	financial assets	5,211	Amortized cost	5,211	
Other Securities (*2)	Available-for-sale financial assets	366,241	Fair value through profit or loss	366,241	

Deposit instruments	Loans and receivables	1,358,311	Amortized cost	1,358,311
Short-term financial instruments	Financial assets at			
	fair value through profit			
	or loss	1,970	Fair value through	
	Loans and receivables	5,545,667	profit or loss	5,547,637

- (*1)As a result of the adoption of IFRS No. 9, as of January 1, 2018, the date of initial application, loss allowance was increased by 107,454 million, retained earnings and non-controlling interests were decreased by 51,450 million and 34,754 million, respectively.
- (*2) As a result of the adoption of IFRS No. 9, as of January 1, 2018, the date of initial application, with respect to securities classified as fair value through profit or loss and equity securities determined fair value through other comprehensive income, reserves were decreased by 421,525 million and retained earnings were increased by 421,525 million.

IFRS No. 9 Financial Instruments retains most of the requirements of IAS No. 39 Financial Instruments: Recognition and Measurement for the classification and measurement of financial liabilities. Accordingly, the application of IFRS No. 9

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

Financial Instruments has no significant effect on the Company s accounting policies related to financial liabilities.

2) Impairment of financial assets

IFRS No. 9 replaces the incurred loss model in IAS No. 39 with a forward-looking expected credit loss model for debt instruments, lease receivables, contractual assets, loan commitments, and financial guarantee contracts.

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 is measured either 12-month or lifetime expected credit loss based on the extent of increase in credit risk.

As of January 1, 2018, the date of initial application, the Company recognized an increase in loss allowances of 107,454 million and decreases in retained earnings and non-controlling interests of 51,450 million and 34,754 million, respectively.

In addition to the application of IFRS No. 9, the Company applied the amendments to IAS No. 1 Presentation of Financial Statements , which requires the recognition of impairment of financial assets to be separated in the consolidated statements of comprehensive income. Impairment loss on trade accounts and notes receivable and Impairment loss on other receivables are presented as separate items.

3) Hedge Accounting

Regarding the initial application of IFRS No. 9, the Company determined to consistently apply hedge accounting requirements of IAS No. 39.

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 consolidated financial statements, except for those as disclosed in note 2.

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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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.

(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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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 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, exchange on non-monetary items are recognized in profit or loss, exchange components of those gains or losses are recognized in profit or loss, exchange components of those gains or losses.

(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 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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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

Trade receivables and debt securities issued are initially recognized when they are originated. All other financial assets are initially recognized when the Company becomes a party to the contractual provisions of the instrument.

A financial asset(unless it is a trade receivable without a significant financing component) is initially measured at fair value plus, for an item not at financial assets measured at fair value through profit or loss, transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

(a) Classification and subsequent measurement Policies applicable from January 1, 2018

On initial recognition, a financial asset is classified as measured at amortized cost, debt instruments measured at fair value through other comprehensive income, equity instruments measured at fair value through other comprehensive income or financial assets measured at fair value through profit or loss.

Financial assets are not reclassified subsequent to their initial recognition unless the Company changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first day of the first reporting period following the change in the business model.

Financial assets measured at amortized cost

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.

it is held within a business model whose objective is to hold assets to collect contractual cash flows, and

its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets measured at amortized cost are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, gains and losses on foreign currency translation and impairment losses are recognized in profit or loss. Any gain or loss on derecognition is recognized in profit or loss.

Debt instruments measured at fair value through other comprehensive income

A debt instrument 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.

it is held within a business model whose objective is achieved by both collection contractual cash flows and selling financial assets, and

its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

Debt instruments measured at fair value through other comprehensive income are subsequently measured at fair value. Interest income which is calculated using the effective interest method, gains and losses from foreign currency translation and impairment losses are recognized in profit or loss and other net profit or loss is recognized in other comprehensive income. At the time of elimination, other accumulated comprehensive income is reclassified to profit or loss.

Equity instruments measured at fair value through other comprehensive income

On initial recognition of an equity investment that is not held for trading, the Company may irrevocably elect to present subsequent changes in the investment s fair value in other comprehensive income. This election is made on an investment-by-investment basis.

Equity instruments measured at fair value through other comprehensive income are subsequently measured at fair value. Dividends are recognized as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognized in other comprehensive income and never reclassified to profit or loss.

Financial assets measured at fair value through profit or loss

All financial assets not classified as measured at amortized cost of fair value through other comprehensive income as described above are measured at fair value through profit or loss. This includes all derivative financial assets. On initial recognition, the Company may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortized cost or at fair value through other comprehensive income as at fair value through profit or loss if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

Financial assets measured at fair value through profit or loss are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.

(b) Classification and subsequent measurement Policies applied before January 1, 2018

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.

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.

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 held-to-maturity. Subsequent to initial recognition, held-to-maturity financial assets are measured at amortized cost using the effective interest rate method.

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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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.

(c) 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.

(d) 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 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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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.

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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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. 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	5-50 years
Structures	4-50 years
Machinery and equipment	4-25 years
Vehicles	3-20 years
Tools	3-10 years
Furniture and fixtures	3-20 years
Lease assets	3-30 years
Bearer plants	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

Table of Contents

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 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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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	4-25 years
Development expense	3-5 years
Port facilities usage rights	4-75 years
Other intangible assets	2-15 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:

Table of Contents

(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.

(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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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.

(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

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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 Policies applicable from January 1, 2018

The Company recognizes loss allowances for expected credit losses on:

financial assets measured at amortized cost

debt instruments measured at fair value through other comprehensive income

lease receivables, contractual assets, loan commitments, and financial guarantee contracts If credit risk has increased significantly since the initial recognition, a loss allowance for lifetime expected credit loss is required to be measured at the end of every reporting period. If credit risk has not increased significantly since the initial recognition, a loss allowance is measured based on 12-month expected credit loss.

If the financial instrument has low credit risk at the end of the reporting period, the Company may assume that the credit risk has not increased significantly since initial recognition. However, a loss allowance for lifetime expected credit losses is required for contract assets or trade receivables that do not contain a significant financing component.

(a) Judgments on credit risk

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating expected credit losses, the Company considers reasonable and supportable information that is

relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Company s historical experience and informed credit assessment and including forward-looking information.

The Company assumes that the credit risk on a financial asset has increased significantly if it is more than 30 days past due. The Company considers a financial asset to be in default when the borrower is unlikely to pay its credit obligations to the Company in full, without recourse by the Company to actions such as realizing security (if any is held). The Company considers a debt security to have low credit risk when its credit risk rating is equivalent to the globally understood definition of investment grade.

(b) Measurement of expected credit losses

Lifetime expected credit losses are the expected credit losses that result from all possible default events over the expected life of a financial instrument. 12-month expected credit losses are the portion of lifetime expected credit losses that result from default that are

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

possible within the 12 months after the reporting date. The maximum period considered when estimating expected credit losses is the maximum contractual period over which the Company is exposed to credit risk.

Expected credit losses are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls such as the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Company expects to receive.

Expected credit losses for financial assets measured at amortized cost are recognized in profit or loss. Loss allowances for financial assets measured at amortized cost are deducted from carrying amount of the assets. For debt instruments measured at fair value through other comprehensive income, the loss allowance is charged to profit or loss and is recognized in other comprehensive income.

(c) Credit-impaired financial assets

At each reporting date, the Company assesses whether financial assets measured at amortized cost and debt instrument measured at fair value through other comprehensive income are credit-impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Objective evidence that a financial asset or group of financial assets are impaired includes:

significant financial difficulty of the issuer or borrower

a breach of contract, such as a default or delinquency in interest or principal payments

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

it becoming probable that the borrower will enter bankruptcy or other financial reorganization

the disappearance of an active market for that financial asset because of financial difficulties

(d) Write-off

The gross carrying amount of a financial asset is written off when the Company has no reasonable expectations of recovering a financial asset in entirety or a portion. The Company individually makes an assessment with respect to the timing and amount of write-off based on whether there is a reasonable expectation of recovery based on continuous payments and extinct prescriptions. The Company expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Company s procedures for recovery of amounts due.

Impairment for financial assets Policies applied before January 1, 2018

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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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.

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

Table of Contents

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

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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 contract assets, contract assets recognized in accordance with revenue from contracts with customers, 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.

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, including hedge accounting

Derivatives are initially recognized at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are recognized as describe below.

(a) Hedge accounting

The Company holds forward exchange contracts, currency swaps and commodity future contracts to manage foreign exchange risk and commodity fair value risk. The Company designated derivatives as hedging instruments to hedge the risk of changes in the fair value

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

of assets, liabilities or firm commitments (a fair value hedge) and foreign currency risk of highly probable forecasted transactions or firm commitments (a cash flow hedge).

On initial designation of the hedge, the Company formally documents the relationship between the hedging instruments and hedged items, including the risk management objectives and strategy in undertaking the hedge transaction, together with the methods that will be used to assess the effectiveness of the hedging relationship.

Fair value hedge

Changes in the fair value of a derivative hedging instrument designated as a fair value hedge are recognized in profit or loss. The gain or loss from remeasuring the hedging instrument at fair value for a derivative hedging instrument and the gain or loss on the hedged item attributable to the hedged risk are recognized in profit or loss in the same line item of the consolidated statement of comprehensive income.

The Company discontinues fair value hedge accounting if the hedging instrument expires or is sold, terminated or exercised, or if the hedge no longer meets the criteria for hedge accounting. Any adjustment arising from gain or loss on the hedged item attributable to the hedged risk is amortized to profit or loss from the date the hedge accounting is discontinued.

Cash flow hedge

When a derivative is designated to hedge the variability in cash flows attributable to a particular risk associated with a recognized asset or liability or a highly probable forecasted transaction that could affect profit or loss, the effective portion of changes in the fair value of the derivative is recognized in other comprehensive income, net of tax, and presented in the hedging reserve in equity. Any ineffective portion of changes in the fair value of the derivative is recognized immediately in profit or loss.

If the hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, terminated, exercised, or the designation is revoked, then hedge accounting is discontinued prospectively. The cumulative gain or loss on the hedging instrument that has been recognized in other comprehensive income is reclassified to profit or loss in the periods during which the forecasted transaction occurs. If the forecasted transaction is no longer expected to occur, then the balance in other comprehensive income is recognized immediately in profit or 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 measured at fair value through profit or loss or financial liabilities measured at amortized cost in accordance with the substance of the contractual 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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(a) Financial liabilities measured at fair value through profit or loss A financial liability is classified as at fair value through profit or loss if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Subsequent to initial recognition, financial liabilities at fair value through profit or loss are measured at fair value, and charges 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 incurred.

(b) Financial liabilities measured at amortized cost

Non-derivative financial liabilities other than financial liabilities measured at fair value through profit or loss are classified as financial liabilities measured at amortized cost. At the date of initial recognition, financial liabilities measured at amortized cost are measured at fair value after deducting transaction costs that are directly attributable to the acquisition. Financial liabilities measured at amortized cost are measured at amortized cost using the effective interest method subsequently to initial recognition.

(c) Derecognition of financial liabilities

The Company derecognizes a financial liability when its contractual obligations are discharged or canceled, or expire. The Company also derecognizes a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognized at fair value. On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

Construction work in progress

The gross amount due from customers for contract work is presented for all contracts in which profits multiply cumulative percentage-of-completion exceed progress billings. If progress billings exceed profits multiply cumulative percentage-of-completion, 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 accounts for the remaining rights and performance obligation on the contract with the customers on a net basis. Due from customers for contract work and due to customers for contract work for same contract are offset and presented on a net basis.

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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(b) Other long-term employee benefits

Other long-term employee benefits include employee benefits that are settled beyond twelve months after the end of the period in which the employees render the related service, 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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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.

If the estimated total contract cost of the construction contract exceeds the total contract revenue, the estimated contract cost exceeding the contract revenue is recognized as a provision for construction losses in the remaining contract for which construction has not proceeded.

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

Table of Contents

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 gasses Emission Right

Greenhouse gasses 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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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 cancelation 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 from contracts with customers

Table of Contents

The Company has initially applied IFRS No. 15 Revenue from Contracts with Customers from January 1, 2018. Revenue is measured based on the consideration promised in the contract with the customer. The Company recognizes revenue when the control over a good or service is transferred to the customer. The following are the revenue recognition policies for performance obligations in the contracts with customers.

(a) Sale of good

The goods sold by the Company consist mainly of steel products from the steel segment and products such as steel, chemicals, auto parts and machinery in the trade segment.

For domestic sales, the control of the product is usually transferred to the customer when the product is delivered to the customer, at which point in time revenue is recognized. Invoices are generally payable within 10 to 90 days. When a customer makes payment

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

prior to the due date, they are offered a discount at certain percentage of the invoice amount.

For export sales, revenue is recognized at the time when control of the product is transferred to the customer based on the International Incoterms for Interpretation of Trade Terms prescribed in the respective contracts, which is generally when the products are loaded to the transportation vessels. Invoices are usually issued at the date of bill of lading and payments are settled by the terms of Letter of Credit (L / C), Document against Acceptance (D / A), Document against Payment (D / P), Telegraphic Transfer (T / T) and others.

The Company provides certain discount when the customer prepays according to the payment terms. The Company recognized revenue only to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur when discount period expire.

(b) Transportation service

For the performance obligation for transportation services included in the Company s product sales contracts, revenue is recognized over the period when in which the services are provided and the revenue is measured by reference to examining the degree to which the service has been completed so far. The billing date and payment terms for the service charge are the same as the billing date and payment terms for sale of goods.

(c) Construction contracts

In the case of construction contracts where the Company renders construction services for plants, etc., the customer controls the assets as they are being constructed. This is because under those contracts, the Company is able to perform construction or design services to meet the customer s specifications, and if a contract is terminated by the customer, the Company is entitled to reimbursement of all costs incurred to date, including a reasonable margin. When the contract can be reliably estimated, the company recognizes the contract revenue and contract cost as revenue and costs based on the progress of the contract activity as of the end of the reporting period. The percentage of completion is determined based on the proportion that contract costs incurred for work performed excluding contract costs incurred that do not reflect the stage of completion to date bear to the estimated total contract costs.

If the outcome of the contract cannot be reliably estimated, the revenue is recognized only to the extent of the contract costs that are probable to be recovered. If the total contract cost is likely to exceed the total contract revenue, expected losses are immediately recognized as a cost.

The Company issues an invoice when the customer has completed a progress confirmation and generally the payment is made within 45 days from the invoice date.

(d) Certain construction contracts for apartments

For certain construction service contracts for apartments where the criterion of an enforceable right to payment for performance is met under IFRS No. 15, even if the legal ownership or physical occupancy of the incomplete construction is not transferred to the customer during the construction period, revenue is recognized based on percentage of completion by considering the terms and conditions described in the relevant law and

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

contracts such as the guarantee for sale policy, government approval on business plan, payment and termination terms. For certain construction contracts for apartments and shopping centers where the criterion of an enforceable right to payment for performance is not met during the construction period, the Company recognizes revenue upon completion of construction when the control of the apartments and shopping centers are transferred to customers.

The timing of the billing and the payment terms of the sales contracts are different according to the terms of the contracts.

Finance income and finance costs

The Company s finance income and finance costs include:

interest income;

interest expense;

dividend income;

the foreign currency gain or loss on financial assets and financial liabilities;

the net gain or loss on financial assets measured at fair value through profit or loss;

hedge ineffectiveness recognized in profit or loss; and

the net gain or loss on the disposal of investments in debt securities measured at fair value through other comprehensive income.

Interest income or expense is recognized using the effective interest method. Dividend income is recognized in profit or loss on the date on which the Company s right to receive payment is established. The effective interest rate is the

Table of Contents

rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to:

the gross carrying amount of the financial asset; or

the amortized cost of the financial liability.

In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset (when the asset is not credit-impaired) or to the amortized cost of the liability. However, for financial assets that have become credit-impaired subsequent to initial recognition, interest income is calculated by applying the effective interest rate to the amortized cost of the financial asset. If the asset is no longer credit-impaired, then the calculation of interest income reverts to the gross basis.

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.

The Company recognizes interest and penalties related to corporate tax as if it is applicable to the income taxes, the Company applies IAS No. 12 Income Taxes, if it is not applicable to the income taxes, the Company applies IAS No. 37 Provisions Contingent Liabilities and Contingent Assets .

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(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.

The Company offsets current tax assets and current tax liabilities if, and only if, the Company:

has a legally enforceable right to set off the recognized amounts, and

intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously.

(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 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. The Company recognizes 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 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.

A deferred income tax asset is recognized for the carryforward of unused tax losses, tax credits and deductible temporary differences to the extent that it is probable that future taxable profit will be available against which the unused tax losses, tax credits and deductible temporary differences can be utilized. The future taxable profit depends on reversing taxable temporary differences. When there are insufficient taxable temporary differences, the probability of future taxable profit (including the reversal of temporary differences) should be considered.

Table of Contents

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 income 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

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

period. 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.

Earnings per share

Management calculates basic earnings per share (EPS) data for POSCO 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 POSCO 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 contact 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 items allocated on a reasonable basis. Segment capital expenditure is the total cost incurred during the period to acquire property, plant and equipment, and intangible assets other than goodwill.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

New standards and interpretations not yet adopted

The following new standard has been published but is not mandatory for the Company for annual period beginning on January 1, 2018, and the Company has not early adopted them.

(a) IFRS No. 16 Leases

The Company will apply IFRS No. 16 Leases for the year beginning on January 1, 2019. The Company is evaluating analysis of financial impact resulting from adoption of new standards and the estimated effect on the consolidated financial statements at the date of initial application based on current situation as of December 31, 2018. However, a reasonable estimation of financial impact is not determined since the analysis of financial impact is not completed.

IFRS No. 16 Leases replaces existing leases guidance, including 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 introduces a single accounting model that requires a lessee to recognize lease related asset and liability in the financial statements. A lessee is required to recognize a right-of-use asset representing its right to use the underlying leased asset and a lease liability representing its obligation to make lease payments. The lessee may elect not to apply the requirements to short-term lease with a term of 12 months or less at the commencement date or low value assets. Accounting treatment for lessor is similar to the existing standard which classifies lease into finance and operating lease.

1) Leases in which the Company is a lessee

Upon adoption of IFRS No. 16, the Company will recognize new assets and liabilities for its operating leases. The nature of expenses related to those leases will change because the Company will recognize a deprecation charge for right-of-use assets and interest expense on lease liabilities. Previously, the Company recognized operating lease expense on a straight-line basis over the term of the lease term. It is expected that there will be no significant impact on finance leases.

As of the authorization date for issuance of these consolidated financial statements, the Company is still evaluating whether certain arrangements related to the use of vessels, land, warehouses and factory facilities contain leases that shall be accounted for in accordance with IFRS No. 16. The outcome of such evaluations may have significant impact

on the Company s consolidated financial statements upon adoption of IFRS No. 16.

As a lessee, the Company shall apply IFRS No. 16 using one of the following two transition methods; (a) retrospectively to each prior reporting period presented in accordance with IAS No. 8 Accounting Policies, Changes in Accounting Estimates and Errors ; or (b) retrospectively with the cumulative effect of initially applying this standard recognized at the date of initial application.

The Company intends to apply the modified retrospective approach when initially applying IFRS No. 16 as of January 1, 2019, the date of initial application. Accordingly, the Company will recognize the accumulated effect resulting from initial application of IFRS No. 16 as retained earnings of the Company at the date of initial application and not restate the financial statements for comparative periods.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

The Company plans to apply the practical expedient to grandfather the definition of a lease on transition. This means that it will apply IFRS No. 16 to all contracts entered into before January 1, 2019 and identified as leases in accordance with IAS No. 17 and IFRIC No. 4.

2) Leases in which the Company is a lessor

As a lessor, the Company expects to have no significant impact on its financial statements since the present lease accounting treatment is not significantly different from applying IFRS No. 16.

(b) IFRIC No. 23 Uncertainty over Tax Treatments

If there is an uncertainty on tax treatment such as dispute of a particular tax treatment by the taxation authority, the Company determines whether it is probable that the taxation authority will accept an uncertain tax treatment in determining taxable profit, tax bases, unused tax losses, unused tax credits or tax rates.

If the Company concludes it is probable that the taxation authority will accept an uncertain tax treatment, the Company determines the taxable profit (tax loss), tax bases, unused tax losses, unused tax credits or tax rates consistently with the tax treatment used or planned to be used in its income tax filings. If the Company concludes it is not probable that the taxation authority will accept an uncertain tax treatment, the Company reflects the effect of uncertainty for each uncertain tax treatment by using either of the most likely amount or the expected value depending on which method the entity expects to better predict the resolution of the uncertainty.

The application of IFRIC No. 23 Uncertainty over Tax Treatments is mandatory for the year beginning on January 1, 2019. The Company expects the adoption of the standard will not have significant impact on consolidated financial statements.

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

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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.

The Company establishes an allowance for impairment that represents its estimate of expected 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.

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 overseas 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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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 with 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.

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 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.

Interest rate risk

The Company manages the exposure to interest rate risk by adjusting of borrowing structure ratio between borrowings at fixed interest rate 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.

Other market price risk

Equity price risk arises from fluctuation of market price of listed 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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

Net borrowing-to-equity ratio as of December 31, 2017 and 2018 is as follows:

	2017	2018
	(in millions of	,
Total borrowings	21,063,657	20,209,270
Less: Cash and cash equivalents	2,612,530	2,643,865
Net borrowings	18,451,127	17,565,405
Total equity	47,326,725	46,672,614
Net borrowings-to-equity ratio	38.99%	37.64%

5. Cash and Cash Equivalents

Cash and cash equivalents as of December 31, 2017 and 2018 are as follows:

	2017	2018
	(in millions	of Won)
Cash	1,896	1,668
Demand deposits and checking accounts	1,259,813	1,471,891
Time deposits	360,985	538,130
Other cash equivalents	989,836	632,176
	2,612,530	2,643,865

As of December 31, 2018, cash equivalents amounting to 42,147 million of POSCO ENGINEERING & CONSTRUCTION CO., LTD., a subsidiary of the Company, are restricted for use related to the joint account of joint operations and others.

6. Trade Accounts and Notes Receivable

(a) Trade accounts and notes receivable as of December 31, 2017 and 2018 are as follows:

Table of Contents

	2017 (in millions	2018 of Won)
Current		
Trade accounts and notes receivable	8,579,620	8,648,250
Finance lease receivables	10,469	57,487
Unbilled due from customers for contract work	728,007	810,655
Less: Allowance for doubtful accounts	(493,533)	(386,188)
	8,824,563	9,130,204
Non-current		
Trade accounts and notes receivable	871,432	583,797
Finance lease receivables	734	45,873
Less: Allowance for doubtful accounts	(140,596)	(202,545)
	731,570	427,125

Trade accounts and notes receivable sold to financial institutions, for which the derecognition conditions were not met, amounted to 309,964 million and 468,706 million as of December 31, 2017 and 2018, 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).

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(b) Finance lease receivables are as follows:

Customer	Contents (in millio	2017 ons of Won)	2018
Rental contractor (executives and employees)	Songdo rental apartment contract		103,360
Korea Electric Power Corporation	Combined thermal power plant #3~4	10,469	
Hystech.Co. Ltd.	Machinery and equipment	734	

11,203 103,360

(c) The gross amount and present value of minimum lease payments as of December 31, 2017 and 2018 are as follows:

	2017	2018
	(in million	s of Won)
Less than 1 year	11,771	57,820
1 year 5 years	828	49,678
Unrealized interest income	(1,396)	(4,138)
Present value of minimum lease payment	11,203	103,360

7. Other Receivables

Other receivables as of December 31, 2017 and 2018 are as follows:

	2017 (in millions	2018 s of Won)
Current		
Loans	617,696	236,782
Other accounts receivable	960,543	954,030
Accrued income	179,971	220,066
Deposits	107,137	108,640
Others	18,925	16,201
Less: Allowance for doubtful accounts	(248,266)	(150,090)
	1,636,006	1,385,629
Non-current	074 150	721 244
Loans Other accounts receivable	874,158 92,939	731,344 155,936
Accrued income	1,663	1,855
Deposits	122,485	152,072
Less: Allowance for doubtful accounts	(212,069)	(177,967)
	879,176	863,240

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

8. Other Financial Assets

Other financial assets as of December 31, 2017 and 2018 are as follows:

	2017 (in million	2018 s of Won)
Current	•	,
Derivatives assets held for trading	63,912	47,288
Debt securities		2,987
Financial assets held for trading	1,970	
Available-for-sale securities (bonds)	136,141	
Current portion of held-to-maturity securities	421	
Deposit instruments ^(*1,2)	1,297,769	1,931,518
Short-term financial instruments (*2)	5,545,667	6,099,303
	7,045,880	8,081,096
Non-current		
Derivatives assets held for trading	4,378	1,795
Equity securities ^(*3)		1,238,630
Debt securities		34,327
Other securities ^(*3)		338,106
Available-for-sale securities (equity instruments) (*3)	1,730,753	
Available-for-sale securities (bonds)	54,439	
Available-for-sale securities (others)	56,782	
Held-to-maturity securities	4,790	
Deposit instruments (*2)	60,542	35,040
	1,911,684	1,647,898

As of December 31, 2017 and 2018, 10,080 million and 5,715 million, respectively, are restricted for the use in a government project.

- (*2)As of December 31, 2017 and 2018, financial instruments amounting to 78,477 million and 73,935 million, respectively, are restricted for use in financial arrangements, pledge and others.
- (*3)As of December 31, 2017 and 2018, 136,099 million and 115,431 million of equity and other securities, respectively, have been provided as collateral for borrowings, construction projects and others.

9. Inventories

(a) Inventories as of December 31, 2017 and 2018 are as follows:

	2017 (in millions	2018 5 of Won)
Finished goods	1,526,628	1,886,040
Merchandise	930,558	1,131,416
Semi-finished goods	1,721,130	1,945,567
Raw materials	2,329,268	2,821,972
Fuel and materials	808,016	888,941
Construction inventories	1,692,092	1,372,259
Materials-in-transit	1,818,576	2,245,740
Others	103,144	68,150
	10,929,412	12,360,085
Less: Allowance for inventories valuation	(135,631)	(206,782)
	10,793,781	12,153,303

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(b) The changes of allowance for inventories valuation for the years ended December 31, 2016, 2017 and 2018 were as follows:

	2016	2017	2018
	(in millions of Won)		
Beginning	231,378	203,164	135,631
Loss on valuation of inventories	152,249	78,560	141,799
Realization on disposal of inventories	(161,458)	(138,967)	(69,426)
Others	(19,005)	(7,126)	(1,222)
Ending	203,164	135,631	206,782

10. Assets Held for Sale

Details of assets held for sale as of December 31, 2017 and 2018 are as follows:

		2017 Controlling company Subsidiaries ^(*1) Total (in millions of Won)		2018
	0			Subsidiaries ^(*2)
Assets				
Other financial assets				778
Property, plant and equipment	392	71,340	71,732	21,076
Others		36	36	
	392	71,376	71,768	21,854

- (*1)During the year ended December 2017, POSCO ENGINEERING & CONSTRUCTION CO., LTD., a subsidiary of the Company, determined to dispose of the office building, Seomyeon Fiesta, in Busan and classified the related property, plant and equipment amounting to 71,340 million as assets held for sale. During the year ended December 31, 2018, disposal of the accompanying assets held for sale was completed.
- (*2)During the year ended December 31, 2018, DAESAN (CAMBODIA) Co., Ltd., a subsidiary of the Company, determined to dispose of the land and classified the related property, plant and equipment amounting to 21,076 million as assets held for sale.

11. Investments in Associates and Joint ventures

(a) Investments in associates and joint ventures as of December 31, 2017 and 2018 are as follows:

	2017 (in million	2018 s of Won)
Investments in associates	1,520,441	1,738,692
Investments in joint ventures	2,037,491	1,911,311
	3,557,932	3,650,003

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(b) Details of investments in associates as of December 31, 2017 and 2018 are as follows:

	Number	Ownership	Acquisition		
Company	of shares	(%)	cost	2017	2018
		(in millions of Won)			
[Domestic]					
EQP POSCO Global NO1 Natural					
Resources Private Equity Fund	178,713,975,892	31.27	178,787	175,553	174,123
POSPower Co., Ltd ^(*1,2)	4,507,138	34.00	164,757		161,477
SNNC	18,130,000	49.00	90,650	110,424	116,922
QSONE Co., Ltd.	200,000	50.00	84,395	85,049	85,550
Chun-cheon Energy Co., Ltd (*2)	16,098,143	45.67	80,491	74,378	62,478
CHUNGJU ENTERPRISE CITY					
DEVELOPMENT Co., Ltd	2,008,000	29.53	10,040	17,252	17,382
Daesung Steel ^(*4)	108,038	17.54	14,000	15,500	15,644
Incheon-Gimpo Expressway Co., Ltd.					
(*2,4)	9,032,539	18.26	45,163	31,660	13,329
Keystone NO. 1. Private Equity Fund	13,800,000	40.45	13,800	12,379	11,183
KoFC POSCO HANWHA KB Shared					
Growth NO. 2. Private Equity Fund ^(*4)	6,485	12.50	6,485	6,828	5,739
KONES, Corp.	3,250,000	41.67	6,893	2,827	2,849
BLUE OCEAN Private Equity Fund	333	27.52	33,300	19,620	
UITrans LRT Co., Ltd. ^(*2)	7,714,380	38.19	38,572	15,841	
Others (46 companies) ^(*2)				67,325	123,734
-					
				634,636	790,410
[Foreign]					
AES-VCM Mong Duong Power					
Company Limited ^(*3)		30.00	164,303	142,348	209,936
South-East Asia Gas Pipeline Company			· ·		
Ltd.	135,219,000	25.04	135,899	197,069	179,459
7623704 Canada Inc. ^(*4)	114,452,000	10.40	124,341	121,702	126,885
Eureka Moly LLC	, , ,	20.00	240,123	79,398	82,447
			,	,	

AMCI (WA) PTY LTD	49	49.00	209,664	63,378	71,086
KOREA LNG LTD.	2,400	20.00	135,205	33,422	43,554
Nickel Mining Company SAS	3,234,698	49.00	157,585	45,905	41,712
NCR LLC		29.41	40,139	33,738	37,602
PT. Batutua Tembaga Raya	128,285	22.00	21,824	21,823	20,479
Zhongyue POSCO (Qinhuangdao)					
Tinplate Industrial Co., Ltd	10,200,000	34.00	9,517	15,617	14,796
PT. Wampu Electric Power ^(*2)	8,708,400	20.00	10,054	13,391	14,120
POSCO SeAH Steel Wire (Nantong)					
Co., Ltd.	50	25.00	4,723	6,517	6,478
Others (29 companies) ^(*2)				111,497	99,728
				885,805	948,282
				1,520,441	1,738,692
				1,520,441	1,738,692

- (*1)During the year ended December 31, 2018, the Company disposed of 63.53% of shares in POSPower Co., Ltd, which resulted in the Company s loss of control, and the Company classified the remaining investment as investment in an associate.
- (*2)As of December 31, 2017 and 2018, investments in associates amounting to 158,370 million and 285,066 million, respectively, are provided as collateral in relation to the associates borrowings.
- (*3)As of December 31, 2017 and 2018, shares of PSC Energy Global Co., Ltd., a subsidiary of the Company, are provided as collateral in relation to the associates borrowings.
- (*4)As of December 31, 2018, it was classified as an associate even though the Company s ownership percentage is less than 20% of ownership percentage since the Company has significant influence over the investee when considering its structure of the Board of Directors and others.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(c) Details of investments in joint ventures as of December 31, 2017 and 2018 are as follows:

	Number	Ownership	Acquisition	Book	value
Company	of shares	(%)	cost	2017	2018
		(in n	nillions of Won)		
[Domestic]					
POSCO MITSUBISHI CARBON					
TECHNOLOGY	11,568,000	60.00	115,680	110,760	180,192
Others (6 companies)				6,094	9,124
. .					
				116,854	189,316
[Foreign]					
Roy Hill Holdings Pty Ltd (*1)	13,117,972	12.50	1,528,672	1,125,133	1,041,600
POSCO-NPS Niobium LLC	325,050,000	50.00	364,609	348,836	363,506
KOBRASCO	2,010,719,185	50.00	32,950	108,485	133,449
BX STEEL POSCO Cold Rolled					
Sheet Co., Ltd.		25.00	61,961	88,305	88,391
DMSA/AMSA (*1)		4.00	322,596	56,735	26,709
CSP Compania Siderurgica do Pecem	1,108,696,532	20.00	558,821	146,427	24,832
Others (13 companies)				46,716	43,508
· · · ·					
				1,920,637	1,721,995
				2,037,491	1,911,311

(*1)As of December 31, 2017 and 2018, the investments in joint ventures are provided as collateral in relation to the joint ventures borrowings.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(d) The movements of investments in associates and joint ventures for the years ended December 31, 2017 and 2018 were as follows:

1) For the year ended December 31, 2017

Company	December 31, 2016 Book value	Acquisition 1		Share of profits (losses) millions of V	Other increase (decrease) ^(*1) Won)	December 31, 2017 Book value
[Domestic]						
EQP POSCO Global NO1						
Natural Resources Private Equity						
Fund	175,690			418	(555)	175,553
SNNC	107,859			2,370	195	110,424
QSONE Co., Ltd.	84,799		(368)	618		85,049
Chun-cheon Energy Co., Ltd	45,077	27,791		1,510		74,378
CHUNGJU ENTERPRISE CITY						
DEVELOPMENT Co., Ltd	12,551			4,701		17,252
BLUE OCEAN Private Equity						
Fund	35,752			(8,154)	(7,978)	19,620
Daesung Steel	12,302			3,198		15,500
Incheon-Gimpo Expressway Co.,						
Ltd.	37,372			(6,463)	751	31,660
Keystone NO. 1. Private Equity						
Fund	13,314			(886)	(49)	12,379
UITrans LRT Co., Ltd.	17,851			(2,010)		15,841
KoFC POSCO HANWHA KB						
Shared Growth NO. 2. Private						
Equity Fund	11,890			(197)	(4,865)	6,828
KONES, Corp.	5,641			(2,774)	(40)	2,827
POSCO MITSUBISHI						
CARBON TECHNOLOGY	83,113			27,582	65	110,760
Others (40 companies)	55,061	28,348	(137)	(7,995)	(1,858)	73,419

Edgar Hinig. FAIlth AAT INANGIAE HOEDINGO ETD/ GAIN FOILING K						
	698,272	56,139	(505)	11,918	(14,334)	751,490
[Foreign]						
AES-VCM Mong Duong Power						
Company Limited	167,141		(30,798)	19,644	(13,639)	142,348
South-East Asia Gas Pipeline						
Company Ltd.	215,996		(37,016)	42,896	(24,807)	197,069
7623704 Canada Inc.	137,512		(7,563)	7,468	(15,715)	121,702
Eureka Moly LLC	89,601			(35)	(10,168)	79,398
AMCI (WA) PTY LTD	70,501			(4,299)	(2,824)	63,378
Nickel Mining Company SAS	45,138			424	343	45,905
KOREA LNG LTD.	63,058		(6,466)	(70,180)	47,010	33,422
NCR LLC	36,738	276		(60)	(3,216)	33,738
PT. Batutua Tembaga Raya	22,723			260	(1,160)	21,823
PT. Wampu Electric Power	8,706			5,927	(1,242)	13,391
Zhongyue POSCO						
(Qinhuangdao) Tinplate						
Industrial Co., Ltd	18,008			(1,268)	(1,123)	15,617
POSCO SeAH Steel Wire						
(Nantong) Co., Ltd.	6,840			303	(626)	6,517
Roy Hill Holdings Pty Ltd	1,186,859			46,020	(107,746)	1,125,133
POSCO-NPS Niobium LLC	393,570		(17,277)	17,173	(44,630)	348,836
KOBRASCO	88,308		(22,135)	56,445	(14,133)	108,485
BX STEEL POSCO Cold Rolled						
Sheet Co., Ltd.	97,369		(5,542)	1,555	(5,077)	88,305
DMSA/AMSA	74,935	13,712		(22,339)	(9,573)	56,735
CSP - Compania Siderurgica do						
Pecem	330,463			(147,847)	(36,189)	146,427
Others (40 companies)	130,651	22,209	(4,408)	46,535	(36,774)	158,213
	3,184,117	36,197	(131,205)	(1,378)	(281,289)	2,806,442
	3,882,389	92,336	(131,710)	10,540	(295,623)	3,557,932
	·) · · · · · · · · · · · · · · · ·	- ,	(-). •)	- ,	())	, <u>-</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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

2) For the year ended December 31, 2018

Company	December 31, 2017 Book value		Dividends (in millions	· /	Other increase (decrease) ^(*1)	December 31, 2018 Book value
[Domestic]						
EQP POSCO Global NO1 Natural						
Resources Private Equity Fund	175,553			(1,430)		174,123
POSPower Co., Ltd		176,731		(3,198)	(12,056)	161,477
SNNC	110,424			6,624	(126)	116,922
QSONE Co., Ltd.	85,049		(550)	1,051		85,550
Chun-cheon Energy Co., Ltd	74,378			(11,900)		62,478
CHUNGJU ENTERPRISE CITY						
DEVELOPMENT Co., Ltd	17,252			130		17,382
BLUE OCEAN Private Equity Fund	19,620			(17,930)	(1,690)	
Daesung Steel	15,500			144		15,644
Incheon-Gimpo Expressway Co.,						
Ltd.	31,660			(18,331)		13,329
Keystone NO. 1. Private Equity						
Fund	12,379			(1,295)	99	11,183
UITrans LRT Co., Ltd.	15,841			(15,841)		
KoFC POSCO HANWHA KB						
Shared Growth NO. 2. Private						
Equity Fund	6,828			(1,089)		5,739
KONES, Corp.	2,827			29	(7)	2,849
POSCO MITSUBISHI CARBON						
TECHNOLOGY	110,760			69,594	(162)	180,192
Others (52 companies)	73,419	44,629	(784)	18,942	(3,348)	132,858
	751,490	221,360	(1,334)	25,500	(17,290)	979,726
[Foroign]						
[Foreign]	142,348		(26,108)	30,096	63,600	209,936
	,			,	,)

AES-VCM Mong Duong Power						
Company Limited						
South-East Asia Gas Pipeline						
Company Ltd.	197,069		(29,301)	17,709	(6,018)	179,459
7623704 Canada Inc.	121,702		(4,509)	4,373	5,319	126,885
Eureka Moly LLC	79,398			(406)	3,455	82,447
AMCI (WA) PTY LTD.	63,378			(3,412)	11,120	71,086
KOREA LNG LTD.	33,422		(10,544)	10,542	10,134	43,554
Nickel Mining Company SAS	45,905			(4,268)	75	41,712
NCR LLC	33,738	2,505		(5,909)	7,268	37,602
PT. Batutua Tembaga Raya	21,823			(1,817)	473	20,479
Zhongyue POSCO (Qinhuangdao)						
Tinplate Industrial Co., Ltd	15,617			(735)	(86)	14,796
PT. Wampu Electric Power	13,391			177	552	14,120
POSCO SeAH Steel Wire (Nantong)						
Co., Ltd.	6,517			23	(62)	6,478
Roy Hill Holdings Pty Ltd	1,125,133			59,095	(142,628)	1,041,600
POSCO-NPS Niobium LLC	348,836		(22,254)	21,536	15,388	363,506
KOBRASCO	108,485		(37,710)	75,170	(12,496)	133,449
BX STEEL POSCO Cold Rolled						
Sheet Co., Ltd.	88,305			540	(454)	88,391
DMSA/AMSA	56,735	17,973		(48,802)	803	26,709
CSP - Compania Siderurgica do						
Pecem	146,427			(109,714)	(11,881)	24,832
Others (42 companies)	158,213	2,771	(22,588)	42,937	(38,097)	143,236
	2,806,442	23,249	(153,014)	87,135	(93,535)	2,670,277
	3,557,932	244,609	(154,348)	112,635	(110,825)	3,650,003

(*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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(e) Summarized financial information of associates and joint ventures as of and for the years ended December 31, 2017 and 2018 are as follows:

1) December 31, 2017

Company	Assets	Liabilities (in m	Equity illions of Wor	Sales	Net income (loss)
[Domestic]					
EQP POSCO Global NO1 Natural Resources					
Private Equity Fund	562,698	866	561,832		1,261
SNNC	705,975	459,519	246,456	576,023	2,417
QSONE Co., Ltd.	248,779	78,680	170,099	15,297	1,236
Chun-cheon Energy Co., Ltd	700,079	539,137	160,942	164,294	(8,250)
Daesung Steel	169,774	112,795	56,979	70,434	18,230
Incheon-Gimpo Expressway Co., Ltd.	1,132,233	922,338	209,895		(23,221)
CHUNGJU ENTERPRISE CITY					
DEVELOPMENT Co., Ltd	76,184	48,072	28,112	77,093	15,921
BLUE OCEAN Private Equity Fund	311,129	188,512	122,617	445,238	(3,345)
Keystone NO. 1. Private Equity Fund	170,155	133,033	37,122	5,391	(2,070)
UITrans LRT Co., Ltd.	464,074	384,202	79,872	3,689	(13,263)
KoFC POSCO HANWHA KB Shared Growth					
NO. 2. Private Equity Fund	55,936	1,315	54,621	10,212	(1,578)
KONES, Corp.	2,766	1,616	1,150	5,379	139
POSCO MITSUBISHI CARBON					
TECHNOLOGY	478,847	295,052	183,795	154,312	46,138
[Foreign]					
South-East Asia Gas Pipeline Company Ltd.	1,911,942	1,121,783	790,159	445,682	171,303
7623704 Canada Inc.	1,182,376	9	1,182,367		82,344
KOREA LNG LTD.	179,269	86	179,183	34,640	32,446
Nickel Mining Company SAS	465,700	324,687	141,013	179,683	(4,450)
PT. Batutua Tembaga Raya	336,085	272,542	63,543	195,520	49,091
	70,437	18,722	51,715	85,850	(3,736)
					. ,

Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd					
PT. Wampu Electric Power	212,095	148,177	63,918	779	29,634
POSCO SeAH Steel Wire (Nantong) Co., Ltd.	70,701	43,588	27,113	84,973	1,210
Roy Hill Holdings Pty Ltd	10,148,416	6,600,900	3,547,516	2,988,372	797,008
POSCO-NPS Niobium LLC	697,470		697,470		32,481
KOBRASCO	252,813	35,843	216,970	179,453	112,890
BX STEEL POSCO Cold Rolled Sheet Co.,					
Ltd.	717,472	391,871	325,601	1,245,178	5,978
DMSA/AMSA	5,586,171	4,167,906	1,418,265	630,229	(475,958)
CSP - Compania Siderurgica do Pecem	4,805,353	4,223,392	581,961	1,290,767	(740,591)

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

2) December 31, 2018

~			Equity	~ .	Net income
Company	Assets	Liabilities (in r	(deficit) nillions of Wor	Sales	(loss)
[Domestic]		, i i i i i i i i i i i i i i i i i i i			
EQP POSCO Global NO1 Natural Resources					
Private Equity Fund	552,760	783	551,977		10,249
POSPower Co., Ltd	425,632	35,761	389,871		(4,536)
SNNC	645,013	384,586	260,427	656,320	14,229
QSONE Co., Ltd.	249,384	78,285	171,099	16,597	2,101
Chun-cheon Energy Co., Ltd	667,454	525,308	142,146	320,950	(18,796)
CHUNGJU ENTERPRISE CITY					
DEVELOPMENT Co., Ltd	63,554	35,003	28,551	16,237	439
BLUE OCEAN Private Equity Fund	305,876	174,640	131,236	459,491	(5,294)
Daesung Steel	169,305	111,502	57,803	75,474	824
Incheon-Gimpo Expressway Co., Ltd.	1,049,629	931,937	117,692		(92,202)
Keystone NO. 1. Private Equity Fund	177,024	144,186	32,838	15,507	(3,962)
UITrans LRT Co., Ltd.	430,227	435,699	(5,472)	12,929	(85,344)
KoFC POSCO HANWHA KB Shared Growth					
NO. 2. Private Equity Fund	59,464	1,061	58,403	2,401	(12,313)
KONES, Corp.	2,618	1,414	1,204	5,167	70
POSCO MITSUBISHI CARBON					
TECHNOLOGY	537,138	237,563	299,575	300,986	116,049
[Foreign]					
South-East Asia Gas Pipeline Company Ltd.	1,726,410	1,009,731	716,679	343,471	70,717
7623704 Canada Inc.	1,232,208	1	1,232,207		44,320
KOREA LNG LTD.	217,883	110	217,773	54,357	52,720
Nickel Mining Company SAS	465,463	329,084	136,379	207,956	(4,569)
PT. Batutua Tembaga Raya	332,305	274,580	57,725	128,609	(8,451)
Zhongyue POSCO (Qinhuangdao) Tinplate					
Industrial Co., Ltd	73,515	24,264	49,251	121,104	(2,231)

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

PT. Wampu Electric Power	223,009	155,407	67,602	13,461	887
POSCO SeAH Steel Wire (Nantong) Co., Ltd.	61,782	34,740	27,042	85,619	78
Roy Hill Holdings Pty Ltd	9,666,619	6,043,492	3,623,127	3,259,256	497,469
POSCO-NPS Niobium LLC	726,810		726,810		41,812
KOBRASCO	317,842	50,945	266,897	229,340	150,550
BX STEEL POSCO Cold Rolled Sheet Co., Ltd.	710,518	384,572	325,946	1,341,849	2,159
DMSA/AMSA	5,562,877	4,171,896	1,390,981	731,127	(529,844)
CSP - Compania Siderurgica do Pecem	4,194,242	4,192,867	1,375	1,860,198	(542,865)

F-74

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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, 2018 are as follows:

Toint an anations	Orroration	Ownership	Lagation
Joint operations	Operation	(%)	Location
Myanmar A-1/A-3 mine	Mineral development and gas production	51.00	Myanmar
Offshore midstream	Gas transportation facility	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
RUM J/V	Mine development	10.00	Australia
Hanam-Gamil package public housing project	Construction	7.70	Korea
Hanam-Gamil district B6, C2, C3 block Public			
housing lot development project	Construction	27.00	Korea
Sejong 2-1 P3 Block public housing project	Construction	37.00	Korea
Yongin-Giheung Station area city			
development project	Construction	61.00	Korea
Korean wave world complex land			
multi-purpose building development project	Construction	33.30	Korea
Sejong 4-1 P3 Block public housing project	Construction	60.00	Korea

13. Investment Property, Net

(a) Investment property as of December 31, 2017 and 2018 are as follows:

2017			2018				
Acquisition cost	Accumulated depreciation and impairment	Book value	Acquisition cost	Accumulated depreciation and impairment	Book value		

		loss			loss	
			(in millions of	of Won)		
Land	360,402		360,402	295,328	(16,743)	278,585
Buildings	727,022	(92,982)	634,040	681,518	(110,183)	571,335
Structures	7,717	(1,436)	6,281	3,327	(1,919)	1,408
Construction-in-progress	64,191		64,191	101,665	(24,378)	77,287
	1,159,332	(94,418)	1,064,914	1,081,838	(153,223)	928,615

As of December 31, 2018, the fair value of investment property is 1,498,136 million.

(b) Changes in the carrying amount of investment property for the years ended December 31, 2017 and 2018 were as follows:

1) For the year ended December 31, 2017

	Beginning	Acquisitions	-	Depreciation ns of Won)	Others ^(*1)	Ending
Land	392,723	20,941	(37,725)		(15,537)	360,402
Buildings	671,539	38,831	(9,506)	(23,450)	(43,374)	634,040
Structures	2,147			(591)	4,725	6,281
Construction-in-progress	51,311	17,648			(4,768)	64,191
	1,117,720	77,420	(47,231)	(24,041)	(58,954)	1,064,914

(*1)Includes reclassification resulting from changing purpose of use, adjustment of foreign currency translation difference and others.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

2) For the year ended December 31, 2018

	Beginning	Acquisitions	Disposals Do (in millions	epreciation ^(*1) of Won)	Others ^(*2)	Ending
Land	360,402	1,327	(26,826)	(16,743)	(39,575)	278,585
Buildings	634,040	727	(32,807)	(28,358)	(2,267)	571,335
Structures	6,281			(603)	(4,270)	1,408
Construction-in-progress	64,191	42,052		(24,948)	(4,008)	77,287
	1,064,914	44,106	(59,633)	(70,652)	(50,120)	928,615

- (*1)Includes impairment loss on investment property recognized by each of the consolidated subsidiaries, including the office for rent of POSCO(Dalian) IT Center Development Co., Ltd. amounting to 51,461 million.
- (*2)Includes reclassification resulting from changing purpose of use, adjustment of foreign currency translation difference and others.

14. Property, Plant and Equipment, Net

(a) Property, plant and equipment as of December 31, 2017 and 2018 are as follows:

2017				2018				
	Accumulate	d			Accumulate	b		
	depreciation	1			depreciation	1		
	and				and			
Acquisition	impairment	tGovernment	Book	Acquisition	impairment	Government	Book	
cost	loss	grants	value	cost	loss	grants	value	

				(in millions	of Won)			
Land	2,534,102	(6,452)		2,527,650	2,553,957	(5,955)		2,548,002
Buildings	9,311,426	(4,433,996)	(412)	4,877,018	9,146,294	(4,743,449)	(393)	4,402,452
Structures	5,452,713	(2,686,802)	(59)	2,765,852	5,884,277	(2,966,304)	(49)	2,917,924
Machinery and								
equipment	46,669,612	(27,301,410)	(245)	19,367,957	47,610,225	(29,091,754)	(342)	18,518,129
Vehicles	296,815	(263,884)	(70)	32,861	302,767	(271,381)	(45)	31,341
Tools	380,144	(315,446)	(1,058)	63,640	399,638	(333,387)	(87)	66,164
Furniture and								
fixtures	643,779	(498,192)	(148)	145,439	638,553	(502,215)	(51)	136,287
Finance lease								
assets	243,160	(97,903)		145,257	213,873	(76,309)		137,564
Bearer plants	70,031	(4,516)		65,515	88,773	(8,002)		80,771
Construction-in-								
progress	1,897,885		(5,539)	1,892,346	1,964,267	(778,373)	(6,255)	1,179,639
	67,499,667	(35,608,601)	(7,531)	31,883,535	68,802,624	(38,777,129)	(7,222)	30,018,273

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(b) Changes in the carrying amount of property, plant and equipment for the years ended December 31, 2017 and 2018 were as follows:

1) For the year ended December 31, 2017

					mpairment		
	Beginning	Acquisitions	-	Depreciation	loss (*1)	Others (*2)	Ending
			(in	millions of Wo	on)		
Land	2,601,208	3,477	(18,226)			(58,809)	2,527,650
Buildings	4,995,631	53,961	(5,782)	(347,419)	(14,112)	194,739	4,877,018
Structures	2,908,480	18,943	(2,558)	(212,643)	(33,586)	87,216	2,765,852
Machinery and							
equipment	20,318,390	194,653	(93,210)	(2,189,624)	(27,811)	1,165,559	19,367,957
Vehicles	46,699	9,982	(1,623)	(17,363)	(4,977)	143	32,861
Tools	71,380	16,424	(976)	(28,516)	(23)	5,351	63,640
Furniture and fixtures	132,406	61,597	(1,296)	(48,400)	(16)	1,148	145,439
Finance lease assets	159,013	4,760	(453)	(14,810)		(3,253)	145,257
Bearer plants				(4,830)		70,345	65,515
Construction-in-progress	2,537,132	1,894,067	(817)		(36,706)	(2,501,330)	1,892,346
	33,770,339	2,257,864	(124,941)	(2,863,605)	(117,231)	(1,038,891)	31,883,535

(*1)As of December 31, 2017, due to the existence of indicators for impairment such as continuous operating loss on Suncheon Bay Personal Rapid Transit business of the Suncheon Eco Trans Co., Ltd, a subsidiary of the Company, the Company performed impairment test and recognized impairment loss of 48,070 million since the recoverable amount is less than its carrying amount. The impairment recorded in 2017 also included 17,651 million related to POSCO for individual assets due to a decline in economic result and others.

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.

2) For the year ended December 31, 2018

]	mpairment		
	Beginning	Acquisitions	Disposals	Depreciation	loss (*1,2)	Others (*3)	Ending
			(i)	n millions of W	Von)		
Land	2,527,650	28,998	(26,157)		6,399	11,112	2,548,002
Buildings	4,877,018	46,129	(21,501)	(331,688)	(73,523)	(93,983)	4,402,452
Structures	2,765,852	18,749	(2,834)	(220,218)	(6,652)	363,027	2,917,924
Machinery and							
equipment	19,367,957	145,220	(62,135)	(2,224,000)	(143,293)	1,434,380	18,518,129
Vehicles	32,861	8,538	(1,149)	(14,835)	(56)	5,982	31,341
Tools	63,640	21,337	(1,867)	(26,421)	(206)	9,681	66,164
Furniture and fixtures	145,439	32,258	(577)	(51,835)	(1,494)	12,496	136,287
Finance lease assets	145,257	28,466	(420)	(19,224)		(16,515)	137,564
Bearer plants	65,515			(3,636)		18,892	80,771
Construction-in-progress	1,892,346	1,884,125	(23,814)		(778,373)	(1,794,645)	1,179,639
	31,883,535	2,213,820	(140,454)	(2,891,857)	(997,198)	(49,573)	30,018,273

(*1)During 2018, the Controlling Company evaluated future economic performance of its Synthetic Natural Gas (SNG) facility that was still in trial run stage. Considering the continuous decline in LNG price, increase in coal prices and the need for additional capital investment in the SNG facility, the Controlling Company concluded that the profitability for the SNG facility is unlikely to be sustainable and decided to terminate the operation of SNG facility as of December 31, 2018. The property, plant and equipment in the SNG facility are primarily comprised of machinery and equipment, among which assets with a carrying value of 167,054 million are expected to be re-used in other facilities of the Controlling Company therefore no impairment test was conducted. For the remaining assets impairment test was performed by estimating the recoverable

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

amount of each individual assets. For the assets which are determined to be technically obsolete and therefore sale is unlikely, recoverable amount represents expected scrap value less cost of disposal.

For the assets for which sale is probable, the recoverable amount is determined based on fair value less cost of disposal. Fair value was measured using cost approach, which is based on an estimated of the current cost to purchase or replace the asset less applicable depreciation and obsolescence. Specifically, the Controlling Company used indirect cost approach to estimate the replacement cost for a new asset by applying asset specific inflation factors to the asset s historical cost. Then the Controlling Company estimates and deducts depreciation for physical deterioration. Depreciation factors are applied primarily based on estimated useful life of the asset and declining balance depreciation method. The fair value measurement of assets in SNG facility is considered to be level 3 because significant inputs used in the estimate, such as asset specific inflation factors and estimated useful lives, are unobservable.

As a result of the impairment test, the Company recognized an impairment loss of 809,737 million in connection with the property, plant and equipment in the SNG facility.

The Controlling Company also has recognized an impairment loss amounting to 61,787 million since recoverable amounts on Strip Casting facilities and others is less than their carrying amount for the period ended December 31, 2018.

- (*2)As of December 31, 2018, POSCO ENERGY CO., LTD., as a subsidiary, performed an impairment test due to the consecutive operating loss of the fuel cell business, and recognized impairment losses amounting to 54,250 million.
- (*3)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, 2017 and 2018 were as follows:

	2017	2018		
	(in millions	s of Won)		
Weighted average expenditure	1,180,563	628,595		
Borrowing costs capitalized	37,261	22,619		
Capitalization rate (%)	1.74 ~ 3.45	2.51 ~ 3.90		
(d) Property, plant and equipment and investment property pledged as collateral as of December 31, 2017 and 2018				

are as follows:

		Book value		
	Collateral right holder	2017	2018 (*2)	
		(in million	s of Won)	
Land ^(*1)	Korean Development Bank and others	822,057	769,843	
Buildings and structures (*1)	Korean Development Bank and others	1,678,403	1,522,129	
Machinery and equipment	Korean Development Bank and others	3,527,420	3,419,528	
Construction-in-progress	Korean Development Bank and others	15,389		
	-			
		6,043,269	5,711,500	

(*1)Investment property and other assets (land-use right) are included.

(*2) As of December 31, 2018, the pledged amount is 5,323,071 million.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

15. Goodwill and Other Intangible Assets, Net

(a) Goodwill and other intangible assets as of December 31, 2017 and 2018 are as follows:

	Acquisition	2017 Accumulated amortization and impairmenGo	overnmen		-	2018 Accumulated amortization and impairmenGo		
	cost	loss	grants	value	cost	loss	grants	value
Goodwill	1,604,288	(254,450)		(in million 1,349,838	1,603,308	(478,159)		1,125,149
Intellectual property rights	3,140,159	(690,966)		2,449,193	3,300,638	(901,113)		2,399,525
Premium in rental	139,873	(21,563)		118,310	158,338	(23,545)		134,793
Development expense	397,129	(316,892)	(19)	80,218	445,752	(346,589)		99,163
Port facilities usage rights	705,692	(396,319)		309,373	724,375	(419,294)		305,081
Exploration and evaluation								
assets	296,320	(90,376)		205,944	285,845	(93,715)		192,130
Customer relationships	857,624	(390,679)		466,945	860,951	(439,178)		421,773
Power generation permit	539,405			539,405				
Other intangible	,			,				
assets	1,006,219	(573,152)	(24)	433,043	1,115,742	(622,417)	(114)	493,211
	8,686,709	(2,734,397)	(43)	5,952,269	8,494,949	(3,324,010)	(114)	5,170,825

(b) The changes in carrying amount of goodwill and other intangible assets for the years ended December 31, 2017 and 2018 were as follows:

1) For the year ended December 31, 2017

			Business		I	mpairment		
	Beginning A	Acquisitio ns	mbinatio	-		loss	Others (*2)	Ending
Goodwill	1,375,131			(In millo	ns of Won)	(21,750)	(3,543)	1,349,838
Intellectual	, ,							, ,
property rights	2,521,171	167,580	47,625	(450)	(217,932)	(74,524)	5,723	2,449,193
Premium in								
rental ^(*1)	119,039	6,006		(3,666)	(611)	(1,661)	(797)	118,310
Development								
expense	117,012	3,479		(1,179)	(66,847)	(694)	28,447	80,218
Port facilities								
usage rights	256,617				(19,912)		72,668	309,373
Exploration and								
evaluation assets	162,268	91,548				(56,519)	8,647	205,944
Customer	514045						(702)	166.045
relationships	514,245				(46,508)		(792)	466,945
Power generation	539,405							539,405
permit Other intangible	559,405							559,405
assets	483,841	84,502		(1,641)	(57,964)	(11,829)	(63,866)	433,043
				(-, 5 • • •)	(2.3) 0.1)	(,)	(22,000)	,0,0.10
	6,088,729	353,115	47,625	(6,936)	(409,774)	(166,977)	46,487	5,952,269

(*1)Premium in rental includes memberships with indefinite useful lives.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(*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.

2) For the year ended December 31, 2018

					Impairment		
	Beginning	Acquisitions	Disposals	Amortization	loss	Others (*3)	Ending
			(ir	n millions of W	on)		
Goodwill	1,349,838				(223,709)	(980)	1,125,149
Intellectual property							
rights	2,449,193	334,667	(18,619)	(198,282)	(96,475)	(70,959)	2,399,525
Premium in rental (*1)	118,310	36,196	(15,675)	(330)	(4,218)	510	134,793
Development							
expense	80,218	4,248	(32)	(37,305)	(411)	52,445	99,163
Port facilities usage							
rights	309,373			(22,975)		18,683	305,081
Exploration and							
evaluation assets	205,944	2,654			(3,339)	(13,129)	192,130
Customer							
relationships	466,945			(48,499)		3,327	421,773
Power generation							
permit	539,405					(539,405)	
Other intangible							
assets	433,043	164,594	(1,644)	(49,190)	(8,844)	(44,748)	493,211
	5,952,269	542,359	(35,970)	(356,581)	(336,996)	(594,256)	5,170,825

(*1)Premium in rental includes memberships with indefinite useful lives.

During the year ended December 31, 2018, the Company disposed of a portion of shares of its subsidiary, POSPower Co., Ltd, which resulted in the Company s loss of control, and derecognition of corresponding intangible assets.

(*3)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, 2017 and 2018 are as follows:

	Total numbe	er of CGUs			
Reportable segments	2017	2018	CGUs	2017	2018
				(in millions	of Won)
Steel	7	7	POSCO VST CO., LTD.	36,955	36,955
			Others	12,494	12,484
Trading	2	2	POSCO DAEWOO Corporation		
			(*1)	1,165,030	1,006,879
			PT. Bio Inti Agrindo	7,099	6,902
			Others		16
E&C	2	2	POSCO ENGINEERING		
			& CONSTRUCTION CO., LTD.		
			(*2)	90,426	24,868
			POSCO Center Beijing	157	155
			POSCO ENERGY CO., LTD.	26,471	26,471
Others	5	5	Others	11,206	10,419
	16	16		1,349,838	1,125,149

(*1)Recoverable amounts of POSCO DAEWOO Corporation are determined based on its value in use. As of December 31, 2018, value in use is estimated by applying a 7.84% discount rate and a 2.0% terminal growth rate after 5 years, 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 158,151 million was recognized as of December 31, 2018 as the recoverable amount is less than 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 126,343 million or 3.71% and when the terminal growth rate decreases by 50,928 million or 0.25%, value in use will be decreased by 1.49%.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(*2)Recoverable amounts of POSCO ENGINEERING & CONSTRUCTION CO., LTD are determined based on its value in use. As of December 31, 2018, value in use is estimated by applying a 9.1% discount rate within 5 years, the period for the estimated future cash flows, based on management s business plan and by no applying a terminal growth rate. Impairment loss on goodwill of 65,558 million was recognized as of December 31, 2018 as the recoverable amount is less than 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 2.72% and when the terminal growth rate decreases by 0.25%, value in use will be decreased by 1.76%.

16. Other Assets

Other current assets and other non-current assets as of December 31, 2017 and 2018 are as follows:

	2017 (in million	2018 s of Won)
Current	``````````````````````````````````````	,
Advance payment	661,779	539,894
Prepaid expenses	143,032	123,770
Firm commitment asset	15,115	11,246
Others	1,316	9,554
	821,242	684,464
Non-current		
Long-term advance payment	24,201	24,280
Long-term prepaid expenses	333,153	334,918
Others (*1)	131,657	149,566
	489,011	508,764

(*1)As of December 31, 2017 and 2018, the Company recognized tax assets amounting to 88,633 million and 116,693 million, respectively, based on the Company s best estimate of the tax amounts to be refunded when the result of the Company s appeal in connection with the additional income tax payment in prior years tax audits and claim for rectification are finalized.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

17. Borrowings

(a) Short-term borrowings and current portion of long-term borrowings as of December 31, 2017 and 2018 are as follows:

	Bank	Issuance date	Maturity date (in millions of Wor	Interest rate (%) 1)	2017	2018
Short-term borrowings						
Bank overdrafts	JP Morgan and others	January, 2017~ December, 2018	January, 2019~ December, 2019	2.7~8.9	217,879	294,364
Short-term borrowings	HSBC and others	January, 2018~ December, 2018	January, 2019~ December, 2019	0.3~10.1	7,956,939	7,193,416
					8,174,818	7,487,780
Current portion of long-term liabilities						
Current portion of long-term borrowings	Export-Import bank of Korea and others	September, 2011~ December, 2018	February, 2019~ December, 2019	0.5~8.8	1,407,123	1,234,915
Current portion of debentures	Korea Development Bank and others	August, 2009~ March, 2018	February, 2019~ December, 2019	1.8~6.3	1,693,974	1,568,108
Less: Current portion of discount on					,,	,,
debentures issued					(1,399)	(1,184)
					3,099,698	2,801,839
					11,274,516	10,289,619

(b) Long-term borrowings, excluding current portion as of December 31, 2017 and 2018 are as follows:

				Interest rate		
	Bank	Issuance date (in 1	Maturity date millions of Won)	(%)	2017	2018
Long-term	Export-Import bank	September, 2001~	March, 2020~			
borrowings	of Korea and others	December, 2018	March, 2037	0.2~8.8	4,839,199	4,499,199
Less: Present value discount					(36,459)	(30,526)
Bonds	KB Securities and others	October, 2010~ November, 2018	April, 2020~ July, 2025	1.9~5.3	4,999,575	5,469,580
Less: Discount on debentures issued	oners	100000000000000000000000000000000000000	5uly, 2020	1.9 0.0	(13,174)	(18,602)
					9,789,141	9,919,651

(c) Assets pledged as collateral in regards to the borrowings as of December 31, 2018 are as follows:

	Bank (in millions of Wo	Book value on)	Pledged amount
Cash and cash equivalents	Shinhan Bank	8,296	8,296
Property, plant and equipment and			
Investment property (*1)	Korea Development Bank and others	5,592,627	5,304,861
Trade accounts and notes receivable	Korea Development Bank and others	157,617	157,617
Inventories	Export-Import Bank of Korea and others	205,433	163,233
Financial instruments	Kookmin Bank and others	40,664	40,664

6,004,637 5,674,671

(*1)Includes other assets such as right to use land.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

18. Other Payables

Other payables as of December 31, 2017 and 2018 are as follows:

	2017 (in million	2018 s of Won)
Current		
Accounts payable	800,374	783,562
Accrued expenses	653,923	720,773
Dividend payable	7,213	8,673
Finance lease liabilities	17,763	10,152
Withholdings	274,188	196,937
	1,753,461	1,720,097
Non-current		
Accounts payable	4,632	1,624
Accrued expenses	14,234	19,021
Finance lease liabilities	75,255	84,602
Long-term withholdings	53,629	43,621
	147,750	148,868

19. Other Financial Liabilities

Other financial liabilities as of December 31, 2017 and 2018 are as follows:

	2017 (in millions (2018 of Won)
Current		
Derivatives liabilities	69,872	27,328
Financial guarantee liabilities	59,940	50,472

Table of Contents

	129,812	77,800
Non-current		
Derivatives liabilities	85,638	46,429
Financial guarantee liabilities	28,467	17,733
	114,105	64,162

20. Provisions

(a) Provisions as of December 31, 2017 and 2018 are as follows:

	2017		,	2018
	Current	Non-current	Current	Non-current
		(in millions	of Won)	
Provision for bonus payments	49,171		46,514	26,964
Provision for construction warranties	11,804	106,232	11,842	130,391
Provision for legal contingencies and claims ^(*1)	495	36,269	16,981	55,716
Provision for the restoration ^(*2)	12,273	121,917	9,379	79,789
Others (*3,4)	37,203	212,754	213,737	138,176
	110,946	477,172	298,453	431,036

(*1)The Company recognized probable outflow of resources amounting to 27,963 million and 50,888 million as provisions for legal contingencies and asserted claim in relation to lawsuits against the Company as of December 31, 2017 and 2018, respectively.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(*2)Due to contamination of lands near the Company s magnesium smelting plant located in Gangneung province and others, the Company recognized present values of estimated costs for recovery, 29,703 million as provisions for restoration as of December 31, 2018. In order to determine the estimated costs, the Company has assumed that it would use all of technologies and materials available for now to recover the land. In addition, the Company has applied a discount rate of 2.28%~2.37% to measure present value of these costs.

(*3) As of December 31, 2017 and 2018, POSCO ENERGY CO., LTD., a subsidiary of the Company, recognized 157,461 million and 200,407 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, 2017 and 2018, the amount includes a provision of 23,600 million and 17,595 million, respectively, for expected outflow of resources in connection with the performance guarantee for the Hwaseong-Dongtan complexes development project of POSCO ENGINEERING & CONSTRUCTION CO., 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 and service
	provided
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	2017 and 2018 were as follows:

(c) Changes in provisions for the years ended December 31, 2017 and 2018 were as follows:

1) For the year ended December 31, 2017

Beginning	Increase	Utilization	Reversal	Others (*1)	Ending
		(in millions	s of Won)		

71
11
)36
764
90
957
18

(*1)Includes adjustments of foreign currency translation differences and others.

2) For the year ended December 31, 2018

	Beginning	Increase	Utilization (in millions	Reversal of Won)	Others (*1)	Ending
Provision for bonus payments	49,171	88,879	(60,723)	(3,856)	7	73,478
Provision for construction warranties	118,036	56,560	(24,608)	(7,660)	(95)	142,233
Provision for legal contingencies and						
claims	36,764	45,789	(6,066)	(3,399)	(391)	72,697
Provision for the restoration	134,190	14,912	(9,212)	(47,682)	(3,040)	89,168
Others	249,957	367,332	(118,388)	(216,668)	69,680	351,913
	588,118	573,472	(218,997)	(279,265)	66,161	729,489

(*1)Includes adjustments of foreign currency translation differences and others.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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, 2016, 2017 and 2018 were as follows:

	2016	2017	2018
	(in mi	llions of W	'on)
Expense related to post-employment benefit plans under defined contribution plans	30,344	35,538	42,825
(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, 2017 and 2018 are as follows:

	2017	2018
	(in millions	of Won)
Present value of funded obligations	1,826,907	2,117,829
Fair value of plan assets ^(*1)	(1,714,166)	(1,997,717)
Present value of non-funded obligations	16,228	19,332
Net defined benefit liabilities	128,969	139,444

(*1)As of December 31, 2017 and 2018, the Company recognized net defined benefit assets amounting to 8,224 million and 1,489 million, respectively, 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, 2017 and 2018 were as follows:

	2017 (in millions	2018 of Won)
Defined benefit obligations at the beginning of period	1,733,020	1,843,135
Current service costs	209,612	212,323
Interest costs	35,830	54,950
Remeasurements :	51,994	212,678
Gain from change in financial assumptions	(50,218)	173,084
Loss (gain) from change in demographic assumptions	15,952	526
Others	86,260	39,068
Benefits paid	(185,220)	(189,165)
Others	(2,101)	3,240
Defined benefit obligations at the end of period	1,843,135	2,137,161

3) Changes in fair value of plan assets for the years ended December 31, 2017 and 2018 were as follows:

	2017 (in millions (2018 of Won)
Fair value of plan assets at the beginning of period	1,693,118	1,714,166
Interest on plan assets	45,516	50,784
Remeasurement of plan assets	(17,190)	(19,761)
Contributions to plan assets	164,828	408,326
Benefits paid	(168,643)	(163,112)
Others	(3,463)	7,314
Fair value of plan assets at the end of period	1,714,166	1,997,717

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

The Company expects to make an estimated contribution of 408,887 million to the defined benefit plan assets in 2019. 4) The fair value of plan assets as of December 31, 2017 and 2018 are as follows:

	2017	2018
	(in millions	of Won)
Equity instruments	41,218	3,151
Debt instruments	367,027	692,825
Deposits	1,254,571	1,244,802
Others	51,350	56,939
	1,714,166	1,997,717

5) The amounts recognized in consolidated statements of comprehensive income for the years ended December 31, 2016, 2017 and 2018 were as follows:

	2016	2017	2018
	(in m	illions of Wo	on)
Current service costs	285,706	209,612	212,323
Net interest costs (*1)	1,901	(9,686)	4,166
	287,607	199,926	216,489

(*1)The actual return on plan assets amounted to 30,422 million, 28,326 million and 31,023 million for the years ended December 31, 2016, 2017 and 2018, respectively.

The above expenses by function were as follows:

	2016	2017	2018
	(in mi	llions of Wo	on)
Cost of sales	161,810	131,724	150,822
Selling and administrative expenses	124,994	67,424	64,505
Others	803	778	1,162
	287,607	199,926	216,489

6) Accumulated actuarial gains (losses), net of tax recognized in other comprehensive income for the years ended December 31, 2016, 2017 and 2018 were as follows:

	2016	2017	2018
	(in mi	illions of Wor	1)
Beginning	(272,152)	(251,612)	(299,155)
Current actuarial gains (losses)	20,540	(47,543)	(173,489)
Ending	(251,612)	(299,155)	(472,644)

7) The principal actuarial assumptions as of December 31, 2017 and 2018 are as follows:

	2017	2018
	(%	·)
Discount rate	2.70~7.75	2.24~10.03
Expected future increase in salaries ^(*1)	1.04~10.00	2.54~10.00

(*1)The expected future increase in salaries is based on the average salary increase rate for the past 3~5 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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

8) Reasonably possible changes at the reporting date to one of the relevant actuarial assumptions, holding the other assumptions constant, would have affected the defined benefit obligation by the amounts shown below:

	1% II	1% Increase		1% Decrease	
	Amount	Amount Percentage (%)		Percentage (%)	
	(in millions of Won)				
Discount rate	(143,793)	(6.7)	166,225	7.8	
Expected future increase in salaries	167,278	7.8	(147,232)	(6.9)	
(1) As of December 21, 2019 the maturity of the expected herefit neumants are as follows:					

9) As of December 31, 2018 the maturity of the expected benefit payments are as follows:

			Within 1 year	v	10 years	10 years - 20 years ns of Won)		Total
Benefits paid			110,168	735,172	836,318	795,347	491,384	2,968,389
	 0.1	1 01	 		0		a	

The maturity analysis of the defined benefit obligation was nominal amounts of defined benefit obligations using expected remaining period of service of employees.

22. Other Liabilities

Other liabilities as of December 31, 2017 and 2018 are as follows:

	2017 (in millions	2018 of Won)
Current		
Due to customers for contract work	782,968	641,064
Advances received	1,183,108	1,130,910
Unearned revenue	7,121	49,805
Withholdings	221,940	233,981
Firm commitment liability	12,192	24,373

Others	33,590	10,174
	2,240,919	2,090,307
Non-current		
Advances received	357,981	148,081
Unearned revenue	18,440	42,992
Others	10,010	59,359
	386,431	250,432

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

23. Financial Instruments

(a) Classification and fair value of financial instruments

1) The carrying amount and the fair values of financial assets and financial liabilities by fair value hierarchy as of December 31, 2017 and 2018 are as follows:

December 31, 2017

			Fair va	alue	
	Book value	Level 1 (in mi	Level 2 llions of Won)	Level 3	Total
Financial assets					
Financial assets at fair value through profit or loss					
Financial assets held for trading	1,970		1,970		1,970
Derivatives assets held for trading	65,051		65,051		65,051
Derivative hedging instruments	3,239		3,239		3,239
Available-for-sale financial assets	1,978,115	1,080,291	17,812	880,012	1,978,115
Held-to-maturity investments	5,211				
Loans and receivables (*1)					
Cash and cash equivalents	2,612,530				
Trade accounts and notes receivable	8,898,176				
Loans and other receivables	9,099,444				
	22,663,736	1,080,291	88,072	880,012	2,048,375
Financial liabilities					
Financial liabilities at fair value through profit or loss					
Derivative liabilities held for trading	142,280		142,280		142,280
Derivative hedging instruments	13,230		13,230		13,230
Financial liabilities measured at amortized cost ^(*1)					

Trade accounts and notes payable	3,477,678		
Borrowings	21,063,657	21,217,415	21,217,415
Financial guarantee liabilities	88,407		
Others	1,865,683		
	26,650,935	21,372,925	21,372,925

(*1)Fair value of financial assets and liabilities measured at amortized cost except borrowings approximates carrying amounts.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

December 31, 2018

		Fair value			
	Book value	Level 1	Level 2	Level 3	Total
		(in n	nillions of Wor	1)	
Financial assets					
Fair value through profit or loss					
Derivative assets	16,662		16,662		16,662
Short-term financial instruments	6,099,303		6,099,303		6,099,303
Debt securities	27,229			27,229	27,229
Other securities	338,106	1,224	5,205	331,677	338,106
Other receivables	2,000			2,000	2,000
Derivative hedging instruments (*2)	32,421		32,421		32,421
Fair value through other comprehensive					
income					
Equity securities	1,238,630	891,514		347,116	1,238,630
Debt securities	1,638			1,638	1,638
Financial assets measured at amortized cost (*1)					
Cash and cash equivalents	2,643,865				
Trade accounts and notes receivable	8,819,617				
Other receivables	1,843,381				
Debt securities	8,447				
Deposit instruments	1,966,558				
	23,037,857	892,738	6,153,591	709,660	7,755,989
Financial liabilities					
Fair value through profit or loss					
Derivative liabilities	60,047		60,047		60,047
Derivative hedging instruments ^(*2)	13,710		13,710		13,710
Financial liabilities measured at amortized cost ^(*1)					
Trade accounts and notes payable	4,035,960				
Borrowings	20,209,270		20,377,105		20,377,105

Table of Contents

Financial guarantee liabilities Others	68,205 1,803,353		
	26,190,545	20,450,862	20,450,862

(*1)Fair value of financial assets and liabilities measured at amortized cost except borrowings approximates carrying amounts.

- (*2) The Company applies hedge accounting which uses forward contracts as hedging instrument in order to hedge the risk of changes in fair value of product prices regarding firm commitments or purchase commitments. Also, the Company applies cash flow accounting which uses currency swap as hedging instrument in order to hedge the risk of changes in foreign currency which influences cash flow from borrowings.
- 2) 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 discounted cash flow method and others. Inputs of the financial instrument valuation model include forward rate, interest rate and others. It may change depending on the type of derivatives and the nature of the underlying assets.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

3) Financial assets and financial liabilities classified as fair value hierarchy Level 3

Value measurement method and significant but not observable inputs for the financial assets classified as fair value hierarchy Level 3 as of December 31, 2018 are as follows:

	Fair value	Valuation technique	Inputs (in millions of	Range of inputs Won)	Effect on fair value assessment with unobservable input
Financial assets at fair value	303,377	Discounted cash flows	Growth rate	0% ~ 0.5%	As growth rate increases, fair value increases
			Discount rate	6.4% ~ 13.8%	As discount rate increases, fair value decreases
	23,747	Proxy firm valuation method	Price multiples	1.085 ~ 5.245	As price multiples increases, fair value increases
	382,536	Asset value approach			

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, 2018 and one of the significant but not observable input is changed, the effect on fair value measurement is as follows:

	Input variable (in mill	Favorable changes ions of Won)	Unfavorable changes
Financial assets at fair value		1,563	958

Fluctuation 0.5% of growth rate		
Fluctuation 0.5% of		
discount rate	17,332	15,715

Changes in fair value of financial assets and financial liabilities classified as Level 3 for the years ended December 31, 2017 and 2018 were as follows:

	2017 (in millions	2018 of Won)
Beginning	349,090	880,012
Acquisition and others	658,359	134,325
Gain (loss) on valuations of derivatives	(10,346)	(34,555)
Other comprehensive income (loss)	35,126	26,771
Impairment	(107,934)	
Disposal and others	(44,283)	(296,893)
Ending	880,012	709,660

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

4) Finance income and costs by category of financial instrument for the years ended December 31, 2016, 2017 and 2018 were as follows:

For the year ended December 31, 2016

	Finance income and costs							
	Interest income (expense)	Gain and loss on valuation	Gain and loss on foreign currency	Gain and loss on disposal (in millions	Impairment loss 5 of Won)	Others	co Total	Other mprehensiv income
Derivatives assets		57,411		310,625			368,036	
Available-for-sale financial assets Held-to-maturity	431			127,524	(248,404)	41,000	(79,449)	310,608
financial assets	266					38	304	
Loans and receivables	181,778		140,751	(17,854)		(172)	304,503	
Derivatives liabilities		(72,976)		(332,415)			(405,391)	
Financial liabilities measured at amortized cost	(658,726)		(283,059)	(61)		(28,367)	(970,213)	
	(476,251)	(15,565)	(142,308)	87,819	(248,404)	12,499	(782,210)	310,608

For the year ended December 31, 2017

Finance income and costs							
Interest	Gain and	Gain and	Gain and	Impairment	Others	Total	Other
income	loss on	loss on	loss on	loss			comprehensive

	(expense)	valuation	foreign currency	disposal				loss
			(i	in millions of	f Won)			
Financial assets								
held for trading		16					16	
Derivatives assets		(99,942)		206,362			106,420	(143)
Available-for-sale								
financial assets	60			418,789	(123,214)	92,961	388,596	(31,389)
Held-to-maturity								
financial assets	236					7	243	
Loans and								
receivables	212,155		(607,837)	(32,456)		(304)	(428,442)	
Derivatives								
liabilities		(61,809)		(231,908)			(293,717)	
Financial								
liabilities								
measured at								
amortized cost	(653,115)		777,935			(9,546)	115,274	
	(440,664)	(161,735)	170,098	360,787	(123,214)	83,118	(111,610)	(31,532)

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

For the year ended December 31, 2018

				ne and costs			041
	Interest income (expense)	Gain and loss on valuation	Gain and loss on foreign currency (in 1	Gain and loss on disposal millions of W	Others Von)	Total	Other comprehensive income (loss)
Financial assets at fair					,		
value through profit or	140 116	(12 202)		11.010	2644	110 206	
loss Derivative assets	140,116	(43,293) 47,720		11,919 233,187	3,644	112,386 280,907	
Financial assets at fair		47,720		233,187		200,907	
value through other							
comprehensive income					59,701	59,701	(149,188)
Financial assets measured					,	,	
at amortized cost	197,142		234,606	(39,970)	(370)	391,408	
Derivative liabilities		8,592		(194,446)		(185,854) (212)
Financial liabilities							
measured at amortized							
cost	(741,296)		(438,708)		(16,990)	(1,196,994)
	(404,038)	13,019	(204,102)	10,690	45,985	(538,446) (149,400)

(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, 2017 and 2018 are as follows:

	(in millions	of Won)
Cash and cash equivalents	2,612,530	2,643,865
Derivative assets	68,290	49,083
Short-term financial instrument	5,545,667	6,099,303
Debt securities		37,314
Other securities		338,106
Financial assets held for trading	1,970	
Available-for-sale financial assets	192,866	
Held-to-maturity investments	5,211	
Other receivables	2,195,466	1,845,381
Trade accounts and notes receivable	8,898,176	8,819,617
Deposit instruments	1,358,311	1,966,558
	20,878,487	21,799,227

The Company provided financial guarantee for the repayment of loans of associates, joint ventures and third parties. As of December 31, 2017 and 2018, the maximum exposure to credit risk related to the financial guarantee amounted to 3,135,084 million and 3,147,280 million, respectively.

2) Impairment losses on financial assets

The Company assesses expected credit losses by estimating the default rate based on the credit loss experience of prior periods and overdue conditions and considers the credit default swap (CDS) premium to reflect changes in credit risk by sector. For credit-impaired assets and significant receivables where the credit risk is significantly increased, credit losses are individually assessed.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

Allowance for doubtful accounts as of December 31, 2017 and 2018 are as follows:

	2017 (in millions o	2018 of Won)
Trade accounts and notes receivable	634,129	588,733
Other accounts receivable	187,706	160,729
Loans	258,957	147,980
Other assets	13,672	19,348
	1,094,464	916,790

Impairment losses on financial assets for the years ended December 31, 2017 and 2018 were as follows:

	2017 (in millions o	2018 of Won)
Bad debt expenses	173,694	74,781
Other bad debt expenses ^(*1)	100,920	81,353
Impairment loss on available-for-sale financial assets	123,214	
Less: Recovery of allowance for other bad debt accounts	(2,743)	(18,261)
Less: Recovery of impairment loss on held-to-maturity financial assets	(20)	
	395,065	137,873

(*1)Other bad debt expenses are mainly related to loans and other accounts receivable.

The aging and allowance for doubtful accounts of trade accounts and notes receivable as of December 31, 2017 and 2018 are as follows:

	201	17	20	18
	Trade accounts and notes receivable	Allowance for doubtful accounts (in million	Trade accounts and notes receivable s of Won)	Allowance for doubtful accounts
Not due	7,736,092	65,314	8,021,110	70,418
Overdue less than 1 month	445,390	12,546	632,082	14,434
1 month 3 months	170,682	742	226,082	4,116
3 months 12 months	384,313	21,030	118,094	11,774
Over 12 months	1,453,785	534,497	1,148,694	487,991
	10,190,262	634,129	10,146,062	588,733

The aging and allowance for doubtful accounts of other receivables as of December 31, 2017 and 2018 are as follows:

	20	17	20	018
	Loans and other account receivable	Allowance for doubtful accounts (in million	Loans and other account receivable s of Won)	Allowance for doubtful accounts
Not due	1,888,726	9,672	1,754,293	140,072
Overdue less than 1 month	235,559	35,539	100,102	4,307
1 month 3 months	69,372	54,335	28,351	851
3 months 12 months	96,942	64,467	59,946	12,411
Over 12 months	365,202	296,322	230,746	170,416
	2,655,801	460,335	2,173,438	328,057

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

Changes in the allowance for doubtful accounts for the years ended December 31, 2016, 2017 and 2018 were as follows:

	2016	2017	2018
	(in n	nillions of Wo	n)
Beginning	999,678	977,771	1,094,464
Initial application of IFRS No. 9			107,454
Bad debt expenses	165,150	173,694	74,781
Other bad debt expenses	37,567	98,177	63,092
Others ^(*1)	(224,624)	(155,178)	(423,001)
Ending	977,771	1,094,464	916,790

(*1)Others for the year ended December 31, 2016, 2017 and 2018, included decreases mainly due to write-off amounting to 216,657 million, 119,964 million and 383,714 million, respectively.
(c) Liquidity risk

1) Contractual maturities for non-derivative financial liabilities are as follows:

	Book value	Contractual cash flow (in mi	Within 1 year llions of Won)	1 year - 5 years	After 5 years
Trade accounts and notes payable	4,035,960	4,037,863	4,006,942	30,921	
Borrowings	20,209,270	24,319,619	12,912,399	10,452,389	954,831
Financial guarantee liabilities (*1)	68,205	3,147,280	3,147,280		
Other financial liabilities	1,803,353	1,817,014	1,668,937	148,077	
	26,116,788	33,321,776	21,735,558	10,631,387	954,831

(*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) Contractual maturities for derivative financial liabilities are as follows:

	Within 1 year (1 year - 5 years in millions	After 5 years of Won)	Total
Currency forward	11,364	34,743		46,107
Currency swap	1,707	5,849	4,369	11,925
Interest swap		1,467		1,467
Others	14,258			14,258
	27,329	42,059	4,369	73,757

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(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, 2017 and 2018 are as follows:

	201	2017		18
	Assets	Assets Liabilities		Liabilities
		(in millions	of Won)	
USD	4,215,151	5,940,380	4,346,481	6,389,276
EUR	552,630	454,072	657,690	509,437
JPY	165,356	709,318	97,722	389,625
Others	220,723	117,632	259,949	142,868

2) As of December 31, 2017 and 2018, provided that functional currency against foreign currencies other than functional currency hypothetically strengthens or weakens by 10%, the changes in gain or loss for the years ended December 31, 2017 and 2018 were as follows:

	2	017	2	018
	10% increase	10% decrease	10% increase	10% decrease
		(in millio	ns of Won)	
USD	(172,523)	172,523	(204,280)	204,280
EUR	9,856	(9,856)	14,825	(14,825)
JPY	(54,396)	54,396	(29,190)	29,190

(e) Interest rate risk

1) The carrying amount of interest-bearing financial instruments as of December 31, 2017 and 2018 are as follows:

	2017	2018
	(in million	s of Won)
Fixed rate		

Financial assets	10,943,300	11,565,519
Financial liabilities	(11,179,635)	(11,781,701)
	(236,335)	(216,182)
Variable rate		
Financial liabilities	(9,977,040)	(8,522,323)
2) Sensitivity analysis on the cash flows of financial instruments with variable inte	arast rota	

2) Sensitivity analysis on the cash flows of financial instruments with variable interest rate

The Company s interest rate risk mainly arises from borrowings with variable interest rate. As of December 31, 2017 and 2018, 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, 2017 and 2018 were as follows:

	2017		2	018
	1% increase	1% decrease	1% increase	1% decrease
		(in million	s of Won)	
Variable rate financial instruments	(99,770)	99,770	(85,223)	85,223

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

24. Share Capital and Capital Surplus

(a) Share capital as of December 31, 2017 and 2018 are as follows:

	2017	2018
	(Share, i	n 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, 2018, total shares of ADRs of 36,860,288 outstanding in overseas stock market are equivalent to 9,215,072 of common stock.

(*2)As of December 31, 2018, 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, 2017 and 2018 were as follows:

		2017			2018	
	Issued shares	Treasury shares	Number of outstanding shares	Issued shares	Treasury shares	Number of outstanding shares
			(sha	ire)		
Beginning	87,186,835	(7,189,170)	79,997,665	87,186,835	(7,187,231)	79,999,604
Disposal of treasury shares		1,939	1,939		1,528	1,528
Ending	87,186,835	(7,187,231)	79,999,604	87,186,835	(7,185,703)	80,001,132
() $()$ $()$ $()$ $()$ $()$	1 01 001	1.0010	0.11			

(c) Capital surplus as of December 31, 2017 and 2018 are as follows:

	2017	2018
	(in millions	of Won)
Share premium	463,825	463,825
Gain on disposal of treasury shares	783,914	784,047
Other capital deficit	174,282	172,135
	1,422,021	1,420,007

(d) POSCO Energy Co., Ltd., a subsidiary of the Company, issued redeemable convertible preferred shares which are classified as non-controlling interests in the consolidated financial statements. The details of redeemable convertible preferred shares as of December 31, 2018 are as follows:

Issue date	Redeemable Convertible Preferred Shares (Share, in Won) February 25, 2017	
Number of shares issued	8,643,193 shares	
Price per share	28,346	
Voting rights	No voting rights for 3 years from issue date	
Dividend rights	 Comparative, Non-participating Minimum dividend rate for 1~3 years : 3.98% Minimum dividend rate after 4 years : Comparative rate + Issuance spread + 2% 	

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

	Redeemable Convertible Preferred Shares (Share, in Won)
Details about Redemption	Issuer can demand redemption of all or part of redeemable convertible preferred shares every year after the issue date, for a period of 10 years from the issue date.
Details about Conversion	Stockholders of redeemable convertible preferred shares can convert them to common shares from 3 years after the issue date to the end of the redemption period (10 years).Conversion price is equal to issue price per share, which could be adjusted according to anti-dilution clause.

Redeemable convertible preferred stocks are classified as non-controlling interests in the consolidated financial statements since the issuer has a redemption right and can control the circumstances in which the entity can settle with a variable quantity of equity instruments.

25. Hybrid Bonds

(a) Hybrid bonds classified as equity as of December 31, 2017 and 2018 are as follows:

	Date of issue	Date of maturity Inte (in millio	erest rate (%) ons of Won)	2017	2018
Hybrid bond 1-1 ^(*1)				800,000	
Hybrid bond 1-2 ^(*2)	2013-06-13	2043-06-13	4.60	200,000	200,000
Issuance cost				(3,081)	(616)
				996,919	199,384

(*1)During the year ended December 31, 2018, the Company exercised the call option of the Hybrid bond.

(*2)Details of issuance of hybrid bonds as of December 31, 2018 are as follows:

	Hybrid bond 1-2
Maturity date	30 years (POSCO has a right to extend the maturity date)
Interest rate	Issue date ~ 2023-06-12 : 4.60% Reset every 10 years as follows; • After 10 years : return on government bond (10 years) + 1.40% • 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 POSCO)
Others	POSCO can call the hybrid bond at year 10 and interest payment date afterwards

The hybrid bond holder s 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, 2018 amounts to 479 million.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(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, 2017 and 2018 are as follows:

	Date of issue	Date of maturity Inter (in million	rest rate (%) ns of Won)	2017	2018
Hybrid bond 1-1 ^(*1)				165,000	
Hybrid bond 1-2 ^(*1)				165,000	
Hybrid bond 1-3 ^(*1)				30,000	
Hybrid bond 1-4 ^(*2)	2013-08-29	2043-08-29	5.21	140,000	140,000
Issuance cost				(1,532)	(429)
				498,468	139,571

(*1)During the year ended December 31, 2018, the Company exercised the call option for the Hybrid bond.

(*2) Details of issuance of hybrid bonds of POSCO ENERGY Co., Ltd .as of December 31, 2018 are as follows:

	Hybrid bond 1-4
Maturity date	30 years (The Company has a right to extend the maturity date)
Interest rate	Issue date ~ 2023-08-29 : 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 issuer)
Others	The issuer 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, 2018 amounts to 639 million.

26. Reserves

(a) Reserves as of December 31, 2017 and 2018 are as follows:

	2017 (in million	2018 as of Won)
Accumulated comprehensive loss of investments in associates and joint ventures	(516,528)	(670,435)
Changes in fair value of equity investments at fair value through other comprehensive		
income		(295,300)
Changes in the unrealized fair value of available-for-sale investments	230,190	
Foreign currency translation differences	(372,166)	(417,817)
Gain or losses on valuation of derivatives	(136)	(352)
Others	(23,916)	(20,464)
	(682,556)	(1,404,368)

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(b) Changes in unrealized fair value of available-for-sale investments and changes in fair value of equity investments at fair value through other comprehensive income for the years ended December 31, 2017 and 2018 were as follows:

	2017 (in millions	2018 s of Won)
Beginning balance	276,143	230,190
Initial application of IFRS No. 9		(421,525)
Changes in unrealized fair value of equity investments	183,761	(139,226)
Reclassification upon disposal	(299,862)	45,737
Impairment of available-for-sale investments	96,083	
Others	(25,935)	(10,476)
Ending balance	230,190	(295,300)

27. Treasury Shares

Based on the Board of Directors resolution, POSCO holds treasury shares for business purposes including price stabilization. The changes in treasury shares for the years ended December 31, 2017 and 2018 were as follows:

	2017		2018	
			Number of shares nillions of Won)	Amount
Beginning Disposal of treasury shares	7,189,170 (1,939)	1,533,468 (414)	7,187,231 (1,528)	1,533,054 (326)
Ending	7,187,231	1,533,054	7,185,703	1,532,728

28. Revenue

(a) Disaggregation of revenue

1) Details of revenue disaggregated by types of revenue and timing of revenue recognition for the years ended December 31, 2016, 2017 and 2018 were as follows:

For the year ended December 31, 2016

	Steel	Trading (in 1	Construction millions of Won)	Others	Total
Types of revenue					
Revenue from sales of goods	26,687,899	16,602,482	11,496	243,149	43,545,026
Revenue from services	102,657	24,703	50,189	2,237,129	2,414,678
Revenue from construction contract			6,474,192	23,087	6,497,279
Others	53,599	146,893	88,728	193,568	482,788
	26,844,155	16,774,078	6,624,605	2,696,933	52,939,771
Timing of revenue recognition					
Revenue recognized at a point in time	26,741,498	16,749,375	100,224	446,667	44,037,764
Revenue recognized over time	102,657	24,703	6,524,381	2,250,266	8,902,007
	26,844,155	16,774,078	6,624,605	2,696,933	52,939,771

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

For the year ended December 31, 2017

	Steel	Trading (in 1	Construction millions of Won)	Others	Total
Types of revenue					
Revenue from sales of goods	30,064,680	20,655,267	20,368	617,394	51,357,709
Revenue from services	111,494	28,793	48,408	1,876,179	2,064,874
Revenue from construction contract			6,262,038	37,154	6,299,192
Others	54,194	118,147	87,559	205,192	465,092
	30,230,368	20,802,207	6,418,373	2,735,919	60,186,867
Timing of revenue recognition					
Revenue recognized at a point in					
time	30,118,874	20,773,414	107,927	832,369	51,832,584
Revenue recognized over time	111,494	28,793	6,310,446	1,903,550	8,354,283
	30,230,368	20,802,207	6,418,373	2,735,919	60,186,867

For the year ended December 31, 2018

	Steel	Trading (in 1	Construction millions of Won)	Others	Total
Types of revenue					
Revenue from sales of goods	31,733,609	21,632,183	3,568	605,206	53,974,566
Revenue from services	583,359	611,752	63,922	2,274,606	3,533,639
Revenue from construction contract			6,860,995	272,778	7,133,773
Others	41,041	163,782	17,784	290,051	512,658
	32,358,009	22,407,717	6,946,269	3,442,641	65,154,636
Timing of revenue recognition					

Revenue recognized at a point in					
time	31,774,650	21,795,965	127,182	906,120	54,603,917
Revenue recognized over time	583,359	611,752	6,819,087	2,536,521	10,550,719
	32,358,009	22,407,717	6,946,269	3,442,641	65,154,636

(b) Details of contract assets and liabilities from contracts with customers as of December 31, 2018 and January 1, 2018, the initial application date of IFRS No. 15 Revenue from Contracts with Customers and IFRS No. 9 Financial Instruments, are as follows;

	The date of initial application (January 1, 2018) (in millions	2018 of Won)
Receivables		
Account receivables	8,795,470	8,819,617
Contract assets		
Due from customers for contract work	647,385	737,712
Contract liabilities		
Advance received	1,547,247	1,278,731
Due to customers for contract work	751,933	641,064
Unearned revenue	77,657	91,872

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

29. Revenue Contract Balances

(a) Details of in-progress contracts as of December 31, 2017 and 2018 are as follows:

	2017	2018
	(in millions	s of Won)
Accumulated cost	21,404,321	26,153,452
Accumulated contract profit	1,524,208	1,848,718
Accumulated contract loss	(718,593)	(804,538)
Accumulated contract revenue	22,209,936	27,197,632
(b) Details of due from customers for contract work and due to customers for contract	t work as of Decen	nber 31, 2017
and 2018 are as follows:		

	2017	2018
	(in millions	s of Won)
Unbilled due from customers for contract work	728,007	810,655
Due to customers for contract work	(782,968)	(641,064)
	(54,961)	169,591

(c) Due to the factors causing the variation of costs for the years ended December 31, 2017 and 2018, 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 years ended December 31, 2017, 2018 and future periods are as follows:

	2017 (in million	2018 s of Won)
Changes in estimated total contract costs	164,812	427,812
Changes in profit before income taxes of construction contract :		
- Current period	(69,656)	(38,720)
- Future periods	(6,041)	69,428

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 period. The estimation is evaluated for the total contract costs and expected total contract revenue as of the end of the period. Also, it may change during 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, 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

Contract revenues are recognized based on the percentage of completion, which is measured on the basis of the gross cost 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 estimates on future contract costs due to various internal and external factors such as fluctuation of market, the risk of business

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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 costAssumption based on recent purchasing price and quoted market priceLabor costAssumption based on standard monthly and daily labor costOutsourcing
costAssumption based on the past experience rate of similar project and market priceManagement reviews the assumptions used in estimated contract costs at each reporting period end and adjusts them,
if necessary.

30. Selling and Administrative Expenses

(a) Other administrative expenses

Other administrative expenses for the years ended December 31, 2016, 2017 and 2018 were as follows:

	2016	2017	2018
	(in m	illions of Won)	
Wages and salaries	769,589	774,900	813,467
Expenses related to post-employment benefits	200,956	78,654	73,290
Other employee benefits	176,794	159,920	176,240
Travel	40,828	39,790	40,929
Depreciation	103,442	97,261	101,274
Amortization	139,569	146,314	112,418
Communication	11,186	11,740	10,616
Electricity expenses	7,527	7,050	8,309
Taxes and public dues	78,895	72,826	71,973
Rental	82,005	69,976	69,516
Repairs	11,316	9,859	15,291
Entertainment	13,157	11,582	11,816

Advertising	86,141	119,724	106,875
Research & development	120,608	125,795	108,352
Service fees	201,129	193,387	165,938
Vehicles maintenance	10,090	8,211	8,942
Industry association fee	13,468	10,140	9,571
Conference	13,108	14,494	14,510
Increase to provisions	6,532	10,990	14,433
Others	40,050	40,493	51,995
	2,126,390	2,003,106	1,985,755

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(b) Selling expenses

Selling expenses for the years ended December 31, 2016, 2017 and 2018 were as follows:

	2016	2017	2018
	(in mi	llions of Won)
Freight and custody expenses ^(*1)	1,342,009	1,336,969	184,675
Operating expenses for distribution center	10,315	10,503	10,614
Sales commissions	94,377	115,925	79,080
Sales advertising	5,117	3,800	4,821
Sales promotion	10,670	12,414	13,792
Sample	2,335	1,989	2,716
Sales insurance premium	31,379	36,546	37,251
Contract cost	49,480	23,061	16,992
Others	8,004	16,070	19,304
	1,553,686	1,557,277	369,245

(*1)During the year ended December 31, 2018, the Company recognized the freight expenses included in selling expenses incurred for the delivery of transportation services identified as a separate performance obligations in cost of sales.

31. Research and Development Expenditures Recognized as Expenses

Research and development expenditures recognized as expenses for the years ended December 31, 2016, 2017 and 2018 were as follows:

	(in mi	(in millions of Won)		
Administrative expenses	120,608	125,795	108,352	
Cost of sales	324,190	361,093	418,250	
	444,798	486,888	526,602	

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

32. Other Operating Income and Expenses

Details of other operating income and expenses for the years ended December 31, 2016, 2017 and 2018 were as follows:

	2016 (in n	2017 nillions of Wo	2018 on)
Other operating income	, i i i i i i i i i i i i i i i i i i i		,
Gain on disposals of assets held for sale	23,112	1,180	27,171
Gain on disposals of investment in subsidiaries, associates and joint			
ventures	23,305	81,794	45,241
Gain on disposals of property, plant and equipment	23,826	32,145	53,139
Gain on disposals of intangible assets	671	23,391	117,139
Gain on valuation of firm commitment		56,301	39,028
Gain on insurance proceeds	22,400	5,878	14,034
Others (*1,2)	109,164	247,792	227,834
	202,478	448,481	523,586
Other operating expenses			
Impairment loss on assets held for sale	(24,890)		(50,829)
Loss on disposals of investments in subsidiaries, associates and joint			
ventures	(22,499)	(19,985)	(5,226)
Loss on disposals of property, plant and equipment	(86,622)	(151,343)	(117,614)
Impairment loss on property, plant and equipment	(196,882)	(117,231)	(1,004,704)
Impairment loss on investment property	(318)		(51,461)
Loss on disposals of investment property	(21)	(1,966)	(9,154)
Impairment loss on intangible assets	(127,875)	(167,995)	(337,519)
Increase to provisions	(53,058)	(33,964)	(134,632)
Loss on valuation of firm commitment		(43,164)	(66,281)
Donations	(43,810)	(51,424)	(52,074)
Idle tangible asset expenses	(6,437)	(10,490)	(9,257)
Others ^(*3)	(143,083)	(93,814)	(175,711)
	(705,495)	(691,376)	(2,014,462)

- (*1)During the year ended December 31, 2018, the Controlling Company recognized 55,306 million of tax refund upon successful appeal to tax tribunal against tax investigation as other operating income.
- (*2) The Company has recognized the refund of VAT and others amounting to 160,501 million as other operating income in 2017, based on the result of the tax amounts to be refunded when the result of the Company s appeal in connection with the additional income tax payment in prior years tax audits for rectification was finalized.
- (*3)During the year ended December 31, 2018, the Controlling Company recognized 52,997 million of additional taxes imposed for value added tax related to imported LNG as other operating expense.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

33. Finance Income and Costs

Details of finance income and costs for the years ended December 31, 2016, 2017 and 2018 were as follows:

	2016	2017 (in millions of Won)	2018
Finance income			
Interest income (*1)	182,475	212,451	337,258
Dividend income	41,000	92,962	63,345
Gain on foreign currency transactions	1,032,552	785,616	716,060
Gain on foreign currency translations	377,723	564,016	212,443
Gain on derivatives transactions	316,524	210,727	247,513
Gain on valuations of derivatives	147,111	64,735	96,986
Gain on disposals of available-for-sale financial assets	130,830	425,684	
Gain on valuations of financial assets at fair value through			
profit or loss			16,149
Others	3,765	16,476	16,216
	2,231,980	2,372,667	1,705,970
Finance costs			
Interest expenses	(658,726)	(653,115)	(741,296)
Loss on foreign currency transactions	(1,147,192)	(756,654)	(810,857)
Loss on foreign currency translations	(405,391)	(422,880)	(321,748)
Loss on derivatives transactions	(338,314)	(236,273)	(208,772)
Loss on valuation of derivatives	(162,676)	(226,487)	(40,674)
Impairment loss on available-for-sale financial assets	(248,404)	(123,214)	
Loss on valuations of financial assets at fair value through			
profit or loss			(59,442)
Others	(53,487)	(65,654)	(61,627)
	(3,014,190)	(2,484,277)	(2,244,416)

(*1)Interest income calculated using the effective interest method for the years ended December 31, 2016, 2017, and 2018 were 106,828 million, 130,710 million, and 197,142 million, respectively.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

34. Expenses by Nature

Expenses that are recorded by nature as cost of sales, selling and administrative expenses, impairment loss on other receivables and other operating expenses in the statements of comprehensive income for the years ended December 31, 2016, 2017 and 2018 were as follows (excluding finance costs and income tax expense):

	2016 (in	2017 millions of Won)	2018
Raw material used, changes in inventories and others	30,177,732	35,584,184	38,884,690
Employee benefits expenses (*2)	3,444,276	3,357,861	3,639,192
Outsourced processing cost	7,678,055	7,074,948	7,462,656
Electricity expenses	1,018,429	933,045	949,435
Depreciation ^(*1)	2,835,843	2,887,646	2,911,048
Amortization	378,004	409,774	356,581
Freight and custody expenses	1,342,009	1,336,969	1,414,940
Sales commissions	94,377	115,925	79,080
Loss on disposal of property, plant and equipment	86,622	151,343	117,614
Impairment loss on property, plant and equipment	196,882	117,231	1,004,704
Impairment loss on goodwill and intangible assets	127,875	167,995	337,519
Donations	43,810	51,424	52,074
Other expenses	3,448,497	4,253,625	4,445,124
-			
	50,872,411	56,441,970	61,654,657

(*1)Includes depreciation expense of investment property.

^(*2)The details of employee benefits expenses for the years ended December 31, 2016, 2017 and 2018 were as follows:

	2016	2017	2018
	(in ı	nillions of Won)
Wages and salaries	3,016,488	3,105,364	3,372,831
Expenses related to post-employment benefits	427,788	252,497	266,361
	3,444,276	3,357,861	3,639,192

35. Income Taxes

(a) Income tax expense for the years ended December 31, 2016, 2017 and 2018 was as follows:

	2016	2017	2018
	(in	millions of Won)	
Current income taxes ^(*1)	699,269	864,143	1,577,581
Deferred income tax due to temporary differences	(209,706)	300,037	(38,851)
Items recorded directly in equity	(110,019)	21,560	144,900
Income tax expense	379,544	1,185,740	1,683,630

(*1)Refund (additional payment) of income taxes when filing a final corporation tax return credited (charged) directly to current income taxes.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(b) The income taxes credited (charged) directly to equity for the years ended December 31, 2016, 2017 and 2018 were as follows:

	2016	2017	2018
	(in n	nillions of Won)	
Net changes in fair value of equity investments at fair value			
through other comprehensive income	(100,550)	1,271	47,423
Remeasurements of defined benefit plans	(11,722)	22,208	56,289
Gain on sale of treasury shares	(10)	(40)	(50)
Others	2,263	(1,879)	41,238
	(110,019)	21,560	144,900

(c) The following table reconciles the calculated income tax expense based on POSCO s statutory rate (27.5%) to the actual amount of taxes recorded by the Company for the years ended December 31, 2016, 2017 and 2018.

	2016	2017 (in millions of Won)	2018
Profit before income tax expense	1,411,609	4,095,051	3,616,016
Income tax expense computed at statutory rate	341,148	990,540	982,287
Adjustments:			
Tax credits	(30,124)	(40,757)	(32,103)
Additional Income tax expense for prior years			
(Over provisions from prior years)	(11,829)	(20,912)	44,336
Tax effect from tax audit			130,196
Investment in subsidiaries, associates and joint			
ventures	76,751	55,113	114,856
Tax effects due to permanent differences	(9,962)	4,798	64,708
Effect of tax rate change ^(*1)		175,647	
Others ^(*2)	13,560	21,311	379,350
	38,396	195,200	701,343

Income tax expense	379,544	1,185,740	1,683,630
Effective tax rate (%)	26.89%	28.96%	46.56%

(*1)During the year ended December 31, 2017, the statutory rate changed from 24.2% to 27.5% for taxable income in excess of 300,000 million was enacted as a result of a revision to Korean tax law, which will be effective from 2018.

(*2)Includes the effect of undeductible impairment loss related to Synthetic Natural Gas (SNG) facility for the year ended December 31, 2018.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(d) The movements in deferred tax assets (liabilities) for the years ended December 31, 2017 and 2018 were as follows:

		2017			2018 Inc.	
	Beginning	Inc. (Dec.)	Ending (in million	Beginning s of Won)	(Dec.)	Ending
Deferred income tax due to temporary differences						
Allowance for doubtful accounts (*1)	213,119	60,875	273,994	273,994	(92,851)	181,143
Reserve for technology developments	(91,960)	53,973	(37,987)	(37,987)	37,987	
PP&E Depreciation	(11,639)	26,280	14,641	14,641	(4,804)	9,837
Share of profit or loss of equity-accounted investees	70,259	125,783	196,042	196,042	31,552	227,594
Allowance for inventories valuation	15,651	(4,871)	10,780	10,780	(104)	10,676
PP&E Revaluation	(1,524,149)	(304,015)	(1,828,164)	(1,828,164)	(33,548)	(1,861,712)
Prepaid expenses	19,665	335	20,000	20,000	(2,741)	17,259
PP&E Impairment loss	5,295	245	5,540	5,540	(927)	4,613
Gain or loss on foreign currency					10.160	
translation	(5,957)	(42,515)	(48,472)	(48,472)	10,462	(38,010)
Defined benefit obligations	361,838	68,279	430,117	430,117	70,334	500,451
Plan assets Provision for construction losses	(355,661) 997	(41,960) (556)	(397,621) 441	(397,621) 441	(66,940) 6,964	(464,561) 7,405
Provision for construction	997	(550)	441	441	0,904	7,403
warranty	24,322	4,395	28,717	28,717	41,601	70,318
Accrued income	(9,441)	(3,474)	(12,915)	(12,915)	(179)	(13,094)
Others ^(*1)	750,151	(55,834)	694,317	694,317	(233,026)	461,291
	(537,510)	(113,060)	(650,570)	(650,570)	(236,220)	(886,790)

Deferred income taxes						
recognized directly to equity						
Net changes in fair value of						
equity investments at fair value						
through other comprehensive						
income ^(*1)	(50,507)	1,271	(49,236)	(49,236)	206,121	156,885
Others	51,832	20,329	72,161	72,161	58,111	130,272
	1,325	21,600	22,925	22,925	264,232	287,157
Deferred tax from tax credit						
Tax credit carry-forward and						
others	307,335	(189,303)	118,032	118,032	(2,443)	115,589
Investments in subsidiaries,						
associates and joint ventures						
Investments in subsidiaries,						
associates and joint ventures	86,130	(17,704)	68,426	68,426	135,512	203,938
	(142,720)	(298,467)	(441,187)	(441,187)	161,081	(280,106)

(*1)These changes includes the cumulative impact of initial application of IFRS No. 15 and IFRS No. 9.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(e) Deferred tax assets and liabilities for the years ended December 31, 2017 and 2018 are as follows:

	Assets	2017 Liabilities	Net	Assets	2018 Liabilities	Net
Deferred income tax due to			(in millions	of Won)		
temporary differences						
Allowance for doubtful						
accounts	273,994		273,994	181,143		181,143
Reserve for technology	270,777		_,,,,,,	101,110		101,110
developments		(37,987)	(37,987)			
PP&E Depreciation	59,912	(45,271)	14,641	55,354	(45,517)	9,837
Share of profit or loss of						
equity-accounted investees	236,637	(40,595)	196,042	278,466	(50,872)	227,594
Allowance for inventories						
valuation	10,780		10,780	10,676		10,676
PP&E Revaluation		(1,828,164)	(1,828,164)		(1,861,712)	(1,861,712)
Prepaid expenses	20,000		20,000	17,259		17,259
PP&E Impairment loss	5,639	(99)	5,540	5,240	(627)	4,613
Gain or loss on foreign						
currency translation	113,760	(162,232)	(48,472)	121,797	(159,807)	(38,010)
Defined benefit obligations	430,117		430,117	500,451		500,451
Plan assets		(397,621)	(397,621)		(464,561)	(464,561)
Provision for construction						
losses	441		441	7,405		7,405
Provision for construction						
warranty	28,717		28,717	70,318		70,318
Accrued income		(12,915)	(12,915)		(13,094)	(13,094)
Others	746,367	(52,050)	694,317	857,583	(396,292)	461,291
	1,926,364	(2,576,934)	(650,570)	2,105,692	(2,992,482)	(886,790)

Deferred income taxes recognized directly to equity

Net changes in fair value of equity investments at fair value through other comprehensive						
income	110,865	(160,101)	(49,236)	247,921	(91,036)	156,885
Others	92,981	(20,820)	72,161	153,609	(23,337)	130,272
	203,846	(180,921)	22,925	401,530	(114,373)	287,157
Deferred tax from tax credit						
Tax credit carry-forward and						
others	118,032		118,032	115,589		115,589
Investments in subsidiaries, associates and joint ventures						
Investments in subsidiaries,						
associates and joint ventures	563,406	(494,980)	68,426	547,662	(343,724)	203,938
	2,811,648	(3,252,835)	(441,187)	3,170,473	(3,450,579)	(280,106)

(f) As of December 31, 2018, the Company did not recognize income tax effects associated with deductible temporary differences of 5,590,698 million mainly relating to loss of subsidiaries and affiliates because realization is not considered probable. As of December 31, 2018, the Company did not recognize income tax effects associated with taxable temporary differences of 4,873,232 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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

36. Earnings per Share

Basic and diluted earnings per share for the years ended December 31, 2016, 2017 and 2018 were as follows:

	2016	2017	2018						
	(in Won, except per share information)								
Profit attribute to controlling interest	1,354,806,734,940	2,756,230,487,872	1,711,901,875,666						
Interests of hybrid bonds	(33,225,163,081)	(33,048,799,997)	(17,720,986,299)						
Weighted-average number of common shares									
outstanding ^(*1)	79,996,389	79,998,600	80,000,606						
Basic and diluted earnings per share	16,521	34,040	21,177						

(*1)The weighted-average number of common shares used to calculate basic and diluted earnings per share are as follows:

	2016	2017 (shares)	2018
Total number of common shares issued	87,186,835	87,186,835	87,186,835
Weighted-average number of treasury shares	(7,190,446)	(7,188,235)	(7,186,229)
Weighted-average number of common shares outstanding	79,996,389	79,998,600	80,000,606

Since there were no potential shares of common stock which had dilutive effects as of December 31, 2016, 2017 and 2018, diluted earnings per share is equal to basic earnings per share.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

37. Related Party Transactions

(a) Significant transactions between the controlling company and related companies for the years ended December 31, 2016, 2017 and 2018 were as follows:

1) For the year ended December 31, 2016

	Sales and others ^(*1)			others (*2)		
	Sales	Others	Purchase of material (in millions	-	Outsourced cocessing cost	Others
Subsidiaries						
POSCO ENGINEERING &						
CONSTRUCTION CO., 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 ^(*3)	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. ^(*4)	219,489		2		863	1,177
POSCO AST ^(*4)	152,098	1			19,695	922
POSCO DAEWOO Corporation	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				
	355,829	2,613				93

POSCO Maharashtra Steel Private Limited						
POSCO(Suzhou) Automotive						
Processing Center Co., Ltd.	149,911					
Others	766,263	22,717	207,601	62,202	212,344	145,562
	11,160,350	125,892	2,214,877	496,841	592,579	380,144
Associates and joint ventures						
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			
	79,588	43,509	667,269	244,898	17,439	8,148
	11,239,938	169,401	2,882,146	741,739	610,018	388,292

(*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, 2016, it was merged into POSCO Processing & Service.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

2) For the year ended December 31, 2017

	Sales and oth	iers ^(*1)		Purchase and others ^(*2) Purchase of Outsourced			
	Sales	Others	Purchase of material (in millions of	fixed assets f Won)	processing cost	Others	
Subsidiaries							
POSCO ENGINEERING &							
CONSTRUCTION CO., LTD.	3,328	71		151,639	32	18,352	
POSCO Processing & Service	298,781	1	113,628	4,595	8,309	404	
POSCO COATED & COLOR							
STEEL Co., Ltd.	417,369	3,533			8,483	106	
POSCO ICT ^(*3)	1,697	5,097		315,748	29,773	183,226	
eNtoB Corporation	1	30	330,921	8,215	139	26,023	
POSCO CHEMTECH	359,862	33,076	479,896	23,043	296,296	6,860	
POSCO ENERGY CO., LTD.	179,966	1,456				2	
POSCO DAEWOO Corporation	5,214,127	35,182	550,258	221	44,108	1,948	
POSCO Thainox Public Company							
Limited	218,005	9,780	10,168				
POSCO America Corporation	345,225		90			1,776	
POSCO Canada Ltd.	439	690	278,915				
POSCO Asia Co., Ltd.	1,949,354	1,454	365,025	337	1,625	4,982	
Qingdao Pohang Stainless Steel Co.,							
Ltd.	161,803					176	
POSCO JAPAN Co., Ltd.	1,436,159	20	26,256	621		44,829	
POSCO-VIETNAM Co., Ltd.	212,883					7	
POSCO MEXICO S.A. DE C.V.	276,387					1,749	
POSCO Maharashtra Steel Private							
Limited	467,206					65	
POSCO (Suzhou) Automotive							
Processing Center Co., Ltd.	192,467						
Others	932,048	10,073	262,828	25,270	240,687	118,665	

	12,667,107	100,463	2,417,985	529,689	629,452	409,170
Associates and joint ventures						
POSCO PLANTEC Co., Ltd.	2,947	112	5,487	300,041	20,718	19,763
SNNC	6,734	712	554,151			4
POSCO-SAMSUNG-Slovakia						
Processing Center	52,779					
Roy Hill Holdings Pty Ltd			697,096			
CSP Compania Siderurgica do						
Pecem	7,384		159,501			
Others	14,943	52,583	79,103			3
	84,787	53,407	1,495,338	300,041	20,718	19,770
	12,751,894	153,870	3,913,323	829,730	650,170	428,940

(*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

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

3) For the year ended December 31, 2018

	Sales and oth	ners ^(*1)	I			
	Sales	Others		Purchase of p fixed assets of Won)	processing cost	Others
Subsidiaries ^(*3)						
POSCO ENGINEERING &						
CONSTRUCTION CO., LTD.	7,827	97		322,924	47	36,428
POSCO COATED & COLOR						
STEEL Co., Ltd.	476,105	2,725			9,211	1,434
POSCO ICT ^(*4)	2,624	7,479		341,472	34,376	196,252
eNtoB Corporation	12	60	377,198	27,508	390	31,455
POSCO CHEMTECH	417,957	35,762	531,452	21,730	319,868	2,802
POSCO ENERGY CO., LTD.	206,638	1,445				
POSCO DAEWOO Corporation	5,835,226	42,888	690,345		57,624	4,318
POSCO Thainox Public Company						
Limited	299,450	5,335	10,115			71
POSCO America Corporation	336,366					2,486
POSCO Canada Ltd.		2,155	300,982			
POSCO Asia Co., Ltd.	1,857,665	253	536,280	650	2,449	6,524
Qingdao Pohang Stainless Steel Co.,						
Ltd.	188,252	7				34
POSCO JAPAN Co., Ltd.	1,353,313	6	25,773	4,204		5,411
POSCO-VIETNAM Co., Ltd.	273,573	156				8
POSCO MEXICO S.A. DE C.V.	299,276	17				35
POSCO Maharashtra Steel Private						
Limited	563,618	584				156
POSCO (Suzhou) Automotive						
Processing Center Co., Ltd.	196,095		2,616			5
Others ^(*5)	1,158,122	44,098	456,804	31,787	264,060	140,869
	13,472,119	143,067	2,931,565	750,275	688,025	428,288

Associates and joint ventures ^(*3)						
POSCO PLANTEC Co., Ltd.	10,904	240	3,166	215,023	24,192	10,257
SNNC	5,105	4,108	558,425			80
POSCO-SAMSUNG-Slovakia						
Processing Center	61,981					
Roy Hill Holdings Pty Ltd			810,196			
Others	14,199	54,747	64,335			6
	92,189	59,095	1,436,122	215,023	24,192	10,343
	13,564,308	202,162	4,367,687	965,298	712,217	438,631

(*1)Sales and others are mainly consist of sales of steel products to subsidiaries, associates and joint ventures.

(*2)Purchases and others are mainly consist of subsidiaries purchases of construction services and purchases of raw materials to manufacture steel products.

(*3) As of December 31, 2018, 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, 2018, the Company made loans of 2,950 million to Suncheon Eco Trans Co., Ltd., a subsidiary of the Company. As of December 31, 2018, corresponding amounts of those loans were recorded as allowance for doubtful accounts.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(b) The related account balances of significant transactions between the controlling company and related companies as of December 31, 2017 and 2018 are as follows:

1) December 31, 2017

	R	eceivables			Paya	bles	
	Trade accounts a	nd	Trac	le accounts	and		
	notes			notes	Accounts		
	receivable	Others	Total (in mill	payable lions of Wo	payable	Others	Total
Subsidiaries			(111 1111)		·11 <i>)</i>		
POSCO ENGINEERING &							
CONSTRUCTION CO., LTD.	. 2	2,908	2,910		21,965	674	22,639
POSCO COATED & COLOR		_,,, 00	_,,, 10		_1,,, 00	071	
STEEL Co., Ltd.	58,184	324	58,508		5	504	509
POSCO ICT	55	217	272	1,458	72,586	27,009	101,053
eNtoB Corporation				12,252	31,899	20	44,171
POSCO CHEMTECH	61,810	3,589	65,399	51,774	20,313	17,568	89,655
POSCO ENERGY CO., LTD.	33,239	1,673	34,912			1,425	1,425
POSCO DAEWOO			, i i i i i i i i i i i i i i i i i i i				
Corporation	483,915	12,739	496,654	10,213	2,145	5,794	18,152
POSCO Thainox Public							
Company Limited	57,826		57,826	1,204			1,204
POSCO America Corporation	5,365		5,365				
POSCO Asia Co., Ltd.	404,857	541	405,398	9,811	24		9,835
Qingdao Pohang Stainless Stee	el						
Co., Ltd.	31,693		31,693				
POSCO MEXICO S.A. DE							
C.V.	55,695	530	56,225				
POSCO Maharashtra Steel							
Private Limited	392,630	5,733	398,363				
Others	384,385	49,403	433,788	15,038	59,575	31,118	105,731
	1,969,656	77,657	2,047,313	101,750	208,512	84,112	394,374

Associates and joint ventures							
POSCO PLANTEC Co., Ltd.	1,946	9	1,955	3,842	15,723		19,565
SNNC	648	61	709	49,506	3		49,509
Others	8,350	904	9,254	824			824
	10,944	974	11,918	54,172	15,726		69,898
	1,980,600	78,631	2,059,231	155,922	224,238	84,112	464,272

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

2) December 31, 2018

7	R Frade accounts a	eceivables nd	Trac	Payables Trade accounts and			
	notes receivable	Others	Total	notes payable	Accounts payable	Others	Total
			(in mil	lions of We	on)		
Subsidiaries							
POSCO ENGINEERING &							
CONSTRUCTION CO., LTD		5,181	5,238		52,775	438	53,213
POSCO COATED & COLOR	ł						
STEEL Co., Ltd.	55,598	317	55,915		25	1,194	1,219
POSCO ICT		229	229	1,572	112,960	8,717	123,249
eNtoB Corporation				10,860	22,072	11	32,943
POSCO CHEMTECH	40,258	3,883	44,141	19,911	58,725	19,012	97,648
POSCO ENERGY CO., LTD.	. 22,163	1,700	23,863			1,425	1,425
POSCO DAEWOO							
Corporation	437,554	1,056	438,610	161	1,881	5,304	7,346
POSCO Thainox Public							
Company Limited	71,189		71,189	467	71		538
POSCO America Corporation	14,338		14,338		221		221
POSCO Asia Co., Ltd.	480,205	1,047	481,252	7,839			7,839
Qingdao Pohang Stainless							
Steel Co., Ltd.	52,037		52,037				
POSCO MEXICO S.A. DE							
C.V.	101,179	218	101,397				
POSCO Maharashtra Steel							
Private Limited	390,413	1,428	391,841				
Others	379,950	54,407	434,357	33,183	36,591	85,745	155,519
	2,044,941	69,466	2,114,407	73,993	285,321	121,846	481,160
Associates and joint venture	S						
POSCO PLANTEC Co., Ltd.	249	10	259	3,275	34,803		38,078

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K

SNNC	541	61	602	22,188			22,188
Roy Hill Holdings Pty Ltd				22,997			22,997
Others	918	910	1,828	217	76		293
	1,708	981	2,689	48,677	34,879		83,556
	2,046,649	70,447	2,117,096	122,670	320,200	121,846	564,716

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(c) Significant transactions between the Company, excluding the controlling company, and related companies for the years ended December 31, 2016, 2017 and 2018 were as follows:

1) December 31, 2016

	Sales and o	others	Purchas othe Purchase of	
	Sales	Others in millions	material of Won)	Others
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 Compania 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-SEAH STEEL WIRE (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
	1,746,453	99,223	277,201	35,912

2) December 31, 2017

	Sales and	others	Purchase an Purchase of	nd others
	Sales	Others (in millions	material	Others
Associates and joint ventures				
POSCO PLANTEC Co., Ltd.	19,513		98	8,113
New Songdo International City Development, LLC	223,567	13,207		49
SNNC	26,288		3,578	17,985
Chun-cheon Energy Co., Ltd	42,147			
Noeul Green Energy	11,863			2,178
VSC POSCO Steel Corporation	19,404		188	
USS-POSCO Industries	26,899	107	2,222	
CSP Compania Siderurgica do Pecem	241,299		101,018	21,154
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	38,484		47,241	
LLP POSUK Titanium			3,972	
BX STEEL POSCO Cold Rolled Sheet Co., Ltd.	4		20,145	
POS-SEAH STEEL WIRE (TIANJIN) CO., Ltd	20,004			
PT. Batutua Tembaga Raya			21,024	
POSCO SeAH Steel Wire (Nantong) Co., Ltd.	34,088		192	
Zhangjiagang Pohang Refractories Co., Ltd.			87	1,632
Sebang Steel	441		23,778	
SHANGHAI WAIGAOQIAO FREE TRADE ZONE				
LANSHENG DAEWOO IN L TRADING CO., LTD.	43,764			
DMSA/AMSA		99	47,092	
South-East Asia Gas Pipeline Company Ltd.		62,423		
Others	272,107	43,126	19,520	19,483
	1,019,872	118,962	290,155	70,594

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

3) December 31, 2018

	Sales and	l others	Purchase a Purchase of	and others
	Sales	Others (in million	material s of Won)	Others
Associates and joint ventures				
POSCO PLANTEC Co., Ltd.	19,394		83	24,103
New Songdo International City Development, LLC	30,997	53,316		97
SNNC	66,075	128	2,395	71,421
Chun-cheon Energy Co., Ltd	25,693			
Noeul Green Energy	6,444			587
VSC POSCO Steel Corporation	12,504		2,314	
USS-POSCO Industries			2,595	
CSP Compania Siderurgica do Pecem	239,922	9,678	346,602	26,324
Zhongyue POSCO (Qinhuangdao) Tinplate Industrial Co., Ltd	46,538		62,851	
LLP POSUK Titanium			944	
BX STEEL POSCO Cold Rolled Sheet Co., Ltd.			10,572	
POS-SEAH STEEL WIRE (TIANJIN) CO., Ltd	12,244			
PT. Batutua Tembaga Raya		168	15,663	
POSCO SeAH Steel Wire (Nantong) Co., Ltd.	30,417		249	
Sebang Steel			13,571	
DMSA/AMSA			46,293	
South-East Asia Gas Pipeline Company Ltd.		50,789		
Others	359,124	62,375	19,192	50,918
	849,352	176,454	523,324	173,450

(d) The related account balances of significant transactions between the Company, excluding the controlling company, and related companies as of December 31, 2017 and December 31, 2018 are as follows:

1) December 31, 2017

	Receivables ^(*1)					Payables			
Tra	de accounts a		Trad	is and					
	notes	-			notes				
	receivable	Loan	Others	Total	payable	Others	Total		
			(in mil	lions of Wor	1)				
Associates and joint ventures									
POSCO PLANTEC Co., Ltd.	2,287		5	2,292	3,442	5,595	9,037		
New Songdo International City									
Development, LLC	484,038	282,775	1,696	768,509		7,146	7,146		
Chun-cheon Energy Co., Ltd			21	21		9,617	9,617		
Nickel Mining Company SAS		59,668	118	59,786					
CSP Compania Siderurgica do Pecen	n 380,180		13,443	393,623		29,700	29,700		
Zhongyue POSCO (Qinhuangdao)									
Tinplate Industrial Co., Ltd	2,108	5,357	6	7,471	2,449		2,449		
PT. Batutua Tembaga Raya	24	29,048		29,072					
POSCO SeAH Steel Wire (Nantong)									
Co., Ltd.	8,067	5,357	32	13,456	107		107		
DMSA/AMSA		69,713	4,443	74,156					
South-East Asia Gas Pipeline									
Company Ltd.		229,880		229,880					
Others	135,128	134,506	6,889	276,523	1,873	2,531	4,404		
	1,011,832	816,304	26,653	1,854,789	7,871	54,589	62,460		

(*1)As of December 31, 2017, the Company recognizes bad-debt allowance for receivables amounting to 4,217 million.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

2) December 31, 2018

			ables ^(*1)		Payables				
T	rade accounts a notes	and		Trade account notes			s and		
	receivable	Loan	Others	Total	payable	Others	Total		
			(in n	nillions of Wo	on)				
Associates and joint ventures									
POSCO PLANTEC Co., Ltd.	3,593		6	3,599	6,160	217	6,377		
New Songdo International City									
Development, LLC	233,157			233,157					
Chun-cheon Energy Co., Ltd						1,758	1,758		
POSPower Co., Ltd	13,703			13,703		66,856	66,856		
Nickel Mining Company SAS		59,664	118	59,782					
CSP Compania Siderurgica do									
Pecem	364,190		9,669	373,859	62,578		62,578		
Zhongyue POSCO (Qinhuangdao))								
Tinplate Industrial Co., Ltd	10,836			10,836	2,101		2,101		
PT. Batutua Tembaga Raya		35,100	171	35,271					
POSCO SeAH Steel Wire (Nantor	ng)								
Co., Ltd.	6,274	3,354	27	9,655	66		66		
DMSA/AMSA		64,297		64,297					
South-East Asia Gas Pipeline									
Company Ltd.		191,107		191,107					
Others	75,382	136,117	13,071	224,570	7,768	5,363	13,131		
				· ·			,		
	707,135	489,639	23,062	1,219,836	78,673	74,194	152,867		

(*1)As of December 31, 2018, the Company recognizes bad-debt allowance for receivables amounting to 102,694 million.

(e) Significant financial transactions between the Company, excluding the controlling company, and related companies for the years ended December 31, 2017 and 2018 were as follows:

1) December 31, 2017

	Beginning	Lend (in n	Collect nillions of W	Others ^(*4)	Ending
Associates and joint ventures				,	
METAPOLIS Co., Ltd. ^(*1)	13,270			(13,270)	
New Songdo International City Development, LLC		484,644	(201,869)		282,775
GALE International Korea, LLC		2,000			2,000
DMSA/AMSA ^(*2)	90,638	2,956		(23,881)	69,713
South-East Asia Gas Pipeline Company Ltd.	276,605	28,967	(46,252)	(29,440)	229,880
PT. Batutua Tembaga Raya	38,120			(9,072)	29,048
PT. Tanggamus Electric Power	3,606			(409)	3,197
PT. Wampu Electric Power	5,761			(654)	5,107
PT. POSMI Steel Indonesia	4,834			(548)	4,286
Nickel Mining Company SAS	60,425			(757)	59,668
AN KHANH NEW CITY DEVELOPMENT J.V					
CO., LTD. ^(*1)	60,425			(60,425)	
Zhongyue POSCO (Qinhuangdao) Tinplate					
Industrial Co., Ltd	6,647		(577)	(713)	5,357
KRAKATAU POS-CHEM DONG-SUH					
CHEMICAL	7,251			(823)	6,428
Hamparan Mulya	3,626		(3,626)		
POS-SEAH STEEL WIRE (TIANJIN) CO., Ltd	5,438		(5,438)		
POSCO SeAH Steel Wire (Nantong) Co., Ltd.	8,460		(2,262)	(841)	5,357
POS-SeAH Steel Wire (Thailand) Co., Ltd.	7,251		(1, 142)	319	6,428
AMCI (WA) PTY LTD	91,775	4,327		(4,041)	92,061
POS-AUSTEM YANTAI AUTOMOTIVE CO.,					
LTD ^(*3)				5,357	5,357
POS-AUSTEM WUHAN AUTOMOTIVE CO.,					
LTD ^(*3)				8,571	8,571
SAMHWAN VINA CO., LTD ^(*3)				1,071	1,071
	684,132	522,894	(261,166)	(129,556)	816,304

(*1)During the year ended December 31, 2017, it was excluded from associates.

(*2)During the year ended December 31, 2017, loans amounting to 13,712 million have been converted to shares of DMSA/AMSA, and its amount is included in others.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(*3) During the year ended December 31, 2017, it was newly classified to associates and joint ventures.

(*4) Includes adjustments of foreign currency translation differences and others.

2) December 31, 2018

	Beginning	Lend (in	Collect millions of V	Others ^(*2) Von)	Ending
Associates and joint ventures		(11)		(OII)	
New Songdo International City Development, LLC	282,775	150	(252,759)	(30,166)	
GALE International Korea, LLC	2,000	8,500	(10,500)		
UITrans LRT Co., Ltd.		5,695			5,695
DMSA/AMSA ^(*1)	69,713	9,965	(342)	(15,039)	64,297
South-East Asia Gas Pipeline Company Ltd.	229,880		(47,569)	8,796	191,107
PT. Batutua Tembaga Raya	29,048	4,678		1,374	35,100
PT. Tanggamus Electric Power	3,197			1,226	4,423
PT. Wampu Electric Power	5,107			223	5,330
PT. POSMI Steel Indonesia	4,286		(2,200)	150	2,236
Nickel Mining Company SAS	59,668			(4)	59,664
Zhongyue POSCO (Qinhuangdao) Tinplate					
Industrial Co., Ltd	5,357		(5,357)		
KRAKATAU POS-CHEM DONG-SUH					
CHEMICAL	6,428			281	6,709
POSCO SeAH Steel Wire (Nantong) Co., Ltd.	5,357	4,451	(6,454)		3,354
POS-SeAH Steel Wire (Thailand) Co., Ltd.	6,428			281	6,709
AMCI (WA) PTY LTD	92,061	3,795		(5,376)	90,480
POS-AUSTEM YANTAI AUTOMOTIVE CO.,					
LTD	5,357	5,564	(5,357)	26	5,590
POS-AUSTEM WUHAN AUTOMOTIVE CO.,					
LTD	8,571	8,902	(8,571)	43	8,945
SAMHWAN VINA CO., LTD	1,071		(1,071)		
	816,304	51,700	(340,180)	(38,185)	489,639

(*1)During the year ended December 31, 2018, loans amounting to 17,559 million 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.

(f) For the years ended December 31, 2016, 2017 and 2018, details of compensation to key management officers were as follows:

	2016	2017	2018
	(in n	nillions of W	/on)
Short-term benefits	90,916	112,688	115,618
Long-term benefits	17,905	8,632	13,400
Retirement benefits	17,870	20,422	21,658
	126,691	141,742	150,676

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 consolidated 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).

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

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.

(b) Details of guarantees

Contingent liabilities on outstanding guarantees and others provided by the Company as of December 31, 2018 are as follows.

	Cuerentee			Guarantee lin	nit	Guarantee a	mount
Guarantor	Guarantee beneficiary	Financial institution		ign currency 1 millions of Wo	Won equivalent n)	Foreign currency	Won equivalent
[The Company]							
POSCO	POSCO Asia Co., Ltd.	BOC and others	USD	100,000,000	111,810	100,000,000	111,810
	POSCO ASSAN TST STEEL INDUSTRY	SMBC and others	USD	146,527,500	163,832	131,874,750	147,449
	POSCO COATED STEEL (THAILAND) CO., LTD.	The Great & CO Co., Ltd. (SPC)	THB	5,501,000,000	188,959	5,501,000,000	188,959
	POSCO Maharashtra Steel	Export-Import Bank of	USD	506,853,000	566,712	168,397,800	188,285

	Private Limited	Korea and others					
	POSCO MEXICO S.A. DE C.V.	BOA and others	USD	160,000,000	178,896	160,000,000	178,896
	POSCO SS VINA Co., Ltd.	Export-Import Bank of Korea and others	USD	354,351,050	396,200	274,570,077	306,996
	POSCO-VIETNAM Co., Ltd.	SMBC and others	USD	156,000,000	174,424	156,000,000	174,424
	PT. KRAKATAU POSCO	Export-Import Bank of Korea and others	USD	1,350,300,000	1,509,770	1,097,236,405	1,226,821
POSCO DAEWOO Corporation	Daewoo Global Development. Pte., Ltd	Export-Import Bank of Korea and others	USD	196,017,000	219,167	196,017,000	219,167
	Daewoo Power PNG Ltd.	Export-Import Bank of Korea	USD	47,600,000	53,222	47,600,000	53,222
	POSCO ASSAN TST STEEL INDUSTRY	ING and others	USD	14,652,750	16,383	14,652,750	16,383
	POSCO DAEWOO INDIA PVT., LTD.	Shinhan Bank and others	USD	149,400,000	167,044	77,990,903	87,203
	PT. Bio Inti Agrindo	Export-Import Bank of Korea and others		125,125,000	139,902	125,125,000	139,902
		KEB Hana Bank	IDR	150,000,000,000	11,520	150,000,000,000	11,520

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

	Guarantee		Guarantee limit			Guarantee amount		
Guarantor	beneficiary	Financial institution		gn currency lions of Won)	-	Foreign currency	Won equivalent	
	Golden Lace DAEWOO Company Limited POSCO DAEWOO	Shinhan Bank Mizuho	USD	9,000,000	·	6,000,000 7,290,000	6,708 8,151	
	CHINA CO., LTD Songdo Posco family Housing	SHINYOUNG SECURITIES CO., LTD.	KRW	10,000	10,000		,	
POSCO ENGINEERING & CONSTRUCTION CO., LTD.	POSCO E&C Vietnam Co., Ltd.	Export-Import Bank of Korea and others	USD	47,000,000	52,551	47,000,000	52,551	
	HONG KONG POSCO E&C (CHINA) INVESTMENT Co., Ltd.	Woori bank and others	USD	148,000,000	165,479	142,000,000	158,770	
	POSCO Engineering and Construction India Private Limited	Woori bank	USD	2,100,000	2,348	2,100,000	2,348	
		KEB Hana Bank	INR	104,000,000	1,663	9,000,000	144	
	PT. POSCO E&C INDONESIA	POSCO Asia Co., Ltd. and others	USD	10,900,000	12,187	10,900,000	12,187	
	Daewoo Global Development. Pte., Ltd	SMBC and others	USD	163,633,000	182,958	163,633,000	182,958	
	Songdo Posco family Housing	SHINYOUNG SECURITIES	KRW	10,000	10,000			

		CO., LTD.					
POSCO ICT	PT.POSCO ICT INDONESIA	POSCO Asia Co., Ltd.	USD	1,500,000	1,677	1,500,000	1,677
POSCO CHEMTECH	PT.Krakatau Posco Chemtech Calcination	POSCO Asia Co., Ltd.	USD	15,200,000	16,995	14,400,000	16,101
POSCO COATED & COLOR STEEL Co., Ltd.	Myanmar POSCO C&C Company, Limited.	POSCO Asia Co., Ltd.	USD	13,986,947	15,639	13,986,947	15,639
POSCO ENERGY CO., LTD.	PT. KRAKATAU POSCO ENERGY	Export-Import Bank of Korea and others	USD	193,900,000	216,800	121,231,918	135,549
POSCO Asia Co., Ltd.	POSCO SINGAPORE LNG TRADING PTE. LTD.	SMBC	USD	40,000,000	44,724	40,000,000	44,724
[Associates and joint ventures]							
POSCO	CSP Compania Siderurgica do Pecem	Export-Import Bank of Korea and others	USD	420,000,000	469,602	392,956,955	439,365
		BNDES	BRL	464,060,000	133,686	462,554,370	133,253

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

	Guarantee			Guarantee	limit	Guarantee amount	
Guarantor	beneficiary	Financial institution	-	gn currency llions of Wor	-	Foreign currency	Won equivalent
	LLP POSUK Titanium Nickel Mining Company SAS	SMBC SMBC	USD EUR	15,000,000 46,000,000	16,772 58,841	15,000,000 46,000,000	16,772 58,841
POSCO DAEWOO Corporation	GLOBAL KOMSCO Daewoo LLC	ICBC	USD	8,225,000	9,196	8,225,000	9,196
POSCO ENGINEERING & CONSTRUCTION CO., LTD.	New Songdo International City Development, LLC	Others	KRW	440,000	440,000	432,000	432,000
,	UITrans LRT Co., Ltd.	Kookmin Bank and others	KRW	20,740	20,740	3,766	3,766
	Chun-cheon	Kookmin Bank and others	KRW	11,600	11,600	941	941
	Energy Co., Ltd Pohang E&E Co., Ltd	Heungkuk Life Insurance Co., Ltd.	KRW	6,500	6,500		
	JB CLARK HILLS		KRW	40,000	40,000	30,000	30,000
POSCO ICT	Incheon-Gimpo Expressway Co, Ltd.	KDB Bank	KRW	100,000	100,000	100,000	100,000
	UITrans LRT Co., Ltd.	Kookmin Bank	KRW	76,000	76,000	76,000	76,000
POSCO CHEMTECH	KRAKATAU POS-CHEM DONG-SUH CHEMICAL	KEB Hana Bank	USD	1,140,000	1,274	791,667	885

Edgar Filing: FAIRFAX FINANCIAL HOLDINGS LTD/ CAN - Form 6-K							
POSCO(Suzhou) Automotive Processing Center Co., Ltd.	POS-InfraAuto (Suzhou) Co., Ltd	KDB Bank	USD	780,000	872	780,000	872
[Others]							
POSCO DAEWOO Corporation	Ambatovy Project Investments Ltd. and others	Export-Import Bank of Korea	USD	87,272,727	97,580	12,030,434	13,451
POSCO ENGINEERING & CONSTRUCTION CO., LTD.	Ecocity CO., LTD and others	Others	KRW	1,524,314	1,524,314	545,893	545,893
POSCO ICT	SMS Energy and others	KEB Hana Bank and others	KRW	78,791	78,791	60,519	60,519
	Hyochun CO., LTD	KYOBO SECURITIES CO., LTD.	KRW	39,575	39,575	39,575	39,575
	BTL Enterprise and others	Kyobo Life Insurance Co., Ltd and others	KRW	1,165,352	1,165,352	1,165,352	1,165,352
POSCO AUSTRALIA PTY LTD	Department of Trade and Investment (NSW Government) and others	Woori bank and others	AUD	26,147,711	20,599	26,147,711	20,599

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

	C (Guarantee lim	Guarantee amount		
Guarantor	Guarantee beneficiary	Financial institution	For	eign currency	Won equivalent	Foreign currency	Won equivalent
				(in millions of V	Von)		
			USD	4,492,463,974	5,023,024	3,549,290,606	3,968,462
			KRW	3,522,872	3,522,872	2,454,046	2,454,046
			IDR	150,000,000,000	11,520	150,000,000,000	11,520
			INR	104,000,000	1,663	9,000,000	144
			THB	5,501,000,000	188,959	5,501,000,000	188,959
			EUR	46,000,000	58,841	46,000,000	58,841
			AUD	26,147,711	20,599	26,147,711	20,599
			BRL	464,060,000	133,686	462,554,370	133,253

(c) POSCO ENGINEERING & CONSTRUCTION CO., LTD. has provided the completion guarantees for Samsung C&T Corporation amounting to 395,162 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 179,619 million as of December 31, 2018.

(d) Other commitments

Details of other commitments of the Company as of December 31, 2018 are as follows:

Company POSCO

Description

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, 2018, 100 million tons of iron ore and 14 million tons of coal remained to be purchased under such long-term contracts.

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.

POSCO entered into consecutive voyage charter (CVC) contract for the transportation of raw materials. As of December 31, 2018, there are 38 vessels under contract and the average remaining contract period is about 10 years. During the year ended December 31, 2018, the freight expenses related to the CVC contract is USD 668 million.

As of December 31, 2018, POSCO entered into a commitment with KOREA ENERGY AGENCY for long- term foreign currency borrowings, which are limited up to the amount of USD 6.49 million. The borrowing is related to the exploration of gas hydrates in Western Fergana-Chinabad. The repayment of the borrowings depends on the success of the projects. POSCO is not liable for the repayment of full or part of the amount borrowed if the respective projects fail. POSCO has agreed to pay a certain portion of its profits under certain conditions, as defined by the borrowing agreements. As of December 31, 2018, the ending balance of the borrowing amounts to USD 1.02 million.

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.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

Company	Description POSCO provides a supplementary fund of up to 9.8 billion to the Company s subsidiary, Busan E&E Co., Ltd., at the request of creditors such as the Korea Development Bank.
	POSCO provides a supplementary funding for the purpose of promoting the Suncheon Bay PRT business of Suncheon Eco Trans Co., Ltd., a subsidiary of the Company, at the request of creditors. On November 2018, creditors sued the company for subrogation based on a supplemental funding agreement. POSCO recognized the provision based on the estimate of the amount and the possibility of any outflows of resources due to the litigation.
POSCO ENGINEERING & CONSTRUCTION CO., LTD.	As of December 31, 2018, POSCO ENGINEERING & CONSTRUCTION CO., LTD. has foreign currency guarantee of up to USD 2,517 million and uses USD 763 million with Woori Bank and others.
POSCO ICT (e) Litigation in progress	As of December 31, 2018, in relation to contract enforcement, POSCO ICT was provided with 131,117 million, 8,939 million and 305 million guaranties from Korea Software Financial Cooperative, Seoul Guarantee Insurance and Engineering Guarantee Insurance, respectively.

As of December 31, 2018, litigations in progress that POSCO and certain subsidiaries are defendants in legal actions arising from the normal course of business are as follows:

	Legal		Won	
Company	actions	Claim amount	equivalent	Description
		(in millions of V	Won, in thousands of	f foreign currencies)

POSCO	27	KRW	75,218	75,218	Lawsuit on claim for employee right and others ^(*1)
POSCO DAEWOO Corporation	1	CAD	79,000	64,808	Lawsuit on claim for damages
	3	INR	4,518,694	72,254	Lawsuit on claim for payment on guarantees and others ^(*1)
	10	KRW	20,049	20,049	Litigation for confirmation of deposit bond and others
	5	USD	28,763	32,160	Lawsuit on claim for damages and others
	1	PKR	124,775	1,003	Lawsuit on claim for damages
POSCO ENGINEERING & CONSTRUCTION., LTD.	120	KRW	442,812	442,812	Lawsuit on claim for damages and others ^(*1)
POSCO ICT	1	BRL	10,182	2,933	Lawsuit on revocation of claim for damage
	11	KRW	6,452	6,452	Lawsuit on claim for damages and others
	1	USD	1,881	2,103	Lawsuit on claim for damages
POSCO A&C	8	KRW	2,752	2,752	Lawsuit on claim for payment on construction and others
POSCO ENERGY CO., LTD.	3	KRW	3,039	3,039	Lawsuit on claim for damages and others
POSCO E&C CHINA CO., LTD.	3	CNY	44,446	7,234	Lawsuit over contract dispute and others
POSCO COATED & COLOR STEEL Co., Ltd.	1	KRW	1,400	1,400	Lawsuit on claim for payment
POSCO ENGINEERING (THAILAND) CO., LTD.	2	THB	509,191	17,491	Lawsuit on claim for payment on construction and others
PT. KRAKATAU POSCO	1	IDR	211,407,872	16,236	Lawsuit on claim for payment on construction
POSCO E&C Vietnam Co., Ltd.	1	USD	3,894	4,354	Lawsuit on claim for payment on construction
POSCO-China Qingdao Processing Center Co., Ltd.	2	CNY	6,774	1,103	Lawsuit over contract dispute and others
POSCO-Malaysia SDN. BHD.	1	MYR			Lawsuit on claim for infringement of right

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

~	Legal			Won	
Company	actions		amount	equivalent	Description
Pos-Sea Pte Ltd	1	USD	12,051	13,474	usands of foreign currencies) Lawsuit over contract dispute
POSCO INDIA HOLDINGS	1	USD	12,001	13,474	Lawsuit over contract dispute
PRIVATE LIMITED	1	INR	220,000	3,518	Lawsuit over contract dispute
POSCO TNPC Otomotiv Celik	1	11 (11	220,000	5,510	Lawsuit over industrial accidents and
San. Ve Tic. A.S	8	TRY	102	22	others
POSCO India Steel Distribution					
Center Private Ltd.	1	INR	223,795	3,578	Lawsuit on claim for tax restitution
POSCO(Dalian)					
IT Center Development Co., Ltd.	1	CNY	4,240	690	Lawsuit over contract dispute
Brazil Sao Paulo Steel					
Processing Center	3	BRL	4,671	1,346	Lawsuit on claim for labor and others
POSCO ENGINEERING &					
CONSTRUCTION DO BRAZIL					Lawsuit on claim for payment on
LTDA.	148	BRL	156,011	44,944	construction and others
POSCO ASSAN TST STEEL					
INDUSTRY	1	TRY	4,870	1,027	Lawsuit on compensation
HONG KONG POSCO E&C					
(CHINA) INVESTMENT Co.,					
Ltd.	1	KRW	3,305	3,305	Lawsuit on claim for payment

(*1)The Company made a reliable estimate in 122 lawsuits by considering the possibility and amount of outflow of resources and recognized 50,888 million as provision for legal contingencies and claims.

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, 2018 for the matters.

39. Additional Information of Cash Flow Statements

(a) Changes in operating assets and liabilities for the years ended December 31, 2016, 2017 and 2018 were as follows:

		IFRS	
	2016	2017	2018
	(in)	millions of Wo	on)
Trade accounts and notes receivable	273,419	63,075	17,806
Other receivables	191,591	113,740	(20,786)
Inventories	(889,998)	(1,435,170)	(1,451,009)
Other current assets	(287,377)	110,688	1,118
Other non-current assets	33,584	12,455	5,974
Trade accounts and notes payable	769,337	(607,999)	379,742
Other payables	(179,174)	(26,922)	(111,893)
Other current liabilities	2,490	338,273	(199,981)
Provisions	(124,884)	(145,763)	(116,790)
Payments of severance benefits	(278,278)	(185,220)	(189,165)
Plan assets	(138,854)	3,815	(245,214)
Other non-current liabilities	223,574	(82,605)	(175,528)
	(404,570)	(1,841,633)	(2,105,726)

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(b) Changes in liabilities arising from financial activities for the year ended December 31, 2017 and 2018 were as follows:

1) December 31, 2017

		Liabilit			
	Short-term borrowings	Long-term borrowings (in m	Dividend payable illions of Wo	Finance lease liabilities n)	Derivatives that hedge borrowings
Beginning	7,979,727	14,725,271	7,770	114,409	(52,373)
Changes from financing cash flows	558,083	(1,410,033)	(931,232)	(10,536)	
Changes arising from obtaining or losing control of subsidiaries or other business The affect of changes in foreign exchange	(12,469)	3,299			
The effect of changes in foreign exchange rates	(350,523)	(435,170)		(10,855)	
Changes in fair values					171,693
Other changes:					
Decrease in retained earnings			863,579		
Decrease in non-controlling interest			67,096		
Amortization of discount on debentures					
issued		5,472			
Ending	8,174,818	12,888,839	7,213	93,018	119,320

2) December 31, 2018

	Liabilit	ties		Derivatives						
Short-term borrowings	Long-term borrowings	Dividend payable	Finance lease liabilities	that hedge borrowings						
	(in millions of Won)									

Beginning	8,174,818	12,888,839	7,213	93,018	119,320
Changes from financing cash flows	(854,554)	(373,862)	(770,099)	(14,955)	(17,237)
Changes arising from obtaining or losing					
control of subsidiaries or other business	(342)				
The effect of changes in foreign exchange					
rates	167,858	200,308	(5,573)	(7,766)	
Changes in fair values					(58,666)
Other changes:					
Decrease in retained earnings			704,444		
Decrease in non-controlling interest			72,688		
Amortization of discount on debentures issued		6,205			
Increase in finance lease assets				24,457	
Ending	7,487,780	12,721,490	8,673	94,754	43,417

40. 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, network and system integration and logistics. The policies of classification and measurement on operating segments were the same for all periods presented.

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(b) Information about reportable segments as of and for the years ended December 31, 2016, 2017 and 2018 were as follows:

1) As of and for the year ended December 31, 2016

	Steel	Trading (in	Construction millions of Won)	Others	Total
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 joint					
ventures	(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 subsidiaries,					
associates and joint ventures	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
2) As of and for the year ended Decem	ber 31, 2017				

2) As of and for the year ended December 31, 2017

Steel

Trading Construction Others Total (in millions of Won)

External revenues	30,230,368	20,802,207	6,886,606	2,735,919	60,655,100
Internal revenues	17,381,010	14,075,996	398,924	2,548,674	34,404,604
Including inter segment revenue	12,004,614	8,043,643	329,215	2,446,029	22,823,501
Total revenues	47,611,378	34,878,203	7,285,530	5,284,593	95,059,704
Interest income	128,827	32,799	100,922	17,940	280,488
Interest expenses	(422,357)	(121,967)	(112,983)	(100,656)	(757,963)
Depreciation and amortization	(2,856,133)	(206,490)	(42,123)	(255,620)	(3,360,366)
Impairment loss on property, plant					
and equipment and others	(149,840)	(140,839)	(37,476)	(8,564)	(336,719)
Impairment loss on					
available-for-sale financial assets	(95,261)		(18,637)	(13,421)	(127,319)
Share of profit or loss of investment					
in associates and joint ventures	8,352		(8,555)	(1,518)	(1,721)
Income tax expense	(977,853)	(109,710)	(109,961)	(77,172)	(1,274,696)
Segment profit	2,790,855	112,661	24,545	232,700	3,160,761
Segment assets	70,017,816	14,139,098	8,609,753	8,776,090	101,542,757
Investment in subsidiaries,					
associates and joint ventures	16,116,654	1,134,798	668,392	1,193,895	19,113,739
Acquisition of non-current assets	2,033,184	286,185	99,190	251,665	2,670,224
Segment liabilities	19,057,249	10,386,294	5,744,693	4,620,902	39,809,138
-					

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

3) As of and for the year ended December 31, 2018

	Steel	Trading	Construction	Others	Total
		- (ir	n millions of Wor	ı)	
External revenues	32,358,009	22,407,717	6,769,410	3,442,641	64,977,777
Internal revenues	18,063,213	15,911,138	551,324	2,755,176	37,280,851
Including inter segment revenue	12,496,287	8,743,666	465,057	2,639,561	24,344,571
Total revenues	50,421,222	38,318,855	7,320,734	6,197,817	102,258,628
Interest income	199,016	36,437	115,019	23,454	373,926
Interest expenses	(468,681)	(189,165)	(111,101)	(94,613)	(863,560)
Depreciation and amortization	(2,812,666)	(210,493)	(36,840)	(265,416)	(3,325,415)
Impairment loss on property, plant and					
equipment and others	(1,057,474)	(86,085)	(82,521)	(117,280)	(1,343,360)
Share of profit or loss of investment in					
associates and joint ventures	(733,879)	(160,085)	(155,371)		(1,049,335)
Income tax expense	(1,307,292)	(52,914)	(238,441)	(65,611)	(1,664,258)
Segment profit	1,268,313	49,264	234	13,608	1,331,419
Segment assets	70,976,493	15,550,854	7,333,221	8,017,433	101,878,001
Investment in subsidiaries, associates					
and joint ventures	16,099,692	1,379,045	511,230	932,107	18,922,074
Acquisition of non-current assets	2,239,467	132,017	49,095	232,281	2,652,860
Segment liabilities	20,289,037	11,454,079	4,386,852	4,134,352	40,264,320

(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

	2016	2017	2018
	(in	millions of Wor	1)
Total revenue for reportable segments	81,885,203	95,059,704	102,258,628
Elimination of inter-segment revenue	(28,801,690)	(34,404,604)	(37,280,851)
Basis difference ^(*2)	(143,742)	(468,233)	176,859

52,939,771 60,186,867 65,154,636

2) Profit

	2016	2017	2018
	(in 1	millions of Wo	n)
Total profit (loss) for reportable segments	135,026	3,160,761	1,331,419
Goodwill and corporate FV adjustments	(123,110)	(84,370)	(77,756)
Elimination of inter-segment profits	1,036,253	(102,922)	638,401
Income tax expense	384,685	1,206,223	1,670,757
Basis difference ^(*2)	(21,245)	(84,641)	53,195
Profit before income tax expense	1,411,609	4,095,051	3,616,016

3) Assets

	2017	2018
	(in millions	s of Won)
Total assets for reportable segments ^(*1)	101,542,757	101,878,001
Equity-accounted investees	(15,555,972)	(15,272,243)
Goodwill and corporate FV adjustments	3,368,333	2,722,115
Elimination of inter-segment assets	(10,330,159)	(11,079,608)
Basis difference ^(*2)	760,670	528,726
	79,785,629	78,776,991

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

(*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

	2017	2018
	(in millions	of Won)
Total liabilities for reportable segments	39,809,138	40,264,320
Corporate FV adjustments	483,693	321,320
Elimination of inter-segment liabilities	(8,731,880)	(9,096,926)
Basis difference ^(*2)	897,953	615,663
	32,458,904	32,104,377

5) Other significant items

a) December 31, 2016

	Total segment	Corporate FV adjustments (in	Elimination of inter-segment transactions millions of Wor	Basis difference ^(*2) h)	Consolidated
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)

Table of Contents

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)
	(5,365,572)	(122,543)	707,312	5,141	(4,775,662)

b) December 31, 2017

	Total segment	Corporate FV adjustments (in	Elimination of inter-segment transactions millions of Wor	Basis difference ^(*2) 1)	Consolidated
Interest income	280,488		(68,037)		212,451
Interest expenses	(757,963)	1,304	103,544		(653,115)
Depreciation and amortization	(3,360,366)	(106,195)	169,141		(3,297,420)
Share of profit or loss of					
investment in associates	(1,721)		12,261		10,540
Income tax expense	(1,274,696)	21,270	47,203	20,483	(1,185,740)
Impairment loss on property,					
plant and equipment and others	(336,719)	(867)	34,619		(302,967)
Impairment loss on available-for-sale financial					
assets	(127,319)		4,105		(123,214)
	(5,578,296)	(84,488)	302,836	20,483	(5,339,465)

POSCO and Subsidiaries

Notes to the Consolidated Financial Statements, Continued

As of December 31, 2016, 2017 and 2018

c) December 31, 2018

	Total segment	Corporate FV adjustments (i	Elimination of inter-segment transactions n millions of Wor	Basis difference ^(*2) n)	Consolidated
Interest income	373,926		(36,668)		337,258
Interest expenses	(863,560)	1,035	121,229		(741,296)
Depreciation and amortization	(3,325,415)	(103,932)	161,718		(3,267,629)
Share of profit or loss of					
investment in associates	(1,049,335)		1,161,970		112,635
Income tax expense	(1,664,258)	25,921	(32,420)	(12,873)	(1,683,630)
Impairment loss on property,					
plant and equipment and others	(1,343,360)	(779)	(107,258)		(1,451,397)
	(7,872,002)	(77,755)	1,268,571	(12,873)	(6,694,059)

(*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 the years ended December 31, 2016, 2017 and 2018 was as follows:

	2016	2017	2018	
	(in	(in millions of Won)		
Domestic	34,883,941	38,882,220	41,671,930	
Japan	1,892,022	2,200,405	2,084,061	
China	5,908,046	6,731,214	6,945,266	
Indonesia	908,361	1,266,572	1,592,046	

Asia-other	4,741,482	6,483,981	7,312,486
North America	1,899,291	1,725,120	1,834,534
Others	2,850,370	3,365,588	3,537,454
	53,083,513	60,655,100	64,977,777
Basis difference	(143,742)	(468,233)	176,859
	52,939,771	60,186,867	65,154,636

In presenting information on the basis of geography, segment revenue is based on the geographical location of customers.

(e) Non-current assets by geographic area as of December 31, 2017 and 2018 are as follows:

	2017	2018	
	(in million	(in millions of Won)	
Domestic	30,790,462	28,298,293	
Japan	162,328	146,490	
China	1,284,561	1,185,828	
Indonesia	2,750,084	2,711,032	
Asia-other	2,516,715	2,356,904	
North America	277,249	173,914	
Others	1,119,319	1,245,252	
	38,900,718	36,117,713	

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 the consolidated revenue.

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)* (P)
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
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document

* Filed previously(P) Paper filing

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/ Choi, Jeong-Woo Name: Choi, Jeong-Woo Title: Chief Executive Officer and Representative Director Date: April 30, 2019