POSCO Separate Financial Statements December 31, 2017 and 2016

(With Independent Auditors' Report Thereon)

Table of Contents

Page

Independent Auditors' Report	. 1
Separate Financial Statements	
Separate Statements of Financial Position	. 3
Separate Statements of Comprehensive Income	. 5
Separate Statements of Changes in Equity	. 6
Separate Statements of Cash Flows	. 7
Notes to the Separate Financial Statements	. 9
Independent Auditors' Review Report on Internal Accounting Control System	36
Report on the Operations of Internal Accounting Control System	37

Independent Auditors' Report

Based on a report originally issued in Korea

The Board of Directors and Shareholders POSCO:

We have audited the accompanying separate financial statements of POSCO ("the Company"), which comprise the separate statements of financial position as of December 31, 2017 and 2016, the separate statements of comprehensive income, changes in equity and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Separate Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on these separate financial statements based on our audits. We conducted our audits in accordance with Korean Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the separate financial statements are free from material misstatement.

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

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

Opinion

In our opinion, the separate financial statements present fairly, in all material respects, the separate financial position of the Company as of December 31, 2017 and 2016, and its separate financial performance and its separate cash flows for the years then ended in accordance with Korean International Financial Reporting Standards.

Other Matter

The procedures and practices utilized in the Republic of Korea to audit such separate financial statements may differ from those generally accepted and applied in other countries. Accordingly, this report and the accompanying separate financial statements are for use by those knowledgeable about Korean auditing standards and their application in practice.

KPMG Samjong Accounting Corp.

Seoul, Korea February 28, 2018

This report is effective as of February 28, 2018, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying separate financial statements and notes thereto. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

POSCO Separate Statements of Financial Position As of December 31, 2017 and 2016

(in millions of Won)	Notes		December 31, 2017	December 31, 2016
Assets				
Cash and cash equivalents	4,5,22	₩	332,405	120,529
Trade accounts and notes receivable, net	6,22,36		3,867,714	3,216,209
Other receivables, net	7,22,36		210,230	246,061
Other short-term financial assets	8,22		5,824,087	4,130,963
Inventories	9,33		4,543,533	3,995,291
Assets held for sale	10		34,545	764
Other current assets	15	_	27,907	22,859
Total current assets		-	14,840,421	11,732,676
Long-term trade accounts and notes receivable, net	6,22		12,774	14,040
Other receivables, net	7,22		62,421	87,669
Other long-term financial assets	8,22		1,393,316	2,145,570
Investments in subsidiaries, associates				
and joint ventures	11		15,098,856	15,031,385
Investment property, net	12		97,307	86,296
Property, plant and equipment, net	13		21,561,270	22,257,409
Intangible assets, net	14		528,074	508,890
Defined benefit assets, net	20		-	81,621
Other non-current assets	15	-	97,819	110,197
Total non-current assets		-	38,851,837	40,323,077
Total assets		₩	53,692,258	52,055,753

POSCO Separate Statements of Financial Position, Continued As of December 31, 2017 and 2016

(in millions of Won)	Notes	_	December 31, 2017	December 31, 2016
Liabilities				
Trade accounts and notes payable Short-term borrowings	22,36	₩	1,025,027	1,082,927
and current installments of long-term borrowings	4,16,22,38		1,235,707	364,840
Other payables	17,22,36,38		862,535	866,074
Other short-term financial liabilities	18,22,38		23,164	16,508
Current income tax liabilities	34		351,148	315,530
Provisions	19		18,166	14,154
Other current liabilities	21	-	54,401	37,219
Total current liabilities		_	3,570,148	2,697,252
Long-term borrowings,				
excluding current installments	4,16,22,38		2,665,517	3,778,014
Other payables	17,22,38		78,481	117,310
Other long-term financial liabilities	18,22,38		129,176	72,742
Defined benefit liabilities, net	20		43	-
Deferred tax liabilities	34		1,273,896	1,015,966
Long-term provisions	19		19,250	29,506
Other non-current liabilities	21	_	14,292	15,516
Total non-current liabilities		_	4,180,655	5,029,054
Total liabilities		-	7,750,803	7,726,306
Equity				
Share capital	23		482,403	482,403
Capital surplus	23		1,156,429	1,156,303
Hybrid bonds	24		996,919	996,919
Reserves	25		233,390	284,240
Treasury shares	26		(1,533,054)	(1,533,468)
Retained earnings	27	_	44,605,368	42,943,050
Total equity		_	45,941,455	44,329,447
Total liabilities and equity		₩_	53,692,258	52,055,753

POSCO Separate Statements of Comprehensive Income For the years ended December 31, 2017 and 2016

(in millions of Won, except per share information)	Notes		2017	2016
Revenue	•	₩	28,553,815	24,324,933
Cost of sales	9,20,30,33,36		(23,832,804)	(19,903,596)
Gross profit Selling and administrative expenses			4,721,011	4,421,337
Administrative expenses	20,22,29,30,33		(896,061)	(889,277)
Selling expenses	29,33		(922,497)	(896,723)
Operating profit			2,902,453	2,635,337
Finance income and costs				
Finance income	22,31		1,143,692	756,480
Finance costs	22,31	-	(667,207)	(882,511)
Other non-operating income and expenses				
Other non-operating income	32,36		436,075	81,869
Other non-operating expenses	32,33,36		(460,272)	(401,841)
Profit before income tax			3,354,741	2,189,334
Income tax expense	34		(809,056)	(404,288)
Profit			2,545,685	1,785,046
Other comprehensive income (loss) Items that will not be reclassified subsequently to profit or loss: Remeasurements of defined benefit plans, net of tax	20		(19,787)	(768)
Items that are or may be reclassified subsequently to profit or loss: Net changes in unrealized fair value	0 22 25		(50.950)	214 250
of available-for-sale investments, net of tax	8,22,25		(50,850)	314,258
Total comprehensive income		₩.	2,475,048	2,098,536
Basic and diluted earnings per share (in Won)	35	₩	31,409	21,899

POSCO Separate Statements of Changes in Equity For the years ended December 31, 2017 and 2016

(in millions of Won)		Share capital	Capital surplus	Hybrid bonds	Reserves	Treasury shares	Retained earnings	Total
Balance as of January 1, 2016	₩	482,403	1,247,581	996,919	(30,018)	(1,533,898)	41,862,570	43,025,557
Comprehensive income:								
Profit		-	-	-	-	-	1,785,046	1,785,046
Other comprehensive income (loss)								
Remeasurements of defined benefit							(700)	(700)
plans, net of tax		-	-	-	-	-	(768)	(768)
Net changes in unrealized fair value of					214 250			014 050
available-for-sale investments, net of tax		-	-	-	314,258	-	-	314,258
Transactions with owners of the Company,								
recognized directly in equity: Year-end dividends		_	_	_	_	_	(479,974)	(479,974)
Interim dividends		-	_	-	_	-	(179,992)	(179,992)
Business combination		-	(91,310)	-	_	_	(170,002)	(91,310)
Interest of hybrid bonds		-	(01,010)	-	-	_	(43,832)	(43,832)
Disposal of treasury shares		-	32	-	-	430		462
Balance as of December 31, 2016	₩	482,403	1,156,303	996,919	284,240	(1,533,468)	42,943,050	44,329,447
Balance as of January 1, 2017	₩	482,403	1,156,303	996,919	284,240	(1,533,468)	42,943,050	44,329,447
Comprehensive income:		- ,	,,		-, -	、,,,	,,	, ,
Profit		-	-	-	-	-	2,545,685	2,545,685
Other comprehensive income (loss)								
Remeasurements of defined benefit								
plans, net of tax		-	-	-	-	-	(19,787)	(19,787)
Net changes in unrealized fair value of								
available-for-sale investments, net of tax		-	-	-	(50,850)	-	-	(50,850)
Transactions with owners of the Company,								
recognized directly in equity:								
Year-end dividends		-	-	-	-	-	(459,987)	(459,987)
Interim dividends		-	-	-	-	-	(359,993)	(359,993)
Interest of hybrid bonds		-	-	-	-	-	(43,600)	(43,600)
Disposal of treasury shares		-	126		-	414		540
Balance as of December 31, 2017	₩_	482,403	1,156,429	996,919	233,390	(1,533,054)	44,605,368	45,941,455

POSCO Separate Statements of Cash Flows For the years ended December 31, 2017 and 2016

(in millions of Won)	Notes	_	2017	2016
Cash flows from operating activities				
Profit		₩	2,545,685	1,785,046
Adjustments for:				
Costs for defined benefit plans			102,884	111,086
Depreciation			2,092,603	2,061,408
Amortization			91,603	79,655
Bad debt expenses			18,133	54,130
Finance income			(940,180)	(508,824)
Finance costs			448,249	565,366
Loss on valuation of inventories			2,363	11,843
Gain on disposal of property, plant and equipment			(26,284)	(19,579)
Loss on disposal of property, plant and equipment			140,987	93,536
Impairment losses on property, plant and equipment			17,651	58,388
Gain on disposal of intangible assets			(24,542)	(4,963)
Impairment losses on intangible assets			11,822	1,545
Impairment losses on investments in subsidiaries,				
associates and joint ventures			173,284	184,283
Reversal of impairment loss on				
investments in subsidiaries, associates and joint ventures			(225,860)	-
Gain on disposal of assets held for sale			(87)	(6,814)
Impairment loss on assets held for sale			21,873	-
Increase to provisions			403	15,520
Income tax expense			809,056	404,288
Others			8,241	(9,725)
Changes in operating assets and liabilities	38		(1,338,714)	(694,145)
Interest received			89,041	80,865
Interest paid			(139,766)	(192,795)
Dividends received			159,506	144,388
Income taxes paid			(483,988)	(375,393)
Net cash provided by operating activities		₩	3,553,963	3,839,109

POSCO Separate Statements of Cash Flows, Continued For the years ended December 31, 2017 and 2016

in millions of Won)	Notes	_	2017	2016
Cash flows from investing activities				
Proceeds from disposal of short-term financial instruments		₩	18,791,233	17,038,277
Proceeds from disposal of long-term financial instruments			1	-
Proceeds from disposal of available-for-sale financial assets			994,901	266,976
Proceeds from disposal of investments in subsidiaries,				
associates and joint ventures			6,112	4,850
Proceeds from disposal of intangible assets			23,431	7,076
Proceeds from disposal of assets held for sale			667	166,791
Proceeds from business combination			-	24,250
Acquisition of short-term financial instruments			(20,482,051)	(17,870,819)
Acquisition of available-for-sale investments			(15,264)	(271,434)
Increase in long-term loans			(60)	(66)
Acquisition of investment in subsidiaries,				
associates and joint ventures			(115,147)	(329,071)
Acquisition of property, plant and equipment			(1,594,897)	(1,875,111)
Payment for disposal of property, plant and equipment			(3,654)	(18,358)
Acquisition of intangible assets		_	(69,923)	(21,050)
Net cash used in investing activities		_	(2,464,651)	(2,877,689)
Cash flows from financing activities	38			
Proceeds from borrowings			654,242	1,082,339
Increase in long-term financial liabilities			2,517	4,422
Repayment of borrowings			(658,144)	(2,844,151)
Decrease in long-term financial liabilities			(9,136)	(8,720)
Payment of cash dividends			(820,102)	(665,168)
Payment of interest of hybrid bonds			(43,600)	(43,719)
Net cash used in financing activities			(874,223)	(2,474,997)
Changes in cash due to foreign currency translation			(3,213)	-
Net increase (decrease) in cash and cash equivalents			211,876	(1,513,577)
Cash and cash equivalents at beginning of the year	5		120,529	1,634,106
Cash and cash equivalents at end of the year	5	₩	332,405	120,529

1. Reporting Entity

POSCO (the "Company") is the largest steel producer in Korea which was incorporated on April 1, 1968 to manufacture and sell steel rolled products and plates in the domestic and overseas markets.

The shares of the Company have been listed on the Korea Exchange since 1988. The Company owns and operates two steel plants (Pohang and Gwangyang) and one office in Korea, and it also operates internationally through six overseas liaison offices.

As of December 31, 2017, major shareholders are as follows:

Shareholder's name	Number of shares	Ownership (%)
National Pension Service	9,660,885	11.08
Nippon Steel & Sumitomo Metal Corporation(*1)	2,894,712	3.32
BlackRock Institutional Trust Company, N.A.(*1)	2,483,875	2.85
Government of Singapore Investment Corp Private Limited	1,934,312	2.22
KB Financial Group Inc. and subsidiaries(*2)	1,919,361	2.20
Others	68,293,690	78.33
	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 W5,000 per share.

(*2) Includes shares held by subsidiaries pursuant to the Commercial Act.

As of December 31, 2017, the shares of the Company are listed on the Korea Exchange, while its ADRs are listed on the New York Stock Exchanges.

2. Statement of Compliance

Statement of compliance

The separate financial statements have been prepared in accordance with Korean International Financial Reporting Standards ("K-IFRS"), as prescribed in the Act on External Audits of Corporations in the Republic of Korea.

These financial statements are separate financial statements prepared in accordance with K-IFRS No. 1027 "Separate Financial Statements" presented by a parent, an investor with joint control of, or significant influence over, an investee, in which the investments are accounted for at cost.

The separate financial statements were authorized for issue by the Board of Directors on January 24, 2018, and will be submitted for approval at the shareholders' meeting to be held on March 9, 2018.

Basis of measurement

The separate financial statements have been prepared on the historical cost basis, except for the following material items in the statement of financial position, as described in the accounting policy below.

- (a) Derivatives instruments are measured at fair value
- (b) Available-for-sale financial assets are measured at fair value
- (c) Defined benefit liabilities are measured at the present value of the defined benefit obligation less the fair value of the plan asset

Functional and presentation currency

These separate financial statements are presented in Korean Won, which is the Company's functional currency which is the currency of the primary economic environment in which the Company operates.

Use of estimates and judgments

The preparation of the separate financial statements in conformity with K-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 separate financial statements is included in the following notes:

- Note 10 Assets held for sale
- Note 11 Investments in subsidiaries, associates and joint ventures
- Note 24 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 8 Available-for-sale securities
- Note 11 Investments in subsidiaries, associates and joint ventures
- Note 19 Provisions
- Note 20 Employee benefits
- Note 34 Income taxes
- Note 37 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 K-IFRS including the level in the fair value hierarchy in which such valuation techniques should be classified.

Significant valuation issues are reported to the Company's Audit Committee.

When measuring the fair value of an asset or a liability, the Company uses market observable data as far as possible. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows.

POSCO Notes to the Separate Financial Statements, Continued As of December 31, 2017

- 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 22 – Financial instruments

Changes in Accounting Policies

Except for the application of the amendments to standards for the first time for their reporting period beginning on January 1, 2017, as described below, the accounting policies applied by the Company in these separate financial statements are the same as those applied by the Company in its separate financial statements as of and for the year ended December 31, 2016.

(a) Amendments to K-IFRS No. 1007 "Statement of Cash Flows"

For the year beginning on January 1, 2017, the Company applied the amendments to K-IFRS No. 1007 "Statement of Cash Flows". K-IFRS No. 1007 requires liabilities related to the cash flows that were classified as a financing activity in the statement of cash flows or will be classified as a financing activity in the future should be disclosed as follows:

- Changes from financing cash flows
- Changes arising from obtaining or losing control of subsidiaries or other businesses
- The effect of changes in foreign exchange rates
- Changes in fair values
- Other changes

K-IFRS No. 1007 does not require the disclosure of comparative information of prior period. The related disclosures are included in note 38. (b) Amendments to K-IFRS No. 1012 "Income Taxes"

For the year beginning on January 1, 2017, the Company applied the amendments to K-IFRS No. 1012 "Income Taxes". In accordance with K-IFRS No. 1012, in the case of debt instruments measured at fair value, deferred tax accounting treatment is clarified. The difference between the carrying amount and taxable base amount of the debt liabilities is considered as temporary differences, regardless of the expected recovery method. When reviewing the recoverability of deferred tax assets, the estimated of probable future taxable income may include the recovery of some of the Company's assets for more than their carrying amount if there is sufficient evidence that it is probable that the Company will recover the asset for more than its carrying amount. In addition, the estimated of probable future taxable income are determined as the amount before considering the deductible effect from reversal of the deductible temporary differences.

The Company believes that the effect of the amendments to the separate financial statements is not significant. Therefore, the Company has not retrospectively applied the amendments in accordance with the transitional requirements.

3. Summary of Significant Accounting Policies

The significant accounting policies applied by the Company in preparation of its separate financial statements are included below. The accounting policies set out below have been applied consistently to all periods presented in these financial statements, except for those as disclosed in note 2.

Investments in subsidiaries, associates and joint ventures

These separate financial statements are prepared and presented in accordance with K-IFRS No. 1027 "Separate Financial Statements". The Company applied the cost method to investments in subsidiaries, associates and joint ventures in accordance with K-IFRS No. 1027. Dividends from a subsidiary, associate or joint venture are recognized in profit or loss when the right to receive the dividend is established.

Foreign currency transactions and translation

Foreign currency transactions are initially recorded using the spot exchange rate between the functional currency and the foreign currency at the date of the transaction. At the end of each reporting period, foreign currency monetary items are translated using the closing rate. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the original transaction. Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rate at the date of the original transaction.

POSCO Notes to the Separate Financial Statements, Continued As of December 31, 2017

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 other comprehensive income. Conversely, when gains or losses on non-monetary items are recognized in profit or loss, exchange components of those gains or losses are recognized in profit or loss.

Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, demand deposits, and short-term investments in highly liquid securities that are readily convertible to known amounts of cash with maturities of three months or less from the acquisition date and which are subject to an insignificant risk of changes in value. Equity investments are excluded from cash and cash equivalents.

Non-derivative financial assets

The Company recognizes and measures non-derivative financial assets by the following four categories: financial assets at fair value through profit or loss, held-to-maturity financial assets, loans and receivables and available-for-sale financial assets. The Company recognizes financial assets in the separate statement of financial position when the Company becomes a party to the contractual provisions of the instrument.

Upon initial recognition, non-derivative financial assets are measured at their fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the asset's acquisition or issuance.

(a) Financial assets at fair value through profit or loss

Financial assets are classified at fair value through profit or loss if they are held for trading or designated as such upon initial recognition. Upon initial recognition, transaction costs are recognized in profit or loss when incurred. Financial assets at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss.

(b) Held-to-maturity financial assets

A non-derivative financial asset with a fixed or determinable payment and fixed maturity, for which the Company has the positive intention and ability to hold to maturity, is classified as held-to-maturity financial assets. Subsequent to initial recognition, held-to-maturity financial assets are measured at amortized cost using the effective interest method.

(c) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Subsequent to initial recognition, loans and receivables are measured at amortized cost using the effective interest method unless the effect of discounting is immaterial.

(d) Available-for-sale financial assets

Available-for-sale financial assets are those non-derivative financial assets that are designated as available-for-sale or are not classified as financial assets at fair value through profit or loss, held-to-maturity financial assets or loans and receivables. Subsequent to initial recognition, they are measured at fair value, with changes in fair value, net of any tax effect, recorded in other comprehensive income in equity. Investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured and derivatives that are linked to and must be settled by delivery of such unquoted equity instruments are measured at cost. When a financial asset is derecognized or impairment losses are recognized, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss. Dividends on an available-for-sale equity instrument are recognized in profit or loss when the Company's right to receive payment is established.

(e) Derecognition of non-derivative financial assets

The Company derecognizes non-derivative financial assets when the contractual rights to the cash flows from the financial asset expire, or the Company transfers the rights to receive the contractual cash flows from the financial asset as well as substantially all the risks and rewards of ownership of the financial asset. Any interest in a transferred financial asset that is created or retained by the Company is recognized as a separate asset or liability.

If the Company retains substantially all the risks and rewards of ownership of the transferred financial assets, the Company continues to recognize the transferred financial assets and recognizes financial liabilities for the consideration received.

(f) Offsetting a financial asset and a financial liability

Financial assets and financial liabilities are offset and the net amount is presented in the separate 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.

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 K-IFRS No. 1036 "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.

POSCO Notes to the Separate Financial Statements, Continued As of December 31, 2017

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.

The carrying amount of the replaced part is derecognized at the time the replacement part is recognized. The costs of the day-to-day servicing of the item are recognized in profit or loss as incurred.

Items of property, plant and equipment are depreciated from the date they are available for use or, in respect of self-constructed assets, from the date that the asset is completed and ready for use. Other than land, the costs of an asset less its estimated residual value are depreciated. Depreciation of property, plant and equipment is recognized in profit or loss on a straight-line basis, which most closely reflects the expected pattern of consumption of the future economic benefits embodied in the asset, over the estimated useful lives of each component of an item of property, plant and equipment. Leased assets are depreciated over the shorter of the lease term and their useful lives unless it is reasonably certain that the Company will obtain ownership by the end of the lease term. Land is not depreciated.

POSCO Notes to the Separate Financial Statements, Continued As of December 31, 2017

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 period are as follows:

Buildings	5-40 years
Structures	5-40 years
Machinery and equipment	15 years
Vehicles	4-9 years
Tools	4 years
Furniture and fixtures	4 years
Lease assets	18 years

The estimated residual value, useful lives and the depreciation method are reviewed at least at the end of each reporting period and, if expectations differ from previous estimates, the changes are accounted for as changes in accounting estimates.

Borrowing costs

The Company capitalizes borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. Other borrowing costs are recognized in expense as incurred. A qualifying asset is an asset that requires a substantial period of time to get ready for its intended use or sale. Financial assets and inventories that are manufactured or otherwise produced over a short period of time are not qualifying assets. Assets that are ready for their intended use or sale when acquired are not qualifying assets.

To the extent that the Company borrows funds specifically for the purpose of obtaining a qualifying asset, the Company determines the amount of borrowing costs eligible for capitalization as the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings. The Company immediately recognizes other borrowing costs as an expense. To the extent that the Company borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the Company shall determine the amount of borrowing costs eligible for capitalization by applying a capitalization rate to the expenditures on that asset. The capitalization rate shall be the weighted average of the borrowing costs applicable to the borrowings of the Company that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. The amount of borrowing costs that the Company capitalizes during a period shall not exceed the amount of borrowing costs incurred during that period.

Intangible assets

Intangible assets are measured initially at cost and, subsequently, are carried at cost less accumulated amortization and accumulated impairment losses.

Amortization of intangible assets except for goodwill is calculated on a straight-line basis over the estimated useful lives of intangible assets from the date that they are available for use. The residual value of intangible assets is zero. However, as there are no foreseeable limits to the periods over which club memberships are expected to be available for use, this intangible asset is determined as an having an indefinite useful life and not amortized.

Intellectual property rights	7 years
Development costs	4 years
Port facilities usage rights	4-75 years
Other intangible assets	4 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.

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

Leases 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.

Impairment for financial assets

A financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is objective evidence that it is impaired. A financial asset is impaired if objective evidence indicates that a loss event has occurred after the initial recognition of the asset, and that the loss event had a negative effect on the estimated future cash flows of that asset that can be estimated reliably. However, losses expected as a result of future events, regardless of likelihood, are not recognized.

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

- (a) significant financial difficulty of the issuer or obligor
- (b) a breach of contract, such as a default or delinquency in interest or principal payments
- (c) the lender, for economic or legal reasons relating to the borrower's financial difficulty, granting to the borrower a concession that the lender would not otherwise consider
- (d) it becoming probable that the borrower will enter bankruptcy or other financial reorganization
- (e) the disappearance of an active market for that financial asset because of financial difficulties
- (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 impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss shall be reversed either directly or by adjusting an allowance account.

(b) Financial assets carried at cost

If there is objective evidence that an impairment loss has occurred on an unquoted equity instrument that is not carried at fair value because its fair value cannot be reliably measured, or on a derivative asset that is linked to and must be settled by delivery of such an unquoted equity instrument, the amount of the impairment loss is measured as the difference between the carrying amount of the financial asset and the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment losses are not reversed.

(c) Available-for-sale financial assets

When a decline in the fair value of an available-for-sale financial asset has been recognized in other comprehensive income and there is objective evidence that the asset is impaired, the cumulative loss that had been recognized in other comprehensive income shall be reclassified from equity to profit or loss as a reclassification adjustment even though the financial asset has not been derecognized. Impairment losses recognized in profit or loss for an investment in an equity instrument classified as available-for-sale are not reversed through profit or loss. If, in a subsequent period, the fair value of a debt instrument classified as available-for-sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognized in profit or loss, the impairment loss shall be reversed, with the amount of the reversal recognized in profit or loss.

Impairment for non-financial assets

The carrying amounts of the Company's non-financial assets, other than assets arising from 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. 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 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.

POSCO Notes to the Separate Financial Statements, Continued As of December 31, 2017

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.

Any impairment identified at the CGU level is used to reduce the carrying amount of the other assets in the CGU on a pro rata basis. 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

Derivatives are initially recognized at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are recognized in profit or loss.

(a) Embedded derivatives

Embedded derivatives are separated from the host contract and accounted for separately only if the following criteria have been met: (a) the economic characteristics and risks of the host contract and the embedded derivatives are not clearly and closely related to a separate instrument with the same terms as the embedded derivative that would meet the definition of a derivative, and (b) the hybrid (combined) instrument is not measured at fair value through profit or loss. Changes in the fair value of separable embedded derivatives from the host contract are recognized immediately in profit or loss.

(b) Other derivatives

Changes in the fair value of a derivative that is not designated as a hedging instrument are recognized immediately in profit or loss.

Non-derivative financial liabilities

The Company classifies non-derivative financial liabilities into financial liabilities at fair value through profit or loss or other financial liabilities in accordance with the substance of the contractual arrangement and the definitions of financial liabilities. The Company recognizes financial liabilities in the separate statement of financial position when the Company becomes a party to the contractual provisions of the financial liability.

(a) Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading or designated as upon initial recognition. Subsequent to initial recognition, financial liabilities at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss. Upon initial recognition, transaction costs that are directly attributable to the acquisition are recognized in profit or loss as incurred.

(b) Other financial liabilities

Non-derivative financial liabilities other than financial liabilities at fair value through profit or loss are classified as other financial liabilities. At the date of initial recognition, other financial liabilities are measured at fair value minus transaction costs that are directly attributable to the acquisition. Subsequent to initial recognition, other financial liabilities are measured at amortized cost using the effective interest method. The Company derecognizes a financial liability from the separate statement of financial position when it is extinguished (i.e. when the obligation specified in the contract is discharged, cancelled or expires).

Employee benefits

(a) Short-term employee benefits

Short-term employee benefits are employee benefits that are due to be settled within twelve months after the end of the period in which the employees render the related service. When an employee has rendered service to the Company during an accounting period, the Company recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service as profit or loss. If the Company has a legal or constructive obligation which can be reliably measured, the Company recognizes the amount of expected payment for profit-sharing and bonuses payable as liabilities.

(b) Other long-term employee benefits

Other long-term employee benefits include employee benefits that are settled beyond 12 months after the end of the period in which the employees render the related service, 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. The present value is determined by discounting the expected future cash flows using the interest rate of 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. 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 total of cumulative unrecognized past service cost and present value of 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 liability (asset), taking into account any changes in the 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.

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.

POSCO Notes to the Separate Financial Statements, Continued As of December 31, 2017

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.

Provision for restoration related to contaminated area is recognized when the area meets the Company's policy and legal standards of contamination.

A provision is used only for expenditures for which the provision was originally recognized.

Emission Rights

The Company accounts for greenhouse gases emission right and the relevant liability as follows pursuant to the Act on the Allocation and Trading of Greenhouse Gas Emission Permits which became effective in Korea in 2015.

(a) Greenhouse Gases Emission Right

Greenhouse Gases Emission Right consists of emission allowances which are allocated from the government free of charge and those purchased from the market. The cost includes any directly attributable costs incurred during the normal course of business.

Emission rights held for the purpose of performing the obligation are classified as intangible asset and initially measured at cost and subsequently carried at cost less accumulated impairment losses. Emission rights held for short-swing profits are classified as current asset and are measured at fair value with any changes in fair value recognized as profit or loss in the respective reporting period.

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 obligation 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 as of the end of the reporting period.

Equity instruments

(a) Share capital

Common stock is classified as equity and the incremental costs arising directly attributable to the issuance of common stock less their tax effects are deducted from equity.

If the Company reacquires its own equity instruments, the amount of those instruments ("treasury shares") are presented as a contra equity account. No gain or loss is recognized in profit or loss on the purchase, sale, issuance or cancellation of its own equity instruments. When treasury shares are sold or reissued subsequently, the amount received is recognized as an increase to equity, and the resulting surplus or deficit on the transaction is recorded in capital surplus.

(b) Hybrid bonds

Debt and equity instruments issued by the Company are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of financial liability and an equity instrument. When the Company has an unconditional right to avoid delivering cash or another financial asset to settle a contractual obligation, the instruments are classified as equity instruments.

Revenue

Revenue from the sale of goods, services provided and the use of assets is measured at the fair value of the consideration received or receivable, net of returns and allowances, trade discounts and volume rebates, which are not significant for all periods presented.

(a) Sale of goods

Revenue from the sale of goods in the ordinary course of activities is measured at the fair value of the consideration received or receivable, net of returns, trade discounts and volume rebates. Revenue is recognized when persuasive evidence exists, usually in the form of an executed sales agreement, that the significant risks and rewards of ownership have been transferred to the buyer, recovery of the consideration is probable, the associated costs and possible return of goods can be estimated reliably, there is no continuing management involvement with the goods, and the amount of revenue can be measured reliably. The appropriate timing for transfer of risks and rewards varies depending on the individual terms and conditions of the sales contract. For international sales, this timing depends on the type of international commercial terms of the contract.

(b) Rental income

Rental income from investment property, net of lease incentives granted, is recognized in profit or loss on a straight-line basis over the term of the lease.

Finance income and finance costs

Finance income comprises interest income on funds invested (including available-for-sale financial assets), dividend income, gains on the disposal of available-for-sale financial assets and changes in the fair value of financial assets at fair value through profit or loss. Interest income is recognized as it accrues in profit or loss, using the effective interest method. Dividend income is recognized in profit or loss on the date that the Company's right to receive payment is established.

Finance costs comprise interest expense on borrowings and changes in the fair value of financial assets at fair value through profit or loss. Borrowing costs are recognized in profit or loss using the effective interest rate method.

Income tax

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 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 K-IFRS 1012 "Income Taxes", if it is not applicable to the income taxes, the Company applies K-IFRS 1037 "Provisions Contingent Liabilities and Contingent Assets".

(a) Current tax

Current tax is the expected tax payable or receivable on the taxable profit or loss for the year, using tax rates enacted or substantively enacted at the end of the reporting period and any adjustment to tax payable in respect of previous years. The taxable profit is different from the accounting profit for the period since the taxable profit is calculated excluding the temporary differences, which will be taxable or deductible in determining taxable profit of future periods, and non-taxable or non-deductible items from the accounting profit.

(b) Deferred tax

The measurement of deferred 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 The Company recognizes a deferred tax liability for all taxable temporary liabilities. differences associated with investments in subsidiaries, associates, and joint ventures, except to the extent that the Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. The Company recognizes a deferred tax asset for deductible temporary differences arising from investments in subsidiaries, associates and joint ventures, to the extent that it is probable that the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized. However, deferred tax is not recognized for the following temporary differences: taxable temporary differences arising on the initial recognition of goodwill, or the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting profit or loss nor taxable income. The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. Deferred tax assets and liabilities are offset only if there is a legally enforceable right to offset the related current tax liabilities and assets, and they relate to income taxes levied by the same tax authority and they intend to settle current tax liabilities and assets on a net basis.

Earnings per share

Management calculates basic earnings per share ("EPS") data for the Company's ordinary shares, which is presented at the end of the statement of comprehensive income. Basic EPS is calculated by dividing profit attributable to ordinary shareholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held.

New standards and interpretations not yet adopted

The Company will apply K-IFRS No. 1109 "Financial Instruments" and K-IFRS No. 1115 "Revenue from Contracts with Customers" for the year beginning on January 1, 2018. The Company is evaluating analysis of financial impact resulting from adoption of new standards and the estimated effect on the separate financial statements at the date of initial application based on current situation as of December 31, 2017. However, a reasonable estimation of financial impact is not determined since the analysis of financial impact is not completed.

The following new standards, including K-IFRS No. 1109 and K-IFRS No. 1115, interpretations and amendments to existing standards have been published but are not mandatory for the Company for annual periods beginning on January 1, 2017, and the Company has not early adopted them.

(a) K-IFRS No. 1109 "Financial Instruments"

K-IFRS No. 1109 "Financial Instruments" regulates requirements for measurement and recognition of certain contracts in relation to trading financial assets and liabilities or non-financial items. It replaces existing guidance in K-IFRS No. 1039 "Financial Instruments: Recognition and Measurement".

The standard will generally be applied retrospectively application with some exemptions an entity not required to restate the comparative information for prior periods in relation to classification and measurement (including impairment) changes. Such exemptions will be applied by the Company. The Company will recognize the accumulated effect resulting from initial application of K-IFRS No. 1109 as reserves and retained earnings of the Company at the date of initial application.

The standard's impact on the separate financial statements are as follows.

1) Classification and measurement of financial assets

When applying K-IFRS No. 1109, the classification of financial assets will be driven by the Company's business model for managing the financial assets and contractual terms of cash flow.

The following table shows the classification of financial assets measured subsequently at amortized cost, at fair value through other comprehensive income and at fair value through profit or loss. If a hybrid contract contains a host that is a financial asset, the classification of the hybrid contract shall be determined for the entire contract without separating the embedded derivative.

Business model	Contractual cash flows are solely payments of principal and interests	All other cases
To collect contractual cash flows	Amortized cost(*1)	
Both to collect contractual cash flows and sell financial assets	Fair value through other comprehensive income(*1)	Fair value through profit or loss(*2)
For trading, and others	Fair value through profit or loss	

(*1) The Company may irrevocably designate as at fair value through profit or loss to eliminate or significantly reduce an accounting mismatch.

(*2) The Company may irrevocably designate equity investments that is not held for trading as at fair value through other comprehensive income.

As of December 31, 2017, the Company owns available-for-sale financial assets of W1,395,589 million and loans and receivables of W10,197,020 million.

As a result of analysis of the impact on the separate financial statements, the Company expects that debt instruments whose contractual cash flows do not solely represent payments of principal and interest and those held for trading will be measured at fair value through profit or loss; loans and receivables whose contractual cash flows solely represent receipt of principal and interest but are not owned for the purpose of collection of contractual cash flows will be measured at fair value through profit or loss. Accordingly, the financial assets at fair value through profit or loss may increase upon adoption of K-IFRS No. 1109 and may increase the volatility in profit or loss. The Company expects the application of K-IFRS No. 1109 on these financial assets will not have a material impact on the financial statements.

POSCO Notes to the Separate Financial Statements, Continued As of December 31, 2017

According to K-IFRS No. 1109, the Company may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value of an investment in an equity instrument which is not held for trading at initial recognition. As of December 31, 2017, the Company owns equity instruments classified as financial assets available-for-sale for the purpose of long-term strategic plan and the fair value of the accompanying asset is W1,384,784 million. According to K-IFRS No. 1109, the Company made an irrevocable election to classify the equity instrument as assets measured at fair value through other comprehensive income, for which all subsequent changes in fair value are recognized in other comprehensive income and not subsequently recycled to profit or loss.

2) Impairment: Financial assets and contract assets

K-IFRS No. 1109 replaces the incurred loss model in the existing standard with a forwardlooking expected credit loss model for debt instruments, lease receivables, contractual assets, loan commitments, and financial guarantee contracts.

Under K-IFRS No. 1109, impairment losses are likely to be recognized earlier than using the incurred loss model under the existing guidance in K-IFRS No. 1039 as loss allowances will be measured either 12-month or lifetime expected credit loss based on the extent of increase in credit risk.

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. Additionally, the Company has elected to recognize lifetime expected credit losses for contract assets or trade receivables that contain a significant financing component.

The Company expects impairment losses of financial assets subject to expected credit loss model under K-IFRS No. 1109 to be recognized earlier. As of January 1, 2018, the date of initial application, the Company expects recognize increase in loss allowance and decrease in retained earnings.

3) Classification and measurement of financial liabilities

K-IFRS No. 1109 mostly adheres to the existing requirements under K-IFRS No. 1039 regarding to classification of financial liabilities.

Under K-IFRS No. 1039, all financial liabilities designated at fair value through profit or loss recognized their fair value movements in profit or loss. However, K-IFRS No. 1109 requires the amount of the change in the liability's fair value attributable to changes in the credit risk to be recognized in other comprehensive income. Amounts presented in other comprehensive income are not subsequently transferred to profit or loss.

The Company did not designate financial liabilities as financial liability at fair value through profit or loss as of December 31, 2017 and expects the adoption of K-IFRS No. 1109 will not have significant impact on the classification of financial liabilities.

(b) K-IFRS No. 1115 "Revenue from Contracts with Customers"

K-IFRS No. 1115 "Revenue from Contracts with Customers" provides a unified five-step model for determining the timing, measurement and recognition of revenue. It replaces existing revenue recognition guidance, including K-IFRS No. 1018 "Revenue", K-IFRS No. 1011 "Construction Contracts", K-IFRS No. 2031 "Revenue- Barter transactions involving advertising services", K-IFRS No. 2113 "Customer Loyalty Programs", K-IFRS No. 2115 "Agreements for the construction of real estate", and K-IFRS No. 2118 "Transfers of assets from customers".

The Company intends to apply the retrospective approach which will recognize 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 K-IFRS No. 1115 by applying the new standard only to those contracts that are not considered as completed contracts at the date of initial application. Accordingly, upon adoption of K-IFRS No. 1115, the Company will not restate the financial statements for comparative periods.

Existing K-IFRS standards and interpretations including K-IFRS No. 1018 provide revenue recognition guidance by transaction types such as sales of goods, rendering of services, interest income, royalty income, dividend income and construction revenue; however, under the new standard, K-IFRS No. 1115, the five-step approach (Step 1: Identify the contract(s) with a customer, Step 2: Identify the performance obligations in the contract, Step 3: Determine the transaction price, Step 4: Allocate the transaction price to the performance obligations in the contract, Step 5: Recognize revenue when the entity satisfied a performance obligation) is applied for all types of contracts or agreements.

The standard's impact on the separate financial statements are as follows.

1) Identification of performance obligations

The Company operates manufacturing and selling steel rolled products and plates, and certain sales contracts include transport service. When applying K-IFRS No. 1115, 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 will be recognized when the obligation of delivery of the product is completed.

The Company identified transport service included in the sales contract as a separate performance obligation that will be satisfied over the promised service period.

As of January 1, 2018, the date of initial application, change in relevant accounting policy is expected to result in decrease in retained earnings.

2) Variable consideration

The Company provides a certain percentage of price discount, if an accounts receivable is collected earlier than a certain collection date. Under K-IFRS No. 1115, 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.

As of January 1, 2018, the date of initial application, change in accounting policy due to K-IFRS No. 1115 is expected to result in decrease in retained earnings.

(c) K-IFRS No. 1116 "Leases"

K-IFRS No. 1116 "Leases" will replace K-IFRS No. 1017 "Leases" and K-IFRS No. 2104 "Determining whether an Arrangement contains a Lease". It is effective for annual periods beginning on or after January 1, 2019, with early adoption permitted for a Company which has adopted to K-IFRS No. 1115.

As a lessee, the Company shall apply this standard using one of the following two methods; (a) retrospectively to each prior reporting period presented in accordance with K-IFRS No. 1008 "Accounting Policies, Changes in Accounting Estimates and Errors" but using the practical expedients for completed contracts- i.e. completed contracts as of the beginning of the earliest prior period presented are not restated; or (b) retrospectively with the cumulative effect of initially applying this standard recognized at the date of initial application.

K-IFRS No. 1116 suggests an 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 of which has a term of 12 months or less at the commencement date and low value assets. Accounting treatment for lessor is similar to the existing standard which classifies lease into finance and operating lease.

Application of K-IFRS No. 1116 will change current operating lease expense which has been recognized in straight-line method into depreciation expense of right-of-use asset and interest expense of lease liability, and therefore, nature of expense recognized in relation to lease will change. However, it is expected that there will be no significant impact on finance lease.

The Company has not yet initiated to prepare for the application of K-IFRS No. 1116 and the Company has not performed an assessment of the impact resulting from the application of K-IFRS No. 1116. The Company will complete the analysis of financial impacts arising from applying this standard in 2018.

4. 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 separate financial statements.

(a) Financial risk management

1) Risk management framework

The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework. The Company's risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Company's activities.

The Company, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

2) Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Company's receivables from customers and investment securities. In addition, credit risk arises from finance guarantees.

The Company implements a credit risk management policy under which the Company only transacts business with counterparties that have a certain level of credit rate evaluated based on financial condition, historical experience, and other factors. The Company's exposure to credit risk is influenced mainly by the individual characteristics of each customer. The default risk of a nation or an industry in which a customer operates its business does not have a significant influence on credit risk. The Company has established a credit policy under which each new customer is analyzed individually for creditworthiness.

The Company establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade and other receivables. The main components of this allowance are a specific loss component that relates to individually significant exposures, and a collective loss component established for companies of similar assets in respect of losses that have been incurred but not yet identified. The collective loss allowance is determined based on historical data of payment statistics for similar financial assets. Debt securities are analyzed individually, and an expected loss shall be directly deducted from debt securities.

Credit risk also arises from transactions with financial institutions, and such transactions include transactions of cash and cash equivalents, various deposits, and financial instruments such as derivative contracts. The Company manages its exposure to this credit risk by only entering into transactions with banks that have high international credit ratings. The Company's treasury department authorizes, manages, and 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.

The Company's cash flow from business, borrowing or financing is sufficient to meet the cash requirements for the Company's strategy 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.

① Currency risk

The Company is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the functional currency of the Company, Korean Won.

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. The Company reduces the foreign currency exposure by repayment of foreign currency borrowings subjected to investment in overseas when its maturities come.

② Interest rate risk

The Company manages the exposure to interest rate risk by adjusting of borrowing structure ratio between borrowings at fixed interest rates and variable interest rate. The Company monitors interest rate risks regularly in order to avoid exposure to interest rate risk on borrowings at variable interest rate.

③ Other market price risk

Equity price risk arises from listed equity securities among available-for-sale equity securities. Management of the Company measures regularly the fair value of listed equity securities and the risk of variance in future cash flow caused by market price fluctuations. Significant investments are managed separately and all buy and sell decisions are approved by management of the Company.

(b) Management of capital

The fundamental goal of capital management is the maximization of shareholders' value by means of the stable dividend policy and the retirement of treasury shares. The capital structure of the Company consists of equity and net borrowings (after deducting cash and cash equivalents) and current financial instruments from borrowings. The Company applied the same capital risk management strategy that was applied in the previous period.

Net borrowing-to-equity ratio as of December 31, 2017 and 2016 is as follows:

(in millions of Won)		2017	2016		
Total borrowings	₩	3,901,224	4,142,854		
Less: Cash and cash equivalents		332,405	120,529		
Net borrowings		3,568,819	4,022,325		
Total equity	₩	45,941,455	44,329,447		
Net borrowings-to-equity ratio		7.77%	9.07%		

5. Cash and Cash Equivalents

Cash and cash equivalents as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016	
Demand deposits and checking accounts	₩	97,907	5,495	
Other cash equivalents		234,498	115,034	
	₩	332,405	120,529	

6. Trade Accounts and Notes Receivable

Trade accounts and notes receivable as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016		
Current					
Trade accounts and notes receivable	₩	3,886,950	3,231,461		
Less: Allowance for doubtful accounts		(19,236)	(15,252)		
	₩	3,867,714	3,216,209		
Non-current					
Trade accounts and notes receivable	₩	18,586	21,671		
Less: Present value discount		(5,107)	(7,364)		
Less: Allowance for doubtful accounts		(705)	(267)		
	₩	12,774	14,040		

Trade accounts and notes receivable sold to financial institutions, for which the derecognition conditions were not met, amounted to W83,976 million and W31,370 million as of December 31, 2017 and 2016, respectively. The fair value of trade accounts and notes receivable approximates the carrying amounts and trade accounts and notes receivable are included in short-term borrowings from financial institutions. (Note 16)

7. Other Receivables

Other receivables as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016		
Current					
Other accounts receivable	₩	199,724	231,535		
Others		22,476	20,235		
Less: Allowance for doubtful accounts		(11,970)	(5,709)		
	₩	210,230	246,061		
Non-current					
Long-term loans	₩	22,877	23,183		
Long-term other accounts receivable		44,616	61,728		
Others		2,896	2,758		
Less: Allowance for doubtful accounts		(7,968)			
	₩	62,421	87,669		

8. Other Financial Assets

(a) Other financial assets as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016
Current			
Available-for-sale securities (bonds)	₩	2,305	-
Short-term financial instruments(*1)		5,811,702	4,124,150
Cash deposits(*2)		10,080	6,813
	₩	5,824,087	4,130,963
Non-current			
Long-term derivatives assets held for trading	₩	-	80,959
Available-for-sale securities (equity instruments)		1,384,784	2,058,240
Available-for-sale securities (others)		8,500	6,338
Cash deposits(*3)		32	33
	₩	1,393,316	2,145,570

(*1) Short-term financial instruments amounting to W1,384 million are levied in relation to pending litigations as of December 31, 2016.

(*2) Deposits amounting to ₩10,080 million and ₩6,813 million as of December 31, 2017 and 2016, respectively, are restricted in relation to government assigned project.

(*3) The Company is required to provide deposits to maintain checking accounts and accordingly the withdrawal of these deposits is restricted.

(b) Available-for-sale equity securities as of December 31, 2017 and 2016 are as follows:

(in millions of Won)					2017				2016
	Number of shares	Ownership (%)		Acquisition cost	Fair value	Net changes in fair value of available-for-sale investments	Accumulated impairment loss	Book value	Book value
Marketable equity securities			-						
Nippon Steel & Sumitom o Metal									
Corporation	15,698,500	1.65	₩	473,962	430,748	82,751	(125,965)	430,748	644,257
KB Financial group Inc.	3,863,520	0.92		178,839	244,947	121,894	(55,786)	244,947	496,076
Woori Bank	20,280,000	3.00		244,447	319,410	74,963	-	319,410	267,787
Hyundai Heavy Industries Co., Ltd.(*1)	-	-		-	-	-	-	-	214,904
DONGKUK STEEL MILL CO., LTD	1,786,827	1.87		10,471	19,655	9,184	-	19,655	19,744
SAMWONSTEEL Co., Ltd.	5,700,000	14.25		8,930	19,010	16,483	(6,403)	19,010	20,064
DONGKUK INDUSTRIES COMPANY	2,611,989	4.82		11,911	10,278	(1,633)	-	10,278	19,355
Others (9 companies)(*2,3)				80,981	52,240	16,290	(45,031)	52,240	74,526
				1,009,541	1,096,288	319,932	(233,185)	1,096,288	1,756,713
Non-marketable equity securities(*	5)								
Congonhas Minerios S.A.(*3,4)	3,658,394	2.02		221,535	145,394	11,176	(87,317)	145,394	190,884
Poongsan Special Metal Corp.	315,790	5.00		7,657	7,657	-	-	7,657	7,657
HANKUM.CO.LTD	21,000	4.99		4,599	4,599	-	-	4,599	4,599
Core-Industry Co., Ltd.	490,000	19.84		4,214	4,214	-	-	4,214	4,214
AJUSTEEL CO.,LTD	17,000	4.36		4,165	4,165	-	-	4,165	4,165
Others (43 companies)(*2,3)				280,532	122,467	(9,191)	(148,874)	122,467	90,008
				522,702	288,496	1,985	(236,191)	288,496	301,527
			₩	1,532,243	1,384,784	321,917	(469,376)	1,384,784	2,058,240

- (*1) Hyundai Heavy Industries Co., Ltd. has been split off into Hyundai Heavy Industries Co., Ltd.("the surviving Company"), Hyundai Robotics Co., Ltd., Hyundai Construction Equipment Co., Ltd., and Hyundai Electric & Energy Systems Co., Ltd. during the year ended December 31, 2017. After the split-off, the Company sold each of its shares during the year ended December 31, 2017.
- (*2) The Company has recognized W994 million and W661 million of impairment losses on security of Steel Flower Co., Ltd., and Troika Natural Resources PEF respectively, due to additional decline in the fair value of the security during the year ended December 31, 2017.
- (*3) The Company has recognized W87,317 million, W3,920 million and W1,458 million of impairment losses on security of Congonhas Minerios S.A., Asian Clean Energy PEF and FINE BESTEEL Co., Ltd. respectively, due to prolonged or significant decline in the fair value of the security during the year ended December 31, 2017.
- (*4) Fair value is based on an analysis performed by an external professional evaluation agency.
- (*5) Non-marketable equity securities whose fair values cannot be reliably measured are recorded at cost.

9. Inventories

(a) Inventories as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016		
Finished goods	₩	927,413	696,192		
Semi-finished goods		1,255,713	1,092,864		
By-products		8,454	4,303		
Rawmaterials		917,241	814,993		
Fuel and materials		520,341	535,036		
Materials-in-transit		916,255	863,226		
Others	_	479	520		
		4,545,896	4,007,134		
Less: Allowance for inventories valuation	_	(2,363)	(11,843)		
	₩	4,543,533	3,995,291		

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

(in millions of Won)		2017	2016		
Beginning	₩	11,843	15,254		
Loss on valuation of inventories		2,363	11,843		
Utilization on sale of inventories		(11,843)	(15,254)		
Ending	₩	2,363	11,843		

10. Assets Held for Sale

Assets held for sale as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016
Investments in subsidiaries(*1)	₩	34,153	-
Property, plant and equipment		392	764
	₩	34,545	764

(*1) During the year ended December 31, 2017, the Company determined to dispose part of the interest of POSCO Thainox Public Company Limited, subsidiary of the Company, and classified investments in subsidiaries amounting W56,234 million as assets held for sale. The Company recognized W21,873 million of impairment loss from the difference between book value and net fair value of the interest, and finished disposal for part of it.

11. Investments in Subsidiaries, Associates and Joint ventures

(a) Investments in subsidiaries, associates and joint ventures as of December 31, 2017 and 2016 are as follows:

(in millions of Won)	_	2017 2016			
Subsidiaries	₩	12,129,758	12,043,125		
Associates		639,229	656,670		
Joint ventures	_	2,329,869	2,331,590		
	₩_	15,098,856	15,031,385		

There are no significant restrictions on the ability of subsidiaries, associates and joint ventures to transfer funds to the controlling company, such as in the forms of cash dividends and repayment of loans or payment of advances.

(b) Details of subsidiaries and carrying amounts as of December 31, 2017 and 2016 are as follows:

(in millions of Won)						2017			2016
			Number of	Ownership		Net asset	Acquisition	Book	Book
	Country	Principal operations	shares	(%)		value	cost	value	value
[Domestic]									
POSCO DAEWOO Corporation(*1)	Korea	Trading	77,606,130	62.90	₩	2,775,626	3,610,164	3,610,164	3,371,481
POSCO ENGINEERING & CONSTRUCTION., LTD.	Korea	Engineering and construction	22,073,568	52.80		2,651,454	1,014,314	1,014,314	1,014,314
POSCO ENERGY CO., LTD.	Korea	Power generation	40,234,508	89.02		1,695,863	658,176	658,176	658,176
POSCO Processing&Service(*1)	Korea	Steel sales and trading	12,568,393	93.95		519,662	385,995	385,995	624,678
POSCO COATED & COLOR STEEL Co., Ltd.	Korea	Coated steel manufacturing and sales	3,412,000	56.87		220,618	108,421	108,421	108,421
POSCO Venture Capital Co., Ltd.	Korea	Investment in venture companies	19,700,000	95.00		117,245	103,780	103,780	103,780
POSCO CHEMTECH	Korea	Refractory manufacturing and sales	35,442,000	60.00		643,206	100,535	100,535	100,535
POSCO ES MATERIALS CO., LTD	Korea	Secondary battery active material				74 70 4			
		manufacturing and sales	3,052,230	75.32		71,764	83,309	83,309	83,000
POSMATE	Korea	Business facility maintenance	902,946	83.83		122,374	73,374	73,374	73,374
POSCO ICT	Korea	Computer hardware							
		and software distribution	99,403,282	65.38		398,645	70,990	70,990	70,990
POSCO M-TECH(*2.3)	Korea	Packing materials manufacturing							
		and sales	20.342.460	48.85		82,675	107,278	50.857	53,651
POSCO Family Strategy Fund(*3)	Korea	Investment in venture companies	460	69.91		46,519	45,273	32.457	45,273
Busan E&E Co,. Ltd.(*4)	Korea	Municipal solid waste fuel							
Baban Ede 66, Ed.(1)	nored	and power generation	6,029,660	70.00		44,874	30,148	30,148	30,148
Others (11 companies)(*3)	Korea	p 3	-,,			473,717	262,755	215,155	159,755
					-	9,864,242	6,654,512	6,537,675	6,497,576
[Foreign]					-	0,001,212	0,001,012	0,007,070	0,107,070
PT. KRAKATAU POSCO	Indonesia	Steel manufacturing and sales	739,900	70.00		70,536	813,431	813,431	813,431
POSCO WA PTY LTD	Australia	Iron ore sales and mine development	612,870,646	100.00		418,924	631,625	631,625	626,996
POSCO Maharashtra Steel Private Limited(*5)	India	Steel manufacturing and sales	361,789,958	100.00		424,199	722,569	722,569	665,450
POSCO AUSTRALIA PTY LTD	Australia	Iron ore sales and mine development	761,775	100.00		506,238	330,623	330,623	330,623
Zhangjiagang Pohang Stainless Steel Co., Ltd.	China	Stainless steel manufacturing	701,775	100.00			000,020	000,020	350,025
Zhangjagang i onang stainess steer co., Etu.	China	and sales	-	58.60		557,208	283.845	283.845	283.845
POSCO Thainox Public Company Limited(*6)	Thailand	Stainless steel manufacturing	-	58.00			203,045	203,040	203,045
POSCO mainox Public Company Limited(6)	malianu	and sales	6,616,916,519	84.88		298,136	444.506	416.612	246.986
POSCO SS VINA Co., Ltd.	Vietnam		0,010,910,519	100.00		19.318	241,426	241,426	240,980
POSCO-China Holding Corp.	China	Steel manufacturing and sales Investment management	-	100.00		163.845	240,430	240,430	240,430
POSCO-India Private Limited(*3)	India		764,999,999	99.99		78,211	184,815	240,430	
		Steel manufacturing and sales					184,815		184,815
POSCO MEXICO S.A. DE C.V.	Mexico USA	Plate steel manufacturing and sales	2,686,745,272	84.84 99.45		208,885 73,521	192,156	180,072 192,156	180,072 192,156
POSCO America Corporation		Steel trading	437,941						
POSCO-VIETNAM Co., Ltd.	Vietnam	Steel manufacturing and sales	-	100.00		32,067	160,572	160,572	160,572
POSCO VST CO., LTD.	Vietnam	Stainless steel manufacturing		05.05		27,712			
		and sales	-	95.65			144,573	144,573	144,573
POSCO(Guangdong) Automotive Steel Co., Ltd.	China	Plate steel manufacturing and sales		83.64		97,574	130,751	130,751	130,751
POSCO COATED STEEL (THAILAND) CO., LTD.	Thailand	Plate steel manufacturing and sales	36,000,000	100.00		91,207	121,592	121,592	121,592
POSCO Asia Co., Ltd.	Hong Kong	Steel and raw material trading	9,360,000	100.00		175,120	117,710	117,710	117,710
POSCO ASSAN TST STEEL INDUSTRY	Turkey	Steel manufacturing and sales	144,579,160	60.00		(51,781)	92,800	92,800	92,800
POSCO JAPAN Co., Ltd.	Japan	Steel trading	90,438	100.00		123,993	68,436	68,436	68,436
Qingdao Pohang Stainless Steel Co., Ltd.	China	Stainless steel manufacturing				92.508			
		and sales	-	70.00		/	65,982	65,982	65,982
POSCO(Suzhou) Automotive						136.261			
Processing Center Co., Ltd.	China	Steel manufacturing and sales	-	90.00			62,494	62,494	62,494
POSCO AFRICA (PROPRIETARY) LIMITED	South Africa	Mine development	1,390	100.00		40,957	50,297	50,297	50,297
POSCO-Malaysia SDN. BHD.	Malaysia	Steel manufacturing and sales	144,772,000	81.79		(9,373)	45,479	45,479	45,479
POSCO(Guangdong) Coated Steel Co., Ltd.	China	Plate steel sheet manufacturing				37,604			
		and sales	-	87.04		37,004	31,299	31,299	31,299
POSCO Electrical Steel India Private Limited(*5)	India	Electrical steel processing and sales	-	-			-	-	57,119
Others (27 companies)					_	607,602	412,872	371,742	390,215
					-	4,220,472	5,770,355	5,592,083	5,545,549
					₩	14,084,714	12,424,867	12,129,758	12,043,125
						.,		_,,. 50	2,2 .2, .20

- (*1) During the year ended December 31, 2017, POSCO Processing&Service spun-off its Steel distribution business and other businesses and the businesses were merged with POSCO DAEWOO Corporation.
- (*2) POSCO M-TECH was classified as an investment in a subsidiary as the Company has more than half of the voting rights by virtue of an agreement with Pohang University of Science and Technology, which has 4.72% of ownership in POSCO M-TECH.
- (*3) During the year ended December 31, 2017, the Company conducted the impairment test on securities of POSCO M-TECH, POSCO Family Strategy Fund, Suncheon Eco Trans Co., Ltd and POSCO-India Private Limited due to signs of impairment such as continuous business loss. As a result of the impairment test, the Company has recognized W2,793 million, W12,816 million, W47,600 million and W109,248 million of impairment losses on its securities due to its carrying amount that significantly exceeded its recoverable amount.
- (*4) As of December 31, 2017 and 2016, the investment in a subsidiary amounting to W30,148 million was provided as collateral in relation to the loan agreements of Busan E&E Co,. Ltd.
- (*5) During the year ended December 31, 2017, POSCO Maharashtra Steel Private Limited merged with POSCO Electrical Steel India Private Limited.
- (*6) As of December 31, 2017, the fair value of POSCO Thainox Public Company Limited was increased significantly and the recoverable amount is estimated since there is an objective evidence of a decrease in impairment loss recognized in prior periods. Recoverable amount was determined based on fair value less cost to sell, which was calculated by the stock price as of March 31, 2017. As a result, the Company recognized W225,860 million as gain on reversal of impairment loss. Meanwhile, the Company classified part of the interest of POSCO Thainox Public Company Limited as assets held for sale. (Note 10)
- (c) Details of associates and carrying amounts as of December 31, 2017 and 2016 are as follows:

(in millions of Won)			2017						
	Country	Principal operations	Number of shares	Ownership (%))	Net asset value	Acquisition cost	Book value	Book value
[Domestic]									
EQP POSCO Global NO1									
Natural Resources PEF SNNC	Korea Korea	Mine investment STS material manufacturing	169,316,307,504	29.50	₩	561,832	169,316	169,316	169,316
51110	Rorea	and sales	18,130,000	49.00		246,456	100,655	100,655	100,655
Others (6 companies)						(23,077)	540,468	19,052	23,771
						785,211	810,439	289,023	293,742
[Foreign]									
Nickel Mining Company SAS	New	Raw material							
	Caledonia	manufacturing and sales	3,234,698	49.00		141,013	189,197	189,197	189,197
7623704 Canada Inc.(*1)	Canada	Mine investment	114,452,000	10.40		1,182,367	124,341	124,341	124,341
Zhongyue POSCO (Qinhuangdao)		Tinplate manufacturing							
Tinplate Industrial Co., Ltd	China	and sales	-	24.00		51,715	11,003	11,003	11,003
Others (4 companies)						36,819	25,547	25,665	38,387
					-	1,411,914	350,088	350,206	362,928
					₩	2,197,125	1,160,527	639,229	656,670

(*1) As of December 31, 2017, it was classified as an associate even though the Company's ownership percentage is less than 20% of ownership since the Company has significant influence over the investee when considering its structure of the Board of Directors and others.

(d) Details of joint ventures and carrying amounts as of December 31, 2017 and 2016 are as follows:

(in millions of Won)						2017			2016
	Country	Principal operations	Number of shares	Ownership (%)		Net asset value	Acquisition cost	Book value	Book value
Roy Hill Holdings Pty Ltd(*1)	Australia	Mine development	10,494,377	10.00	₩	3,547,516	1,225,464	1,225,464	1,225,464
CSP - Compania Siderurgica do Pecem	Brazil	Steel manufacturing and sales	1,108,696,532	20.00		581,961	558,821	573,830	575,551
POSCO-NPS Niobium LLC	USA	Mine development	325,050,000	50.00		697,470	364,609	364,609	364,609
KOBRASCO	Brazil	Steel materials manufacturing							
		and sales	2,010,719,185	50.00		216,970	98,962	98,962	98,962
Others (3 companies)						259,691	67,004	67,004	67,004
					₩	5,303,608	2,314,860	2,329,869	2,331,590

(*1) As of December 31, 2017 and 2016, the investment in joint ventures amounting to ₩1,225,464 million was provided as collateral in relation to loan from project financing of Roy Hill Holdings Pty Ltd.

12. Investment Property, Net

(a) Investment property as of December 31, 2017 and 2016 are as follows:

(in millions of Won)			2017			2016				
	-	Acquisition cost	Accumulated depreciation	Book value	Acquisition cost	Accumulated depreciation	Book value			
Land	₩	38,035	-	38,035	34,213	-	34,213			
Buildings		133,473	(83,680)	49,793	121,248	(74,811)	46,437			
Structures	_	21,691	(12,212)	9,479	17,169	(11,523)	5,646			
	₩	193,199	(95,892)	97,307	172,630	(86,334)	86,296			

The fair value of investment property as of December 31, 2017 is W416,051 million.

- (b) Changes in the carrying amount of investment property for the years ended December 31, 2017 and 2016 were as follows:
 - 1) For the year ended December 31, 2017

(in millions of Won)	_	Beginning	Depreciation(*1)	Transfer(*2)	Ending
Land	₩	34,213	-	3,822	38,035
Buildings		46,437	(3,308)	6,664	49,793
Structures	_	5,646	(585)	4,418	9,479
	₩_	86,296	(3,893)	14,904	97,307

- (*1) The useful life and depreciation method of investment property are identical to those of property, plant and equipment.
- (*2) Mainly includes assets transferred from property, plant and equipment in relation to change in rental ratio and the purpose of use.

(in millions of Won,	-	Beginning	Depreciation(*1)	Transfer(*2)	Ending
Land	₩	35,557	-	(1,344)	34,213
Buildings		47,399	(2,961)	1,999	46,437
Structures	_	3,796	(283)	2,133	5,646
	₩_	86,752	(3,244)	2,788	86,296

2) For the year ended December 31, 2016

- (*1) The useful life and depreciation method of investment property are identical to those of property, plant and equipment.
- (*2) Mainly includes assets transferred from property, plant and equipment in relation to change in rental ratio and the purpose of use.

13. Property, Plant and Equipment, Net

(a) Property, plant and equipment as of December 31, 2017 and 2016 are as follows:

(in millions of Won)				2017			2016					
		Acquisition cost	Accumulated depreciation	Accumulated impairment	Government grants	Book value	Acquisition cost	Accumulated depreciation	Accumulated impairment	Government grants	Book value	
Land	₩	1,474,993	-	-	-	1,474,993	1,472,419	-	-	-	1,472,419	
Buildings		6,030,099	(3,685,001)	(10,699)	-	2,334,399	5,945,593	(3,483,883)	(10,701)	-	2,451,009	
Structures		4,880,792	(2,519,411)	(9,373)	-	2,352,008	4,827,063	(2,352,796)	(9,876)	-	2,464,391	
Machinery and equipment		37,370,140	(23,803,414)	(129,388)	-	13,437,338	36,804,554	(23,092,275)	(135,237)	-	13,577,042	
Vehicles		203,522	(196,475)	-	-	7,047	204,641	(193,325)	-	-	11,316	
Tools		192,138	(171,023)	-	-	21,115	195,197	(171,953)	-	-	23,244	
Furniture and fixtures		251,722	(220,328)	(344)	-	31,050	263,487	(229,249)	(348)	-	33,890	
Finance lease assets		88,046	(15,941)	-	-	72,105	88,046	(10,198)	-	-	77,848	
Construction-in-progress		1,836,350			(5,135)	1,831,215	2,151,250			(5,000)	2,146,250	
	₩	52,327,802	(30,611,593)	(149,804)	(5,135)	21,561,270	51,952,250	(29,533,679)	(156,162)	(5,000)	22,257,409	

- (b) Changes in the carrying amount of property, plant and equipment for the years ended December 31, 2017 and 2016 were as follows:
 - 1) For the year ended December 31, 2017

(in millions of Won)	-	Beginning	Acquisitions	Disposals	Depreciation	Impairment(*1)	Others(*2)	Ending
Land	₩	1,472,419	-	(4,970)	-	-	7,544	1,474,993
Buildings		2,451,009	2,324	(4,129)	(217,381)	-	102,576	2,334,399
Structures		2,464,391	5,712	(1,876)	(188,449)	(29)	72,259	2,352,008
Machinery and equipment		13,577,042	71,692	(77,575)	(1,649,668)	(17,619)	1,533,466	13,437,338
Vehicles		11,316	521	-	(7,117)	-	2,327	7,047
Tools		23,244	3,891	(8)	(11,289)	(3)	5,280	21,115
Furniture and fixtures		33,890	3,793	(29)	(9,063)	-	2,459	31,050
Finance lease assets		77,848	-	-	(5,743)	-	-	72,105
Construction-in-progress		2,146,250	1,513,388	-			(1,828,423)	1,831,215
	₩	22,257,409	1,601,321	(88,587)	(2,088,710)	(17,651)	(102,512)	21,561,270

- (*1) The Company has recognized impairment losses since recoverable amount on Fe powder factory and ULPC facilities were less than their carrying amount for the year ended December 31, 2017.
- (*2) Represents assets transferred from construction-in-progress to intangible assets and other property, plant and equipment, assets transferred from investment properties, and others.

2) For the year ended December 31, 2016

(in millions of Won)		Beginning	Acquisitions	Business combination	Disposals	Depreciation	Impairment(*1)	Others(*2)	Ending
Land	₩	1,412,715	52	10,273	(248)	-	-	49,627	1,472,419
Buildings		2,566,168	2,100	70,641	(2,074)	(230,235)	(351)	44,760	2,451,009
Structures		2,519,866	3,346	8,630	(1,746)	(189,333)	(916)	124,544	2,464,391
Machinery and equipment		14,014,079	76,671	146,466	(22,768)	(1,607,171)	(57,110)	1,026,875	13,577,042
Vehicles		11,623	1,984	39	(11)	(7,545)	-	5,226	11,316
Tools		23,720	3,329	289	(94)	(10,517)	-	6,517	23,244
Furniture and fixtures		31,820	4,675	237	(32)	(8,897)	(11)	6,098	33,890
Finance lease assets		5,733	76,581	-	-	(4,466)	-	-	77,848
Construction-in-progress		928,426	1,503,749	1,025,516				(1,311,441)	2,146,250
	₩	21,514,150	1,672,487	1,262,091	(26,973)	(2,058,164)	(58,388)	(47,794)	22,257,409

- (*1) The Company has recognized an impairment loss since recoverable amounts on production facilities of automotive steel, electric furnace of high mill (2nd) and FINEX 1 plant are less than their carrying amounts for the year ended December 31, 2016.
- (*2) Represents assets transferred from construction-in-progress to intangible assets and other property, plant and equipment, assets transferred to investment property, assets transferred from asset held-for-sale and others.
- (c) Borrowing costs capitalized and the capitalized interest rate for the years ended December 31, 2017 and 2016 are as follows:

(in millions of Won)	_	2017	2016
Weighted average expenditure	\mathbf{W}	740,490	719,017
Borrowing costs capitalized		24,706	27,489
Capitalization rate		3.34%	3.82%

14. Intangible Assets, Net

(a) Intangible assets as of December 31, 2017 and 2016 are as follows:

(in millions of Won)			20	17		2016				
		Acquisition cost	Accumulated amortization	Accumulated impairment	Book value	Acquisition cost	Accumulated amortization	Accumulated impairment	Book value	
Intellectual property rights	₩	40,995	(16,818)	-	24,177	35,640	(12,969)	-	22,671	
Membership		51,276	-	(2,999)	48,277	51,511	-	(2,999)	48,512	
Development expense		348,326	(273,521)	-	74,805	316,381	(213,596)	-	102,785	
Port facilities usage rights		706,480	(396,441)	-	310,039	633,799	(376,451)	-	257,348	
Construction-in-progress		55,292	-	-	55,292	52,925	-	-	52,925	
Other intangible assets		285,010	(257,704)	(11,822)	15,484	285,061	(260,412)	-	24,649	
	₩	1,487,379	(944,484)	(14,821)	528,074	1,375,317	(863,428)	(2,999)	508,890	

- (b) Changes in the carrying amount of intangible assets for the years ended December 31, 2017 and 2016 were as follows:
 - 1) For the year ended December 31, 2017

(in millions of Won)	-	Beginning	Acquisitions	Disposals	Amortization	Impairment(*2)	Transfer(*3)	Ending
Intellectual property rights	₩	22,671	-	(447)	(4,339)	-	6,292	24,177
Membership(*1)		48,512	-	(235)	-	-	-	48,277
Development expense		102,785	2,021	-	(61,037)	-	31,036	74,805
Port facilities usage rights		257,348	-	-	(19,990)	-	72,681	310,039
Construction-in-progress		52,925	62,200	-	-	-	(59,833)	55,292
Other intangible assets	_	24,649	1,573	(2)	(6,237)	(11,822)	7,323	15,484
	₩	508,890	65,794	(684)	(91,603)	(11,822)	57,499	528,074

- (*1) Economic useful life of membership is indefinite.
- (*2) The Company has recognized impairment losses on some other intangible assets since the recoverable amounts were less than carrying amounts.
- (*3) Represents assets transferred from construction-in-progress to intangible assets and assets transferred from property, plant and equipment, and others.

2) For the year ended December 31, 2016

(in millions of Won)	_	Beginning	Acquisitions	Business combination	Disposals	Amortization	Impairment(*2)	Transfer(*3)	Ending
Intellectual property rights	₩	19,997	-	-	(752)	(3,609)	-	7,035	22,671
Membership(*1)		52,058	-	-	(2,170)	-	294	(1,670)	48,512
Development expense		98,038	2,793	23,033	(60)	(54,523)	-	33,504	102,785
Port facilities usage rights		265,575	-	-	-	(15,260)	-	7,033	257,348
Construction-in-progress		31,951	32,627	6,390	-	-	-	(18,043)	52,925
Other intangible assets		23,143	3,337	235	(488)	(6,263)		4,685	24,649
	₩	490,762	38,757	29,658	(3,470)	(79,655)	294	32,544	508,890

- (*1) Economic useful life of membership is indefinite.
- (*2) The Company has recognized impairment losses on some membership since the recoverable amounts were less than carrying amounts. Also, the Company reversed the accumulated impairment loss up to the carrying amount before recognition of any impairment loss since recoverable amounts of some memberships exceeded the carrying amounts.
- (*3) Represents assets transferred from construction-in-progress to intangible assets and assets transferred from property, plant and equipment.

15. Other Assets

Other current assets and other long-term assets as of December 31, 2017 and 2016 are as follows:

	2017	2016
\mathbf{W}	7,156	6,692
	20,751	16,167
₩	27,907	22,859
\mathbf{W}	5,395	5,654
	92,424	104,543
₩	97,819	110,197
	₩	 ₩ 7,156 20,751 ₩ 27,907 ₩ 5,395 92,424

(*1) As of December 31, 2017 and 2016, the Company recognized tax assets amounting to W88,633 million and W100,693 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.

16. Borrowings

(a) Borrowings as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016
Short-term borrowings			
Short-term borrowings	₩	383,976	331,370
Current portion of long-term borrowings		2,715	33,470
Current portion of debentures		849,644	-
Less: Current portion of discount on debentures issued		(628)	-
	₩	1,235,707	364,840
Long-term borrowings			
Long-term borrowings	₩	1,468	28,997
Debentures		2,672,327	3,762,146
Less: Discount on debentures issued		(8,278)	(13,129)
	₩	2,665,517	3,778,014

(b) Short-term borrowings as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		Issuance	Maturity	Annual		
	Lenders	date	date	interest rate (%)	2017	2016
Short-term borrowings Transfers of account receivables	Korea Development Bank	2017.12.11	2018.05.11	2.14	300,000	300,000
that do not qualify for derecognition	-	-	-	-	83,976	31,370
				1	₩ 383,976	331,370

(c) Current portion of long-term borrowings as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		Issuance	Maturity	Annual			
	Lenders	date	date	interest rate (%)		2017	2016
Borrowings	Woori Bank	2010.06.10~	2018.03.15~				
		2011.04.28	2019.03.15	1.75	₩	2,715	12,471
Foreign borrowings		-	-	-		-	20,999
Debentures	Domestic debentures 304-1	2011.11.28~	2018.10.04~				
	and other	2013.10.04	2018.11.28	3.35~4.05		469,736	-
Foreign debentures	Samurai Bond 13	2013.12.11	2018.12.10	1.35		379,280	-
					₩	851,731	33,470

(d) Long-term borrowings excluding current portion, as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		Issuance	Maturity	Annual			
	Lenders	date	date	interest rate (%)		2017	2016
Borrowings	Woori Bank	2011.04.28	2019.03.15	1.75	₩	375	24,051
Foreign borrowings	KOREA ENERGY AGENCY	2007.12.27~		3 year			
		2008.12.29	2022.12.29	Government bond		1,093	4,946
Debentures	Domestic debentures 304-2	2011.11.28~	2019.03.15~				
	and others	2016.05.03	2023.10.04	1.76 ~ 4.12		1,028,258	1,497,022
Foreign debentures	Japan Yen private bond	2010.10.28~	2020.10.28~				
	and others	2011.12.22	2021.12.22	2.70~5.25		1,635,791	2,251,995
					₩	2,665,517	3,778,014

17. Other Payables

Other payables as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016
Current			
Accounts payable	\mathbf{W}	460,427	486,294
Accrued expenses		379,797	361,258
Dividend payable		4,671	4,793
Finance lease liabilities		6,003	5,905
Withholdings		11,637	7,824
	\mathbf{W}	862,535	866,074
Non-current	_		
Long-term accounts payable	\mathbf{W}	-	1,119
Long-term accrued expenses		9,625	36,707
Finance lease liabilities		65,500	71,657
Long-term withholdings		3,356	7,827
	\mathbf{W}	78,481	117,310

18. Other Financial Liabilities

Other financial liabilities as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016
Current	_		
Derivative liabilities	\mathbf{W}	9,632	-
Financial guarantee liabilities		13,532	16,508
	₩	23,164	16,508
Non-current	_		
Derivative liabilities	\mathbf{W}	74,834	-
Financial guarantee liabilities		54,342	72,742
	₩	129,176	72,742
	_	54,342	

19. Provisions

(a) Provisions as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		20	17	20	16
		Current	Non-current	Current	Non-current
Provision for bonus payments(*1)	₩	5,893	-	3,985	-
Provision for restoration(*2)		12,273	17,198	10,169	27,009
Provision for litigation(*3)		-	2,052		2,497
	₩	18,166	19,250	14,154	29,506

- (*1) Represents the provision for bonuses limited to 100% of annual salaries for executives.
- (*2) Due to contamination of land near the Company's magnesium smelting plant located in Gangneung province and others, the Company recognized present values of estimated costs for recovery as provisions for restoration as of December 31, 2017. 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 discount rates of 2.73% to assess present value of these costs.
- (*3) The Company has recognized provisions for certain litigations for the year ended December 31, 2017.

(b) Changes in provisions for the years ended December 31, 2017 and 2016 were as follows:

1) For the year ended December 31, 2017

(in millions of Won)	_	Beginning	Increase	Reversal	Utilization	Ending
Provision for bonus payments	₩	3,985	22,300	-	(20,392)	5,893
Provision for restoration		37,178	822	-	(8,529)	29,471
Provision for litigation	_	2,497		(419)	(26)	2,052
	₩	43,660	23,122	(419)	(28,947)	37,416

2) For the year ended December 31, 2016

(in millions of Won)	_	Beginning	Increase	Reversal	Utilization	Ending
Provision for bonus payments Provision for restoration	₩	7,271 37.112	8,365 25,909	(12.475)	(11,651) (13,368)	3,985 37,178
Provision for litigation		411	2,086	(12,475)	(13,300)	2,497
	W	44,794	36,360	(12,475)	(25,019)	43,660

20. Employee Benefits

(a) Defined contribution plans

The expense related to post-employment benefit plans under defined contribution plans for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)		2017	2016
Expense related to post-employment benefit plans			
under defined contribution plans	₩	26,227	22,039

(b) Defined benefit plans

1) The amounts recognized in relation to net defined benefit liabilities (assets) in the statements of financial position as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016
Present value of funded obligations	₩	1,108,876	1,065,255
Fair value of plan assets		(1,108,833)	(1,146,876)
Net defined benefit liabilities (assets)	W	43	(81,621)

2) Changes in present value of defined benefit obligations for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)		2017	2016
Defined benefit obligation at the beginning of period	₩	1,065,255	1,023,071
Current service costs		115,113	113,209
Interest costs		19,468	24,136
Remeasurement :		25,425	(3,816)
- Gain from change in financial assumptions		(53,949)	(49,519)
- Loss (gain) from change in demographic assumptions		19,428	(2,574)
- Loss from change in others		59,946	48,277
Business combination		-	1,133
Benefits paid		(116,385)	(92,478)
Defined benefit obligation at the end of period	₩	1,108,876	1,065,255

3) Changes in the fair value of plan assets for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)		2017	2016
Fair value of plan assets at the beginning of period	₩	1,146,876	1,012,599
Interest on plan assets		31,697	26,259
Remeasurement of plan assets		(11,643)	(4,829)
Contributions to plan assets		49,963	198,439
Business combination		-	244
Benefits paid		(108,060)	(85,836)
Fair value of plan assets at the end of period	₩	1,108,833	1,146,876

The Company expects to make an estimated contribution of W50,000 million to the defined benefit plan assets in 2018.

4) The fair value of plan assets as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016
Debt instruments	₩	352,413	289,511
Deposits		747,590	857,339
Others		8,830	26
	₩	1,108,833	1,146,876

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

(in millions of Won)	_	2017	2016
Current service costs	\mathbf{W}	115,113	113,209
Net interest costs(*1)		(12,229)	(2,123)
	$\overline{\mathbb{W}}$	102,884	111,086

(*1) The actual return on plan assets amounted to W20,054 million and W21,430 million for the years ended December 31, 2017 and 2016, respectively.

The above expenses by function were as follows:

(in millions of Won)		2017	2016
Cost of sales	\mathbf{W}	74,040	86,870
Selling and administrative expenses		27,974	23,295
Others		870	921
	₩	102,884	111,086

6) Remeasurements of defined benefit plans, net of tax recognized in other comprehensive income (loss) for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)		2017	2016
Beginning	₩	(162,784)	(162,016)
Remeasurements of			
defined benefit plans		(37,068)	(1,013)
Tax effects		17,281	245
Ending	₩	(182,571)	(162,784)

7) The principal actuarial assumptions as of December 31, 2017 and 2016 are as follows:

	2017	2016
Discount rate	3.10%	2.76%
Expected future increases in salaries(*1)	1.50%	1.50%

(*1) The expected future increases in salaries are based on the average salary increase rate for the past three years.

All assumptions are reviewed at the end of the reporting period. Additionally, the total estimated defined benefit obligation includes actuarial assumptions associated with the long-term characteristics of the defined benefit plan.

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

(in millions of Won)		1% Increase		1% De	crease
	_	Amount	Percentage (%)	Amount	Percentage (%)
Discount rate	₩	(74,551)	(6.7)	84,963	7.7
Expected future increases in salaries		83,512	7.5	(74,790)	(6.7)

9) As of December 31, 2017 the maturity of the expected benefit payments are as follows:

(in millions of Won)	_	Within 1 year	1 year - 5 years	5 years - 10 years	10 years - 20 years	After 20 years	Total
Benefits to be paid	₩	39,884	356,028	559,793	282,920	148,887	1,387,512

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

21. Other Liabilities

Other liabilities as of December 31, 2017 and 2016 are as follows:

(in millions of Won)	_	2017	2016
Current			
Advances received	\mathbf{W}	27,358	6,251
Withholdings		25,556	29,580
Unearned revenue		1,487	1,388
	\mathbf{W}	54,401	37,219
Non-current			
Unearned revenue	\mathbf{W}	14,292	15,516

22. Financial Instruments

(a) Classification of financial instruments

1) Financial assets as of December 31, 2017 and 2016 are as follows:

(in millions of Won)	-	2017	2016
Financial assets at fair value through profit or loss Derivatives assets held for trading	₩	_	80.959
Available-for-sale financial assets		1,395,589	2,064,578
Loans and receivables		10,197,020	7,706,575
	\mathbb{W}	11,592,609	9,852,112

2) Financial liabilities as of December 31, 2017 and 2016 are as follows:

(in millions of Won)	_	2017	2016
Financial liabilities at fair value through profit or loss Derivatives liabilities held for trading	₩	84,466	-
Financial liabilities measured at amortized cost			
Trade accounts and notes payable		1,025,027	1,082,927
Borrowings		3,901,224	4,142,854
Financial guarantee liabilities(*1)		67,874	89,250
Others		932,405	976,574
	₩	6,010,996	6,291,605

(*1) Financial liabilities were recognized in connection with financial guarantee contracts as of December 31, 2017. The details of the amount of guarantees provided are as follows:

(in millions of Won)			Guarantee		Guarantee	amount
Guarantee beneficiary	Financial institution	_	Foreign currency	Won equivalent	Foreign currency	Won equivalent
Zhangjiagang Pohang	BTMU	CNY	260,500,000	42,631	234,450,000	38,368
Stainless Steel Co., Ltd.	Credit Agricole	CNY	305,000,000	49,913	274,500,000	44,922
	SMBC	CNY	195,000,000	31,912	175,500,000	28,721
POSCO Maharashtra	Export-Import Bank of Korea	USD	193,000,000	206,780	92,600,000	99,212
Steel Private Limited	HSBC	USD	110,000,000	117,854	46,000,000	49,284
	DBS	USD	100,000,000	107,140	50,000,000	53,570
	SCB	USD	106,853,000	114,482	58,318,500	62,482
	Citi	USD	60,000,000	64,284	21,000,000	22,499
	ING	USD	80,000,000	85,712	56,000,000	59,998
POSCO ASSAN TST	SMBC	USD	62,527,500	66,992	56,274,750	60,293
STEEL INDUSTRY	ING	USD	60,000,000	64,284	54,000,000	57,856
	BNP	USD	24,000,000	25,714	21,600,000	23,142
POSCO Asia Co., Ltd.	BOC	USD	50,000,000	53,570	50,000,000	53,570
POSCO MEXICO S.A. DE C.V	BOA	USD	30,000,000	32,142	30,000,000	32,142
	BTMU	USD	30,000,000	32,142	30,000,000	32,142
	CITI BANAMEX	USD	40,000,000	42,856	40,000,000	42,856
	ING	USD	20,000,000	21,428	20,000,000	21,428
	SMBC	USD	40,000,000	42,856	40,000,000	42,856
POSCO SS VINA Co., Ltd.	Export-Import Bank of Korea	USD	249,951,050	267,798	221,975,545	237,825
	BOA	USD	40,000,000	42,856	35,488,000	38,02
	BTMU	USD	40,000,000	42,856	35,488,000	38,02
	DBS	USD	24,400,000	26,142	21,647,680	23,193
POSCO-VIETNAM Co., Ltd.	Export-Import Bank of Korea	USD	196,000,000	209,994	196,000,000	209,99
POSCO VST CO., LTD.	ANZ	USD	25,000,000	26,785	3,125,000	3,348
	HSBC	USD	20,000,000	21,428	2,500,000	2,679
	MIZUHO	USD	20,000,000	21,428	2,500,000	2,679
PT. KRAKATAU POSCO	Export-Import Bank of Korea	USD	567,000,000	607,484	500,314,957	536,03
	SMBC	USD	140,000,000	149,996	123,722,261	132,556
	BTMU	USD	119,000,000	127,497	103,478,261	110,86
	SCB	USD	107,800,000	115,497	95,722,261	102,55
	MIZUHO	USD	105,000,000	112,497	91,304,348	97,823
	Credit Suisse AG	USD	91,000,000	97,497	79,130,435	84,78
	HSBC	USD	91,000,000	97,497	79,130,435	84,780
	ANZ	USD	73,500,000	78,748	65,896,174	70,60
	BOA	USD	35,000,000	37,499	30,434,783	32,608
	The Tokyo Star Bank, Ltd	USD	21,000,000	22,499	18,260,870	19,565
POSCO COATED STEEL	The Tokyo Star Dank, Etu	030	21,000,000	22,433	10,200,070	13,300
(THAILAND) CO., LTD.	The Great & Co.	THB	5,501,000,000	180,268	5,501,000,000	180,268
LLP POSUK Titanium	SMBC	USD	15,000,000	16,071	15,000,000	16,07
CSP - Compania	Export-Import Bank of Korea	USD	182,000,000	194,995	182,000,000	194,995
Siderurgica do Pecem	Santander	USD		50,999		50,999
Siderurgica do Pecern			47,600,000		47,600,000	
	BNP	USD	47,600,000	50,999	47,600,000	50,999
	MIZUHO	USD	47,600,000	50,999	47,600,000	50,999
	Credit Agricole	USD	20,000,000	21,428	20,000,000	21,428
	SOCIETE GENERALE	USD	20,000,000	21,428	20,000,000	21,428
	KfW	USD	20,000,000	21,428	20,000,000	21,428
	BBVA Seoul	USD	17,600,000	18,857	17,600,000	18,85
	ING	USD	17,600,000	18,857	17,600,000	18,85
	BNDES	BRL	464,060,000	150,100	464,060,000	150,100
Nickel Mining Company SAS	SMBC	EUR	46,000,000	58,846	37,000,000	47,332
		USD	3,407,031,550	3,650,295	2,806,912,260	3,007,32
		CNY	760,500,000	124,456	684,450,000	112,011
		EUR	46,000,000	58,846	37,000,000	47,332
		THB	5,501,000,000	180,268	5,501,000,000	180,268
		BRL	464,060,000	150,100	464,060,000	150,100

- 3) Finance income and costs by category of financial instrument for the years ended December 31, 2017 and 2016 were as follows:
 - 1) For the year ended December 31, 2017

(in millions of Won)		Finance income and costs							
	-	Interest income (expense)	Dividend income(*1)	Gain and loss on foreign currency	Gain and loss on disposal	Impairment loss	Others	Total	Other comprehensive income (loss)
Financial assets at fair value through profit or loss	₩				-	-	(80,959)	(80,959)	
Available-for-sale financial assets		55	35,223	-	421,559	(94,350)	-	362,487	(50,850)
Loans and receivables Financial liabilities at		94,083	-	(158,090)	-	-	(2,745)	(66,752)	-
fair value through profit or loss		-	-	-	-	-	(84,466)	(84,466)	-
Financial liabilities at amortized cost		(116,558)	-	330,525	-	-	9,524	223,491	-
	₩	(22,420)	35,223	172,435	421,559	(94,350)	(158,646)	353,801	(50,850)

(*1) Finance income in the statement of comprehensive income includes the dividends from subsidiaries, associates, and joint ventures of ₩122,684 million for the year ended December 31, 2017.

(2) For the year ended December 31, 2016

(in millions of Won)	Finance income and costs							
	Interest income (expense	Dividend	Gain and loss on foreign currency	Gain and loss on disposal	Impairment loss	Others	Total	Other comprehensive income (loss)
Financial assets at fair value through profit or loss	₩			(16,917)	-	(9,923)	(26,840)	-
Available-for-sale financial assets	23	39 27,008	-	130,183	(222,725)	-	(65,295)	314,258
Loans and receivables Financial liabilities at	89,6	- 24	20,749	-	-	(740)	109,633	-
fair value through profit or loss			-	-	-	8,118	8,118	-
Financial liabilities at amortized cost	(154,8	- 54)	(123,220)	-	-	8,994	(269,090)	-
د	₩ (65,0	01) 27,008	(102,471)	113,266	(222,725)	6,449	(243,474)	314,258

(*1) Finance income in the statement of comprehensive income includes the dividends from subsidiaries, associates, and joint ventures of ₩117,443 million for the year ended December 31, 2016.

(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 2016 are as follows:

(in millions of Won)	-	2017	2016
Cash and cash equivalents	₩	332,405	120,529
Financial assets at fair value through profit or loss		-	80,959
Available-for-sale financial assets		10,805	6,338
Loans and other receivables		5,984,127	4,355,797
Trade accounts and notes receivable		3,867,714	3,216,209
Long-term trade accounts and notes receivable	_	12,774	14,040
	₩	10,207,825	7,793,872

The Company provided financial guarantee for the repayment of loans of subsidiaries, associates, and joint ventures. As of December 31, 2017 and 2016, the maximum exposure to credit risk caused by financial guarantee amounted to W3,497,038 million and W4,308,272 million, respectively.

2) Impairment losses on financial assets

① Allowance for doubtful accounts as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016
Trade accounts and notes receivable	₩	19,941	15,519
Other accounts receivable		11,970	5,709
Loans		7,968	
	₩	39,879	21,228

 (2) Impairment losses on financial assets for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)		2017	2016
Bad debt expenses	₩	18,133	54,130
Impairment loss on available-for-sale securities		94,350	222,725

③ The aging and impairment losses of trade accounts and notes receivable as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		201	7	2016		
		Trade accounts and notes receivable	Impairment	Trade accounts and notes receivable	Impairment	
Not due	₩	3,809,914	705	3,193,023	229	
Over due less than 1 month		47,566	1,193	17,940	261	
1 month - 3 months		4,525	160	2,451	255	
3 months - 12 months		14,630	911	4,909	388	
Over 12 months		23,794	16,972	27,445	14,386	
	₩	3,900,429	19,941	3,245,768	15,519	

④ The aging and impairment losses of loans and other account receivable as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		201	7	2016		
		Loans and other account receivable	Impairment	Loans and other account receivable	Impairment	
Not due	₩	121,311	8,057	170,618	90	
Over due less than 1 month		8,495	-	6,747	-	
1 month - 3 months		90	-	23,725	-	
3 months - 12 months		479	45	770	-	
Over 12 months		26,505	11,836	5,658	5,619	
	₩	156,880	19,938	207,518	5,709	

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

(in millions of Won)		2017	2016
Beginning	₩	21,228	11,564
Bad debt expenses		18,133	54,130
Others		518	(44,466)
Ending	₩	39,879	21,228

(c) Liquidity risk

Contractual maturities for non-derivative financial liabilities, including estimated interest, are as follows:

(in millions of Won)		Book value	Contractual cash flow	Within 3 months	3 months - 6 months	6 months - 1 year	1 year - 5 years	After 5 years
Trade accounts and notes payable Borrowings	₩	1,025,027 3.901,224	1,025,027 4,290,677	1,025,027 97,166	- 354.526	- 913.271	- 2.718.434	- 207.280
Financial guarantee liabilities(*1)		67,874	3,497,038	3,497,038	000		2,710,404	-
Other financial liabilities		1,016,871	1,025,382	838,528	2,244	25,757	158,853	-
	₩	6,010,996	9,838,124	5,457,759	356,770	939,028	2,877,287	207,280

(*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.

(d) Currency risk

 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 2016 are as follows:

(in millions	of Won) 2017			2016			
		Assets	Liabilities	Assets	Liabilities		
USD	₩	892,188	1,892,720	876,981	2,310,417		
JPY		127,956	530,150	42,610	573,461		
CNY		316,243	371	322,449	5,438		
INR		395,585	-	254,803	-		
Others		267,270	60,552	250,348	6,461		
	₩	1,999,242	2,483,793	1,747,191	2,895,777		

 As of December 31, 2017 and 2016, provided that functional currency against foreign currencies other than functional currency hypothetically strengthens or weakens by 10%, the changes in gain or loss for the years ended December 31, 2017 and 2016 were as follows:

(in millions	s of Won)	20 1	17	2016		
	_	10% increase	10% decrease	10% increase	10% decrease	
USD	₩	(100,053)	100,053	(143,344)	143,344	
JPY		(40,219)	40,219	(53,085)	53,085	
CNY		31,587	(31,587)	31,701	(31,701)	
INR		39,559	(39,559)	25,480	(25,480)	

(e) Interest rate risk

1) The carrying amount of interest-bearing financial instruments as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016
Fixed rate			
Financial assets	\mathbf{W}	6,179,401	4,280,514
Financial liabilities		(3,968,544)	(4,178,948)
	₩	2,210,857	101,566
Variable rate			
Financial liabilities	\mathbf{W}	(4,183)	(41,468)

2) Sensitivity analysis on the fair value of financial instruments with fixed interest rate

The Company does not account for any fixed rate financial assets and liabilities at fair value through profit or loss, and the Company does not designate derivatives (interest rate swaps) as hedging instruments under fair value hedge accounting model. Therefore a change in interest rates at the reporting date would not affect profit or loss.

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

As of December 31, 2017 and 2016, provided that other factors remain the same and the interest rate of borrowings with floating rates increases or decreases by 1%, the changes in interest expense for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)		2017		2016		
	1	% increase	1% decrease	1% increase	1% decrease	
Variable rate						
financial instruments	\mathbf{W}	(42)	42	(415)	415	

(f) Fair value

1) Fair value and book value

The carrying amount and the fair value of financial instruments as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		20	17	2016		
		Book value	Fair value	Book value	Fair value	
Assets measured at fair value	_					
Available-for-sale financial assets(*1)	₩	1,291,390	1,291,390	1,950,447	1,950,447	
Derivatives assets		-	-	80,959	80,959	
	_	1,291,390	1,291,390	2,031,406	2,031,406	
Assets measured at amortized cost(*2)	-					
Cash and cash equivalents		332,405	332,405	120,529	120,529	
Trade accounts and note receivable, net		3,880,488	3,880,488	3,230,249	3,230,249	
Loans and other receivables, net		5,984,127	5,984,127	4,355,797	4,355,797	
	-	10,197,020	10,197,020	7,706,575	7,706,575	
Liabilities measured at fair value	_	94.466	04.466			
Derivatives liabilities		84,466	84,466	-	-	
Liabilities measured at amortized cost(*2)						
Trade accounts and notes payable		1,025,027	1,025,027	1,082,927	1,082,927	
Borrowings		3,901,224	4,041,204	4,142,854	4,354,129	
Financial guarantee liabilities		67,874	67,874	89,250	89,250	
Others		932,405	932,405	976,574	976,574	
	₩	5,926,530	6,066,510	6,291,605	6,502,880	

- (*1) Available-for-sale financial assets which are not measured at fair value are not included.
- (*2) The fair value of financial assets and liabilities measured at amortized cost is measured using discounted cash flow method, and the fair value is mainly calculated for the disclosures in the note. On the other hand, the Company has not performed fair value measurement for the financial assets and liabilities measured at amortized cost except borrowings which are classified as fair value hierarchy level 2 since their carrying amounts approximate fair value.
- 2) The fair values of financial assets and financial liabilities by fair value hierarchy as of December 31, 2017 and 2016 are as follows:
 - ① December 31, 2017

(in millions of Won)		Level 1	Level 2	Level 3	Total
Financial assets Available-for-sale financial assets	₩	1,096,288		195,102	1,291,390
Financial liabilities Derivatives liabilities	₩	-	84,466	-	84,466

⁽²⁾ December 31, 2016

(in millions of Won)		Level 1	Level 2	Level 3	Total
Financial assets Available-for-sale financial assets	₩	1,756,713	-	193,734	1,950,447
Derivatives assets		-	70,613	10,346	80,959
	₩	1,756,713	70,613	204,080	2,031,406
Financial liabilities Derivatives liabilities	₩	-			-

3) Financial assets and financial liabilities classified as fair value hierarchy Level 2

Fair values of financial instruments are calculated based on the derivatives instrument valuation model such as market approach method and discounted cash flow method. Inputs of the financial instrument valuation model include interest rate, exchange rate, spot price of underlying assets, volatility and others. It may change depending on the type of derivatives and the nature of the underlying assets.

- 4) Financial assets and financial liabilities classified as fair value hierarchy Level 3
 - ① Value measurement method and significant but not observable inputs for the financial assets classified as fair value hierarchy Level 3 as of December 31, 2017 are as follows:

(in millions of Won)						Effect on fair value assessment
		Fair value	Valuation technique	Inputs	Range of inputs	with unobservable input
Available-for-sale financial assets	₩	145,394	Discounted cash flows	Discount rate	10.50%	As discount rate increases, fair value decreases
		49,708	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, 2017 and one of the significant but not observable input is changed, the effect on fair value measurement is as follows:

(in millions of Won)			Favorable	Unfavorable
	Input variable		changes	changes
Available-for-sale financial assets	Fluctuation 0.5% of discount rate	₩	11,257	10,294

③ Changes in fair value of financial assets and financial liabilities classified as Level 3 for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)		2017	2016
Beginning	₩	204,080	298,605
Acquisition		62,208	10,150
Changes in the fair value of derivatives		(10,346)	(59,829)
Other comprehensive income (loss)		32,532	(30,651)
Impairment		(91,898)	(14,086)
Disposal and others		(1,474)	(109)
Ending	₩	195,102	204,080

23. Share Capital and Capital Surplus

(a) Share capital as of December 31, 2017 and 2016 are as follows:

(in Won, except per share information)

(in Won, except per share information)		2017	2016
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, 2017, total shares of ADRs of 36,840,292 are equivalent to 9,210,073 of common stock.
- (*2) As of December 31, 2017, the difference between the ending balance of common stock and the par value of issued common stock is W46,469 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 2016 were as follows:

(Share)		2017			2016			
	Issued shares	Treasury shares	Number of outstanding shares	Issued shares	Treasury shares	Number of outstanding shares		
Beginning	87,186,835	(7,189,170)	79,997,665	87,186,835	(7,191,187)	79,995,648		
Disposal of treasury shares	-	1,939	1,939	-	2,017	2,017		
Ending	87,186,835	(7,187,231)	79,999,604	87,186,835	(7,189,170)	79,997,665		

(c) Capital surplus as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016
Share premium	₩	463,825	463,825
Gain on disposal of treasury shares		783,914	783,788
Loss from merger		(91,310)	(91,310)
	₩	1,156,429	1,156,303

24. Hybrid Bonds

(a) Hybrid bonds classified as equity as of December 31, 2017 and 2016 are as follows:

(in millions of Won)	Date of issue	Date of maturity	Rate of interest (%)		2017	2016
Hybrid bond 1-1(*1) Hybrid bond 1-2(*1)	2013-06-13 2013-06-13	2043-06-13 2043-06-13	4.30 4.60	₩	800,000 200,000	800,000 200,000
lssuance cost				_	(3,081)	(3,081)
				₩_	996,919	996,919

(*1) Details of hybrid bonds as of December 31, 2017 are as follows:

(in millions of Won)	Hybrid bond 1-1	Hybrid bond 1-2
Issue price	800,000	200,000
Maturity date	30 years (The Company has a	right to extend the maturity date)
Interest rate	lssue date ~ 2018-06-12 : 4.30%	Issue date ~ 2023-06-12 : 4.60%
	reset every 5 years as follows;	Reset every 10 years as follows;
	After 5 years : return on government bond (5 years) + 1.30% After 10 years : additionally + 0.25% according to Step-up clauses After 25 years : additionally + 0.75%	 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 interes	st payment is available to the Company)
Others	The Company can call the hybrid bond at year 5 and interest payment date afterwards	The Company can call the hybrid bond at year 10 and interest payment date afterwards

The interest accumulated but not paid on the hybrid bonds as of December 31, 2017 amounts to W2,389 million.

25. Reserves

(a) Reserves as of December 31, 2017 and 2016 are as follows:

(in millions of Won)	_	2017	2016
Accumulated changes in the unrealized fair value of available-for-sale investments, net of tax	₩	233,390	284,240

(b) Changes in the unrealized fair value of available-for-sale investments for the years ended December 31, 2017 and 2016 were as follows:

	2017	2016
₩	284,240	(30,018)
	261,078	296,833
	(408,497)	(104,970)
	94,350	222,725
	2,219	(100,330)
₩	233,390	284,240
		 ₩ 284,240 261,078 (408,497) 94,350 2,219

26. Treasury Shares

Based on the Board of Director's resolution, the Company holds treasury shares for the business purposes including price stabilization. The changes in treasury shares for the years ended December 31, 2017 and 2016 were as follows:

(shares, in millions of Won)	2017		2016	
	Number of shares	Amount	Number of shares	Amount
-	Silares	Amount	51101 05	Amount
Beginning	7,189,170 W	1,533,468	7,191,187 W	1,533,898
Disposal of treasury shares	(1,939)	(414)	(2,017)	(430)
Ending	7,187,231 ₩	1,533,054	7,189,170 ₩	1,533,468

27. Retained Earnings

(a) Retained earnings as of December 31, 2017 and 2016 are summarized as follows:

(in millions of Won)		2017	2016
Legal reserve	₩	241,202	241,202
Reserve for business rationalization		918,300	918,300
Reserve for research and manpower development		376,667	726,667
Appropriated retained earnings for business expansion		39,510,500	37,910,500
Appropriated retained earnings for dividends		947,673	1,141,390
Unappropriated retained earnings		2,611,026	2,004,991
	₩	44,605,368	42,943,050

(b) Statements of appropriation of retained earnings as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017	2016
Retained earnings before appropriation			
Unappropriated retained earnings			
carried over from prior year	₩	488,721	444,537
Remeasurements of defined benefit plans		(19,787)	(768)
Interests of hybrid bonds		(43,600)	(43,832)
Interim dividends		(359,993)	(179,992)
(Dividends (ratio) per share			
₩4,500 (90%) in 2017			
₩2,250 (45%) in 2016			
Profit for the period		2,545,685	1,785,046
		2,611,026	2,004,991
Transfer from discretionary reserve			
Reserve for research and manpower development		240,000	350,000
Appropriated retained earnings for dividends		3,570	193,717
		243,570	543,717
Appropriation of retained earnings			
Dividends		279,999	459,987
(Dividends (ratio) per share			
₩3,500 (70%) in 2017			
₩5,750 (115%) in 2016			
Appropriated retained earnings			
for business expansion		2,000,000	1,600,000
		2,279,999	2,059,987
Unappropriated retained earnings carried			
forward to subsequent year	₩	574,597	488,721

28. Revenue

Details of revenue for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)	-	2017	2016
Sale of goods Others	\mathbf{W}	28,387,520 166,295	24,147,416 177,517
	\mathbf{W}	28,553,815	24,324,933

29. Selling and Administrative Expenses

(a) Administrative expenses

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

(in millions of Won)	_	2017	2016
Wages and salaries	₩	219,965	209,324
Expenses related to post-employment benefits		33,170	35,254
Other employee benefits		43,222	49,730
Travel		12,475	12,202
Depreciation		16,800	18,158
Amortization		58,878	56,031
Rental		53,537	60,609
Repairs		7,370	7,389
Advertising		104,210	73,823
Research & development		103,818	83,057
Service fees		165,197	168,865
Supplies expenses		4,573	5,257
Vehicles maintenance		6,186	6,142
Industry association fee		5,439	8,324
Training		19,157	16,886
Conference		4,898	3,920
Bad debt expenses		3,898	44,051
Others	_	33,268	30,255
	₩	896,061	889,277

(b) Selling expenses

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

(in millions of Won)		2017	2016
Freight and custody expenses	₩	785,480	784,013
Operating expenses for distribution center		9,737	9,735
Sales commissions		111,661	86,818
Sales advertising		3,662	5,031
Sales promotion		5,311	5,511
Sample		1,000	936
Sales insurance premium		5,646	4,679
	₩	922,497	896,723

30. Research and Development Expenditures Recognized as Expenses

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

(in millions of Won)		2017	2016
Selling and administrative expenses	$\overline{\mathbf{W}}$	103,818	83,057
Cost of sales		355,204	317,466
	\overline{W}	459,022	400,523

31. Finance Income and Costs

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

(in millions of Won)		2017	2016
Finance income			
Interest income	₩	94,138	89,863
Dividend income		157,907	144,451
Gain on foreign currency transactions		203,512	247,539
Gain on foreign currency translations		256,199	53,541
Gain on disposals of available-for-sale investments		422,380	131,007
Gain on valuation of derivatives		-	79,602
Others		9,556	10,477
	₩	1,143,692	756,480
Finance costs			
Interest expenses	₩	116,558	154,864
Loss on foreign currency transactions		216,182	298,006
Loss on foreign currency translations		71,094	105,545
Impairment loss on available-for-sale investments		94,350	222,725
Loss on valuation of derivatives		165,425	81,408
Loss on derivative transactions		-	17,034
Others		3,598	2,929
	₩	667,207	882,511

32. Other Non-Operating Income and Expenses

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

(in millions of Won)		2017	2016
Other non-operating income			
Gain on disposals of property, plant and equipment	₩	26,284	19,579
Gain on disposals of intangible assests		24,542	4,963
Reversal of impairment losses on investment in			
subsidiaries, associates and joint ventures		225,860	-
Gain on disposals of assets held for sale		87	6,814
Premium income		4,593	9,285
Reveral of provisions		419	12,475
Others(*1)		154,290	28,753
	₩	436,075	81,869
Other non-operating expenses			
Loss on disposals of property, plant and equipment	₩	140,987	93,536
Impairment loss on property, plant and equipment		17,651	58,388
Impairment loss on intangible assets		11,822	1,545
Impairment loss on investment in			
subsidiaries, associates and joint ventures		173,284	184,283
Impairment loss on assets held for sale		21,873	-
Other bad debt expenses		14,235	10,079
Donations		42,084	34,324
Others		38,336	19,686
	₩	460,272	401,841

(*1) The Company has recognized the refund of VAT amounting to ₩133,103 million as nonoperating 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 were finalized.

33. Expenses by Nature

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

(in millions of Won)		2017	2016
Changes in inventories(*1)	₩	(407,701)	(109,406)
Raw materials and consumables used		16,838,874	12,853,852
Employee benefits expenses(*3)		1,635,553	1,644,415
Outsourced processing cost		2,138,917	2,035,578
Depreciation(*2)		2,092,603	2,061,408
Amortization		91,603	79,655
Electricity and water expenses		655,781	755,994
Service fees		241,634	246,205
Rental		74,363	79,840
Advertising		104,210	73,823
Freight and custody expenses		785,480	784,013
Sales commissions		111,661	86,818
Loss on disposals of property, plant and equipment		140,987	93,536
Impairment loss on property, plant and equipment		17,651	58,388
Impairment loss on investments in			
subsidiaries, associates and joint ventures		173,284	184,283
Other expenses		1,416,734	1,163,036
	₩	26,111,634	22,091,438

(*1) Changes in inventories are the changes in products, semi-finished products and byproducts.

- (*2) Includes depreciation of investment property.
- (*3) The details of employee benefits expenses for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)		2017	2016
Wages and salaries	₩	1,492,354	1,477,745
Expenses related to post-employment benefits		143,199	166,670
	₩	1,635,553	1,644,415

34. Income Taxes

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

(in millions of Won)

		2017		
Current income taxes(*1)	W	531,666	472,264	
Deferred income taxes		257,930	32,119	
Items credited directly to equity		19,460	(100,095)	
Income tax expense	₩	809,056	404,288	

- (*1) Refund (additional payment) of income taxes when filing a final corporation tax return credited (charged) directly to current income taxes.
- (b) The income taxes credited (charged) directly to equity for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)		2017	2016
Net changes in unrealized fair value			
of available-for-sale investments	₩	2,219	(100,330)
Remeasurements of defined benefit plans		17,281	245
Gain on disposal of treasury shares		(40)	(10)
	₩	19,460	(100,095)

(c) The calculated income tax expense based on statutory rates compared to the actual amount of taxes recorded by the Company for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)		2017	2016
Profit before income tax expense	₩	3,354,741	2,189,334
Income tax expense computed at statutory rate		811,385	529,357
Adjustments:			
Tax credit		(30,069)	(22,948)
Over provisions from prior years		(25,245)	(2,625)
Investment in subsidiaries,			
associates and joint ventures		(24,050)	(91,223)
Tax effect due to permanent differences		(44,064)	(10,624)
Deficit not recognized in the past		(32,305)	-
Effect of tax rate change		150,554	-
Others		2,850	2,351
		(2,329)	(125,069)
Income tax expense	₩	809,056	404,288
Effective tax rate (%)		24.1%	18.5%

(d) The movements in deferred tax assets (liabilities) for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)			2017			2016	
	-	December 31,	Increase	December 31,	December 31,	Increase	December 31,
	_	2016	(decrease)	2017	2015	(decrease)	2016
Deferred income tax due to							
temporary differences							
Reserve for special repairs	₩	(10,707)	(1,071)	(11,778)	(11,049)	342	(10,707
Reserve for technology							
developments		(91,153)	53,570	(37,583)	(175,853)	84,700	(91,153
PPE - Depreciation		(17,793)	7,269	(10,524)	(33,229)	15,436	(17,793)
Impairment loss		350,453	(16,267)	334,186	238,678	111,775	350,453
Prepaid expenses		19,658	292	19,950	19,150	508	19,658
PPE - Revaluation		(1,517,978)	(305,542)	(1,823,520)	(1,387,331)	(130,647)	(1,517,978
Gain or loss on foreign							
currency translation		10,797	(40,024)	(29,227)	(8,121)	18,918	10,797
Defined benefit obligations		239,377	54,735	294,112	224,379	14,998	239,377
Plan assets		(269,257)	(35,663)	(304,920)	(245,036)	(24,221)	(269,257
Accrued revenue		(2,586)	(968)	(3,554)	(2,160)	(426)	(2,586
Others		229,788	60,251	290,039	151,220	78,568	229,788
	_	(1,059,401)	(223,418)	(1,282,819)	(1,229,352)	169,951	(1,059,401
Deferred tax from deficit and tax credit	t –						
Deficit carried over		-	28,200	28,200	-	-	-
Tax credit carry-forward		82,212	(82,212)	-	173,177	(90,965)	82,212
	-	82,212	(54,012)	28,200	173,177	(90,965)	82,212
Deferred income taxes	-						
recognized directly to equity							
Net changes in							
the unrealized fair value of AFS		(90,746)	2,219	(88,527)	9,584	(100,330)	(90,746)
Remeasurements of defined							
benefit plans		51,969	17,281	69,250	51,724	245	51,969
·	_	(38,777)	19,500	(19,277)	61,308	(100,085)	(38,777
	w	(1.015.966)	(257,930)	(1,273,896)	(994,867)	(21.099)	(1,015,966

(e) Deferred tax assets (liabilities) as of December 31, 2017 and 2016 are as follows:

(in millions of Won)		2017		2016			
	Assets	Liabilities	Net	Assets	Liabilities	Net	
Deferred income tax due to							
temporary differences							
Reserve for special repairs	<i>↓</i> -	(11,778)	(11,778)	-	(10,707)	(10,707)	
Reserve for technology							
developments	-	(37,583)	(37,583)	-	(91,153)	(91,153)	
PPE - Depreciation	19,594	(30,118)	(10,524)	17,139	(34,932)	(17,793)	
Impairment loss	334,186	-	334,186	350,453	-	350,453	
Prepaid expenses	19,950	-	19,950	19,658	-	19,658	
PPE - Revaluation	-	(1,823,520)	(1,823,520)	-	(1,517,978)	(1,517,978)	
Gain or loss on foreign							
currency translation	113,051	(142,278)	(29,227)	88,263	(77,466)	10,797	
Defined benefit obligations	294,112	-	294,112	239,377	-	239,377	
Plan assets	-	(304,920)	(304,920)	-	(269,257)	(269,257)	
Accrued revenue	-	(3,554)	(3,554)	-	(2,586)	(2,586)	
Others	329,404	(39,365)	290,039	294,183	(64,395)	229,788	
	1,110,297	(2,393,116)	(1,282,819)	1,009,073	(2,068,474)	(1,059,401)	
Deferred tax from deficit and tax credit							
Deficit carried over	28,200	-	28,200	-	-	-	
Tax credit carry-forward	-	-	-	82,212	-	82,212	
	28,200	-	28,200	82,212	-	82,212	
Deferred income taxes							
recognized directly to equity							
Net changes in							
the unrealized fair value of AFS	59,445	(147,972)	(88,527)	28,629	(119,375)	(90,746)	
Remeasurements of defined							
benefit plans	69,250	-	69,250	51,969	-	51,969	
	128,695	(147,972)	(19,277)	80,598	(119,375)	(38,777)	
Ą	↓ 1,267,192	(2,541,088)	(1,273,896)	1,171,883	(2,187,849)	(1,015,966)	

35. Earnings per Share

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

(in Won, except per share information)		2017	2016
Profit for the period Interests of hybrid bonds, net of tax Weighted-average number	₩	2,545,685,288,495 (33,048,799,997)	1,785,045,916,393 (33,225,163,081)
of common shares outstanding(*1) Basic and diluted earnings per share	₩	79,998,600 31,409	79,996,389 21,899

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

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

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

36. Related Party Transactions

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

1) For the year ended December 31, 2017

(in millions of Won)	Sales and of	thers(*1)	Purchase and others(*2)			
-			Purchase of	Purchase of	Outsourced	
	Sales	Others	material	fixed assets	processing cost	Others
Subsidiaries(*3)						
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(*4)	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(*3)					· · · · · ·	
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) As of December 31, 2017, the Company provided guarantees to related parties (Note 22).
- (*4) Others (purchase) mainly consist of service fees related to maintenance and repair of ERP System.

2) For the year ended December 31, 2016

(in millions of Won)	Sales and	others	Purchase and others				
—			Purchase of	Purchase of	Outsourced		
	Sales	Others	material	fixed assets	processing 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	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.(*1)	219,489	-	2	-	863	1,177	
POSCO AST(*1)	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	-	-	-		
POSCO Maharashtra Steel Private Limited	355,829	2,613	-	-	-	93	
POSCO(Suzhou) Automotive Processing Center Co., Ltd.	149,911	-	-	-	-		
Others	766,263	22,717	207,601	62,202	212,344	145,562	
_	11,160,350	125,892	2,214,877	496,841	592,579	380,144	
Associates and joint ventures(*3)							
SeAH Changwon Integrated Special Steel	28	-	1.095	-	627		
POSCO PLANTEC Co., Ltd.	2.245	48	3,533	244,898	16.812	8.146	
SNNC	6,004	1.042	487,395	-	-	2	
POSCO-SAMSUNG-Slovakia Processing center	44,686	-	-	-	-		
KOBRASCO	-	29.297	-	-	-		
Others	26,625	13,122	175,246	-	-		
	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) During the year ended December 31, 2016, they were merged into POSCO Processing&Service.

(b) The related account balances of significant transactions with related companies as of December 31, 2017 and 2016 are as follows:

1) December 31, 2017

(in millions of Won)	Receivables			Payables				
	Trade accounts and			Trade accounts and				
	notes receivable	Others	Total	notes payable	Accounts payable	Others	Total	
Subsidiaries								
POSCO ENGINEERING & CONSTRUCTION CO., LTD. ¥	2	2,908	2,910	-	21,965	674	22,639	
POSCO COATED & COLOR 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 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 Steel 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 jointventures								
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	
W	1,980,600	78,631	2,059,231	155,922	224,238	84,112	464,272	

2) December 31, 2016

(in millions of Won)		Receivables		Payables			
	Trade accounts and			Trade accounts and			
	notes receivable	Others	Total	notes payable	Accounts payable	Others	Total
Subsidiaries							
POSCO ENGINEERING & CONSTRUCTION CO., LTD. W	3	3,359	3,362		9,825	515	10,34
POSCO Processing&Service	207,744	178	207,922	1,085	5,367	5,184	11,63
POSCO COATED & COLOR STEEL Co., Ltd.	48,716	324	49,040	-	5	1,600	1,60
POSCO ICT	-	128	128	1,062	89,382	6,074	96,51
eNtoB Corporation	-	-	-	9,948	29,310	15	39,27
POSCO CHEMTECH	27,253	3,868	31,121	54,702	11,870	19,282	85,85
POSCO ENERGY CO., LTD.	18,701	2,012	20,713	-	-	1,425	1,42
POSCO DAEWOO Corporation	182,700	11,184	193,884	460	183	49	69
POSCO Thainox Public Company Limited	62,034	8	62,042	-	224	-	22
POSCO America Corporation	10,008		10,008		-	-	
POSCO Asia Co., Ltd.	375,823	458	376,281	25,101	-	-	25,10
Qingdao Pohang Stainless Steel Co., Ltd.	25,386		25,386		5	-	
POSCO MEXICO S.A. DE C.V.	114,166	1,024	115,190	-	-	-	
POSCO Maharashtra Steel Private Limited	208,737	9,923	218,660	-	-	-	
Others	333,031	64,526	397,557	17,374	46,455	26,974	90,80
	1,614,302	96,992	1,711,294	109,732	192,626	61,118	363,47
Associates and jointventures							
POSCO PLANTEC Co., Ltd.	30	9	39	2,125	39,647	-	41,77
SNNC	223	26	249	40,201	-	-	40,20
Others	800	1	801	991	17,685	-	18,67
	1,053	36	1,089	43,317	57,332	-	100,64
14	1,615,355	97,028	1,712,383	153,049	249,958	61,118	464,12

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

(in millions of Won)		2017	2016
Short-term benefits Long-term benefits	₩	45,489 4,368	27,682 11,956
Retirement benefits		14,593	6,960
	₩	64,450	46,598

Key management officers include directors (including non-standing directors), executive officials and fellow officials who have significant influence and responsibilities in the Company's business and operations.

37. Commitments and Contingencies

(a) Contingent liabilities

Contingent liabilities may develop in a way not initially expected. Therefore, management continuously assesses contingent liabilities to determine whether an outflow of resources embodying economic benefits has become probable. If it becomes probable that an outflow of future economic benefits will be required for an item previously dealt with as a contingent liability, a provision is recognized in the financial statements of the period in which the change in probability occurs (except in the extremely rare circumstances where no reliable estimate can be made).

The 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.

The 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 provisions, 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 obligation.

(b) Commitments

- The Company 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, 2017, 116 million tons of iron ore and 18 million tons of coal remained to be purchased under such long-term contracts.
- 2) The Company 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.

- 3) As of December 31, 2017, the Company entered into commitments with KOREA ENERGY AGENCY for long-term foreign currency borrowings, which are limited up to the amount of USD 6.49 million. The borrowings are related to the exploration of gas hydrates in Western Fergana-Chinabad. The repayment of the borrowings depends on the success of the project. The Company is not liable for the repayment of full or part of the money borrowed if the respective project fail. The Company has agreed to pay a certain portion of its profits under certain conditions, as defined by the borrowing agreements. As of December 31, 2017, the balances of the borrowing are USD 1.02 million.
- 4) The Company has provided a supplemental funding agreement, as the largest shareholder, as requested from the creditors, including Norddeutsche Landesbank, for seamless funding to the construction of new power plant by POSCO ENERGY CO., LTD.
- 5) The Company provides a supplementary fund of up to W9.8 billion to the Company's subsidiary, Busan E&E Co,. Ltd., at the request of creditors such as the Korea Development Bank.
- 6) The Company provides 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.
- (c) As of December 31, 2017, the Company has provided three blank checks to KOREA ENERGY AGENCY as collateral for long-term foreign currency borrowings.
- (d) Litigation in progress

The Company is involved in 16 litigations for alleged damages aggregating to W24.7 billion as of December 31, 2017 which arose in the ordinary course of business. The Company has recognized provisions for one of 16 litigations amounting to W2.1 billion by estimating the outcome of such litigations reasonably. Except the one litigations, the Company has not recognized any provisions since the Company believes that it does not have a present obligation on other litigations as of December 31, 2017.

38. Statements of Cash Flows

(a) Changes in operating assets and liabilities for the years ended December 31, 2017 and 2016 were as follows:

(in millions of Won)		2017	2016
Trade accounts and notes receivable, net	$\overline{\mathbb{W}}$	(706,458)	(467,096)
Other accounts receivable		35,409	24,329
Inventories		(542,819)	(528,926)
Prepaid expenses		(4,326)	5,058
Other current assets		(511)	4,372
Long-term guarantee deposits		(145)	199
Other non-current assets		60	(60)
Trade accounts and notes payable		(54,063)	492,256
Other accounts payable		(10,525)	(397)
Accrued expenses		(6,412)	(6,756)
Advances received		21,108	(2,560)
Withholdings		(4,024)	8,728
Unearned revenue		(1,125)	(1,416)
Other current liabilities		(6,576)	(16,795)
Payments of severance benefits		(116,385)	(92,478)
Plan assets		58,097	(112,603)
Other non-current liabilities		(19)	
	₩	(1,338,714)	(694,145)

(b) Changes in liabilities arising from financial activities for the year ended December 31, 2017 were as follows:

(in millions of Won)						
	-	Short-term borrowings	long-term borrowings	Dividend payable	Long-term financial liabilities	Derivatives that hedge long-term borrowings
Beginning	₩	331,370	3,811,484	4,793	93,150	(70,613)
Changes from financing cash flows		54,242	(58,144)	(863,701)	(6,618)	-
The effect of changes in foreign exchange rates		(1,636)	(239,468)	-	(155)	-
Changes in fair values		-	-	-	-	155,079
Other changes:						
Decrease in retained earnings		-	-	863,579	-	-
Amortization of discount on debentures issued		-	3,376	-	-	-
Ending	₩	383,976	3,517,248	4,671	86,377	84,466

Notice to Readers

This report is annexed in relation to the audit of the separate financial statements as of December 31, 2017 and the review of internal accounting control system pursuant to Article 2-3 of the Act on External Audit for Joint-stock Companies of the Republic of Korea.

Independent Auditors' Review Report on Internal Accounting Control System

English Translation of a Report Originally Issued in Korean

To the President of POSCO:

We have reviewed the accompanying Report on the Operations of Internal Accounting Control System ("IACS") of POSCO (the "Company") as of December 31, 2017. The Company's management is responsible for designing and maintaining effective IACS and for its assessment of the effectiveness of IACS. Our responsibility is to review management's assessment and issue a report based on our review. In the accompanying report of management's assessment of IACS, the Company's management stated: "Based on the assessment on the operations of the IACS, the Company's IACS has been effectively designed and operating as of December 31, 2017, in all material respects, in accordance with the IACS Framework issued by the Internal Accounting Control System Operation Committee."

We conducted our review in accordance with IACS Review Standards, issued by the Korean Institute of Certified Public Accountants. Those Standards require that we plan and perform the review to obtain assurance of a level less than that of an audit as to whether Report on the Operations of Internal Accounting Control System is free of material misstatement. Our review consists principally of obtaining an understanding of the Company's IACS, inquiries of company personnel about the details of the report, and tracing to related documents we considered necessary in the circumstances. We have not performed an audit and, accordingly, we do not express an audit opinion.

A company's IACS is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in conformity with Korean International Financial Reporting Standards. Because of its inherent limitations, however, IACS 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.

Based on our review, nothing has come to our attention that Report on the Operations of Internal Accounting Control System as of December 31, 2017 is not prepared in all material respects, in accordance with IACS Framework issued by the Internal Accounting Control System Operation Committee.

This report applies to the Company's IACS in existence as of December 31, 2017. We did not review the Company's IACS subsequent to December 31, 2017. This report has been prepared for Korean regulatory purposes, pursuant to the External Audit Law, and may not be appropriate for other purposes or for other users.

Seoul, Korea February 28, 2018

Report on the Operations of Internal Accounting Control System

English Translation of a Report Originally Issued in Korean

Report on the Operations of Internal Accounting Control System

English Translation of a Report Originally Issued in Korean

To the Board of Directors and Audit Committee of POSCO:

I, as the Internal Accounting Control Officer ("IACO") of POSCO (the Company"), have assessed the status of the design and operations of the Company's internal accounting control system ("IACS") as of December 31, 2017.

The Company's management, including IACO, is responsible for the design and operations of its IACS. I, as the IACO, have assessed whether the IACS has been effectively designed and operating to prevent and detect any error or fraud which may cause any misstatement of the financial statements, for the purpose of establishing the reliability of financial statement preparation and presentation for external uses. I, as the IACO, applied the IACS Framework issued by the Internal Accounting Control System Operation Committee for the assessment of design and operations of the IACS.

Based on the assessment of the operations of the IACS, the Company's IACS has been effectively designed and operating as of December 31, 2017, in all material respects, in accordance with the IACS Framework issued by the Internal Accounting Control System Operation Committee.

January 22, 2018

Kwon, Oh-Joon, Chief Executive Officer

Choi, Jeong-Woo, Internal Accounting Control Officer