LG CORP.

SEPARATE FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED
DECEMBER 31, 2019 AND 2018

ATTACHMENT: INDEPENDENT AUDITORS' REPORT

LG CORP.

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Independent Auditors' Report

English Translation of Independent Auditors' Report Originally Issued in Korean on March 19, 2020.

To the Shareholders and the Board of Directors of LG Corp.:

Report on the Audited Separate Financial Statements

Our Opinion

We have audited the accompanying separate financial statements of LG Corp. (the "Company"), which comprise the separate statements of financial position as of December 31, 2019, and December 31, 2018, respectively, and the related separate statements of income, separate statements of comprehensive income, separate statements of changes in shareholders' equity and separate statements of cash flows, all expressed in Korean won, for the years then ended, and a summary of significant accounting policies and other explanatory information.

In our opinion, the separate financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019, and December 31, 2018, respectively, and its financial performance and its cash flows for the years then ended in accordance with Korean International Financial Reporting Standards ("K-IFRS").

We have also audited, in accordance with the Korean Standards on Auditing("KSAs"), the internal control over financial reporting of the Company as of December 31, 2019, based on 'Conceptual Framework for Designing and Operating Internal Control over Financial Reporting' and our report dated March 19, 2020, expressed an unqualified opinion..

Basis for Audit Opinion

We conducted our audits in accordance with the Korean Standards on Auditing ("KSAs"). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audit of the Separate Financial Statements* section of our report. We are independent of the Company in accordance with the ethical requirements, including those related to independence, that are relevant to our audit of the separate financial statements in the Republic of Korea as required by prevailing audit regulations. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

The key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the separate financial statements of the current period. These matters were addressed in the context of our audit of the separate financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

(1) Impairment Test of Investments in Associates.

As noted in Note 11, the Company has a 24.69% stake in LG International Co., Ltd., which is classified as an associate. As of December 31, 2019, the book value of LG International Co., Ltd. was ₩296,741 million.

The management of the Company judged that there are signs of impairment due to the decrease in market value of LG International Corp.'s shares and performed the impairment test in accordance with K-IFRS 1036, *Impairment of Assets*.

We determined this matter to Key Audit Matters with consideration of the significance of the book value of the investments in LG International Corp. and significant management judgment in assessment of impairment.

The major audit procedures we have conducted in relation to the Key Audit Matters are as follows:

- Review management's assessment of the existence of any impairment signs of investment in associates held by the Company.
- Evaluate the objectivity and eligibility of independent external experts used by the Company's management in impairment test.
- Ask about the methodology and key significant assumptions (future cash flow, discount rate, etc.) of the valuation model applied by the Company and confirm their validity.
- Evaluate the appropriateness of management's estimation of business plans by comparing performance against past business plans.
- Check the sensitivity analysis of the impairment test presented by the management.

Responsibilities of Management and Those Charged with Governance for the Separate Financial Statements

Management is responsible for the preparation of the accompanying separate financial statements in accordance with K-IFRS, and for such internal control as they determine is necessary to enable the preparation of separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the separate financial statements, management of the Company is responsible for assessing the Company’s ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going-concern basis of accounting, unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance’s responsibilities include overseeing the Company’s financial reporting process.

Auditors’ Responsibilities for the Audit of the Separate Financial Statements

Our objectives are to obtain reasonable assurance about whether the separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors’ report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with KSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these separate financial statements.

As part of an audit in accordance with KSAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the separate financial statements, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the management's use of the going-concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the separate financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the separate financial statements, including the disclosures, and whether the separate financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Deloitte.

We communicate with those charged with governance of the Company regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance of the Company with a statement that we have complied with relevant ethical requirements, including those related to independence, and to communicate with them all matters that may reasonably be thought to bear on our independence and, where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the separate financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report, unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditors' report is Young-Jae Kim.

Deloitte Anjin LLC

March 19, 2020

Notice to Readers

This report is effective as of March 19, 2020, the auditors' report date. Certain subsequent events or circumstances may have occurred between the auditors' report date and the time the auditors' report is read. Such events or circumstances could significantly affect the separate financial statements and may result in modifications to the auditors' report.

LG CORP. (the “Company”)

SEPARATE FINANCIAL STATEMENTS AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

The accompanying separate financial statements, including all footnote disclosures, were prepared by, and are the responsibility of, the Company.

Young-Soo Kwon
President and Chief Operating Officer
LG Corp.

LG CORP.
SEPARATE STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2019 AND 2018

	Korean won			
	December 31, 2019		December 31, 2018	
	(In millions)			
ASSETS				
CURRENT ASSETS:				
Cash and cash equivalents (Notes 5, 6, 19 and 26)	₩	150,273	₩	132,903
Financial institution deposits (Notes 5, 19, 23 and 26)		500,500		250,500
Other receivables, net (Notes 5, 7, 19, 22 and 26)		35,933		9,730
Other current assets (Note 8)		3,175		4,485
Assets held for sale (Notes 11, 27 and 28)		136,178		-
Total current assets		826,059		397,618
NON-CURRENT ASSETS:				
Available-for-sale ("AFS") financial assets (Notes 5, 19 and 26)		98,940		97,334
Other non-current receivables, net (Notes 5, 7, 22, 23 and 26)		5		499
Investments in subsidiaries (Note 11)		758,789		1,058,892
Investments in associates and joint ventures (Note 11)		6,943,881		6,943,881
Other non-current assets (Note 8)		2,789		3,081
Property, plant and equipment, net (Note 9)		46,394		36,306
Investment property, net (Notes 9 and 24)		882,868		772,903
Intangible assets (Note 10)		17,366		17,128
Right-of use assets (Note 24)		870		-
Total non-current assets		8,751,902		8,930,024
TOTAL ASSETS	₩	9,577,961	₩	9,327,642

(Continued)

LG CORP.
SEPARATE STATEMENTS OF FINANCIAL POSITION
AS OF DECEMBER 31, 2019 AND 2018 (CONTINUED)

	Korean won			
	December 31, 2019		December 31, 2018	
	(In millions)			
LIABILITIES AND SHAREHOLDERS' EQUITY				
CURRENT LIABILITIES:				
Other current payables (Notes 5, 19, 22 and 26)	₩	119,416	₩	112,297
Current tax liabilities (Note 20)		9,842		26,161
Other current liabilities (Note 13)		6,989		7,195
Current lease liabilities (Notes 5, 24 and 26)		444		-
Liabilities related to assets held for sale (Notes 20, 27 and 28)		19,358		-
Total current liabilities		156,049		145,653
NON-CURRENT LIABILITIES:				
Other non-current payables (Notes 5, 19, 22 and 26)		15,526		11,030
Net defined benefit liability (Note 12)		5,903		3,848
Deferred tax liability (Note 20)		68,443		63,152
Other non-current liabilities (Note 13)		4,862		5,218
Non-current lease liabilities (Notes 5, 24 and 26)		433		-
Total non-current liabilities		95,167		83,248
TOTAL LIABILITIES		251,216		228,901
SHAREHOLDERS' EQUITY				
Issued capital (Note 14)		879,359		879,359
Capital surplus (Note 15)		2,409,002		2,409,002
Other capital items (Note 14)		(2,385)		(2,385)
Accumulated other comprehensive income (Note 16)		37,074		35,857
Retained earnings (Note 17)		6,003,695		5,776,908
TOTAL EQUITY		9,326,745		9,098,741
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	₩	9,577,961	₩	9,327,642

(Concluded)

See accompanying notes to separate financial statements.

LG CORP.
SEPARATE STATEMENTS OF INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

	Korean won			
	Year ended December 31, 2019		Year ended December 31, 2018	
	(In millions)			
Operating income:				
Dividend income (Notes 4, 18 and 22)	₩	476,247	₩	368,202
Royalty revenue (Notes 4, 18 and 22)		270,550		270,069
Rental revenue (Notes 4, 18, 22 and 24)		127,875		118,925
		874,672		757,196
Operating expenses:				
Employee benefit (Notes 18 and 22)		48,164		42,038
Depreciation (Notes 9 ,18 and 24)		22,974		19,762
Other operating expenses (Notes 18 and 22)		159,739		149,094
		230,877		210,894
Net operating income		643,795		546,302
Non-operating income and expenses:				
Financial income (Note 19)		9.390		11,667
Financial expenses (Note 19)		904		1,249
Other non-operating income		10,853		36,239
Other non-operating expenses		5,814		38,999
Profit before income tax expense		657,320		553,960
Income tax expense (Note 20)		76,159		1,298
Profit for the year	₩	581,161	₩	552,662
Earnings per share (in Korean won):				
Common stock basic/diluted (Note 21)	₩	3,305	₩	3,413
Pre-1996 Commercial Law Amendment preferred stock basic/diluted (Note 21)		3,355		3,193

See accompanying notes to separate financial statements.

LG CORP.
SEPARATE STATEMENTS OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

	Korean won			
	Year ended December 31, 2019		Year ended December 31, 2018	
	(In millions)			
Profit for the year	₩	581,161	₩	552,662
Other comprehensive income (loss):		(1,450)		(6,595)
Items that will not be reclassified subsequently to profit or loss		(1,450)		(6,595)
Remeasurement on the net defined benefit liability		(2,667)		(1,353)
Net gain (loss) on other financial assets		1,217		(5,242)
Total comprehensive income for the year	₩	579,711	₩	546,067

See accompanying notes to financial statements.

LG CORP.
SEPARATE STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

	Korean won					
	Issued capital	Capital surplus	Other capital items	Accumulated other comprehensive income (loss)	Retained earnings	Total
	(In millions)					
Balance at January 1, 2018	₩ 879,359	₩ 2,409,002	₩ (2,385)	₩ 41,099	₩ 5,454,267	₩ 8,781,342
Annual dividends	-	-	-	-	(228,668)	(228,668)
Profit for the year	-	-	-	-	552,662	552,662
Remeasurement on the net defined benefit liability	-	-	-	-	(1,353)	(1,353)
Net gain (loss) on other financial assets	-	-	-	(5,242)	-	(5,242)
Balance at December 31, 2018	₩ 879,359	₩ 2,409,002	₩ (2,385)	₩ 35,857	₩ 5,776,908	₩ 9,098,741
Balance at January 1, 2019	₩ 879,359	₩ 2,409,002	₩ (2,385)	₩ 35,857	₩ 5,776,908	₩ 9,098,741
Annual dividends	-	-	-	-	(351,707)	(351,707)
Profit for the year	-	-	-	-	581,161	581,161
Remeasurement on the net defined benefit liability	-	-	-	-	(2,667)	(2,667)
Net gain (loss) on other financial assets	-	-	-	1,217	-	1,217
Balance at December 31, 2019	₩ 879,359	₩ 2,409,002	₩ (2,385)	₩ 37,074	₩ 6,003,695	₩ 9,326,745

See accompanying notes to separate financial statements.

LG CORP.
SEPARATE STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

	Korean won	
	Year ended December 31, 2019	Year ended December 31, 2018
	(In millions)	
CASH FLOWS FROM OPERATING ACTIVITIES:		
Profit for the year	₩ 581,161	₩ 552,662
Additions of expenses not involving cash outflows:		
Depreciation	22,974	19,762
Amortization of intangible assets	1,856	1,862
Retirement benefits	3,606	3,893
Interest expenses	381	333
Income tax expense	76,158	1,298
Loss on disposals of property, plant and equipment	7	1
Loss on disposals of investment property	5,674	-
Loss on disposals of intangible assets	2	-
Impairment loss on investments in associates	-	38,863
Loss on foreign currency translations	-	72
Other selling and administration expenses	94	86
	110,752	66,170
Deduction of income not involving cash inflows:		
Interest income	8,293	9,964
Dividend income	476,247	368,202
Other operating income	357	333
Gain on disposals of property, plant and equipment	3	18
Gain on disposals of investments in associates	404	-
Gain on disposals of investments in subsidiaries	10,245	35,813
Gain on foreign currency translation	538	630
	(496,087)	(414,960)
Movements in working capital:		
Other receivables	(24,925)	18,270
Other current assets	1,310	(705)
Other non-current assets	(966)	(1,347)
Other payables	9,519	4,489
Other current liabilities	(206)	623
Net defined benefit liability	(5,119)	(14,146)
	(20,387)	7,184

(Continued)

LG CORP.
SEPARATE STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018 (CONTINUED)

	Korean won	
	Year ended December 31, 2019	Year ended December 31, 2018
	(In millions)	
Interest income received	₩ 7,510	₩ 10,833
Dividend income received	476,247	368,202
Interest expenses paid	(24)	-
Income taxes paid	(67,365)	(217,704)
	416,368	161,331
Net cash provided by operating activities	591,807	372,387
CASH FLOWS FROM INVESTING ACTIVITIES:		
Cash inflows from investing activities:		
Decrease in financial institution deposits	600,000	686,035
Disposals of investments in subsidiaries	192,442	57,688
Disposals of investments in associates	404	-
Disposals of property, plant and equipment	29	192
Disposals of investment property	1,284	-
Disposals of intangible assets	93	-
	794,252	743,915
Cash outflows for investing activities:		
Increase in financial institution deposits	850,000	636,035
Acquisitions of investments in subsidiaries	18,273	50,285
Acquisitions of investments in associates	-	423,339
Acquisitions of property, plant and equipment	5,133	1,032
Acquisitions of investment properties	142,559	1,473
Acquisitions of intangible assets	974	926
	(1,016,939)	(1,113,090)
Net cash used in investing activities	(222,687)	(369,175)

(Continued)

LG CORP.
SEPARATE STATEMENTS OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018 (CONTINUED)

	Korean won	
	Year ended December 31, 2019	Year ended December 31, 2018
	(In millions)	
CASH FLOWS FROM FINANCING ACTIVITIES:		
Cash outflows for financing activities:		
Payments of dividends	351,689	228,655
Redemptions of lease liabilities	599	
	(352,288)	(228,655)
Net cash used in financing activities	(352,288)	(228,655)
NET INCREASE IN CASH AND CASH EQUIVALENTS	16,832	(225,443)
CASH AND CASH EQUIVALENTS, AT THE BEGINNING OF YEAR	132,903	357,788
Effects of exchange rate changes on cash and cash equivalents	538	558
CASH AND CASH EQUIVALENTS, AT THE END OF YEAR	₩ 150,273	₩ 132,903

(Concluded)

See accompanying notes to financial statements.

LG CORP.
NOTES TO SEPARATE FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

1. GENERAL:

LG Corp. (the “Company”) is an investment holding company, which was formed to meet the changes in domestic and international business environments and become a global competitor through an effective management specializing its business sector. On March 1, 2003, it acquired LG Electronics Inc. (“LGEI”), an investment company, and the real estate lease and investment business company, Serveone Co., Ltd.

The Company has been listed on the Korea Exchange stock market since February 1970. After numerous paid-up capital increases, spin-offs and mergers, the Company has outstanding capital stock of ₩879,359 million, including preferred stocks of ₩16,573 million as of December 31, 2019.

As of December 31, 2019, the Company’s related parties and major shareholders are as follows:

Name of shareholder	Number of shares	Percentage of shares (%) (*)
Ku, Gwang Mo	25,881,884	14,72
Ku, Bon Jun	13,317,448	7.57
Ku, Bon Shik	7,728,609	4.39
Kim, Young Shik	7,253,100	4.12
Ku, Bon Neung and others	21,204,138	12.06
LG Yonam Education Foundation	3,675,742	2.09
LG Yonam Foundation	572,525	0.33
Others	96,238,362	54.72
Total	175,871,808	100.00

(*) Includes preferred stocks

2. STANDARDS AFFECTING PRESENTATION AND DISCLOSURE AND SIGNIFICANT ACCOUNTING POLICIES:

The separate financial statements have been confirmed at the board of directors’ meeting held on February 13, 2020, and will be finalized at the shareholders’ meeting on March 27, 2019.

The Company has adopted the Korean International Financial Reporting Standards (“K-IFRSs”) from January 1, 2010, which is determined as the transition date of the Company to K-IFRS. Also, these are the separate financial statements of the Company in accordance with K-IFRS 1027 (separate financial statements), those 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 or in accordance with K-IFRS 1109 (Financial Instruments) or K-IFRS 1028 Investment in Associates.

The significant accounting policies under K-IFRS followed by the Company in the preparation of separate financial statements are summarized below. Unless stated otherwise, these accounting policies have been applied consistently to the separate financial statements for the current period and the comparative period.

(1) Amendments to K-IFRSs and new interpretations that are mandatorily effective for the current year

1) Newly adopted and revised standards, their interpretations and thereby changes in accounting policies being effective for the financial year beginning on January 1, 2019, are as follows:

- K-IFRS 1116 – Leases (Enactment)

In the current year, the Company has applied K-IFRS 1116 that is effective for annual periods that begin on or after January 1, 2019.

K-IFRS 1116 introduces new or amended requirements with respect to lease accounting. It introduces significant changes to lessee accounting by removing the distinction between operating and finance lease and requiring the recognition of a right-of-use asset and a lease liability at the commencement for all leases, except for short-term leases and leases of low-value assets. In contrast to lessee accounting, the requirements for lessor accounting have remained largely unchanged. Details of these new requirements are described in '(12) Lease'. The impact of the adoption of K-IFRS 1116 on the Company's separate financial statements is described below.

The date of initial application of K-IFRS 1116 for the Company is January 1, 2019.

The Company has applied K-IFRS 1116 using the cumulative catch-up approach, with these practical expedients.

- To recognize the cumulative effect of initially applying this standard as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at the date of initial application.
- Not to restate comparative information applying K-IFRS 1017 Leases and K-IFRS 2104 Determining whether an Arrangement contains a Lease.

① Impact of the new definition of a lease
The Company has made use of the practical expedient available on transition to K-IFRS 1116 not to reassess whether a contract is or contains a lease. Accordingly, the definition of a lease in accordance with K-IFRS 1017 and K-IFRS 2104 will continue to be applied to those contracts entered or modified before January 1, 2019.

The change in definition of a lease mainly relates to the concept of control. K-IFRS 1116 determines whether a contract contains a lease on the basis of whether the customer has the right to control the use of an identified asset for a period of time in exchange for consideration. This is in contrast to the focus on 'risks and rewards' in K-IFRS 1017 and K-IFRS 2104.

The Company applies the definition of a lease and related guidance set out in K-IFRS 1116 to all contracts entered into or changed on or after January 1, 2019.

② Impact on Lessee Accounting

(i) Former operating leases

K-IFRS 1116 changes how the Company accounts for leases previously classified as operating leases under K-IFRS 1017, which were off balance sheet.
Applying K-IFRS 1116 for all leases (except as noted below), the Company:

- Recognizes right-of-use assets and lease liabilities in the consolidated statements of financial position, initially measured at the present value of the future lease payments
- Recognizes depreciation of right-of-use assets and interest on lease liabilities in profit or loss
- Separates the total amount of cash paid into a principal portion (presented within financing activities) and interest (presented within financing activities) in the consolidated statements of cash flows.

Lease incentives (e.g., rent-free period) are recognized as part of the measurement of the right-of-use assets and lease liabilities, whereas under K-IFRS 1017, they resulted in the recognition of a lease incentive, amortized as a reduction of rental expenses generally on a straight-line basis. Under K-IFRS 1116, right-of-use assets are tested for impairment in accordance with K-IFRS 1036.

For short-term leases (lease term of 12 months or less) and leases of low-value assets, the Company has opted to recognize a lease expense on a straight-line basis as permitted by K-IFRS 1116.

The Company used these practical expedients when applying the cumulative catch-up approach to leases previously classified as an operating lease applying K-IFRS 1017.

- To apply a single discount rate to a portfolio of leases with reasonably similar characteristics
- To rely on its assessment of whether leases are onerous applying International Accounting Standard (IAS) 37 Provisions, Contingent Liabilities and Contingent Assets immediately before the date of initial application as an alternative to performing an impairment review.
- To elect not to recognize right-of-use asset and lease liability to leases for which the lease term ends within 12 months of the date of initial application.
- To exclude initial direct costs from the measurement of the right-of-use asset at the date of initial application.
- To use hindsight, such as in determining the lease term if the contract contains options to extend or terminate the lease

(ii) Former finance leases

Except for the applying K-IFRS 1116 in accordance with paragraph C5(b), for leases that were classified as finance leases applying K-IFRS 1017, the carrying amount of the right-of-use asset and the lease liability at the date of initial application shall be the carrying amount of the lease asset and lease liability immediately before that date measured applying IAS 17.

For those leases, the Company accounts for the right-of-use asset and the lease liability applying K-IFRS 1116 from the date of initial application.

③ Impact on Lessor Accounting

K-IFRS 1116 does not change substantially how a lessor accounts for leases. Under K-IFRS 1116, a lessor continues to classify leases as either finance leases or operating leases and account for those two types of leases differently.

However, K-IFRS 1116 has changed and expanded the disclosures required, in particular with regard to how a lessor manages the risks arising from its residual interest in leased assets.

Under K-IFRS 1116, an intermediate lessor accounts for the head lease and the sublease as two separate contracts. The intermediate lessor is required to classify the sublease as a finance or operating lease by reference to the right-of-use asset arising from the head lease (and not by reference to the underlying asset as was the case under K-IFRS 1017).

Because of this change, the Company has reclassified certain of its sublease agreements as finance leases. As required by K-IFRS 1109, an allowance for expected credit losses has been recognized on the finance lease receivables.

④ Financial impact of the initial application of K-IFRS 1116

The lessee's incremental borrowing rate used when measuring lease liabilities at January 1, 2019 is 2.24%.

The table below demonstrate the relationship between the discounted amounts of operating lease commitments as at December 31, 2018, applied K-IFRS 1017 using the incremental borrowing rate at the date of initial application, and the amount of lease liabilities at the date of initial application.

Classification		Book Value
Operating lease commitments as at December 31, 2018 (a)	₩	1,036
Short-term leases and leases for which the underlying asset is of low value (b)		(36)
Discount on present value (c)		(29)
Financial lease liabilities under K-IFRS 1017 as at December 31, 2018 (d)		-
Lease liabilities as at January 1, 2019 (e = a+b+c+d)		971

Right-of-use assets of ₩971million and lease liabilities of ₩971million were recognized at the date of initial application of K-IFRS 1116.

- K-IFRS 1109 – Financial Instruments (Amendment)

The amendments to K-IFRS 1109 clarify that for the purpose of assessing whether a prepayment feature meets the 'solely payments of principal and interest' (SPPI) condition, the party exercising the option may pay or receive reasonable compensation for the prepayment irrespective of the reason for prepayment. In other words, financial assets with prepayment features with negative compensation do not automatically fail SPPI.

-K-IFRS 1028 Long-Term Interests in Associates and Joint Ventures (Amendment)

The amendment clarifies that K-IFRS 1109, including its impairment requirements, applies to other financial instruments in an associate or joint venture to which the equity method is not applied. These include long-term interests that, in substance, form part of the entity's net investment in an associate or joint venture. The Company applies K-IFRS 1109 to such long-term interests before it applies K-IFRS 1028. In applying K-IFRS 1109, the Company does not take into account any adjustments to the carrying amount of long-term interests required by K-IFRS 1028 (i.e., adjustments to the carrying amount of long-term interests arising from the allocation of losses of the investee or assessment of impairment in accordance with K-IFRS 1028).

- Annual Improvements to K-IFRS Standards 2015–2017 Cycle

The annual improvements include amendments to four standards such as K-IFRS 1012 Income Taxes, K-IFRS 1023 Borrowing Costs, K-IFRS 1103 Business Combinations, and K-IFRS 1111 Joint Arrangements.

① K-IFRS 1012 Income Taxes
The amendments clarify that an entity should recognize the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where the entity originally recognized the transactions that generated the distributable profits. This is the case irrespective of whether different tax rates apply to distributed and undistributed profits.

② K-IFRS 1023 Borrowing Costs
The amendments clarify that if any specific borrowing remains outstanding after the related asset is ready for its intended use or sale, that borrowing becomes part of the funds that an entity borrows generally when calculating the capitalization rate on general borrowings.

③ K-IFRS 1103 Business Combinations
The amendments to K-IFRS 1103 clarify that when an entity obtains control of a business that is a joint operation, the entity applies the requirements for a business combination achieved in stages, including remeasuring its previously held interest (PHI) in the joint operation at fair value. The PHI to be remeasured includes any unrecognized assets, liabilities and goodwill relating to the joint operation.

④ K-IFRS 1111 Joint Arrangements
The amendments to K-IFRS 1111 clarify that when a party that participates in, but does not have joint control of, a joint operation that is a business obtains joint control of such a joint operation, the entity does not remeasure its PHI in the joint operation.

- K-IFRS 1019 Employee Benefits Plan Amendment, Curtailment or Settlement (Amendment)

The amendments clarify that the past service cost (or of the gain or loss on settlement) is calculated by measuring the defined benefit liability (asset) using updated assumptions and comparing benefits offered and plan assets before and after the plan amendment (or curtailment or settlement), but ignoring the effect of the asset ceiling (that may arise when the defined benefit plan is in a surplus position). IAS 19 is now clear that the change in the effect of the asset ceiling that may result from the plan amendment (or curtailment or settlement) is determined in a second step and is recognized in the normal manner in other comprehensive income.

The paragraphs that relate to measuring the current service cost and the net interest on the net defined benefit liability (asset) have also been amended. The Company will now be required to use the updated assumptions from this remeasurement to determine current service cost and net interest for the remainder of the reporting period after the change to the plan. In the case of the net interest, the amendments make it clear that for the period post plan amendment, the net interest is calculated by multiplying the net defined benefit liability (asset) as remeasured under K-IFRS 1019.99, with the discount rate used in the remeasurement (also taking into account the effect of contributions and benefit payments on the net defined benefit liability (asset)).

- K-IFRS 1115 Revenue from Contracts with Customers (Amendment)

The amendment clarifies that it does not reduce the scope of disclosure even if K-IFRS 1115 is applied by revising the meaning of 'contract' referred to in paragraph 129.1 to 'individual contract' in relation to 'additional disclosure of cost application method.' In addition, because K-IFRS 1115 does not distinguish between the types of contracts, service contracts that were not covered by the previous revenue standard, paragraph 145.1, may also be subject to paragraph 129.1 of K-IFRS 1115. This clarifies that the scope of the contract that is subject to the disclosure requirement in accordance with paragraph 129.1 may be broadened compared to the previous revenue standard.

- K-IFRS 2123 Interpretation Uncertainty over Income Tax Treatments (Amendment)

K-IFRS 2123 interpretation sets out how to determine the accounting tax position when there is uncertainty over income tax treatments. The interpretation requires an entity to:

① Determine whether uncertain tax positions are assessed separately or as a group; and
② Assess whether it is probable that a tax authority will accept an uncertain tax treatment used, or proposed to be used, by an entity in its income tax filings:

- If yes, the entity should determine its accounting tax position consistently with the tax treatment used or planned to be used in its income tax filings.
- If no, the entity should reflect the effect of uncertainty in determining its accounting tax position.

- K-IFRS 1109 – Financial Instruments and K-IFRS 1107 – Financial Instruments: Disclosure (Amendment)

The amendments mainly deal with the addition of temporary exceptions from applying specific hedge accounting requirements while the uncertainty arises from interest rate benchmark reform. The amendment requires that for the purpose of determining whether a forecast transaction (or a component thereof) is highly probable, an entity shall assume that the interest rate benchmark on which the hedged cash flows (contractually or non-contractually specified) are based is not altered as a result of interest rate benchmark reform. When applying the prospective assessment, the amendment further requires that an entity shall assume that the hedged risk or the interest rate benchmark on which the hedged item or the hedging instrument is based is not altered as a result of the reform. Additionally, for a hedge of a non-contractually specified benchmark component of interest rate risk, an entity shall apply the requirement that the risk component shall be separately identifiable only at the inception of the hedging relationship. Meanwhile, an entity shall prospectively cease applying the temporary exceptions to a hedged item at the earlier of: (a) when the uncertainty arising from interest rate benchmark reform is no longer present with respect to the timing and the amount of the interest rate benchmark-based cash flows of the hedged item; and (b) when the hedging relationship that the hedged item is part of is discontinued.

The amendments are to be effective for annual periods beginning on or after January 1, 2020, and must be applied retrospectively. Early application is permitted.

The Company does not anticipate that the application of the enactment and amendments will have a significant impact on its separate financial statements.

2) New and revised K-IFRSs that have been issued, but are not yet effective

-K-IFRS 1103 Definition of a business (Amendment)

The amendments clarify that while businesses usually have outputs, outputs are not required for an integrated set of activities and assets to qualify as a business. To be considered a business, an acquired set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. Additional guidance is provided that helps determine whether a substantive process has been acquired.

The amendments introduce an optional concentration test that permits a simplified assessment of whether an acquired set of activities and assets is not a business. Under the optional concentration test, the acquired set of activities and assets is not a business if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar assets.

The amendments are applied prospectively to all business combinations and asset acquisitions for which the acquisition date is on or after the first annual reporting period beginning on or after January 1, 2020, with early application permitted.

-Amendments to References to the Conceptual Framework in K-IFRS Standards (Amendment)

Together with the revised Conceptual Framework, which became effective upon publication on December 21, 2018, the International Accounting Standards Board (“IASB”) has also issued Amendments to References to the Conceptual Framework in International Financial Reporting Standards (IFRS). The document contains amendments to K-IFRS 1102, 1103, 1106, 1114, 1001, 1008, 1034, 1037, 1038, 2112, 2119, 2120, 2122, and 2032

Not all amendments, however, update those pronouncements with regard to references to and quotes from the framework so that they refer to the revised Conceptual Framework. Some pronouncements are only updated to indicate which version of the Framework they are referencing to (the Framework (2007), the IASB Framework of 2010, or the new revised Framework of 2018) or to indicate that definitions in the Standard have not been updated with the new definitions developed in the revised Conceptual Framework.

The amendments, where they actually are updates, are effective for annual periods beginning on or after January 1, 2020, with early application permitted.

The Company does not anticipate that the application of the enactment and amendments will have a significant impact on its separate financial statements.

(2) Basis of preparing separate financial statements

1) Basis of measurement

The separate financial statements have been prepared on the historical cost basis, except otherwise stated below, such as financial instruments.

2) Functional and reporting currency
The separate financial statements of the Company are presented in the currency of the primary economic environment in which the entity operates (its functional currency). The Company’s functional currency and the reporting currency for the separate financial statements are Korean won.

(3) Foreign currency translation

Transactions that occur in currencies other than the Company's functional currency will be recorded at a translated amount using the exchange rate on the day of the transaction. At the end of the reporting period, all monetary assets and liabilities will be translated using the exchange rate at the end of the reporting date. Meanwhile, non-monetary assets and liabilities measured at fair value will be retranslated using the exchange rate on the day of fair value evaluation, whereas non-monetary assets and liabilities measured at historical cost will not be translated.

Exchange differences are recognized in profit or loss in the period in which they arise, except for:

- Exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings; and
- Exchange differences on transactions entered into in order to hedge certain foreign currency risks.

(4) Cash and cash equivalents

Cash and cash equivalents include cash, savings and checking accounts and highly liquid short-term investments (maturities of three months or less from acquisition). Bank overdraft is accounted for as short-term borrowings.

(5) Financial assets

All financial assets are recognized and derecognized on the trade date where the purchase or sale of a financial asset is under a contract whose terms require delivery of the financial asset within the time frame established by the market concerned, and are initially measured at fair value, plus transaction costs, except for those financial assets classified as at FVTPL, which are initially measured at fair value.

All regular-way purchases or sales of financial assets are recognized and derecognized on a trade-date basis. Regular-way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace.

At initial recognition, all recognized financial assets that are within the scope of K-IFRS 1109 are classified as to be amortized cost, FVTOCI and FVTPL on the basis of the entity's business model for managing the financial assets and the contractual cash flow characteristics of the financial assets.

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Company neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, it recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, it continues to recognize the financial asset and also recognize a collateralized borrowing for the proceeds received.

On derecognition of all financial assets, the difference between the total amount of proceeds received and the accumulated other comprehensive income and book value of financial assets is recognized in profit or loss.

If the entirety of financial assets is not eliminated (e.g., the Company has the option to repurchase a portion of the transferred asset, or it holds a residual interest and the holding of such residual interest is not considered to have all the risks and rewards of ownership and it holds control of assets), based on the relative fair value of each part of the financial asset as of the date of the transfer, the Company allocates the existing book value of financial assets as part of the continuing involvement that is recognized and no longer recognized.

1) Classification of financial assets

Debt instruments that meet the following conditions are measured subsequently at amortized cost:

- The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are SPPI on the principal amount outstanding.

Debt instruments that meet the following conditions are measured subsequently at FVTOCI:

- The financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets; and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are SPPI on the principal amount outstanding.

By default, all other financial assets are measured subsequently at FVTPL.
Despite the foregoing, the Company may make the following irrevocable election/designation at initial recognition of a financial asset:

- The Company may irrevocably elect to present subsequent changes in fair value of an equity investment in other comprehensive income if certain criteria are met (see (1-3) below); and
- The Company may irrevocably designate a debt investment that meets the amortized cost or FVTOCI criteria as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch (see (1-4) below).

1-1) Amortized cost and effective interest method

The effective interest method is a method of calculating the amortized cost of a debt instrument and of allocating interest income over the relevant period. For financial assets other than purchased or originated credit-impaired financial assets (i.e., assets that are credit impaired on initial recognition), the effective interest rate is the rate that exactly discounts estimated future cash receipts (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) excluding expected credit losses (“ECLs”), through the expected life of the debt instrument, or, where appropriate, a shorter period, to the gross carrying amount of the debt instrument on initial recognition. For purchased or originated credit-impaired financial assets, a credit-adjusted effective interest rate is calculated by discounting the estimated future cash flows, including ECLs, to the amortized cost of the debt instrument on initial recognition.

The amortized cost of a financial asset is the amount at which the financial asset is measured at initial recognition minus the principal repayments, plus the cumulative amortization using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. The gross carrying amount of a financial asset is the amortized cost of a financial asset before adjusting for any loss allowance.

Interest income is recognized using the effective interest method for debt instruments measured subsequently at amortized cost and at FVTOCI. For financial assets other than purchased or originated credit-impaired financial assets, interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit impaired (see below). For financial assets that have subsequently become credit impaired, interest income is recognized by applying the effective interest rate to the amortized cost of the financial asset. If, in subsequent reporting periods, the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit impaired, interest income is recognized by applying the effective interest rate to the gross carrying amount of the financial asset.

For purchased or originated credit-impaired financial assets, the Company recognizes interest income by applying the credit-adjusted effective interest rate to the amortized cost of the financial asset from initial recognition. The calculation does not revert to the gross basis even if the credit risk of the financial asset subsequently improves so that the financial asset is no longer credit impaired.

Interest income is recognized in profit or loss and is included in the "finance income - interest income" line item (see Note 19).

1-2) Debt instruments classified as at FVTOCI

The corporate bonds held by the Company are classified as at FVTOCI. Fair value is determined in the manner described in Note 26. The corporate bonds are initially measured at fair value plus transaction costs. Subsequently, changes in the carrying amount of these corporate bonds as a result of foreign exchange gains and losses, impairment gains or losses, and interest income calculated using the effective interest method are recognized in profit or loss. The amounts that are recognized in profit or loss are the same as the amounts that would have been recognized in profit or loss if these corporate bonds had been measured at amortized cost. All other changes in the carrying amount of these corporate bonds are recognized in other comprehensive income and accumulated under the heading of investments' revaluation reserve. When these corporate bonds are derecognized, the cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss.

1-3) Equity instruments designated as at FVTOCI

On initial recognition, the Company may make an irrevocable election (on an instrument-by-instrument basis) to designate investments in equity instruments as at FVTOCI. Designation at FVTOCI is not permitted if the equity investment is held for trading or if it is contingent consideration recognized by an acquirer in a business combination.

A financial asset is held for trading if:

- It has been acquired principally for the purpose of selling it in the near term; or
- On initial recognition, it is part of a portfolio of identified financial instruments that the Company manages together and has evidence of a recent actual pattern of short-term profit-taking; or
- It is a derivative (except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument).

Investments in equity instruments at FVTOCI are initially measured at fair value plus transaction costs. Subsequently, they are measured at fair value with gains and losses arising from changes in fair value recognized in other comprehensive income and accumulated in the investments' revaluation reserve. The cumulative gain or loss is not reclassified to profit or loss on disposal of the equity investments; instead, it is transferred to retained earnings.

Dividends on these investments in equity instruments are recognized in profit or loss in accordance with K-IFRS 1109, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the 'operating income' line item (Note 4) in profit or loss.

1-4) Financial assets at FVTPL

Financial assets that do not meet the criteria for being measured at amortized cost or FVTOCI are measured at FVTPL. Specifically:

- Investments in equity instruments are classified as at FVTPL, unless the Company designates an equity investment that is neither held for trading nor a contingent consideration arising from a business combination as at FVTOCI on initial recognition (see (1-3) above).
- Debt instruments that do not meet the amortized cost criteria or the FVTOCI criteria (see (1-1) and (1-2) above) are classified as at FVTPL. In addition, debt instruments that meet either the amortized cost criteria or the FVTOCI criteria may be designated as at FVTPL upon initial recognition if such designation eliminates or significantly reduces a measurement or recognition inconsistency (so called 'accounting mismatch') that would arise from measuring assets or liabilities or recognizing the gains and losses on them on different bases. The Company has not designated any debt instruments as at FVTPL.

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognized in profit or loss to the extent they are not part of a designated hedging relationship (see hedge accounting policy). The net gain or loss recognized in profit or loss includes any dividend earned on the financial asset and is included in the 'operating income' line item (Note 4). Meanwhile, interest income on financial assets at FVTPL is included in 'financial income - other' (Note 19). Fair value is determined in the manner described in Note 26.

2) Foreign exchange gains and losses

The carrying amount of financial assets that are denominated in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of each reporting period. Specifically;

- For financial assets measured at amortized cost that are not part of a designated hedging relationship, exchange differences are recognized in profit or loss in the 'other gains and losses' line item (Note 19);
- For debt instruments measured at FVTOCI that are not part of a designated hedging relationship, exchange differences on the amortized cost of the debt instrument are recognized in profit or loss in the 'other gains and losses' line item (Note 19). Other exchange differences are recognized in other comprehensive income in the investments' revaluation reserve;
- For financial assets measured at FVTPL that are not part of a designated hedging relationship, exchange differences are recognized in profit or loss in the 'other gains and losses' line item (Note 19); and
- For equity instruments measured at FVTOCI, exchange differences are recognized in other comprehensive income in the investments' revaluation reserve.

3) Impairment of financial assets

The Company recognizes a loss allowance for ECLs on investments in debt instruments that are measured at amortized cost or at FVTOCI, lease receivables, trade receivables and contract assets, as well as on financial guarantee contracts. The amount of ECLs is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Company always recognizes lifetime ECL for trade receivables, contract assets and lease receivables. The ECLs on these financial assets are estimated using a provision matrix based on the Company's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current as well as the forecast direction of conditions at the reporting date, including time value of money where appropriate.

For all other financial instruments, the Company recognizes lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instrument has not increased significantly since initial recognition, the Company measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Lifetime ECL represents the ECLs that will result from all possible default events over the expected life of a financial instrument. In contrast, 12-month ECL represents the portion of lifetime ECL that is expected to result from default events on a financial instrument that are possible within 12 months after the reporting date.

3-1) Significant increase in credit risk

In assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, the Company compares the risk of a default occurring on the financial instrument at the reporting date with the risk of a default occurring on the financial instrument at the date of initial recognition. In making this assessment, the Company considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort. Forward-looking information considered includes the future prospects of the industries in which the Company's debtors operate, obtained from economic expert reports, financial analysts, governmental bodies, relevant think-tanks and other similar organizations, as well as consideration of various external sources of actual and forecast economic information that relate to the Company's core operations.

In particular, the following information is taken into account when assessing whether credit risk has increased significantly since initial recognition:

- An actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;
- Significant deterioration in external market indicators of credit risk for a particular financial instrument, for example, a significant increase in the credit spread, the credit default swap prices for the debtor or the length of time or the extent to which the fair value of a financial asset has been less than its amortized cost;
- An actual or expected significant deterioration in the operating results of the debtor;
- Existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- Significant increases in credit risk on other financial instruments of the same debtor;
- An actual or expected significant adverse change in the regulatory, economic or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

Irrespective of the outcome of the assessment above, the Company presumes that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless it has reasonable and supportable information that demonstrates otherwise.
Despite the foregoing, the Company assumes that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial instrument is determined to have low credit risk at the reporting date. A financial instrument is determined to have low credit risk if:

(1) The financial instrument has a low risk of default,
(2) The debtor has a strong capacity to meet its contractual cash flow obligations in the near term, and
(3) Adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations.

The Company considers a financial asset to have low credit risk when the asset has external credit rating of 'investment grade' in accordance with the globally understood definition or if an external rating is not available, the asset has an internal rating of 'performing.' Performing means that the counterparty has a strong financial position and there are no past-due amounts.

For financial guarantee contracts, the date that the Company becomes a party to the irrevocable commitment is considered to be the date of initial recognition for the purposes of assessing the financial instrument for impairment. In assessing whether there has been a significant increase in the credit risk since initial recognition of a financial guarantee contract, the Company considers the changes in the risk that the specified debtor will default on the contract.

The Company regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

3-2) Definition of default

The Company considers the following as constituting an event of default for internal credit risk management purposes, as historical experience indicates that the financial assets that meet either of the following criteria are generally not recoverable:

- When there is a breach of financial covenants by the debtor; or

Irrespective of the analysis above, the Company considers that default has occurred when a financial asset is more than 90 days past due, unless it has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

3-3) Credit-impaired financial assets

A financial asset is credit impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit impaired includes observable data about the following events:

(a) Significant financial difficulty of the issuer or the borrower;
(b) A breach of contract, such as a default or past due event (see (3-2) above);
(c) The lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;
(d) It is becoming probable that the borrower will enter bankruptcy or other financial reorganization; or
(e) The disappearance of an active market for that financial asset because of financial difficulties.

3-4) Write-off policy

The Company writes off a financial asset when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, for example, when the debtor has been placed under liquidation or has entered into bankruptcy proceedings, or in the case of trade receivables, when the amounts are more than two years past due, whichever occurs sooner. Financial assets written off may still be subject to enforcement activities under the Company's recovery procedures, taking into account legal advice where appropriate. Any recoveries made are recognized in profit or loss.

3-5) Measurement and recognition of ECLs

The measurement of ECLs is a function of the probability of default, loss given default (i.e., the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information as described above. As for the exposure at default, for financial assets, this is represented by the assets' gross carrying amount at the reporting date; for financial guarantee contracts, the exposure includes the amount drawn down as at the reporting date, together with any additional amounts expected to be drawn down in the future by default date determined based on historical trend, the Company's understanding of the specific future financing needs of the debtors and other relevant forward-looking information.

For financial assets, the ECL is estimated as the difference between all contractual cash flows that are due to the Company in accordance with the contract and all the cash flows that the Company expects to receive, discounted at the original effective interest rate. For a lease receivable, the cash flows used for determining the ECLs are consistent with the cash flows used in measuring the lease receivable in accordance with K-IFRS 1116 *Leases*. For a financial guarantee contract, as the Company is required to make payments only in the event of a default by the debtor in accordance with the terms of the instrument that is guaranteed, the expected loss allowance is the expected payment to reimburse the holder for a credit loss that it incurs, less any amounts that the Company expects to receive from the holder, the debtor or any other party.

If the Company has measured the loss allowance for a financial instrument at an amount equal to lifetime ECL in the previous reporting period, but determines at the current reporting date that the conditions for lifetime ECL are no longer met, it measures the loss allowance at an amount equal to 12-month ECL at the current reporting date, except for assets for which simplified approach was used.

The Company recognizes an impairment gain or loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt instruments that are measured at FVTOCI, for which the loss allowance is recognized in other comprehensive income and accumulated in the investment revaluation reserve, and does not reduce the carrying amount of the financial asset in the separate statements of financial position.

4) Derecognition of financial assets

The Company derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire or when it transfers the financial asset and, substantially, all the risks and rewards of ownership of the asset to another entity. If the Company neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, it recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Company retains substantially all the risks and rewards of ownership of a transferred financial asset, it continues to recognize the financial asset and also recognize a collateralized borrowing for the proceeds received.

On derecognition of a financial asset measured at amortized cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognized in profit or loss. In addition, on derecognition of an investment in a debt instrument classified as at FVTOCI, the cumulative gain or loss previously accumulated in the investments' revaluation reserve is reclassified to profit or loss. In contrast, on derecognition of an investment in equity instrument that the Company has elected on initial recognition to measure at FVTOCI, the cumulative gain or loss previously accumulated in the investments' revaluation reserve is not reclassified to profit or loss, but is transferred to retained earnings.

(6) Property, plant and equipment

Property, plant and equipment are stated at cost, less subsequent accumulated depreciation and accumulated impairment losses. The cost of an item of property, plant and equipment is directly attributable to its purchase or construction, which includes any costs directly attributable to bringing the asset to the location and the condition necessary for it to be capable of operating in the manner intended by management. It also includes the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent costs are recognized at the carrying amount of an asset or as an asset if it is probable that future economic benefits associated with the assets will flow to the Company and the cost of an asset can be measured reliably. Routine maintenance and repairs are expensed as incurred.

The Company does not depreciate land and some tangible assets, and depreciation is computed using the straight-line method based on the estimated useful lives of the assets as follows:

	Estimated useful lives (years)
Buildings	25–50
Structures	25
Furniture, fixtures and vehicles	5–12

The Company reviews the depreciation method; the estimated useful lives; and residual values of property, plant and equipment at the end of each annual reporting period. If expectations differ from previous estimates, the changes are accounted for as a change in accounting estimate.

An item of property, plant and equipment is derecognized upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in profit or loss in the period in which the property is derecognized.

(7) Investment property

Investment property held to earn rentals and/or for capital appreciation (including property under construction for such purposes) is measured initially at its cost, including transaction costs. Subsequent to initial recognition, investment property is measured at cost, less accumulated depreciation and accumulated impairment losses.

Subsequent costs are recognized in the carrying amount of an asset or as an asset if it is probable that future economic benefits associated with the assets will flow into the Company and the cost of an asset can be measured reliably. Routine maintenance and repairs are expensed as incurred.

Among the investment properties, land is not depreciated. However, investment properties other than land are depreciated over their useful lives of 25–50 years using the straight-line method.

The depreciation method, residual value and useful lives of investment properties are reassessed or reviewed at the end of each annual reporting period, and any changes in them are treated as change in accounting estimates.

(8) Intangible assets

1) Intangible assets acquired separately

Intangible assets acquired separately are carried at cost, less accumulated amortization and accumulated impairment losses. Intangible assets compose of intellectual property, other intangible assets and construction in progress. They are amortized using the straight-line method over five to 10 years, with no residual value. For facility rights that the Company has, there is no foreseeable limit to its use, and thus, it is deemed to have indefinite useful life and is not amortized. Intangible assets with indefinite useful lives are tested for impairment at least annually and whenever there is an indication that the asset may be impaired.

In relation to intangible assets with definite useful lives, the estimated useful life and amortization method are reviewed at the end of each annual reporting period, with the effect of any changes in estimate being accounted for as change in accounting estimates.

2) Derecognition of intangible assets

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in profit or loss when the asset is derecognized.

(9) Impairment of tangible and intangible assets other than goodwill

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). When it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise, they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever, there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value, less costs to sell and value in use. If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or the cash-generating unit) is reduced to its recoverable amount and the reduced amount is recognized in profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or the cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

(10) Investment in subsidiaries, associates and joint ventures

In accordance with K-IFRS 1027, the Company's separate financial statements are financial statements that were prepared by the parent, or the investor with joint control of, or significant influence over, an investee, and where this parent, or investor, accounts for the investments at cost. The Company chose the cost method based on K-IFRS 1027 to report investments in subsidiaries, associates and joint ventures. Dividends obtained from subsidiaries, associates and joint ventures are recognized in profit or loss when the right to receive dividends is confirmed.

(11) Financial liabilities and equity instruments

1) Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangement.

2) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognized when the proceeds are received, net of direct issue costs.

3) Financial liabilities

Financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instrument. Financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial liabilities are added to, or deducted from, the fair value of the financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial liabilities at FVTPL are recognized immediately in profit or loss.

Financial liabilities are classified as either financial liabilities measured at FVTPL or other financial liabilities.

4) Financial liabilities measured at FVTPL

Financial liabilities are classified as financial liabilities measured at FVTPL when they are contingent consideration that may be paid by an acquirer as part of a business combination to which K-IFRS 1103 applies, or they are designated as financial liabilities measured at FVTPL.

5) Other financial liabilities

Other financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs.
Other financial liabilities are subsequently measured at amortized cost using the effective interest method, with interest expense recognized on an effective yield basis.

The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

6) Financial guarantee contract liabilities

A financial guarantee contract is a contract that requires the issuer to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payments when due in accordance with the terms of a debt instrument.

Financial guarantee contract liabilities are initially measured at their fair values and, if not designated as at FVTPL, are subsequently measured at the higher of:

- The amount of the loss allowance determined in accordance with K-IFRS 1109 (see financial assets above); and
- The amount recognized initially less, where appropriate, cumulative amortization recognized in accordance with K-IFRS 1115 set out above.

7) Derecognition of financial liabilities

The Company derecognizes financial liabilities when, and only when, its obligations are discharged, canceled or they expire.

(12) Lease

The Company has chosen the cumulative catch-up approach at the date of initial application of K-IFRS 1116. Therefore, the Company does not restate the comparative information. Detailed accounting policies applied under K-IFRS 1017 and K-IFRS 1116 are as follows:

1) Accounting policy applied on or after January 1, 2019

1-1) The Company as lessee

The Company assesses whether a contract is or contains a lease, at the inception of the contract. The Company recognizes a right-of-use asset and a corresponding lease liability with respect to all lease arrangements in which it is the lessee, except for short-term leases (defined as leases with a lease term of 12 months or less) and leases of low-value assets (such as tablets and personal computers, small items of office furniture and telephones). For these leases, the Company recognizes the lease payments as an operating expense on a straight-line basis over the term of the lease, unless another systematic basis is more representative of the time pattern in which economic benefits from the leased assets are consumed.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted by using the rate implicit in the lease. If this rate cannot be readily determined, the Company uses its incremental borrowing rate.

Lease payments included in the measurement of the lease liability comprise:

- Fixed lease payments (including in-substance fixed payments), less any lease incentives receivable;
- Variable lease payments that depend on an index or rate, initially measured using the index or rate at the commencement date;
- The amount expected to be payable by the lessee under residual value guarantees;
- The exercise price of purchase options, if the lessee is reasonably certain to exercise the options; and
- Payments of penalties for terminating the lease, if the lease term reflects the exercise of an option to terminate the lease.

The lease liability is presented as a separate line in the separate statements of financial position.

The lease liability is subsequently measured by increasing the carrying amount to reflect interest on the lease liability (using the effective interest method) and by reducing the carrying amount to reflect the lease payments made.

The Company remeasures the lease liability (and makes a corresponding adjustment to the related right-of-use asset) whenever:

- The lease term has changed or there is a significant event or change in circumstances resulting in a change in the assessment of exercise of a purchase option, in which case, the lease liability is remeasured by discounting the revised lease payments using a revised discount rate.
- The lease payments change due to changes in an index or rate or a change in expected payment under a guaranteed residual value, in which case, the lease liability is remeasured by discounting the revised lease payments using an unchanged discount rate (unless the lease payments change is due to a change in a floating interest rate, in which case, a revised discount rate is used).
- A lease contract is modified and the lease modification is not accounted for as a separate lease, in which case, the lease liability is remeasured based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

The right-of-use assets comprise the initial measurement of the corresponding lease liability, lease payments made at or before the commencement day, less any lease incentives received and any initial direct costs. They are subsequently measured at cost less accumulated depreciation and impairment losses.

Whenever the Company incurs an obligation for costs to dismantle and remove a leased asset, restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease, a provision is recognized and measured under IAS 37. To the extent that the costs relate to a right-of-use asset, the costs are included in the related right-of-use asset, unless those costs are incurred to produce inventories.

Right-of-use assets are depreciated over the shorter period of lease term and useful life of the underlying asset. If a lease transfer's ownership of the underlying asset or the cost of the right-of-use asset reflects that the Company expects to exercise a purchase option, the related right-of-use asset is depreciated over the useful life of the underlying asset. The depreciation starts at the commencement date of the lease.

The right-of-use assets are presented as a separate line item in the separate statements of financial position.

The Company applies K-IFRS 1036 to determine whether a right-of-use asset is impaired and accounts for any identified impairment loss as described in the 'Property, Plant and Equipment' policy. (Note 2. (9))

Variable rents that do not depend on an index or rate are not included in the measurement of the lease liability and the right-of-use asset. The related payments are recognized as an expense in the period in which the event or the condition that triggers those payments occurs and are included in profit or loss.

As a practical expedient, K-IFRS 1116 permits a lessee not to separate non-lease components, and instead account for any lease and associated non-lease components as a single arrangement. The Company has not used this practical expedient. For contracts that contain a lease component and one or more additional lease or non-lease components, the Company allocates the consideration in the contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

1-2) The Company as lessor

Leases for which the Company is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases.

When the Company is an intermediate lessor, it accounts for the head lease and the sublease as two separate contracts. The sublease is classified as a finance or operating lease by reference to the right-of-use asset arising from the head lease.

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized on a straight-line basis over the lease term.

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized on a straight-line basis over the lease term.

When a contract includes both lease and non-lease components, the Company applies IFRS 15 to allocate the consideration under the contract to each component.

2) Accounting policy applied on or before January 1, 2019

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

2-1) The Company as lessee

Assets held under finance leases are initially recognized as assets and liabilities of the Company at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. 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. The financial charge, except in case that it is capitalized as part of the cost of that asset according to the Company's accounting for borrowing costs (see Note 2.(13)), is immediately expensed in the period in which it is incurred. Contingent rents are charged as expenses in the periods in which they are incurred.

Operating lease payments are recognized as an expense on a straight-line basis over the lease term, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed. Contingent rents for operating lease are charged as expenses in the periods in which they are incurred.

In the event that lease incentives are received to enter into operating leases, such incentives are recognized as a liability. The aggregate benefit of incentives is recognized as a reduction of rental expenses on a straight-line basis, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed.

2-2) The Company as lessor

Amounts due from lessees under finance leases are recognized as receivables at the amount of the Company's net investment in the leases. Finance lease interest income is allocated to accounting periods so as to reflect an effective interest rate on the Company's net investment outstanding in respect of the leases. Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized on a straight-line basis over the lease term.

(13) Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. Investment income earned on the temporary investment of specific borrowings, pending their expenditure on qualifying assets, is deducted from the borrowing costs eligible for capitalization. When floating interest rate borrowing is used for acquisition of qualifying asset and effective cash flow hedging of interest risks has been made, the effective portion of gain and loss from valuation of derivatives is deferred to equity and reflected in profit and loss when qualifying assets have an effect in the profit and loss of a specific period. When fixed interest rate borrowing is used for acquisition of qualifying asset and effective fair value hedging of interest risks has been made, the capitalized borrowing costs bear the hedging interest rate. All other borrowing costs are recognized in profit or loss in the period in which they are incurred.

(14) Employee benefits

For defined benefit retirement benefit plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each reporting period. Remeasurement, comprising actuarial gains and losses, the effect of the changes to the asset ceiling (if applicable) and the return on plan assets (excluding interest), is reflected immediately in the separate statements of financial position, with a charge or credit recognized in other comprehensive income in the period in which they occur. Remeasurement recognized in other comprehensive income is reflected immediately in retained earnings and will not be reclassified to profit or loss. Past service cost is recognized in profit or loss in the period of a plan amendment. Net interest is calculated by applying the discount rate at the beginning of the period to the net defined benefit liability or asset. Defined benefit costs are composed of service cost (including current service cost, past service cost, as well as gains and losses on curtailments and settlements), net interest expense (income), and remeasurement.

The Company presents the service cost and net interest expense (income) components in profit or loss, and the remeasurement component in other comprehensive income. Curtailment gains and losses are accounted for as past service costs.

The retirement benefit obligation recognized in the separate statements of financial position represents the actual deficit or surplus in the Company’s defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans.

(15) Provisions

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

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material). The discount rate used is a pretax rate that reflects current market assessments of the time value of money and the risks specific to the liability. Where discounting is used, the increase in the provision due to the passage is recognized in profit or loss as borrowing cost.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

At the end of each reporting period, the remaining provision balance is reviewed and assessed to determine if the current best estimate is being recognized. If the existence of an obligation to transfer economic benefit is no longer probable, the related provision is reversed during the period.

(16) Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable, net of value-added tax ("VAT"), returns, rebates and discounts. The Company recognizes revenue when it is reliably measurable and the inflows of future economic benefits are likely. For each type of sales, the Company recognizes revenue as follows:

1) Dividend income
Dividends are recognized as revenue when the right to dividends is determined.

2) Royalty revenue
Income from use of trademark rights is recognized on an accrual basis to reflect related contracts' economic substance.

3) Rental revenue
The Company recognizes revenue for real estate rent income according to passage of time.

4) Interest income
Interest income is recognized through passage of time by the effective interest rate method. When receivables are impaired, the book value of the receivable is reduced to collectible amount (future cash inflows discounted by initial effective interest rate of the financial asset) and increasing amount due to passage of time is recognized as interest income. Initial effective interest rate is used when recognizing interest income from such receivables.

(17) Income tax

Income tax expense consists of current tax and deferred tax.

1) Current tax payable

The current tax is computed based on the taxable profit for the year. The taxable profit differs from the profit for the period as reported in the separate statements of comprehensive income because it excludes items of income or expenses that are taxable or deductible in other years, and it further excludes items that are never taxable or deductible. The Company's liability for current tax expense is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

2) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the separate financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset if, and only if, the Company has a legally enforceable right to set off current tax assets against current tax liabilities and the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities that intend either to settle current tax liabilities and assets on a net basis or to realize the assets and settle the liabilities simultaneously in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

For the purpose of measuring deferred tax liabilities and deferred tax assets for investment properties that are measured using the fair value model, the carrying amounts of such properties are presumed to be recovered entirely through sale, unless the presumption is rebutted. The presumption is rebutted when the investment property is depreciable and is held within a business model, whose objective is to consume substantially all of the economic benefits embodied in the investment properties over time, rather than through sale.

3) Recognition of current tax payable and deferred tax

Current and deferred taxes are recognized in profit or loss, except for those related to items other than profit or loss, such as other comprehensive income (loss) or items recognized directly in equity (current taxes and deferred taxes are both recognized in items other than profit or loss) of same or different accounting periods or items arising from initial accounting treatments of a business combination. For business combinations, income tax effects are considered when measuring goodwill or determining the Company's shares in fair value of acquiree's identifiable assets, liabilities and contingent liabilities that exceed cost of business combination.

(18) Treasury stock

When the Company repurchases its equity instruments (treasury stock), the incremental costs that increase in relation to capital transactions, net of tax effect, are deducted from the shareholders' equity and recognized as other capital items deducted from the total equity in the separate statements of financial position. In addition, profits or losses from purchase, sale or retirement of treasury stocks are directly recognized in shareholders' equity and not in current profit or loss.

(19) Fair Value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Company takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these separate financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of K-IFRS 1102, *Share-Based Payment;* leasing transactions that are within the scope of K-IFRS 1017, *Leases;* and measurements that have some similarities to fair value, but are not fair value, such as net realizable value in K-IFRS 1002, *Inventories;* or value in use in K-IFRS 1036, *Impairment of Assets*.

In addition, for financial reporting purposes, fair value measurements are categorized into Levels 1, 2 or 3, based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

• Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.
• Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly.
• Level 3 inputs are unobservable inputs for the asset or liability.

3. SIGNIFICANT CONSIDERATION AND MAJOR SOURCES OF ESTIMATION UNCERTAINTIES:

In the application of the Company's accounting policies, which are described in Note 2, management is required to make judgments, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and associated assumptions are based on historical experience and other factors that are considered to be relevant. Actual results may differ from those estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period or in the period of the revision and future periods if the revision affects both current and future periods.

(1) Key sources of estimation uncertainty

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

1) Defined Benefit Plan

The Company operates the defined benefit plan. Actuarial assumptions are the Company's best estimates of the variables in determining the cost of providing postretirement benefits such as discount rates, rates of expected future salary increases and mortality rates. Significant estimation uncertainty is likely to persist in making such assumptions due to the long-term nature of postretirement benefit plan. At the end of this year, defined benefit liability of the plan is ₩30,683 million (prior year ₩33,834 million), as detailed in Note 12.

2) Impairment test

The recoverable amount of cash-generating unit to review the impairment is determined based on the calculation of value in use or fair value less costs to sell. These calculations are based on future estimates.

4. SEGMENT INFORMATION:

The Company has only one operating segment in accordance with K-IFRS 1108, *Operating Segments*, from entire Company's perspective. Operating segment information for the years ended December 31, 2019 and 2018, is as follows:

1) Operating income information (Unit: Korean won in millions)

Sectors	Year ended December 31, 2019	Year ended December 31, 2018
Dividend revenue	₩ 476,247	₩ 368,202
Royalty revenue	270,550	270,069
Rent revenue	127,875	118,925
Total	₩ 874,672	₩ 757,196

2) Regional information

The Company's operating income is all derived from domestic business, and all of its non-current assets are located in South Korea.

3) Major client information

Operating income from major clients that cover more than 10% of operation income for the years ended December 31, 2019 and 2018, is ₩516,022 million and ₩490,986 million, respectively.

5. CLASSIFICATION OF FINANCIAL INSTRUMENTS AND FAIR VALUE:

Carrying amount and fair value of financial assets and liabilities as of December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

1) Financial assets

Financial assets	Account	December 31, 2019		December 31, 2018	
		Carrying amount	Fair value	Carrying amount	Fair value
Cash and cash equivalents	Cash and cash equivalents	₩ 150,273	₩ 150,273	₩ 132,903	₩ 132,903
Financial assets measured at FVTPL	Equity investment	1,000	1,000	1,000	1,000
	Subtotal	1,000	1,000	1,000	1,000
Financial assets measured at FVTOCI	Marketable equity securities	37,683	37,683	33,818	33,818
	Unmarketable equity securities	60,257	60,257	62,516	62,516
	Subtotal	97,940	97,940	96,334	96,334
Financial liabilities measured at amortized cost	Financial institution deposits	500,500	500,500	250,500	250,500
	Other accounts receivable	33,545	33,545	8,620	8,620
	Accrued income	1,894	1,894	1,110	1,110
	Deposits	499	499	499	499
	Subtotal	536,438	536,438	260,729	260,729
	Total	₩ 785,651	₩ 785,651	₩ 490,966	₩ 490,966

2) Financial liabilities

Financial liabilities	Account	December 31, 2019		December 31, 2018	
		Carrying amount	Fair value	Carrying amount	Fair value
Financial liabilities measured at amortized cost	Other accounts payable	₩ 49,390	₩ 49,390	₩ 44,147	₩ 44,147
	Accrued expenses	637	637	2,605	2,605
	Accrued dividends	360	360	341	341
	Deposits received	84,556	84,556	76,234	76,234
Lease liabilities		877	877	-	-
	Total	₩ 135,820	₩ 135,820	₩ 123,327	₩ 123,327

6. CASH AND CASH EQUIVALENTS:

The cash and cash equivalents in the separate statements of cash flows are the same as the cash and cash equivalents in the separate statements of financial position. Details of cash and cash equivalents as of December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	December 31, 2019		December 31, 2018	
Cash	₩	3	₩	10
Bank deposits		10		50,005
Other cash equivalents		150,260		82,888
Total	₩	150,273	₩	132,903

7. ACCOUNTS RECEIVABLE AND OTHER RECEIVABLES:

As of December 31, 2019 and 2018, accounts receivable and other receivables are not impaired or overdue. Details are as follows (Unit: Korean won in millions):

	December 31, 2019				December 31, 2018			
Description	Current		Non-current		Current		Non-current	
Accounts receivable	₩	33,545	₩	-	₩	8,620	₩	-
Accrued income		1,894		-		1,110		-
Deposits		494		5		-		499
Total	₩	35,933	₩	5	₩	9,730	₩	499

(*) Accounts receivable and other receivables are measured as whole period expected credit losses in accordance with the K-IFRS 1109 at the end of the current term, and there is no additional loss allowance to be reflected accordingly.

8. OTHER ASSETS:

Details of other assets as of December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

	December 31, 2019				December 31, 2018			
Description	Current		Non-current		Current		Non-current	
Advance payments	₩	-	₩	2,789	₩	-	₩	3,081
Prepaid expenses		3,175		-		4,485		-
Total	₩	3,175	₩	2,789	₩	4,485	₩	3,081

9. PROPERTY, PLANT AND EQUIPMENT AND INVESTMENT PROPERTY:

(1) Changes in acquisition cost of property, plant and equipment and investment property for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

	Year ended December 31, 2019										
	Property, plant and equipment						Investment property				
Description	Land	Buildings	Structures	Vehicles	Furniture and fixtures	Construction in progress	Land	Buildings	Structures	Construction in progress	Total
Beginning balance	₩ 6,883	₩20,903	₩ 461	₩15,816	₩ 8,683	₩ -	₩380,935	₩ 537,076	₩ 9,290	₩ -	₩ 980,047
Acquisition	-	-	-	2,954	2,179	-	89,874	54,405	-	-	149,412
Disposals	-	-	-	(44)	-	-	(6,911)	(61)	-	-	(7,016)
Transfers in	5,637	2,193	-	-	-	-	-	-	34	-	7,864
Transfers out	-	-	(34)	-	-	-	(5,637)	(2,193)	-	-	(7,864)
Ending balance	₩12,520	₩23,096	₩ 427	₩18,726	₩ 10,862	₩ -	₩458,261	₩ 589,227	₩ 9,324	₩ -	₩1,122,443

	Year ended December 31, 2018										
	Property, plant and equipment						Investment property				
Description	Land	Buildings	Structures	Vehicles	Furniture and fixtures	Construction in progress	Land	Buildings	Structures	Construction in progress	Total
Beginning balance	₩ 6,666	₩19,686	₩ 434	₩13,690	₩ 8,080	₩ 2,010	₩381,152	₩ 536,909	₩ 8,727	₩ -	₩ 977,354
Acquisition	-	-	-	21	603	529	-	1,384	590	-	3,127
Disposals	-	-	-	(434)	-	-	-	-	-	-	(434)
Transfers in	217	1,217	27	2,539	-	-	-	-	-	-	4,000
Transfers out	-	-	-	-	-	(2,539)	(217)	(1,217)	(27)	-	(4,000)
Ending balance	₩ 6,883	₩20,903	₩ 461	₩15,816	₩ 8,683	₩ -	₩380,935	₩ 537,076	₩ 9,290	₩ -	₩ 980,047

(2) Changes in accumulated depreciation for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

	Year ended December 31, 2019						
	Property, plant and equipment				Investment property		
Description	Buildings	Structures	Vehicles	Furniture and fixtures	Buildings	Structures	Total
Beginning balance	₩ 7,451	₩ 252	₩ 3,320	₩ 5,417	₩ 150,326	₩ 4,072	₩ 170,838
Disposals	-	-	(16)	-	(14)	-	(30)
Transfers in	-	-	-	-	515	19	534
Transfers out	(515)	(19)	-	-	-	-	(534)
Depreciation	733	17	1,700	897	18,694	333	22,374
Ending balance	₩ 7,669	₩ 250	₩ 5,004	₩ 6,314	₩ 169,521	₩ 4,424	₩ 193,182

	Year ended December 31, 2018						
	Property, plant and equipment				Investment property		
Description	Buildings	Structures	Vehicles	Furniture and fixtures	Buildings	Structures	Total
Beginning balance	₩ 6,461	₩ 221	₩ 2,205	₩ 4,565	₩ 134,126	₩ 3,753	₩ 151,331
Disposals	-	-	(257)	-	-	-	(257)
Transfers in	360	14	-	-	-	-	374
Transfers out	-	-	-	-	(360)	(14)	(374)
Depreciation	630	17	1,372	852	16,560	333	19,764
Ending balance	₩ 7,451	₩ 252	₩ 3,320	₩ 5,417	₩ 150,326	₩ 4,072	₩ 170,838

(3) Details of valuation with fair value of investment property as of December 31, 2019, are as follows (Unit: Korean won in millions):

Description	Date of revaluation	Land	Buildings and structures	Total
Book value of investment property:				
Book value (*1)		₩ 467,747	₩ 439,437	₩ 907,184
Result of valuation:				
Twin tower (*2)	2019-11-12	627,750	302,250	930,000
Gasandong building	2019-11-12	95,402	104,603	200,005
Gwanghwamun building	2019-10-23	241,060	98,940	340,000
Buho building	2019-11-12	22,935	1,227	24,162
Seoul-station building(*3)	2019-10-23	226,845	128,155	355,000
Total		₩ 1,213,992	₩ 635,175	₩ 1,849,167

(*1) It includes the valuation amounts related to its own use (Book value: ₩24,316 million).
(*2) During the current period, the Company acquired all remaining stake in the building from LG international Co., Ltd.
(*3) Acquisition cost was considered as market value.

Fair value assessment was performed by an independent third party, Nara Appraisal Co., Ltd.

The fair value of investment property is classified as Level 3, based on the input variables that are used in the valuation method.

The valuation method for measurement of fair value is the method of discounted cash flow, so the fair value of investment property is measured by the discounted present value that the net cash flow from the investment property is discounted by the discount rate of risk adjustment by reflecting the cost in relation to rental promotion, such as estimated success rate of rental market, vacant period, rental rate, free rental period and other costs that the lessee does not pay. Main input variables that are significant for measuring the fair value, but not observable, are estimated success rate of rental market, vacant rate, free rental period and discount rate of risk adjustment.

In addition, rental income related to investment property during this period is ₩127,875 million.

10. INTANGIBLE ASSETS:

(1) Composition of the Company's intangible assets as of December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

Description	December 31, 2019						December 31, 2018					
	Intellectual property rights		Membership		Other		Intellectual property rights		Membership		Other	
Acquisition cost	₩	17,991	₩	9,876	₩	7,598	₩	16,776	₩	9,582	₩	7,012
Accumulated depreciation		(11,715)		-		(5,718)		(10,555)		-		(5,021)
Accumulated impairment		-		(666)		-		-		(666)		-
Carrying amounts	₩	6,276	₩	9,210	₩	1,880	₩	6,221	₩	8,916	₩	1,991

(2) Changes in intangible assets for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019							
	Intellectual property rights		Membership		Other		Total	
Beginning balance	₩	6,221	₩	8,916	₩	1,991	₩	17,128
Acquisition		-		389		586		975
Disposal		-		(95)		-		(95)
Transfers in (out)		1,215		-		-		1,215
Amortization		(1,160)		-		(697)		(1,857)
Ending balance	₩	6,276	₩	9,210	₩	1,880	₩	17,366

Description	Year ended December 31, 2018							
	Intellectual property rights		Membership		Other		Total	
Beginning balance	₩	6,318	₩	8,392	₩	2,371	₩	17,081
Acquisition		-		524		402		926
Transfers in (out)		982		-		-		982
Amortization		(1,079)		-		(782)		(1,861)
Ending balance	₩	6,221	₩	8,916	₩	1,991	₩	17,128

11. INVESTMENTS IN SUBSIDIARIES, ASSOCIATES AND JOINT VENTURES:

(1) Composition of the Company's investments in subsidiaries as of December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

	December 31, 2019						
Companies	Location of incorporation	Major operation	Closing date	Percentage of ownership (%)	Percentage of ownership (common stock) (%)	Book value	
LG CNS Co., Ltd. (*1)	South Korea	Services	12-31	84.95	84.95	₩	194,355
S&I Corporation Co., Ltd.(*2)	South Korea	Renting	12-31	100.00	100.00		250,054
LG Sports Ltd.	South Korea	Services	12-31	100.00	100.00		106,097
LG Management Development Institute	South Korea	Research and development	12-31	100.00	100.00		17,203
LG Holdings Japan Co., Ltd.	Japan	Renting	12-31	100.00	100.00		191,080
LG Corp. U.S.A.(*3)	U.S.A	Renting	12-31	-	-		-
		Total				₩	758,789

	December 31, 2018						
Companies	Location of incorporation	Major operation	Closing date	Percentage of ownership (%)	Percentage of ownership (common stock) (%)	Book value	
LG CNS Co., Ltd. (*1)	South Korea	Services	12-31	84.95	84.95	₩	330,533
S&I Corporation Co., Ltd.(*2)	South Korea	Renting	12-31	100.00	100.00		250,054
LG Sports Ltd.	South Korea	Services	12-31	100.00	100.00		106,097
LG Management Development Institute	South Korea	Research and development	12-31	100.00	100.00		17,203
LG Holdings Japan Co., Ltd.	Japan	Renting	12-31	100.00	100.00		191,080
LG Corp. U.S.A.(*3)	U.S.A	Renting	12-31	100.00	100.00		163,925
		Total				₩	1,058,892

(*1) Under the contract for the sale of the stock, the book value of ₩136,178 million, which is equivalent to 35% based on the total number of shares issued, has been classified as held for sale.

(*2) During the previous period, S&I Corporation (formerly, Serveone Co., Ltd) conducted physical division to divide Servone Co., Ltd. and changed its name.

(*3) In the current period, it was sold.

(2) Composition of the Company's investments in associates and joint ventures as of December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

	December 31, 2019						
Companies	Location of incorporation	Major operation	Closing date	Percentage of ownership (%)	Percentage of ownership (common stock) (%)	Book value	
LGEI	South Korea	Manufacturing	12-31	30.47	33.67	₩	2,804,603
LG Chem Ltd.	South Korea	Manufacturing	12-31	30.06	33.34		1,621,178
LG Hausys, Ltd.	South Korea	Manufacturing	12-31	30.07	33.53		183,828
LG Household & Health Care Ltd.	South Korea	Manufacturing	12-31	30.00	34.03		141,608
LG Uplus Corp.	South Korea	Telecommunications	12-31	36.05	36.05		1,162,048
GIIR Corporation	South Korea	Hoardings	12-31	35.00	35.00		39,496
LG Hitachi Co., Ltd.	South Korea	Services	12-31	49.00	49.00		14,023
LG MMA Corp. (*1)	South Korea	Manufacturing	12-31	50.00	50.00		115,350
LG Fuel Cell System Inc. (*2)	America	Research and experimental development	12-31	-	-		-
Silicon Works Co., Ltd.	South Korea	Manufacturing	12-31	33.08	33.08		145,004
LG international Co., Ltd.	South Korea	Commodities brokerage	12-31	24.69	24.69		296,741
ZKW Holding GmbH (*3)	Austria	Manufacturing	12-31	30.00	30.00		404,713
MGIV GmbH (*3)	Austria	Manufacturing	12-31	30.00	30.00		15,289
		Total				₩	6,943,881

	December 31, 2018						
Companies	Location of incorporation	Major operation	Closing date	Percentage of ownership (%)	Percentage of ownership (common stock) (%)	Book value	
LGEI	South Korea	Manufacturing	12-31	30.47	33.67	₩	2,804,603
LG Chem Ltd.	South Korea	Manufacturing	12-31	30.06	33.34		1,621,178
LG Hausys, Ltd.	South Korea	Manufacturing	12-31	30.07	33.53		183,828
LG Household & Health Care Ltd.	South Korea	Manufacturing	12-31	30.00	34.03		141,608
LG Uplus Corp.	South Korea	Telecommunications	12-31	36.05	36.05		1,162,048
GIIR Corporation	South Korea	Hoardings	12-31	35.00	35.00		39,496
LG Hitachi Co., Ltd.	South Korea	Services	12-31	49.00	49.00		14,023
LG MMA Corp. (*1)	South Korea	Manufacturing	12-31	50.00	50.00		115,350
LG Fuel Cell System Inc. (*2)	America	Research and experimental development	12-31	15.56	15.56		-
Silicon Works Co., Ltd.	South Korea	Manufacturing	12-31	33.08	33.08		145,004
LG international Co., Ltd.	South Korea	Commodities brokerage	12-31	24.69	24.69		296,741
ZKW Holding GmbH (*3)	Austria	Manufacturing	12-31	30.00	30.00		404,713
MGIV GmbH (*3)	Austria	Manufacturing	12-31	30.00	30.00		15,289
		Total				₩	6,943,881

(*1) It is a joint venture.
(*2) In the current period, it was liquidated. On the other hand, the book value was completely impaired during the prior period.
(*3) In the prior period, it was acquired.

12. RETIREMENT BENEFIT PLAN:

The Company operates a defined benefit plan for its employees, and according to the plan, the employees will be paid his or her average salary amount of the final three months multiplied by the number of years vested, adjusted for payment rate and other. The actuarial valuation of plan assets and the defined benefit liability is performed by Aon Hewitt, which is a reputable actuary, using the projected unit credit method.

(1) As of December 31, 2019 and 2018, amounts recognized in the separate statements of financial position related to retirement benefit obligation are as follows (Unit: Korean won in millions):

Description	December 31, 2019		December 31, 2018	
Present value of defined benefit obligation	₩	30,683	₩	33,834
Fair value of plan assets		(24,780)		(29,986)
Net defined benefit liability	₩	5,903	₩	3,848

(2) Changes in defined benefit obligation for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019		Year ended December 31, 2018	
Beginning balance	₩	33,834	₩	51,275
Current service cost		3,507		3,557
Interest cost		760		1,302
Remeasurement on the net defined benefit liability		3,326		1,402
Benefits paid		(12,234)		(21,607)
Other		1,490		(2,095)
Ending balance	₩	30,683	₩	33,834

(3) Income and loss related to defined benefit plan for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019		Year ended December 31, 2018	
Service cost	₩	3,507	₩	3,557
Current service cost		3,507		3,557
Net interest on the net defined benefit liability (asset)		90		324
Interest cost on defined benefit obligation		760		1,302
Comprising interest on plan assets		(670)		(978)
Operational management fee on plan assets		50		81
Total	₩	3,647	₩	3,962

(4) Changes in plan assets for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019	Year ended December 31, 2018
Beginning balance	₩ 29,986	₩ 39,041
Comprising interest on plan assets	670	978
Remeasurement-return on plan assets	(192)	(384)
Benefits paid	(12,234)	(16,068)
Contributions from the employer	6,600	6,500
Operational management fee on plan assets	(50)	(81)
Ending balance	₩ 24,780	₩ 29,986

(5) All of the plan assets are mainly invested in financial instruments that guarantee principal and interest rate as of December 31, 2019 and 2018.

(6) Actuarial assumptions used as of December 31, 2019 and 2018, are as follows:

Description	December 31, 2019	December 31, 2018
Discount rate (%)	2.22	2.34
Expected rate of salary increase (%)	5.29	5.67

(7) The sensitivity analysis of the defined benefit obligation as of December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

	Year ended December 31, 2019		
Description	Center scenario	+ 1%	- 1%
Change in discount rate	₩ 30,683	₩ 28,125	₩ 33,650
Change in rate of salary increase	30,683	33,692	28,045

(*)The above sensitivity is estimated based on the assumption that not all the assumptions will change, except for discount rate and rate of salary increase.

	Year ended December 31, 2018		
Description	Center scenario	+ 1%	- 1%
Change in discount rate	₩ 33,834	₩ 32,074	₩ 35,814
Change in rate of salary increase	33,834	35,737	32,104

(*) The above sensitivity is estimated based on the assumption that not all the assumptions will change, except for discount rate and rate of salary increase.

(8) Remeasurement related to net defined benefit liability for the years ended December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019		Year ended December 31, 2018	
Actuarial gains arising from changes in demographic assumptions	₩	1,144	₩	85
Actuarial gains (losses) arising from changes in financial assumptions		(421)		(2)
Actuarial gains arising from experience		331		1,805
Return on plan assets, excluding amounts included in interest income		192		384
Actuarial gains (losses) arising from transfer in/out adjustment		2,272		(486)
Total	₩	3,518	₩	1,786

Meanwhile, the Company deducted ₩(851) million arising from income tax effect for actuarial gain (loss) during the current period.

(9) Estimated contribution that will be paid in the next fiscal year is as follows (Unit: Korean won in millions):

	2020	
Estimated contributions to plan assets	₩	4,202

13. OTHER LIABILITIES:

Other liabilities as of December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	December 31, 2019				December 31, 2018			
	Current		Non-current		Current		Non-current	
Advances from lease	₩	-	₩	4,862	₩	-	₩	5,218
VAT withheld		5,523		-		6,703		-
Withholdings		1,466		-		492		-
Total	₩	6,989	₩	4,862	₩	7,195	₩	5,218

14. ISSUED CAPITAL:

Details of issued capital as of December 31, 2019, are as follows (Unit: Korean won in millions):

Type of stock	Number of authorized shares	Number of issued shares	Number of shares owned by related party	Par value (in Korean won)		Amount of issued capital	
Common stock	700,000,000	172,557,131	79,633,446	₩	5,000	₩	862,786
Preferred stock (*)	-	3,314,677	-		5,000		16,573

(*) Preferred stocks are stocks without voting rights that are eligible for additional 1% based on face value of the stock compared to common stocks when receiving cash dividends. In case of no dividend payout, it is granted voting rights for the period from the shareholders' meeting that resolved not to pay to the shareholders to the meeting that resolved to pay dividends.

The Company has 93,789 shares of common stock and 6,810 shares of preferred stock as of December 31, 2019 and 2018, respectively. The carrying amounts of common stock and preferred stock are ₩2,334 million and ₩51 million, respectively.

15. CAPITAL SURPLUS:

Composition of the Company's capital surplus as of December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

Description	December 31, 2019		December 31, 2018	
Paid-up capital in excess of par value	₩	898,266	₩	898,266
Assets' revaluation reserves		338,100		338,100
Other capital surplus		1,172,636		1,172,636
Total	₩	2,409,002	₩	2,409,002

16. ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS):

(1) Composition of accumulated other comprehensive income (loss) as of December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

Description	December 31, 2019		December 31, 2018	
Gain on valuation of AFS financial assets	₩	37,074	₩	35,857

(2) Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019		Year ended December 31, 2018	
Beginning balance	₩	35,857	₩	41,099
Changes in valuation of AFS financial assets		1,606		(6,916)
Related income tax		(389)		1,674
Ending balance	₩	37,074	₩	35,857

17. RETAINED EARNINGS:

(1) Composition of retained earnings as of December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

Description	December 31, 2019		December 31, 2018	
Retained earnings restricted to appropriation (*)	₩	337,318	₩	302,147
Retained earnings subject to appropriation		5,666,377		5,474,761
Total	₩	6,003,695	₩	5,776,908

(*) As it is classified as legal reserve according to commercial law, appropriation is restricted, except for transferring to capital stock or using to reduce accumulated deficit.

(2) Changes in retained earnings for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019		Year ended December 31, 2018	
Beginning balance	₩	5,776,908	₩	5,454,267
Profit for the year		581,161		552,662
Dividends		(351,707)		(228,668)
Remeasurement on the net defined benefit liability		(2,667)		(1,353)
Ending balance	₩	6,003,695	₩	5,776,908

(3) Separate statements of appropriation of retained earnings for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

	Korean won	
	Year ended December 31, 2019	Year ended December 31, 2018
UNAPPROPRIATED RETAINED EARNINGS:		
Unappropriated retained earnings carried over from prior year	₩ -	₩ -
Profit for the year	581,161	552,662
Actuarial gains and losses on defined benefit plans	(2,667)	(1,353)
	578,494	551,309
APPROPRIATION:		
Legal reserve	38,686	35,171
Dividends	386,862	351,708
Other reserve	152,946	164,430
	578,494	551,309
UNAPPROPRIATED RETAINED EARNINGS CARRIED FORWARD TO SUBSEQUENT YEAR	₩ -	₩ -

(4) The amount of dividends and dividends per share for the years ended December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

	December 31, 2019				
Type of stock	Number of issued shares	Number of treasury stocks	Number of stocks eligible for dividend	Dividend per share (Korean won)	Total dividend
Common stock	172,557,131	93,789	172,463,342	₩ 2,000	₩ 344,927
Preferred stock	3,314,677	6,810	3,307,867	2,050	6,781

	December 31, 2018				
Type of stock	Number of issued shares	Number of treasury stocks	Number of stocks eligible for dividend	Dividend per share (Korean won)	Total dividend
Common stock	172,557,131	93,789	172,463,342	₩ 1,300	₩ 224,202
Preferred stock	3,314,677	6,810	3,307,867	1,350	4,466

18. OPERATING INCOME:

Operating income for the years ended December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

	Year ended December 31, 2019		Year ended December 31, 2018	
Operating income:				
Dividends revenue	₩	476,247	₩	368,202
Royalties revenue		270,550		270,069
Rental revenue		127,875		118,925
		874,672		757,196
Operating expenses:				
Employee benefit:				
Salaries and wages		40,414		31,905
Severance benefits		3,606		3,893
Welfare		4,144		6,240
		48,164		42,038
Depreciation:		22,974		19,762
Other operating expenses:				
Amortization of intangible assets		1,856		1,861
Taxes and dues		7,322		5,786
Advertising expenses		79,432		72,140
Training expenses		981		982
Commission		50,217		53,433
Insurance premium		1,293		727
Operating lease expense		213		659
Other selling and administrative expenses		18,425		13,506
		159,739		149,094
Net operating income	₩	643,795	₩	546,302

19. FINANCIAL INCOME AND FINANCIAL EXPENSES:

(1) Financial income consists of interest income, the details of which, for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019	Year ended December 31, 2018
Interest income	₩ 8,293	₩ 9,965
Gain on financial warranty	358	168
Gain on foreign currency transaction and translation	739	1,534
Total	₩ 9,390	₩ 11,667

(2) Financial expenses for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019	Year ended December 31, 2018
Interest expense	₩ 381	₩ 333
Loss on foreign currency transaction and translation	523	916
Total	₩ 904	₩ 1,249

(3) Net gain (loss) from financial instruments for the years ended December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019	Year ended December 31, 2018
Financial assets:		
Other financial assets (*1)	₩ 2,180	₩ (3,823)
Financial assets measured at amortized cost (*2)	8,293	10,583
Subtotal	10,473	6,760
Financial liabilities:		
Financial liabilities measured at amortized cost	(357)	(333)
Other financial liabilities	(24)	-
Subtotal	(381)	(333)
Total	₩ 10,092	₩ 6,427

(*1) It includes dividend income and valuation gain or loss recognized in other comprehensive income.
(*2) It includes net income (loss) incurred from cash and cash equivalents and financial institution deposits.

20. INCOME TAX:

(1) Composition of income tax expense for the years ended December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019		Year ended December 31, 2018	
Current income tax payable	₩	51,039	₩	86,951
Adjustment for prior corporate taxes		4		852
Changes in deferred tax assets:		25,116		(86,505)
Beginning deferred tax assets due to temporary differences		(63,148)		(146,348)
Beginning deferred assets as held for sale due to temporary differences		-		(5,415)
Ending deferred tax assets due to temporary differences		(68,443)		(63,152)
Ending assets held for sale due to temporary differences		(19,358)		-
Deferred taxes directly reflected in equity		463		2,106
Income tax expense	₩	76,159	₩	1,298

(2) A reconciliation between accounting income before income tax and income tax expense of the Company for the years ended December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019		Year ended December 31, 2018	
Income before income tax expense	₩	657,320	₩	553,960
Tax expense calculated on book income		154,910		129,068
Adjustments:		(78,751)		(127,770)
Non-taxable income		(121,185)		(73,005)
Non-deductible expenses		991		12,402
Adjustment for prior corporate taxes		4		852
Others (differences due to the tax rates, etc.)		41,439		(68,019)
Income tax expense	₩	76,159	₩	1,298

(3) Income tax directly reflected in equity for the years ended December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019		Year ended December 31, 2018	
Revaluation of other financial assets	₩	(388)	₩	1,674
Remeasurement of defined benefit obligation		851		432
Total deferred tax directly reflected in equity	₩	463	₩	2,106

(4) Changes in deferred tax assets (liabilities) for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

	Year ended December 31, 2019									
Description		Beginning balance		Reflected in income (loss)		Reflected in equity		Replaced		Ending balance
Temporary differences:										
Investments in subsidiaries and associates	₩	(61,133)	₩	(29,650)	₩	-	₩	19,358	₩	(71,425)
Property, plant and equipment		15,154		1,617		-		-		16,771
Intangible assets		169		(8)		-		-		161
Other financial assets		(6,411)		-		(388)		-		(6,799)
Provisions		953		(726)		851		-		1,078
Other financial liabilities		2,638		10		-		-		2,648
Others		(14,518)		3,641		-		-		(10,877)
Deferred tax assets (liabilities)	₩	(63,148)	₩	(25,116)	₩	463	₩	19,358	₩	(68,443)

	Year ended December 31, 2018									
Description		Beginning balance		Reflected in income (loss)		Reflected in equity		Replaced		Ending balance
Temporary differences:										
Investments in subsidiaries and associates	₩	(143,433)	₩	87,715	₩	-	₩	(5,415)	₩	(61,133)
Property, plant and equipment		13,762		1,312		-		-		15,074
Intangible assets		179		(10)		-		-		169
Other financial assets		(8,085)		-		1,674		-		(6,411)
Provisions		1,446		(925)		432		-		953
Other financial liabilities		3,727		(1,089)		-		-		2,638
Others		(13,944)		(498)		-		-		(14,442)
Deferred tax assets (liabilities)	₩	(146,348)	₩	86,505	₩	2,106	₩	(5,415)	₩	(63,152)

(5) As of December 31, 2019, the details of deferred tax liabilities related to assets held for sales are as follows (Unit: Korean won in millions):

Description		December 31, 2019
Liabilities related to assets held for sale(*)	₩	(19,358)

(*) In accordance with the contract for the sale of the stake in LG CNS Co., Ltd. in the current term, the temporary difference corresponding to the ratio of the stake in the sale (35% based on the total number of shares issued) is recognized as a deferred tax liability. Meanwhile, deferred tax liabilities related to the sale of shares in LG CNS Co., Ltd. were replaced by liabilities related to assets held for sale.

(6) As of December 31, 2019, temporary differences not recognized as deferred tax assets (liabilities) related to investment asset and equity interest are as follows (Unit: Korean won in millions):

Description		December 31, 2019
Investments in subsidiaries	₩	(326,054)
Investments in associates and joint ventures		1,354,973
Total	₩	1,028,919

21. EARNINGS PER SHARE:

(1) Net income per share for the years ended December 31, 2019 and 2018, is as follows:

	Year ended December 31, 2019		Year ended December 31, 2018	
Basic earnings per share of common share	₩	3,305	₩	3,143
Basic earnings per share of Pre-1996 Commercial Law Amendment preferred share (*)		3,355		3,193

(*) Basic earnings per share are calculated for preferred share, which K-IFRS 1033 *Earnings per Share* clarify as common share, such as having no priority rights for dividend of profit and distribution of residual property.

(2) Net income and weighted-average number of shares used to calculate earnings per share of common share for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019		Year ended December 31, 2018	
Profit for the year attributable to owners of the Company	₩	581,161	₩	552,662
Less dividends for Pre-1996 Commercial Law Amendment preferred share and preferred stock portion of residual profit		(11,099)		(10,563)
Net income used to calculate basic earnings per share of common share	₩	570,062	₩	542,099
Weighted-average number of common shares		172,463,342 shares		172,463,342 shares

(3) Net income and weighted-average number of shares used to calculate earnings per share of Pre-1996 Commercial Law Amendment preferred share for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019		Year ended December 31, 2018	
Dividends for preferred share and preferred stock portion of residual profit	₩	11,099	₩	10,563
Net income used to calculate basic earnings per share of preferred share		11,099		10,563
Weighted-average number of preferred shares		3,307,867 shares		3,307,867 shares

(4) As there are no potential common shares of the Company, diluted earnings per share of common shares and preferred shares are equal to basic earnings per share.

(5) Effects of changes in accounting policies (Unit: Korean won in millions):

Description	Current Year	
Effects of K-IFRS 16 on continued operating profits	₩	(7)
Effects of continued operations on basic earnings per share of common share		-
Effects of continued operation on diluted earnings per share of common share		-

22. RELATED-PARTY TRANSACTIONS:

(1) Details of related parties as of December 31, 2019 and 2018, are as follows:

December 31, 2019

Companies with direct ownership	Companies with direct ownership's subsidiaries (domestic) (*1)	Companies with direct ownership's subsidiaries (overseas) (*1)	Companies with direct ownership's associates
Subsidiaries:			
LG CNS Co., Ltd.	Haengbokmaru Co., Ltd.	LG CNS China, Inc. and 13 others	T-money Co., Ltd(*2)
	Biztechpartners Co., Ltd.		T-money CSP Co., Ltd(*2)
	Sejong Green Power Co., Ltd		T-money Asia sdn bhd (T MONEY MALAYSIA SDN BHD)
	Open Source Consulting Co., Ltd (*3)		Songdo U-Life LLC.
			U Life Solutions
			Songdo International Sports Club LLC.
			Recaudo Bogota S.A.S.
			Hellas SmarTicket Societe Anonyme
			Ulaanbaatar Smart card Co, LLC
			Ulleungdo Natural Energy Independent Island Co., Ltd
			Daegu clean energy Co., Ltd.
			SMDep Co., Ltd.
			KEPCO-LG CNS Mangilao Solar LLC
			Mangilao Investment LLC
			KEPCO-LG CNS Mangilao Solar LLC
			Mangilao Intermediate Holdings LLC(*5)
S&I Corporation Co., Ltd.	Konjiam Yewon Co., Ltd.	S&I Vietnam Construction Co., Ltd and 2 Others	Dongnam Solar Energy Co., Ltd.
	Mirae M Co., Ltd.	S&I CM NANJING and 2 Others (*5)	Serveone Co., Ltd.(*6)
	Dream nuri Co., Ltd.		SERVEONE(Nanjing).Co., LTD (*7)
	S&I CM (*4)		SERVEONE(Guangzhou) Co., Ltd(*7)
			SERVEONE VIETNAM Co., Ltd(*7)
			Serveone Europe Sp. z o.o.(*7)
LG Management Development Institute			
LG Sports Ltd.			
LG Holdings Japan Co., Ltd.			Combustion Synthesis Co., LTD.
Associates:			
LGEI	Hi Plaza Inc.	LG Electronics Mexico S.A. DE C.V. and others	
	Hi-M Solutec Co., Ltd.		
	HITeleservice Co., Ltd.		
	Ace R&D Co., Ltd.		
	LG innotek Co., Ltd.		
	Innowith Co., Ltd.		
	Hanuri Co., Ltd.		
	LG innotek Alliance Fund		
	ZKW Lighting Systems(*5)		
LG Chem Ltd.	Haengboknuri Co., Ltd.	LG Chem America, Inc. and others	
	FarmHannong Co., Ltd.		
	Ugimagkorea Co., Ltd.		
LG Hausys, Ltd.	Greennuri Co. Ltd.	LG Hausys America, Inc. and others	
LG Uplus Corp.	CS Leader	DACOM America Inc.	
	Ain Teleservice		

December 31, 2019			
Companies with direct ownership	Companies with direct ownership's subsidiaries (domestic) (*1)	Companies with direct ownership's subsidiaries (overseas) (*1)	Companies with direct ownership's associates
	CS One Partner		
	MEDIA LOG Co., Ltd.		
	With U Co., Ltd.		
	LG Hello Vision Co., Ltd.(*8)		
	LG Hello Vision Hana Broadcasting Corporation(*8).		
LG Household & Health Care Ltd.	Coca-Cola Beverage Co.	Beijing LG Household Chemical Co., Ltd. and others	
	Hankook Beverage Co., Ltd.		
	The FaceShop Co., Ltd.		
	HAITAI HTB Co., Ltd.		
	K&I Co., Ltd		
	CNP COSMETICS Co., Ltd.		
	Balkeunnuri Co., Ltd.		
	FMG Co., Ltd.		
	OBM rap Co., Ltd		
	LG Farouk Co.		
	TAI GUK PHARM Co., Ltd.		
	JS Pharmaceutical Co., Ltd.		
	Ulleung Mountain Chu Spring Water Development Company(*5)		
	Rucipello KOREA Co., Ltd(*9)		
	Mizen Story Co., Ltd(*10)		
GIIR Corporation	HS Ad Co., Ltd.	GIIR America Inc. and others	
	L. Best		
LG Hitachi Co., Ltd.			
Silicon Works Co., Ltd.		Silicon Works Inc. and others	
LG International Corp.	Dangjin Tank Terminal Co., Ltd.	LG International (America) Inc. and others	
	Pantos Logistics Co., Ltd.	PANTOS LOGISTICS (CHINA) CO., LTD and others	
	Pantos Busan Newport Logistics Center Co., Ltd.		
	Helistar Air Co., Ltd.		
	Hanultari Co., Ltd.		
ZKW Holding GmbH	ZKW Lighting Systems(*5)	ZKW Group GmbH and others	
ZKW Austria Immobilien Holding GmbH(*11)		ZKW Austria Immobilien GmbH(*11)	
Joint ventures:			
LG MMA Corp.			
Other related parties' affiliates by the Act (*12)			
LG Display Co., Ltd.	Nanummnuri Co., Ltd	LG Display Nanjing Co. Ltd and others.	
Saldevida Korea Co.			
LG. Tostem BM Co., Ltd			
SEETEC Co., Ltd.			
Clean Soul Ltd.			
DACOM Crossing Corporation			
Robostar Co., Ltd.	Robomedi Co., Ltd.	ROBOSTAR (SHANGHAI) CO.,LTD	

(*1) Joint ventures of associates are excluded.
(*2) The Company's name is changed from Korea Smart Card Co., Ltd., Korea Smart Card CS Partners Co., Ltd. to T-money Co., Ltd, , T-money CSP Co., Ltd. in the current period.
(*3) Due to the purchasing shares during the current period, it was classified as a subsidiary of LG CNS Co., Ltd.
(*4) Newly established during the current period through physical division from S&I Corporation Co., Ltd.
(*5) Newly established during the current period.
(*6) Due to the selling shares during the current period, it was classified from S&I Corporation Co., Ltd.'s subsidiary to associate.
(*7) Subsidiary of Serveone Co., Ltd.

(*8) With stock acquisition during the current period, it has been classified as a subsidiary of LG Uplus Corp.
(*9) With stock acquisition during the current period, it has been classified as a subsidiary of LG Household & Health Care Ltd.
(*10) Due to the exercise of the right to convert during the current period, it was classified from LG Household & Health Care Ltd.'s associate to subsidiary.
(*11) The Company's name is changed from MGIV GmbH, Mommert Immobilien GmbH to ZKW Austria Immobilien Holding GmbHd, ZKW Austria Immobilien GmbH in the current period.
(*12) These companies are not related parties defined in paragraph 9 of K-IFRS 1024. However, the companies are designated by the Fair Trade Commission as related parties in accordance with the resolution of the Securities and Futures Commission in accordance with the substantive relationship stipulated in paragraph 10 of K-IFRS 1024.

December 31, 2018

Companies with direct ownership	Companies with direct ownership's subsidiaries (domestic) (*1)	Companies with direct ownership's subsidiaries (overseas) (*1)	Companies with direct ownership's associates
Subsidiaries:			
LG CNS Co., Ltd.	Korea Elecom Co., Ltd(*2)	LG CNS China, Inc. and 15 others	Korea Smart Card Co., Ltd.
	Haengbokmaru Co., Ltd.		Korea Smart Card CS Partners Co., Ltd.
	Biztechpartners Co., Ltd.		T-money Asia sdn bhd (T MONEY MALAYSIA SDN BHD)
	Sejong Green Power Co., Ltd(*3)		Songdo U-Life LLC.
			U Life Solutions
			Songdo International Sports Club LLC.
			Recaudo Bogota S.A.S.
			Hellas SmarTicket Societe Anonyme
			Ulaanbaatar Smart card Co, LLC
			Ulleungdo Natural Energy Independent Island Co., Ltd
			Daegu clean energy Co., Ltd.
			SMDep Co., Ltd. (*4)
			Mangilao Holdings LLC
			Mangilao Investment LLC
			Mangilao Solar LLC
S&I Corporation Co., Ltd.(*5)	Serveone Co., Ltd.(*6)	Serveone (Nanjing) Co., Ltd. and 3 Others	Dongnam Solar Energy Co., Ltd.
	Konjiam Yewon Co., Ltd.	S&I Corporation Vietnam Co., Ltd	
	Mirae M		
	Dream nuri		
LG Management Development Institute			
LG Sports Ltd.			
LG Holdings Japan Co., Ltd.			Combustion Synthesis Co., LTD.
LG Corp. U.S.A.(*7)			
Associates:			
LGEI	Hi Plaza Inc.	LG Electronics Mexico S.A. DE C.V. and others	
	Hi-M Solutec Co., Ltd.		
	HITeleservice Co., Ltd.		
	New Growth Venture Fund(*8)		
	New Growth Venture Fund Ⅱ(*8)		
	Ace R&D Co., Ltd.		
	Hientech Co., Ltd.(*9)		
	LG-Hitachi Water Solutions Co., Ltd.(*9)		
	LG innotek Co., Ltd.		
	Innowith Co., Ltd.		
	Hanuri Co., Ltd.		
	LG innotek Alliance Fund		

December 31, 2018

Companies with direct ownership	Companies with direct ownership's subsidiaries (domestic) (*1)	Companies with direct ownership's subsidiaries (overseas) (*1)	Companies with direct ownership's associates
LG Chem Ltd.	Haengboknuri Co., Ltd.	LG Chem America, Inc. and others	
	FarmHannong Co., Ltd.		
	Ugimagkorea Co., Ltd.(*15)		
LG Hausys, Ltd.	Greennuri Co. Ltd.(*6)	LG Hausys America, Inc. and others	
LG Uplus Corp.	CS Leader	DACOM America Inc.	
	Ain Teleservice		
	CS One Partner		
	MEDIA LOG Co., Ltd.		
	With U Co., Ltd.		
LG Household & Health Care Ltd.	Coca-Cola Beverage Co.	Beijing LG Household Chemical Co., Ltd. and others	
	Hankook Beverage Co., Ltd.		
	The FaceShop Co., Ltd.		
	HAITAI HTB Co., Ltd.		
	K&I Co., Ltd		
	CNP COSMETICS Co., Ltd.		
	Balkeunnuri Co., Ltd.		
	FMG Co., Ltd.(*10)		
	OBM rap Co., Ltd		
	LG Farouk Co.		
	Ulleung Mountain Chu Spring Water Development Company(*8)		
	TAI GUK PHARM Co., Ltd. (*11)		
	JS Pharmaceutical Co., Ltd. (*11)		
GIIR Corporation	HS Ad Co., Ltd.	GIIR America Inc. and others	
	L. Best		
LG Hitachi Co., Ltd.			
LG Fuel Cell Systems Inc.(*8)	LG Fuel Cell Systems (Korea) Inc(*8).		
Silicon Works Co., Ltd.		Silicon Works Inc.	
LG International Corp.	Dangjin Tank Terminal Co., Ltd.	LG International (America) Inc. and others	
	Pantos Logistics Co., Ltd.	PANTOS LOGISTICS (CHINA) CO., LTD and others	
	Pantos Busan Newport Logistics Center Co., Ltd.		
	Helistar Air Co., Ltd.		
	Hanultari Co., Ltd. (*6)		
ZKW Holding GmbH (*12)		ZKW Group GmbH and others	
MGIV GmbH(*12)		Mommert Immobilien GmbH	
Joint ventures:			
LG MMA Corp.			
Other related parties' affiliates by the Act (*16)			
LG Display Co., Ltd.	Nanummnuri Co., Ltd	LG Display Nanjing Co. Ltd and others.	
Global Dynasty Overseas Resource Development Private Investment Company(*13)			
Saldevida Korea Co.			
LG. Tostem BM Co., Ltd			
SEETEC Co., Ltd.			
MiGenstory Co., Ltd. (formerly Genstory Co., Ltd.)			
Clean Soul Ltd.			
DACOM Crossing Corporation			
Robostar Co., Ltd. (*14)	Robomedi Co., Ltd. (*14)	ROBOSTAR(SHANGAHI)CO., LTD	

(*1) Joint ventures of associates are excluded.
(*2) Excluded from the subsidiary of LG CNS Co., Ltd. due to the disposal of its stock during the current period.
(*3) Due to the obligation to purchase shares by agreement during the prior period, it was transferred from associate to subsidiary.
(*4) Subsidiary of Korea Smart Card Co., Ltd.
(*5) S&I Corporation (formerly Serveone Co., Ltd) conducted physical division which divides Servone Co., Ltd. during the prior period and changed its name.
(*6) Newly established during the prior period.
(*7) By selling the stocks to LG Electronics U.S.A., Inc. which is classified as a subsidiary of LG Electronics Inc , it was classified as an overseas subsidiary of LG Electronics Inc in the current period.
(*8) In the current period, it was liquidated.
(*9) Excluded from the subsidiary of LGEI due to the disposal of its stock during the current period.
(*10) The Company's name is changed from Zenisce Co., Ltd. to FMG Co., Ltd.
(*11) With stock acquisition during the prior period, it has been classified as a subsidiary of LG Household & Health Care Ltd.
(*12) With stock acquisition during the prior period, it has been classified as an associate.
(*13) Excluded from the related parties in the current period, due to the loss of LG International Corp.'s control.
(*14) With stock acquisition during the prior period, it has been classified as an associate of LGEI.
(*15) With stock acquisition during the prior period, it has been classified as an associate of LG Chem Ltd.
(*16) These companies are not related parties defined in paragraph 9 of K-IFRS 1024. However, the companies are designated by the Fair Trade Commission as related parties in accordance with the resolution of the Securities and Futures Commission in accordance with the substantive relationship stipulated in paragraph 10 of K-IFRS 1024.

(2) Major transactions with the related parties for the years ended December 31, 2019 and 2018, are as follows: (Unit: Korean won in millions):

	December 31, 2019		
	Revenue and others	Acquisition of property, plant and equipment	Other purchase
Subsidiaries:			
LG CNS Co., Ltd.	₩ 48,184	₩ 586	₩ 3,137
LG N-Sys Inc. (*1)	-	-	-
Biztechpartners Co., Ltd. (*2)	-	-	47
S&I Corporation Co., Ltd.	64,633	5,862	41,008
Serveone Co., Ltd. (*3)	-	-	88
LG Sports Ltd.	117	-	8,530
LG Management Development Institute	2,361	-	5,500
LG Holdings Japan Co., Ltd.	186	-	-
LG Corp. U.S.A	190	-	-
Associates and subsidiaries:			
LGEI (*4)	206,365	-	910
LG Chem Ltd.	214,377	2,655	11
LG Hausys, Ltd.	7,525	-	-
LG Household & Health Care Ltd. (*4)	66,149	-	-
LG Uplus Corp.	95,280	-	130
GIIR Corporation (*4)	2,717	-	18,999
Silicon Works Co., Ltd.	4,466	-	-
LG Hitachi Co., Ltd.	134	-	-
LG International Corp. (*4)	15,841	133,909	4
Joint ventures:			
LG MMA Corp	74,415	-	-
Other related parties' affiliates by the Act: (*5)			
LG display Co., Ltd and others	55,060	-	-
Total	₩ 858,000	₩ 143,012	₩ 78,364

	December 31, 2018		
	Revenue and others	Acquisition of property, plant and equipment	Other purchase
Subsidiaries:			
LG CNS Co., Ltd.	₩ 29,035	₩ 552	₩ 2,989
LG N-Sys Inc. (*1)	134	-	-
Biztechpartners Co., Ltd. (*2)	-	-	47
S&I Corporation Co., Ltd.	12,638	1,689	37,998
Serveone Co., Ltd. (*3)	-	-	16
LG Sports Ltd.	172	-	5,030
LG Management Development Institute	4,510	-	9,154
LG Holdings Japan Co., Ltd.	138	-	-
LG Corp. U.S.A	47	-	-
Associates and subsidiaries:			
LGEI (*4)	185,691	590	1,654
LG Chem Ltd.	211,174	-	10
LG Hausys, Ltd.	12,056	-	-
LG Household & Health Care Ltd. (*4)	64,188	-	-
LG Uplus Corp.	94,121	-	136
GIIR Corporation (*4)	2,712	-	17,982
Silicon Works Co., Ltd.	3,766	-	-
LG Hitachi Co., Ltd.	92	-	-
LG International Corp. (*4)	9,838	-	5
Joint ventures:			
LG MMA Corp	53,753	-	-
Other related parties' affiliates by the Act: (*5)			
LG display Co., Ltd and others	54,458	-	-
Total	₩ 738,523	₩ 2,831	₩ 75,021

(*1) Merged with LG CNS Co., Ltd. on April 1, 2018.

(*2) BNE Partners, Inc. (surviving corporation) merged with Biztechpartners Co., Ltd., and changed its name to Biztechpartners Co., Ltd during the prior period.

(*3) It was classified as an associate from a subsidiary of S&I Corporation Co., Ltd as a stake sale during the current period, and it includes ₩58 million in other purchases as an associate.

(*4) It includes transactions with an associates' subsidiary.

(*5) These companies are not related parties as defined in paragraph 9 of K-IFRS 1024; however, the companies are designated by the Fair Trade Commission as related parties in accordance with the resolution of the Securities and Futures Commission in accordance with the substantive relationship stipulated in paragraph 10 of K-IFRS 1024.

(3) Outstanding receivables and payables from transactions with related parties as of December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

	December 31, 2019		
	Accounts receivable and others	Loans	Accounts payable and others
Subsidiaries:			
LG CNS Co., Ltd.	₩ 448	₩ -	₩ 4,917
S&I Corporation Co., Ltd.	4,177	-	3,090
Serveone Co., Ltd. (*1,2)	-	-	6
LG Sports Ltd.	6	-	9,350
LG Management Development Institute	10	-	2,119
LG Holdings Japan Co., Ltd.	172	-	-
LG Corp. U.S.A	-	-	-
Associates and subsidiaries:			
LGEI (*3)	28,082	-	29,245
LG Chem Ltd.	1,360	-	12,391
LG Hausys, Ltd.	-	-	4,340
LG Household & Health Care Ltd. (*3)	939	-	4,282
LG International Corp. (*3)	-	-	7,054
LG Uplus Corp	1,159	-	5,387
GIIR Corporation (*3)	610	-	21,407
LG Hitachi Co., Ltd.	15	-	-
Joint ventures:			
LG MMA Corp.	-	-	897
Other related parties' affiliates by the Act: (*4)			
LG Display Co., Ltd and others	-	-	8,781
Total	₩ 36,978	₩ -	₩ 113,266

	December 31, 2018		
	Accounts receivable and others	Loans	Accounts payable and others
Subsidiaries:			
LG CNS Co., Ltd.	₩ 422	₩ -	₩ 5,178
S&I Corporation Co., Ltd.	3,787	-	2,790
Serveone Co., Ltd. (*1,2)	-	-	18
LG Sports Ltd.	2	-	550
LG Management Development Institute	12	-	4,531
LG Holdings Japan Co., Ltd.	126	-	-
LG Corp. U.S.A	47		-
Associates and subsidiaries:		-	
LGEI (*3)	742	-	29,440
LG Chem Ltd.	5,102	-	11,286
LG Hausys, Ltd.	133	-	39
LG Household & Health Care Ltd. (*3)	1,038	-	4,261
LG International Corp. (*3)	-		4,696
LG Uplus Corp	-	-	5,397
GIIR Corporation (*3)	494	-	19,094
LG Hitachi Co., Ltd.	8	-	-
Joint ventures:		-	
LG MMA Corp.	267		631
Other related parties' affiliates by the Act: (*4)			
LG Display Co., Ltd and others	1	-	11,246
Total	₩ 12,181	₩ -	₩ 99,157

(*1) It was established by dividing the MRO division of S&I Corporation Co., Ltd. in the previous period.
(*2) It was classified as an associate from a subsidiary of S&I Corporation Co., Ltd as a stake sale during the current period.
(*3) It includes transactions with an associates' subsidiary.
(*4) These companies are not related parties as defined in paragraph 9 of K-IFRS 1024; however, the companies are designated by the Fair Trade Commission as related parties in accordance with the resolution of the Securities and Futures Commission in accordance with the substantive relationship stipulated in paragraph 10 of K-IFRS 1024.

(4) Fund transactions with the related parties for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

	Year ended December 31, 2019					
	Payment in cash (reduction of capital)	Sale of portion	Loan		Borrowings	
Description			Loan	Payback	Borrowings	Repayment
Subsidiaries:						
LG Corp. U.S.A	₩ 18,273	₩ -	₩ -	₩ -	₩ -	₩ -
LG Electronics U.S.A., Inc.(*)	-	192,442	-	-	-	-
Total	₩ 18,273	₩ 192,442	₩ -	₩ -	₩ -	₩ -

(*) LG Corp. U.S.A. Stocks was sold to LG Electronics U.S.A., Inc. in the current period.

	Year ended December 31, 2018					
	Payment in cash (reduction of capital)	Sale of portion	Loan		Borrowings	
Description			Loan	Payback	Borrowings	Repayment
Subsidiaries:						
LG Corp. U.S.A	₩ 50,285	₩ -	₩ -	₩ -	₩ -	₩ -
Associates:						
LG Fuel Cell Systems Inc.	3,338	-	-	-	-	-
Total	₩ 53,623	₩ -	₩ -	₩ -	₩ -	₩ -

(5) The Company provided guarantees, and guarantees for the related parties for the year ended December 31, 2019, are as follows (Unit: USD, JPY, Korean won in millions):

Company provided	Amount of mortgage			Collateral offered	Usage history of provided company		
	USD	JPY	KRW (*)		Amount	Institution	Date
LG Holdings Japan Co., Ltd.	-	20,000,000,000	212,694	Borrowing limited guarantee	JPY 4,000,000,000	SMBC	2017-12-15
					JPY 2,900,000,000	SMBC	2019-07-31
					JPY 100,000,000	SMBC	2019-08-29

(*) The amount of foreign currency guarantees provided is the amount converted at the exchange rate of December 31, 2019.

(6) The compensation and benefits for the Company's key management (registered executives, including non-permanent and non-registered executives) who has significant control and responsibility on planning, operating and controlling the activities of the Company for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019	Year ended December 31, 2018
Short-term employee benefits	₩ 25,033	₩ 18,566
Severance benefits	2,482	3,881
Total	₩ 27,515	₩ 22,447

23. FUNDING ARRANGEMENTS AND PLEDGING:

(1) The Company has bank overdraft agreement limited to ₩5,000 million with Woori Bank, and general loan agreement limited to ₩95,000 million with Kookmin Bank and two others.

(2) Restricted financial assets as of December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Account	December 31, 2019		December 31, 2018		Details
Financial institution deposits	₩	500	₩	500	Chungcheongbuk-do Province creative financial fund
Long-term deposits		5		5	Deposit for the checking accounts
Total	₩	505	₩	505	

(3) There is no pledging as of December 31, 2019.

24. LEASES:

(1) The Company as lessee

1) The carrying amount of the right-of-use assets as of December 31, 2019 and 2018, is as follows (Unit: Korean won in millions):

	Vehicle	
Acquisition	₩	1,260
Depreciation		(390)
Book values		870

The Company has operating lease contracts for vehicles and office supplies. The average lease term is two years. Approximately 33% of property, plant and equipment leases have expired during the current period. Expired contracts have been replaced by new leases on the same underlying asset. Due to this, right-of-use assets increased by ₩770 million during the current period.

2) The amounts recognized as profit or loss in 2019 are as follows(Unit: Korean won in millions):

	Amounts	
Depreciation of right-to-use assets	₩	601
Interest expense of lease liabilities		24
Expenses related to short-term leases		75
Expenses related to leases of low-value assets		29
Expenses related to revocation of contract, etc.		6

As of December 31, 2019, the lease agreement for short term is all ended and the total cash outflow due to leases is ₩727 million.

3) The details of the liquidity classification of lease liabilities as of December 31, 2019, are as follows(Unit: Korean won in millions):

		Amounts
Current liabilities	₩	444
Non-current liabilities		433
Total	₩	877

4) The details of the lease liabilities maturity analysis as of December 31, 2019, are as follows(Unit: Korean won in millions):

		Minimum lease payments		Present value of minimum lease payments
Within one year	₩	458	₩	444
One year-five years		441		433
Total	₩	899	₩	877

(2) The Company as lessor

1) The Company has real estate lease contracts and the major operating lease contracts as of December 31, 2019 and 2018, as follows (Unit: Korean won in millions):

	December 31, 2019							
Contract		Less than one year		1 year–5 years		More than five years		Total
Building lease contract (Twin)	₩	72,506	₩	-	₩	-	₩	72,506
Building lease contract (Gasan)		19,155		70,047		66,956		156,158
Building lease contract (Gwanghwamun)		23,281		-		-		23,281
Building lease contract (Buho)		761		-		-		761
Building lease contract (Seoul station)		8,772		1,639		-		10,411
Total	₩	124,475	₩	71,686	₩	66,956	₩	263,117

	December 31, 2018							
Contract		Less than one year		1 year–5 years		More than five years		Total
Building lease contract (Twin)	₩	60,974	₩	-	₩	-	₩	60,974
Building lease contract (Gasan)		16,990		67,847		91,286		176,123
Building lease contract (Gwanghwamun)		23,198		195		-		23,393
Building lease contract (Buho)		748		-		-		748
Building lease contract (Seoul station)		14,272		2,354		-		16,626
Total	₩	116,182	₩	70,396	₩	91,286	₩	277,864

2) The Company recognized rental revenue related to operating lease contracts for the years ended December 31, 2019 and 2018, in the amount of ₩127,875 million and ₩118,925 million, respectively.

25. PENDING LITIGATIONS:

Pending litigations as of December 31, 2019, are one case where the Company sued and two cases where the Company is sued (including trademark infringement and damages-related litigation).

26. RISK MANAGEMENT:

(1) Capital risk management

The Company performs capital management to maintain the ability to continuously provide profits to shareholders and interested parties and to maintain optimum capital structure to reduce capital expenses.

In order to maintain such optimum structure, the Company may adjust dividend payments, redeem paid-up capital to shareholders, issue stocks to reduce liability or sell assets.

The Company's capital structure consists of net liability, which is borrowings, less cash and cash equivalents and equity. The overall capital risk management policy of the Company is unchanged from prior period. In addition, items managed as capital by the Company as of December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

	December 31, 2019	December 31, 2018
Total borrowings	₩ -	₩ -
Less cash and cash equivalents	150,273	132,903
Borrowings, net	(150,273)	(132,903)
Total equity	9,326,745	9,098,741
Debt ratio (*)	-	-

(*) The Company does not calculate equity to net borrowings ratio because borrowings, net is negative number.

(2) Financial risk management

The Company is exposed to various financial risks, such as market (foreign exchange and price), credit and liquidity, related to financial instruments. The purpose of risk management of the Company is to identify the potential risks to financial performance, and reduce, eliminate and evade those risks to a degree acceptable to the Company. The Company makes use of derivative financial instruments to hedge certain risks, such as foreign exchange and interest rate risks.

1) Price risk

The Company is exposed to price risks from equity instruments. As of December 31, 2019, fair value of equity instruments is ₩37,683 million, and when all the other variables are constant and when the price of equity instrument changes by 10%, the effect after tax to equity will be ₩2,856 million.

2) Credit risk

Credit risk refers to risk of financial losses to the Company when the counterpart defaults on the obligations of the contract. Credit risk arises from cash and cash equivalents, derivatives and bank and financial institution deposits, as well as credit risks of customers, including receivables and firm commitments. As for banks and financial institutions, the Company makes transactions with reputable financial institutions; therefore, the credit risk from them is limited. For ordinary transactions, customer's financial status, credit history and other factors are considered to evaluate their credit status. The Company does not have policies to manage credit limits of each customer.

As of December 31, 2019, the maximum exposure of credit risk from loans and receivables is similar to their carrying amount. The maximum amount of exposure to credit risk arising from the payment guarantees described in Note 22.(5) is the limit of payment guarantees of ₩212,694 million.

3) Liquidity risk

The Company establishes short-term and long-term fund management plans. The Company analyzes and reviews actual cash outflows and its budget to correspond the maturity of financial liabilities to that of financial assets. Management of the Company believes that the financial liability may be redeemed by cash flow arising from operating activities and financial assets.

Maturity analysis of non-derivative financial liabilities according to its remaining maturity as of December 31, 2019, is as follows (Unit: Korean won in millions):

Description	Within a year	1 year–5 years	More than five years	Total
Non-interest financial instrument	₩ 119,416	₩ 8,732	₩ 11,655	₩ 139,803
Financial guarantee (*)	212,694	-	-	212,694
Lease liabilities	444	433	-	877

(*) The maximum amount of payment guarantees (JPY 20,000,000,000) provided to financial institutions for overseas subsidiary loans as described in Note 22.(5) above, which is the maximum amount that the Company will be required to pay if the guarantor claims the full amount of the guarantee. Based on the estimates made at the end of the reporting period, the Company believes that it is more likely than not to pay the guarantees in accordance with the payment guarantees. However, the above assumptions may change, as the probability of a credit loss to the financial receivables held by the assurance provider may change the probability that the assurance provider will make payments to the Company under the guarantee contract.

Maturity analysis above is based on the book value and the earliest maturity date by which the payments should be made.

The Company manages liquidity through cash inflows from financial assets and financing arrangements with financial institutions. The maturity instruments of financial assets as of December 31, 2019, are as follows. (Unit: Korean won in millions):

	December 31, 2019							
Description	Within a year		1 year–5 years		More than five years		Total	
Accounts receivable and other receivables	₩	35,933	₩	-	₩	5	₩	35,938
Investment in equity and debt		-		-		98,940		98,940

	December 31, 2018							
Description	Within a year		1 year–5 years		More than five years		Total	
Accounts receivable and other receivables	₩	9,730	₩	494	₩	5	₩	10,229
Investment in equity and debt		-		-		97,334		97,334

4) Foreign currency risk

The Company undertakes transactions denominated in foreign currencies; consequently, exposures to exchange-rate fluctuations arise. The carrying amounts of the Company's foreign currency-denominated monetary assets and monetary liabilities at the end of the reporting period are as follows (Unit: Korean won in millions):

Currency	Assets		Liabilities	
USD	₩	28,310	₩	-
JPY		172		-
Total	₩	28,482	₩	-

The Company regularly measures currency risk deprived from fluctuations of exchange rate.
Details of the Company's sensitivity to a 10% increase and decrease in Korean won against the relevant foreign currencies are as follows (Unit: Korean won in millions):

Currency	10% increase		10% decrease	
USD	₩	2,146	₩	(2,146)
JPY		13		(13)
Total	₩	2,159	₩	(2,159)

(3) Estimation of fair value

The fair values of financial instruments (i.e., financial assets held for trading and other financial assets) traded on active markets are determined with reference to quoted market prices. The Company uses the current bid price as the quoted market price for its financial assets.

The fair values of financial instruments not traded on an active market (i.e., over-the-counter derivatives) are determined using a valuation technique. The Company uses various valuation techniques using assumptions based on current market conditions. The fair values of long-term liabilities and financial liabilities available for settlement are determined using prices from observable current market transactions and dealer quotes for similar instruments. Where such prices are not available, a discounted cash flow analysis or other valuation technique is performed to measure their fair values.

The fair values of loans and receivables are approximated as their carrying value, less impairment loss. The Company estimates the fair values of financial liabilities as the present value of future contractual cash flows discounted based on current market rates applied to similar financial instruments.
Financial instruments that are measured subsequent to initial recognition at fair value are classified into Levels 1 to 3, based on the degree to which the fair value is observable, as described below.

- Level 1: Fair value measurements are those derived from quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: Fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices).
- Level 3: Fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

1) Financial instruments that are measured subsequent to initial recognition at fair value by fair value hierarchy levels as of December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	December 31, 2019			
	Level 1	Level 2	Level 3	Total
Financial assets measured at FVTOCI				
Marketable equity securities	₩ 37,683	₩ -	₩ -	₩ 37,683
Unmarketable equity securities	-	-	60,257	60,257
Total	₩ 37,683	₩ -	₩ 60,257	₩ 97,940

Description	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Financial assets measured at FVTOCI				
Marketable equity securities	₩ 33,819	₩ -	₩ -	₩ 33,819
Unmarketable equity securities	-	-	62,516	62,516
Total	₩ 33,819	₩ -	₩ 62,516	₩ 96,335

There were no significant transfers between Levels 1 and 2 as of December 31, 2019 and 2018.

2) The fair value hierarchy of financial instruments with fair value cannot be reliably measured at fair value in the statements of financial position as of December 31, 2019 and 2018, as follows (Unit: Korean won in millions):

	December 31, 2019				
	Fair value				Book value
Description	Level 1	Level 2	Level 3	Total	
Loans and receivables:					
Financial institution deposits	₩ -	₩ -	₩ 500,500	₩ 500,500	₩ 500,500
Loans (*)	-	-	-	-	-
Other accounts receivable (*)	-	-	33,545	33,545	33,545
Accrued income (*)	-	-	1,894	1,894	1,894
Deposits (*)	-	-	499	499	499
Total	-	-	536,438	536,438	536,438
Financial liabilities measured at amortized cost:					
Other accounts payable (*)	-	-	49,390	49,390	49,390
Accrued expenses (*)	-	-	637	637	637
Accrued dividends (*)	-	-	360	360	360
Deposits received	-	84,556	-	84,556	84,556
Lease liabilities	-	-	877	877	877
Total	₩ -	₩ 84,556	₩ 51,264	₩ 135,820	₩ 135,820

	December 31, 2018				
	Fair value				Book value
Description	Level 1	Level 2	Level 3	Total	
Loans and receivables:					
Financial institution deposits	₩ -	₩ -	₩ 250,500	₩ 250,500	₩ 250,500
Loans (*)	-	-	-	-	-
Other accounts receivable (*)	-	-	8,620	8,620	8,620
Accrued income (*)	-	-	1,110	1,110	1,110
Deposits (*)	-	-	499	499	499
Total	-	-	260,729	260,729	260,729
Financial liabilities measured at amortized cost:					
Other accounts payable (*)	-	-	44,147	44,147	44,147
Accrued expenses (*)	-	-	2,605	2,605	2,605
Accrued dividends (*)	-	-	341	341	341
Deposits received	-	76,234	-	76,234	76,234
Total	₩ -	₩ 76,234	₩ 47,093	₩ 123,327	₩ 123,327

(*) Short-term receivables and short-term payment obligations denominated in Level 3 are measured at original amount since the discount effect is not significant.

3) Changes in Level 3 financial assets for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

	Year ended December 31, 2019						
Description	Beginning balance	Net income (loss)	Comprehensive income	Purchases	Disposals	Ending balance	Ending unrealized gain
Other financial assets	₩ 62,516	₩ -	₩ (2,259)	₩ -	₩ -	₩ 60,257	₩ 23,640

	Year ended December 31, 2018						
Description	Beginning balance	Net income (loss)	Comprehensive loss	Purchases	Disposals	Ending balance	Ending unrealized gain
Other financial assets	₩ 58,176	₩ -	₩ 4,340	₩ -	₩ -	₩ 62,516	₩ 25,900

The amount recognized as comprehensive income (loss) is relevant to non-listed shares as of December 31, 2019, and recognized as changes of valuation gain (loss) (see Note 16) on other financial assets.

4) A description of the valuation techniques and the inputs used in the fair value measurement of financial instruments classified as Level 2 and Level 3 is as follows:

-Non-listed shares
The fair value of non-listed shares measured using a discounted cash flow model that is not based on observable market prices or rates will be used to estimate the future cash flows, such as sales growth, pretax operating profit margin and the weighted-average cost of capital. Capital Asset Pricing Model (CAPM) was used to calculate the weighted-average cost of capital. The key assumptions of estimation listed above are determined to have a significant impact on the fair value of non-listed shares, and the Company has classified the fair value hierarchy system on Level 3 of the fair value measurement of non-listed shares.

5) There is no change in the valuation technique used in the fair value measurement of financial instruments classified as Levels 2 and 3.

6) Relationship between unobservable inputs to fair value and information on fair value hierarchy Level 3 applying significant unobservable inputs is as follows (Unit: Korean won in millions):

Description	Fair value	Valuation technique	Unobservable input(s)	Range (%)	Relationship of unobservable inputs to fair value
Financial assets					
Other financial assets	₩ 60,113	Discounted cash flow method	Growth rate	0%	Increase (decrease) in the growth rate used would result in increase (decrease) of fair value
			Discount rate	10.10% – 11.35%	Increase (decrease) in the discount rate used would result in decrease (increase) of fair value

7) A description of the valuation processes in the fair value measurement for Level 3 that the Company is carrying out is as follows:

The Company measures fair value of assets and liabilities for financial reporting purposes and reports the result of fair value measurements to chief finance officer directly.

Undesirable inputs that are used to estimate Level 3 fair value measurement are derived in a manner that is described below.

- Pretax profit margin and sales growth rate, which are used to measure the fair value of non-listed shares, are estimated based on the average value of pretax operating margin and sales growth rate of comparable-listed companies.

- Weighted-average cost of capital discount rate that is used to measure the fair value of non-listed shares is estimated by the weighted-average, after-tax, outside capital cost; capital cost estimates of the share value beta reflected for the purpose of the issuer of the shares; and capital structure based on the equity beta of comparable public companies has been derived based on the CAPM.

8) Impact on net income and other comprehensive income due to changes in fair value measured Level 3 financial instruments' associated significant unobservable inputs is as follows (Unit: Korean won in millions):

Description	Unobservable input(s)	Changes of reasonably possible unobservable input	Net income: Favorable change	Net income: Unfavorable change	Other comprehensive income: Favorable change	Other comprehensive income: Unfavorable change
Other financial assets	Growth rate	+/-1%	-	-	₩ 1,324	₩ (1,100)
	Discount rate	+/-1%	-	-	1,887	(1,566)

Meanwhile, the Company has judged that unobservable changes of inputs to reflect alternative assumptions would not change fair value measurement significantly.

9) There is no significant change of business and economic environment affecting the fair value of the financial assets and liabilities during the current year.

27. NON- CASH TRANSACTIONS:

(1) Significant non-cash investing and financing activities for the years ended December 31, 2019 and 2018, are as follows (Unit: Korean won in millions):

Description	Year ended December 31, 2019	Year ended December 31, 2018
Substitution of assets held for sale by subsidiaries	₩ 136,178	₩ -
Recognition liabilities related to assets held for sale	19,358	-

(2) Details of changes in liabilities arising from financing activities for the year ended December 31, 2019, are as follows (Unit: Korean won in millions):

	Beginning	Cash flow	Non-cash change (Other)	Non-cash change (Liquidity Reclassification)	Others	Ending
Lease liabilities	₩ 971	₩ (599)	₩ -	₩ -	₩ 505	₩ 877

28. ASSETS AND LIABILITIES HELD FOR SALE:

On November 28, 2019, through a resolution of the Board of Directors, the Company approved the sale of 30,519,074 (35% based on the total number of shares issued) common shares of LG CNS to Crystal Korea Co, Ltd. The details of assets and liabilities held for sale as of the end of the current term are as follows (Unit: Korean won in millions):

Description	December 31, 2019
Stocks for LG CNS	₩ 136,178
Liabilities related with assets held for sale	19,358

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INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

English Translation of Independent Auditors' Report on Internal Control over Financial Reporting Originally Issued in Korean on March 19, 2020

To the Shareholders and the Board of Directors of LG Corp.:

Audit Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of LG Corp. (the "Company") as of December 31, 2019, based on 'Conceptual Framework for Designing and Operating Internal Control over Financial Reporting'. In our opinion, the Company's internal control over financial reporting is designed and operated effectively as of December 31, 2019, in all material respects, in accordance with the 'Conceptual Framework for Designing and Operating Internal Control over Financial Reporting'.

We have also audited, in accordance with the Korean Standards on Auditing ("KSAs"), the separate financial statements of the Company, which comprise the separate statement of financial position as of December 31, 2019, and the separate statement of income, separate statement of comprehensive income, separate statement of changes in equity and separate statement of cash flows, for the year then ended, and notes to the separate financial statements, including a summary of significant accounting policies, and our report dated March 19, 2020 [date of report, which should be the same as the date of this report on internal control over financial reporting], expressed unqualified opinion.

Basis for Audit Opinion

We conducted our audits in accordance with the KSAs. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Internal Control over Financial Reporting section of our report. We are independent of the Company in accordance with the ethical requirements that are relevant to our audits of the internal control over financial reporting in the Republic of Korea, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Internal Control over Financial Reporting

Management is responsible for designing, operating and maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying *Report on the Operations of the Internal Accounting Control System*.
Those Charged with Governance is responsible for the oversight of internal control over financial reporting of the Company.

Auditor's Responsibilities for the Audit of the Internal Control over Financial Reporting

Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We conducted our audit in accordance with the KSAs. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

The audit of internal control over financial reporting involves performing procedures to obtain audit evidence about whether a material weakness exists. The procedures selected depend on the auditors' judgment, including the assessment of the risks of that a material weakness exists. The audit includes obtaining an understanding of internal control over financial reporting and testing and evaluating the design and operating effectiveness of internal control over financial reporting based on the assessed risks.

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Definition and Limitations of Internal Control over Financial Reporting

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

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

The engagement partner on the audit resulting in this independent auditor's report is Young-Jae Kim.

Deloitte Anjin LLC

March 19, 2020

Notice to Readers

This report is effective as of March 19, 2020, the auditors' report date. Certain subsequent events or circumstances may have occurred between the auditors' report date and the time the auditors' report is read. Such events or circumstances could significantly affect the separate financial statements and may result in modifications to the auditors' report.

Report on the Operations of the Internal Accounting Control System ("IACS")

To the Shareholders and the Board of Directors and the Audit Committee of LG Corp.:

I, as the Internal Accounting Control Officer ("IACO") of LG Corp. (the "Company"), assessed the status of the design and operations of the Company's Internal Accounting Control System ("IACS") for the year ended December 31, 2019.

The Company's management, including IACO, is responsible for designing and operating IACS. I, as the IACO, assessed whether the IACS has been effectively designed and is operating to prevent and detect any error or fraud, which may cause any misstatement of the separate financial statements for the purpose of establishing the reliability of financial reporting and the preparation of separate financial statements for external purposes.
I, as the IACO, applied the frame of reference 'Conceptual Framework for Designing and Operating Internal Control over Financial Reporting' which is announced by IACS committee for the designing and operating of the IACS. Also, I, as the IACO, applied the Conceptual Framework for assessment and designing Internal Control over Financial Reporting' which is announced by IACS committee for the assessment of design and operations of the IACS.

Based on the assessment on the operations of the IACS, the Company's IACS has been effectively designed and is operating as of December 31, 2019, in all material respects, in accordance with the IACS standards.

We certify that report does not contain any untrue statement of a fact, or omit to state a fact necessary to be presented herein. We also certify that this report does not contain or present any statement which cause material misunderstandings, and we have reviewed and verified this report with sufficient due care

February 13, 2020

Young-Soo Kwon

President and Chief Operating Officer

Beom-Jong Ha

Internal Accounting Control Officer

Disclosure on Execution of External Audit

We attach required disclosure on the execution of external audit performed in accordance with ***Article 18-3 of the Act on External Audit of Stock Companies***.

1. Company and Reporting Period subject to External Audit

Company	LG Corp.			
Reporting Period	2019/01/01	From	2019/12/31	To

2. Number of Participants and Details on the Hours Executed in Audit

(Unit: Number of Participants, Hours Executed)

Participant(s) Number and Hour(s)		Engagement Quality Reviewer(s)		Audit Professional(s)						IT Specialist(s), Tax Specialist(s), and Valuation Specialist(s)		Construction contracts order-made productio n industry specialist(s)		Total	
				Engagement Partner(s)		Members Of KICPA (Registered)		Members of KICPA (Non-Registered)							
Number of Participant(s)		2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Number of Participant(s)		5	3	1	2	15	11	6	4	9	9	-	-	36	29
Hours Executed	Interim	20	11	107	122	1,745	1,806	440	198	-	-	-	-	2,312	2,137
	Audit	34	31	188	81	2,375	1,053	803	434	294	198	-	-	3,694	1,797
	Total	54	42	295	203	4,120	2,859	1,243	632	294	198	-	-	6,006	3,934

3. Key Disclosure on Execution of External Audit

<table>
<tr><th>Title</th><th colspan="6">Detail</th></tr>
<tr><td rowspan="2">Audit Planning Stage</td><td colspan="2">Dates Performed</td><td colspan="2">April 2019 – September 2019</td><td>5</td><td>Days</td></tr>
<tr><td colspan="2">Main Planning Work Performed</td><td colspan="4">Understanding the Company and business environments, composing the audit member, identifying and evaluating significant risk of material misstatements, deciding the nature/timing/extent of an audit, reviewing the application of professionals and determining the materiality in the application of an audit</td></tr>
<tr><td rowspan="6">Fieldwork Performed</td><td colspan="2" rowspan="2">Dates Performed</td><td colspan="2">Number of Participant(s)</td><td colspan="2" rowspan="2">Main Fieldwork Performed</td></tr>
<tr><td>On-Site</td><td>Off-Site</td></tr>
<tr><td></td><td>Days</td><td>Number of Participant(s)</td><td>Number of Participant(s)</td><td colspan="2"></td></tr>
<tr><td>2019/11/18–2019/11/29</td><td>10</td><td>4</td><td>2</td><td colspan="2">Interim audit (understanding the transaction type of each process and control testing)</td></tr>
<tr><td>2020/01/14–2020/01/16</td><td>3</td><td>3</td><td>2</td><td colspan="2">External audit (substantive procedure for the material account balances and transactions, consolidation audit)</td></tr>
<tr><td>2020/01/21–2020/01/31</td><td>8</td><td>5</td><td>2</td><td colspan="2">External audit (substantive procedure for the material account balances and transactions, consolidation audit)</td></tr>
<tr><td rowspan="3">Physical Counts - Inventory (Observation)</td><td>Time (When Performed)</td><td colspan="2">-</td><td>-</td><td colspan="2">Day(s)</td></tr>
<tr><td>Place (Where Performed)</td><td colspan="5">-</td></tr>
<tr><td>Inventory subjected to Counts</td><td colspan="5">-</td></tr>
<tr><td rowspan="3">Physical Counts - Financial Instruments (Observation)</td><td>Time (When Performed)</td><td colspan="2">2020/01/03</td><td>1</td><td colspan="2">Day(s)</td></tr>
<tr><td>Place (Where Performed)</td><td colspan="5">LG Corp. headquarters</td></tr>
<tr><td>Financial Instruments Subjected to Counts</td><td colspan="5">Cash, investment securities, memberships, and others</td></tr>
<tr><td rowspan="2">External Confirmation</td><td>Bank Confirmation</td><td>O</td><td>Accounts Receivable/Payable Confirmation</td><td>O</td><td>Legal Confirmation</td><td>O</td></tr>
<tr><td>Other Confirmation</td><td colspan="5">N/A</td></tr>
<tr><td rowspan="2">Communications with Those Charged with Governance</td><td>Number of Communications</td><td>5</td><td colspan="4">Time(s) Performed</td></tr>
<tr><td>Time (When Performed)</td><td colspan="5">2019/02/21, 2019/05/09, 2019/08/08, 2019/11/08 and 2020/02/13</td></tr>
</table>

4. Communications with Audit Committee

Title	Time (When Performed)	Attendants	Method	Key Content of Discussion
1	2019/02/21	Three Audit Committee members, Engagement Partner and one other person	Face-to-Face Meeting	Audit schedule and main audit matters
2	2019/05/09	Three Audit Committee members, Engagement Partner and one other person	Face-to-Face Meeting	Review of Interim Financial Statements and Introduction to recent accounting trends
3	2019/08/08	Three Audit Committee members, Engagement Partner and one other person	Face-to-Face Meeting	Review of Interim Financial Statements and Report on preliminary selection of Key Audit Matters
4	2019/11/08	Three Audit Committee members, Engagement Partner and one other person	Face-to-Face Meeting	Review of Interim Financial Statements, Selection of Significance in audit and Key Audit Matters
5	2020/02/13	Three Audit Committee members, Engagement Partner and one other person	Face-to-Face Meeting	Report on result of External audit, Independence of Auditor, Result of Main audit matters and Report on group audit matters