Hankook Technology Group Co., Ltd. (formerly, Hankook Tire Worldwide Co., Ltd.)

Separate Financial Statements December 31, 2019 and 2018

Hankook Technology Group Co., Ltd. Index

December 31, 2019 and 2018

	Page(s)
Independent Auditor's Report	1 - 4
Separate Financial Statements	
Separate Statements of Financial Position	5
Separate Statements of Comprehensive Income	6
Separate Statements of Changes in Equity	7
Separate Statements of Cash Flows	8
Notes to the Separate Financial Statements	9- 69
Report on Independent Auditor's Audit of Internal Control over Financial Reporting	70 - 72
Report on the Effectiveness of Internal Control over Financial Reporting	73





Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

To the Board of Directors and Shareholders of Hankook Technology Group Co., Ltd. (formerly, Hankook Tire Worldwide Co., Ltd.)

Opinion

We have audited the accompanying separate financial statements of Hankook Technology Group Co., Ltd. (the Company), which comprise the separate statements of financial position as at December 31, 2019 and 2018, and the separate statements of comprehensive income, separate statements of changes in equity and separate statements of cash flows for the years then ended, and notes to the separate financial statements, including a summary of significant accounting policies and other explanatory information.

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

We also have audited, in accordance with Korean Standards on Auditing, the Company's Internal Control over Financial Reporting 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 Opinion

We conducted our audits in accordance with Korean Standards on Auditing. Our responsibilities under those standards are further described in the *Auditor's 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 of the Republic of Korea that are relevant to our audit of the separate financial statements and we have fulfilled our other ethical responsibilities in accordance with the ethical requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Key Audit Matters

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

Impairment assessment of investment in associates

Key Audit Matter

The book value of investment in associates of Hankook Technology Group Co., Ltd. Is ₩ 1,979,452,253 thousand as at December 31, 2019. As explained in note 13, the Company has significant influence over Hankook Tire & Technology Co., Ltd. and is measuring at cost.

We considered as a key audit matter because of the i) existence of indication of impairment loss on investment in associates due to long-term steady decrease of Hankook Tire & Technology Co., Ltd. share price, ii) significance of management's estimation used in determining recoverable amount of Hankook Tire Co., Ltd., and iii) the category causes significant influence to the Company.

How our audit addressed the Key Audit Matter

We performed the following audit procedures for the valuation model, key assumptions and decisions related to the value-in-use valuation. We engaged a specialist in value assessment when performing audit procedures.

- We assessed the capability and related experience (independence and competency) of the expert that the management used in value-in-use valuation.
- We made an inquiry about and assessed valuation model that the management applied.
- We obtained an understanding of the future cash flow of Hankook Tire & Technology Co., Ltd., and tested whether future cash flow estimation is based on the business plan approved by management.
- We assessed the adequacy of the estimation of the past business plan by comparing it with the performance for Hankook Tire & Technology Co., Ltd.
- We assessed the rationality of key assumptions used in valuation model, such as discount rate, growth rate and others by comparing the external benchmark in the same industry and the past financial information of Hankook Tire & Technology Co., Ltd.

Other Matter

Auditing standards and their application in practice vary among countries. The procedures and practices used in the Republic of Korea to audit such financial statements may differ from those generally accepted and applied in other countries.

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

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

In preparing the separate financial statements, management 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.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

Auditor's 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 auditor's 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 Korean Standards on Auditing 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 Korean Standards on Auditing, 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, whether due to fraud or error, 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 the 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 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 auditor's 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 auditor's 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.

We communicate with those charged with governance 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 with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other 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 financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's 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 auditor's report is Keun-young, Chung, Certified Public Accountant.
Seoul, Korea
March 19, 2020
This report is effective as of March 19, 2020, the audit report date. Certain subsequent events or

have to be revised to reflect the impact of such subsequent events or circumstances, if any.

circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying separate financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may

Hankook Technology Group Co., Ltd. Separate Statements of Financial Position December 31, 2019 and 2018

(in thousands of Korean won)	Notes	2019	2018
Assets			
Current assets			
Cash and cash equivalents	6	₩ 37,634,922	₩ 60,612,932
Short-term financial assets	6	95,000,000	70,000,000
Financial assets at fair value through profit or loss	5,6,7	57,361,188	60,037,512
Trade receivables	6,8	16,973,994	19,027,301
Other receivables	6,8	10,300,080	2,368,301
Other current assets	9	10,312	294,649
		217,280,496	212,340,695
Non-current assets			
Long-term financial assets	6	-	10,000,000
Financial assets at fair value through profit or loss	5,6,7	6,393,642	15,180,870
Financial assets at fair value through other comprehensive income	5,6,7	12,010,948	11,044,689
Other non-current receivables	6,8	-	4,000,000
Property, plant and equipment	10	22,333,484	22,875,366
Investment property	11	26,927,071	27,889,141
Intangible assets	12	9,567,856	9,389,077
Investments in subsidiaries	13	56,329,979	30,229,979
Investments in associates	13	1,982,230,355	1,964,392,002
Other non-current assets	9	650,018	650,018
		2,116,443,353	2,095,651,142
Total assets		₩ 2,333,723,849	₩ 2,307,991,837
Liabilities			
Current liabilities			
Other payables	6,14	₩ 13,707,482	₩ 14,155,114
Current tax liabilities		5,457,032	6,825,383
Other current liabilities	15	420,075	264,958
		19,584,589	21,245,455
Non-current liabilities			
Net defined benefit liabilities	16	3,863,643	2,702,535
Other non-current payables	6,14	-	20,000
Deferred tax liabilities	26	57,909,546	57,400,449
Other non-current liabilities	15	73,121	41,973
		61,846,310	60,164,957
Total liabilities		81,430,899	81,410,412
Equity			
Share capital	1,17	46,510,087	46,510,087
Other paid-in capital	18	1,291,535,691	1,291,535,691
Retained earnings	19	913,288,693	888,309,592
Other components of equity	20	958,479	226,055
Total equity		2,252,292,950	2,226,581,425
Total liabilities and equity		₩ 2,333,723,849	₩ 2,307,991,837

The above separate statements of financial position should be read in conjunction with the accompanying notes.

Hankook Technology Group Co., Ltd. Separate Statements of Comprehensive Income Years Ended December 31, 2019 and 2018

(in thousands of Korean won, except per share data)	Notes		2019		2018
Operating income	21,27,29	₩	82,651,352	₩	74,873,650
Operating expense	22		24,327,428		20,590,615
Operating profit			58,323,924		54,283,035
Finance income	23		6,858,316		5,721,599
Finance costs	23		4,212		354,330
Other non-operating income	24		2,891,201		2,912,733
Other non-operating expense	24		3,200,129		2,195,166
Profit before income tax			64,869,100		60,367,871
Income tax expense	26		11,673,163		11,180,223
Profit for the year		₩	53,195,937	₩	49,187,648
Other comprehensive income					
Items that will not be reclassified to profit or loss					
Remeasurements of net defined benefit liabilities (assets)	16		(708,311)		(1,207,638)
Gain (loss) on valuation of equity instruments at fair value through other comprehensive income	20		732,424		600,031
Items that may be subsequently reclassified to profit or loss					
Gain (loss) on valuation of debt instruments at fair value through other comprehensive income	20		-		(745,480)
Other comprehensive income for the year, net of tax			24,113		(1,353,087)
Total comprehensive income for the year		₩	53,220,050	₩	47,834,561
Earnings per share	30				
Basic and diluted earnings per share		₩	580	₩	536

The above separate statements of comprehensive income should be read in conjunction with the accompanying notes.

				Other paid-in	capita	<u> </u>																																																																						
(in thousands of Korean won)	Notes	Share capital	in	Paid-in capital excess of par value	Treasury shares		Treasury shares		Treasury shares		Treasury shares		Treasury shares		Treasury shares		Treasury shares		Treasury shares		Treasury shares		Treasury shares		Treasury shares		Treasury shares		Treasury share:		Treasury shares		Treasury share		Treasury shares			Retained earnings		cumulated gain (loss) on valuatior of financial instruments through other comprehensive income	n	Total equity																																		
Balance as of January 1, 2018		₩ 46,510,087	₩	1,302,628,300	₩	(11,092,609)	₩	867,838,105	₩	371,504	₩	2,206,255,386																																																																
Total comprehensive income for the year				_				_				_																																																																
Profit for the year		-		-		-		49,187,649		-		49,187,649																																																																
Remeasurements of net defined benefit liabilities (assets)	16	-		-		-		(1,207,638)		-		(1,207,638)																																																																
Gain (loss) on valuation of equity instruments at fair value through other comprehensive income	20	-		-		-		-		600,031		600,031																																																																
Gain (loss) on valuation of debt instruments at fair value through other comprehensive income	20	-		-		-		-		(745,480)		(745,480)																																																																
Transactions with owners :																																																																												
Annual dividends	19	-		-		-		(27,508,525)		-		(27,508,525)																																																																
Balance at December 31, 2018		₩ 46,510,087	₩	1,302,628,300	₩	(11,092,609)	₩	888,309,591	₩	226,055	₩	2,226,581,423																																																																
Balance as of January 1, 2019		₩ 46,510,087	₩	1,302,628,300	₩	(11,092,609)	₩	888,309,591	₩	226,055	₩	2,226,581,423																																																																
Changes in accounting policy		-		-		-		-		-		-																																																																
Balance as of January 1, 2019 (Adjusted)		₩ 46,510,087	₩	1,302,628,300	₩	(11,092,609)	₩	888,309,591	₩	226,055	₩	2,226,581,423																																																																
Total comprehensive income for the year																																																																												
Profit for the year		-		-		-		53,195,937		-		53,195,937																																																																
Remeasurements of net defined benefit liabilities (assets)	16	-		-		-		(708,311)		-		(708,311)																																																																
Gain (loss) on valuation of equity instruments at fair value through other comprehensive income	20	-		-		-		-		732,424		732,424																																																																
Gain (loss) on valuation of debt instruments at fair value through other comprehensive income	20	-		-		-		-		-		-																																																																
Transactions with owners :																																																																												
Annual dividends	19	-		-		-		(27,508,525)		-		(27,508,525)																																																																
Balance at December 31, 2019		₩ 46,510,087	₩	1,302,628,300	₩	(11,092,609)	₩	913,288,693	₩	958,479	₩	2,252,292,950																																																																

The above separate statements of changes in equity should be read in conjunction with the accompanying notes.

Hankook Technology Group Co., Ltd. Separate Statements of Cash Flows

Years Ended December 31, 2019 and 2018

(in thousands of Korean won)	Notes		2019		2018
Cash flows from operating activities					
Cash generated from operating activities					
Profit for the year		₩	53,195,937	₩	49,187,649
Adjustments	25		(10,699,984)		(7,507,967)
Changes in operating assets and liabilities	25		2,531,234		4,434,269
			45,027,187		46,113,951
Interest received			4,117,476		4,622,179
Dividends received			18,391,361		16,269,707
Income tax paid			(12,540,114)		(11,685,508)
Net cash inflow from operating activities			54,995,910		55,320,329
Cash flows from investing activities					
Payments for short-term financial assets			(160,000,000)		(116,501,015)
Proceeds from sale of short-term financial assets			135,000,000		84,191,316
Payments for long-term financial assets			-		(10,000,000)
Proceeds from long-term financial assets			10,000,000		-
Proceeds from sale of debt instruments at fair value through profit or loss			33,732,523		180,526,227
Payment of short-term loans			(4,200,000)		-
Payment for long-term loan			-		(4,000,000)
Payment for equity instruments at fair value through profit or loss	7		-		(4,993,539)
Payment for debt instruments at fair value through profit or loss	7		(20,000,000)		(110,000,000)
through other comprehensive income			-		18,363,164
Proceeds from sale of available-for-sale financial assets			-		9,712,548
Payments for property, plant and equipment	10		(34,200)		(358,785)
Proceeds from property, plant and equipment	10		-		90,909
Payments for intangible assets	12		(1,025,366)		(1,545,733)
Proceeds from intangible assets	12		-		203,000
Payments for investments in subsidiaries	13		(26,100,000)		(8,000,000)
Payments for investments in associates	13		(17,838,354)		(9,845,698)
Net cash inflow (outflow) from investing activities			(50,465,397)		27,842,394
Cash flows from financing activities					
Dividends payment	19		(27,508,525)		(27,508,525)
Net cash outflow from financing activities			(27,508,525)		(27,508,525)
Net increase (decrease) in cash and cash equivalents			(22,978,012)		55,654,198
Cash and cash equivalents at the beginning of the financial year			60,612,931		4,958,875
Effects of exchange rate changes on cash and cash equivalents					(142)
Cash and cash equivalents at the end of the year		₩	37,634,922	₩	60,612,931

The above separate statements of cash flow should be read in conjunction with the accompanying notes.

1. General Information

Hankook Technology Group Co., Ltd. (the Company) was incorporated in May, 1941 to manufacture and sell tires, tubes and alloy wheels. In December 1968, the Company offered its shares for public ownership and all of the Company's shares were registered with the Korea Exchange. On April 25, 2012, the Board of Directors resolved to spin-off the tire business unit and the investment business unit separately; the former engages in manufacturing, processing and distribution of tires, tubes and parts; the latter engages in the subsidiary management and real estate rental business. Following the approval of the shareholders' meeting on July 27, 2012, the spin-off has been implemented on September 1, 2012 and the Company changed its corporate name from Hankook Tire Co., Ltd. To Hankook Tire Worldwide Co., Ltd.

On February 28, 2019, the Board of Directors resolved to change its corporate name from Hankook Tire Worldwide Co., Ltd. to Hankook Technology Group Co., Ltd. Following the approval of the shareholders' meeting on March 28, 2019, the Group changed its corporate name on May 8, 2019.

Through the several capital increases, transfers of convertible notes and the spin-off, the authorized number of the Company's ordinary shares are 250 million with a par value of \$500 per share as at December 31, 2019. The share capital of the Company is \$46,510,087 thousand (ordinary shares: 93,020,173) and the Company's shareholders as at the end of the reporting period, are as follows:

	20	19	20)18		
	Number of shares	Percentage of ownership (%)	Number of shares	Percentage of ownership (%)		
Yang Rai Cho	21,942,693	23.6	21,942,693	23.6		
Hyun Shick Cho	17,974,870	19.3	17,974,870	19.3		
Hyun Bum Cho	17,959,178	19.3	17,959,178	19.3		
Treasury shares	1,325,090	1.4	1,325,090	1.4		
Others	33,818,342	36.4	33,818,342	36.4		
	93,020,173	100.0	93,020,173	100.0		

2. Significant Accounting Policies

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

2.1 Basis of Preparation

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

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

The separate financial statements of the Company have been prepared in accordance with Korean IFRS. These are the standards, subsequent amendments and related interpretations issued by the International Accounting Standards Board (IASB) that have been adopted by the Republic of Korea.

The financial statements have been prepared on a historical cost basis, except for the following:

- Certain financial assets and liabilities (including derivative instruments), certain classes of property, plant and equipment and investment property – measured at fair value
- · assets held for sale measured at fair value less costs to sell, and
- · defined benefit pension plans plan assets measured at fair value.

The preparation of financial statements requires the use of critical accounting estimates. Management also needs to exercise judgement in applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the separate financial statements are disclosed in Note 3.

2.2 Changes in Accounting Policies and Disclosures

- 2.2.1 New and amended standards adopted by the Company
- (a) Enactment of Korean IFRS 1116 Leases

Under the new standard, with implementation of a single lease model, lessee is required to recognize assets and liabilities for all lease which lease term is over 12 months and underlying assets are not low value assets. A lessee is required to recognize a right-of-use asset and a lease liability representing its obligation to make lease payments.

With implementation of Korean IFRS 1116 *Lease*, the Company has changed accounting policy. The Company has adopted Korean IFRS 1116 retrospectively, as permitted under the specific transitional provisions in the standard, and recognized the cumulative impact of initially applying the standard as at January 1, 2019, the date of initial application. The Company has not restated comparatives for the 2018 reporting period. The impact of the adoption of the leasing standard and the new accounting policies are disclosed in Note 32.

(b) Amendment to Korean IFRS 1109 Financial Instruments – Prepayment Features with Negative Compensation

The narrow-scope amendments made to Korean IFRS 1109 Financial Instruments enable entities to measure certain prepayable financial assets with negative compensation at amortized cost. When a modification of a financial liability measured at amortized cost that does not result in the derecognition, a modification gain or loss shall be recognized in profit or loss. The amendment does not have a significant impact on the financial statements.

(c) Amendments to Korean IFRS 1019 Employee Benefits –Amendment, Curtailment or Settlement of the Plan

The amendments require that an entity shall calculate current service cost and net interest for the remainder of the reporting period after a plan amendment, curtailment or settlement based on updated actuarial assumptions from the date of the change. The amendments also require that a reduction in a surplus must be recognized in profit or loss even if that surplus was not previously recognized because of the impact of the asset ceiling. The amendment does not have a significant impact on the financial statements.

(d) Amendments to Korean IFRS 1028 Investments in Associates and Joint Ventures – Long-term Interests in Associates and Joint Ventures

The amendments clarify that an entity shall apply Korean IFRS 1109 to financial instruments in an associate or joint venture to which the equity method is not applied. The amendments also clarify that Korean IFRS 1109 requirements are applied to long-term interests that form part of the entity's net investment in an associate or joint venture before applying the impairment requirements of Korean IFRS 1028. The amendment does not have a significant impact on the financial statements.

(e) Enactment to Interpretation of Korean IFRS 2123 Uncertainty over Income Tax Treatments

The Interpretation explains how to recognize and measure deferred and current income tax assets and liabilities where there is uncertainty over a tax treatment, and includes guidance on how to determine whether each uncertain tax treatment is considered separately or together. It also presents examples of circumstances where a judgement or estimate is required to be reassessed. The amendment does not have a significant impact on the financial statements.

(f) Annual Improvements to Korean IFRS 2015 – 2017 Cycle:

· Amendments to Korean IFRS 1103 Business Combination

The amendments clarify that when a party to a joint arrangement obtains control of a business that is a joint operation, and had rights to the assets and obligations for the liabilities relating to that joint operation immediately before the acquisition date, the transaction is a business combination achieved in stages. In such cases, the acquirer shall remeasure its entire previously held interest in the joint operation. The amendment does not have a significant impact on the financial statements.

Amendments to Korean IFRS 1111 Joint Agreements

The amendments clarify that when a party that participates in, but does not have joint control of, a joint operation might obtain joint control of the joint operation in which the activity of the joint operation constitutes a business. In such cases, previously held interests in the joint operation are not remeasured. The amendment does not have a significant impact on the financial statements.

Amendments to Paragraph 57A of Korean IFRS 1012 Income Tax

The amendment is applied to all the income tax consequences of dividends and requires an entity to recognize the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where the entity originally recognized those past transactions or events. The amendment does not have a significant impact on the financial statements.

Korean IFRS 1023 Borrowing Costs

The amendments clarify that if a specific borrowing remains outstanding after the related qualifying asset is ready for its intended use (or sale), it becomes part of general borrowings. The amendment does not have a significant impact on the financial statements.

2.2.2 New standards and interpretations not yet adopted by the Company

The following new accounting standards and interpretations have been published that are not mandatory for December 31, 2019 reporting periods and have not been early adopted by the Company.

(a) Amendments to Korean IFRS 1001 Presentation of Financial Statements and Korean IFRS 1008 Accounting policies, changes in accounting estimates and errors – Definition of Material

The amendments clarify the explanation of the definition of material and amended Korean IFRS 1001 and Korean IFRS 1008 in accordance with the clarified definitions. Materiality is assessed by reference to omission or misstatement of material information as well as effects of immaterial information, and to the nature of the users when determining the information to be disclosed by the Company. These amendments should be applied for annual periods beginning on or after January 1, 2020, and earlier application of permitted. The Company does not expect that these amendments have a significant impact on the financial statements.

(b) Amendments to Korean IFRS 1103 Business Combination - Definition of a Business

To consider the integration of the required activities and assets as a business, the amended definition of a business requires an acquisition to include an input and a substantive process that together significantly contribute to the ability to create outputs and excludes economic benefits from the lower costs. An entity can apply a concentration test, an optional test, where substantially all of the fair value of gross assets acquired is concentrated in a single asset or a group of similar assets, the assets acquired would not represent a business. These amendments should be applied for annual periods beginning on or after January 1, 2020, and earlier application of permitted. The Company does not expect that these amendments have a significant impact on the

financial statements.

2.3 Subsidiaries and Associates

The financial statements of the Company are the separate financial statements prepared in accordance with Korean IFRS 1027 Separate Financial Statements. Investments in subsidiaries associates and joint ventures are recognized at cost under the direct equity method. Management applied the carrying amounts under the previous K-GAAP at the time of transition to the Korean IFRS as deemed cost of investments. The Company recognizes dividend income from subsidiaries, associates and joint ventures, in profit or loss when its right to receive the dividend is established.

2.4 Foreign Currency Translation

(a) Functional and presentation currency

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

(b) Transactions and balances

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

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognized in profit or loss as part of the fair value gain or loss and translation differences on non-monetary assets such as equities classified as equity instrument at fair value through other comprehensive income are recognized in other comprehensive income.

2.5 Financial Assets

(a) Classification

The Company classifies its financial assets in the following measurement categories:

- those to be measured at fair value through profit or loss
- those to be measured at fair value through other comprehensive income, and
- those to be measured at amortized cost.

The classification depends on the Company's business model for managing the financial assets and the contractual terms of the cash flows.

For financial assets measured at fair value, gains and losses will either be recorded in profit or loss or other comprehensive income. For investments in debt instruments, this will depend on the business model in which the investment is held. The Company reclassifies debt investments when, and only when its business model for managing those assets changes.

For investments in equity instruments that are not held for trading, this will depend on whether the Company has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income. Changes in fair value of non-designated equity investment are recognized in profit or loss.

(b) Measurement

At initial recognition, the Company measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at fair value through profit or loss are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

A. Debt instruments

Subsequent measurement of debt instruments depends on the Company's business model for managing the asset and the cash flow characteristics of the asset. The Company classifies its debt instruments into one of the following three measurement categories:

- Amortized cost: Assets that are held for collection of contractual cash flows where those
 cash flows represent solely payments of principal and interest are measured at amortized
 cost. A gain or loss on a debt investment that is subsequently measured at amortized
 cost and is not part of a hedging relationship is recognized in profit or loss when the asset
 is derecognized or impaired. Interest income from these financial assets is included in
 'finance income' using the effective interest rate method.
- Fair value through other comprehensive income: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at fair value through other comprehensive income. Movements in the carrying amount are taken through other comprehensive income, except for the recognition of impairment loss (reversal of impairment loss), interest income and foreign exchange gains and losses which are recognized in profit or loss. When the financial asset is derecognized, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss. Interest income from these financial assets is included in 'finance income' using the effective interest rate method. Foreign exchange gains and losses are presented in 'finance income or costs' and impairment losses are presented in 'finance costs'

Fair value through profit or loss: Assets that do not meet the criteria for amortized cost or
fair value through other comprehensive income are measured at fair value through profit
or loss. A gain or loss on a debt investment that is subsequently measured at fair value
through profit or loss and is not part of a hedging relationship is recognized in profit or
loss and presented net in the statement of profit or loss within 'finance income or costs' in
the year in which it arises.

B. Equity instruments

The Company subsequently measures all equity investments at fair value. Where the Company's management has elected to present fair value gains and losses on equity investments, which held for long-term investment or strategic purpose, in other comprehensive income, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividend income from such investments continue to be recognized in profit or loss as 'finance income' when the right to receive payments is established.

Changes in the fair value of financial assets at fair value through profit or loss are recognized in 'finance income or costs' in the statement of profit or loss as applicable. Impairment loss (reversal of impairment loss) on equity investments measured at fair value through other comprehensive income are not reported separately from other changes in fair value.

(c) Impairment

The Company assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortized cost and fair value through other comprehensive income. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables and lease receivables, the Company applies the simplified approach, which requires expected lifetime credit losses to be recognized from initial recognition of the receivables. (Note 31 provides more detail of how the Company determines there has been a significant increase in credit risk.)

(d) Recognition and Derecognition

Regular way purchases and sales of financial assets are recognized or derecognized on tradedate, the date on which the Company commits to purchase or sell the asset. Financial assets are derecognized when the rights to receive cash flows from the financial assets have expired or have been transferred and the Company has transferred substantially all the risks and rewards of ownership.

If a transfer does not result in derecognition because the Company has retained substantially all the risks and rewards of ownership of the transferred asset, the Company continues to recognize the transferred asset in its entirety and recognizes a financial liability for the consideration received. The Company classified the financial liability as "borrowings" in the statement of financial position.

(e) Offsetting of financial instruments

Financial assets and liabilities are offset and the net amount reported in the statement of financial position where there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis or realize the assets and settle the liability simultaneously. The legally enforceable right must not be contingent on future events and must be enforceable in the normal course of business and in the event of default, insolvency or bankruptcy of the Company or the counterparty.

2.6 Derivative Instruments

Derivatives are initially recognized at fair value on the date when a derivative contract is entered into and are subsequently remeasured at their fair value at the end of each reporting period. Changes in the fair value of any derivative instrument that does not qualify for hedge accounting are recognized immediately in profit or loss within 'other non-operating income (expenses)' or 'finance income (costs)' based on the nature of transactions.

2.7 Property, Plant and Equipment

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

Depreciation of all property, plant and equipment, except for land, is calculated using the straightline method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives as follows:

	Useful life
Buildings	20 - 40 years
Structures	20 - 40
Vehicles	4
Supplies	4

The assets' depreciation method, residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

2.8 Intangible Assets

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

Membership rights that have an indefinite useful life are not subject to amortization because there is no foreseeable limit to the period over which the assets are expected to be utilized. The Company amortizes intangible assets with a limited useful life using the straight-line method over the following periods:

Useful life

Industrial property rights

5 years

2.9 Investment Property

Investment property is property held to earn rentals or for capital appreciation or both. An investment property is measured initially at its cost. An investment property is measured after initial measurement at depreciated cost (less any accumulated impairment losses). After recognition as an asset, investment property is carried at cost less accumulated depreciation and impairment losses. The Company depreciates investment properties, except for land, using the straight-line method over their useful lives for 40 years.

2.10 Impairment of Non-financial Assets

Intangible assets that have an indefinite useful life are not subject to amortization and are tested annually for impairment, or more frequently if events or changes in circumstances indicate that they might be impaired. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. Non-financial assets other than goodwill that suffered an impairment are reviewed for possible reversal of the impairment at the end of each reporting period.

2.11 Financial Liabilities

(a) Classification and measurement

The Company's financial liabilities at fair value through profit or loss are financial instruments held for trading. A financial liability is held for trading if it is incurred principally for the purpose of repurchasing in the near term. A derivative that is not a designated as hedging instruments and an embedded derivative that is separated are also classified as held for trading.

The Company classifies non-derivative financial liabilities, except for financial liabilities at fair value through profit or loss, financial guarantee contracts and financial liabilities that arise when a transfer of financial assets does not qualify for derecognition, as financial liabilities carried at amortized cost and present as 'trade payables', 'borrowings', and 'other financial liabilities' in the statement of financial position.

Preferred shares that require mandatory redemption at a particular date are classified as liabilities. Interest expenses on these preferred shares using the effective interest method are recognized in the statement of profit or loss as 'finance costs', together with interest expenses recognized from other financial liabilities.

(b) Derecognition

Financial liabilities are removed from the statement of financial position when it is extinguished; for example, when the obligation specified in the contract is discharged or cancelled or expired or when the terms of an existing financial liability are substantially modified. The difference between the carrying amount of a financial liability extinguished or transferred to another party and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

2.12 Current and Deferred Tax

The tax expense for the period consists of current and deferred tax. Current and deferred tax is recognized in profit or loss, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

The current income tax expense is measured at the amount expected to be paid to the taxation authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. The Company recognizes current income tax on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the separate financial statements. However, deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred tax assets are recognized only if it is probable that future taxable amounts will be available to utilize those temporary differences and losses.

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

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset when the Group has a legally enforceable right to offset and intends either to settle on a net basis, or to realize the assets and settle the liability simultaneously.

2.13 Employee Benefits

(a) Post-employment benefits

A defined benefit plan is a pension plan that is not a defined contribution plan. Generally, post-employment benefits are payable after the completion of employment, and the benefit amount depended on the employee's age, periods of service or salary levels. The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms approximating to the terms of the related obligation. Remeasurement gains and losses arising from experience adjustments and changes in actuarial assumptions are recognized in the period in which they occur, directly in other comprehensive income.

Changes in the present value of the defined benefit obligation resulting from plan amendments or curtailments are recognized immediately in profit or loss as past service costs.

(b) Other long-term employee benefits

Certain entities within the Company provide long-term employee benefits that are entitled to employees with service period for ten years and above. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans. The Company recognizes service cost, net interest on other long-term employee benefits and remeasurements as profit or loss for the year. These liabilities are valued annually by an independent qualified actuary.

2.14 Revenue Recognition

(a) Rendering of services including Shared Service

The Company is providing supporting service to affiliates. If the Company has the right to receive the amount for the value provided to the customer for the performance completed, the Company recognizes the amount of right for the service provided. This is because the Company can use practical expedient in recognizing the amount of right to receive.

(b) Royalty income

Royalty income is the consideration that provides a license of intellectual property, and is recognized when a later event occurs between fulfillment of the performance obligation to which the consideration is allocated and the subsequent sale or use.

(c) Dividend income

The company conducts investment activities such as investment in subsidiaries. The company recognizes dividend yield at the time it declares dividends.

(e) Rental income

Rental income from investment properties is recognized using the straight-line method over the period of rent.

2.15 Leases

As explained in Note 2.2 above, the Company has changed its accounting policy for leases. The impact of the new accounting policies is disclosed in Note 32.

As at December 31, 2018, leases of property, plant and equipment where the Company, as lessee, had substantially all the risks and rewards of ownership were classified as finance leases. Finance leases were capitalized at the lease's inception at the fair value of the leased property or, if lower, the present value of the minimum lease payments. The corresponding lease payments, net of finance charges, were included in other short-term or long-term payables. Each lease payment was allocated between the liability and finance cost. The finance cost was charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The property, plant and equipment acquired under finance leases was depreciated over the asset's useful life, or over the shorter of the asset's useful life and the lease term if there is no reasonable certainty that the Company will obtain ownership at the end of the lease term.

Leases in which a significant portion of the risks and rewards of ownership were not transferred to the Company as lessee were classified as operating leases. Payments made under operating leases (net of any incentives received from the lessor) were charged to profit or loss on a straight-line basis over the period of the lease.

The Company leases various office supplies and cars. Lease contracts are typically made for fixed periods of 3 to 8 years but may have extension options.

Contracts may contain both lease and non-lease payments. The Company allocates the consideration in the contract to the lease and non-lease components based on their relative standalone prices.

Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. The lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

Until the 2018 financial year, leases of property, plant and equipment were classified as either finance or operating leases. Payments made under operating leases (net of any incentives received from the lessor) were charged to profit or loss on a straight-line basis over the period of the lease.

From January 1, 2019, leases are recognized as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Company.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

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

Lease liability measurement also include payments to be made in option periods if the lessee is reasonably certain to exercise an option to extend the lease.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

To determine the incremental borrowing rate, the Company:

- where possible, uses recent third-party financing received by the individual lessee as a starting point, adjusted to reflect changes in financing conditions since third party financing was received
- uses a build-up approach that starts with a risk-free interest rate adjusted for credit risk for leases held by an entity which does not have recent third-party financing, and
- makes adjustments specific to the lease, for example term, country, currency and security.

The Company is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- · any initial direct costs, and
- · restoration costs

The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

Payments associated with short-term leases of equipment and vehicles and leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less. Low-value assets comprise IT-equipment and small items of office furniture.

2.16 Segment Reporting

Information of each operating segment is reported in a manner consistent with the internal business segment reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the Board of Directors that makes strategic decisions.

2.17 Approval of Issuance of the Financial Statements

The separate financial statements 2018 were approved for issue by the Board of Directors on March 11, 2020 and are subject to change with the approval of shareholders at their Annual General Meeting.

3. Critical Accounting Estimates and Assumptions

The preparation of financial statements requires the Company to make estimates and assumptions concerning the future. Management also needs to exercise judgement in applying the Company's accounting policies. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. As the resulting accounting estimates will, by definition, seldom equal the related actual results, it can contain a significant risk of causing a material adjustment.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below. Additional information of significant judgement and assumptions of certain items are included in relevant notes.

(a) Income taxes

The Company's taxable income generated from these operations are subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain.

If certain portion of the taxable income is not used for investments or increase in wages or dividends in accordance with the *Tax System For Recirculation of Corporate Income*, the Company is liable to pay additional income tax calculated based on the tax laws. Accordingly, the measurement of current and deferred income tax is affected by the tax effects from the new tax system. As the Company's income tax is dependent on the investments, increase in wages and dividends, there is an uncertainty measuring the final tax effects (Note 26).

(b) Fair value of financial instruments

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Company uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period (Note 5).

(c) Impairment of financial assets

The provision for impairment for financial assets are based on assumptions about risk of default and expected loss rates. The Company uses judgement in making these assumptions and selecting the inputs to the impairment calculation based on the Company's past history, existing market conditions as well as forward looking estimates at the end of each reporting period (Note 31).

(d) Net defined benefit liability

The present value of net defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions including the discount rate (Note 16).

(e) Impairment of investments in subsidiaries and associates

Recoverable amounts of investment to monitor the impairment of investments in subsidiaries and associates are determined on the basis of value-in-use calculations (Note 13).

4. Financial Risk Management

(a) Capital Management

The Company manages its capital to ensure that entities under the Company will be able to continue while maximizing the return to shareholders through the optimization of its debt and equity balance. The Company's overall strategy remains unchanged from that of the prior periods. The Company utilizes the debt ratio as capital management index which is the total liabilities divided by the total equity. Total liabilities and total equity are based on the amounts stated in the financial statements. The Company is not subject to any externally imposed capital requirements.

The debt ratio as at the end of the reporting period, are as follows:

(in thousands of Korean won)	2019	2018	
Total liabilities	₩ 81,430,89	99 ₩ 81,410,4	12
Total equity	2,252,292,95	50 2,226,581,4	24
Debt ratio	3.6	% 3.7	′%

- (b) The significant accounting policies and methods (including recognition, measurement, and related gain (loss) recognition) adopted to the Company's financial assets, financial liabilities and equity are detailed in Note 2.
- (c) Financial risk management
- 1) Purpose of financial risk management

The Company is exposed to various risks related to its financial instruments, such as market risk (currency risk, fair value interest rate risk, and price risk), credit risk, liquidity risk and cash flow interest rate risk. The finance department of the Company manages operations, organizes the approach to financial market and controls the financial risks related to operations of the Company through internal risk reports which analyze the scope and degree of each risk factor.

The Company uses derivative financial instruments to hedge against the risks listed. The use of derivatives is decided in the observance of the Company's polices approved by the board of the directors. They provide the documented principles of currency risk, interest rate risk, credit risk, use of derivatives/non-derivatives and excessive liquidity investments. The audit committee constantly oversees the observance of the policies and the degree of risk exposure. The Company does not trade the financial instruments including derivatives for the speculative purpose.

The finance department of the Company report the details quarterly to Foreign Exchange Risk Management Committee monitoring whether the Company continues to comply with the risk management policies and the current risk management system works appropriately for the risks that the Company is exposed to.

2) Market risk

Operations of the Company are mainly exposed to financial risks of changes in currency and interest rate. The Company makes various contracts of derivatives for management of interest risk and foreign exchange rate.

a) Foreign currency risk management

The Company undertakes transactions denominated in foreign currencies; consequently, exposures to exchange rate fluctuations arise. Exchange rate exposures are managed within approved policy parameters utilizing forward foreign exchange contracts.

The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the year end for a 10% change in foreign currency rates.

The table below summarizes the impact of weakened Korean won on the Company's pre-tax profit for the year. The analysis is based on the assumption that Korean won has weakened by 10% with all other variables held constant.

(in thousands of Korean won)	2	2019	2018
USD	₩	(3,020) ₩	(1,315)
EUR		(2,232)	(326)
Others		(2,164)	(931)

b) Interest rate risk

Interest rate risk is defined as the risk that the interest income or expenses arising from the Company's investing and financing activities will fluctuate because of changes in market interest rate. In order to minimizing uncertainty caused by fluctuations in interest rates and minimizing finance costs, the Company monitors a fluctuation of domestic and foreign interest rates and establishes alternatives.

c) Other price risks

The Company is exposed to equity price risks arising from its equity investments. Equity investments are held for strategic rather than trading purposes. The Company does not actively trade these investments.

The below sensitivity analysis was performed based on stock price fluctuation risk at the end of the reporting period.

If the price of financial assets at fair value through other comprehensive income and financial assets at fair value through profit or loss changed by 5% with all other variables held constant, other comprehensive income would be increased/decreased by $\mbox{$W$}$ 84,378 thousand (2018: $\mbox{$W$}$ 44,191 thousand) and Profit before income tax would be increased/decreased by $\mbox{$W$}$ 319,682 thousand (2018: $\mbox{$W$}$ 256,021 thousand) for the year ended December 31, 2019.

There was no significant change in sensitivity of stock price of the Company comparing to that of prior year.

3) Liquidity risk management

The Company has established an appropriate liquidity risk management framework for the management of the Company's short, medium and long-term funding and liquidity management requirements. The Board of Directors has a full responsibility of the liquidity risk management. The Company manages liquidity risk by maintaining adequate reserves and credit facilities, by continuously monitoring forecast and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

a) Details of liquidity risk

The table below illustrates remaining contractual maturity of non-derivative financial liabilities and Net settled derivative financial instrument in detail. Contractual maturity is based on the earliest day when the payment can be claimed to the Company. Maturity analysis of non-derivative financial liabilities according to their remaining maturity at the end of the reporting period, are as follows:

(in thousands of Korean won)	2019								
	Book	Contractual	Residual amount						
	amount	cash flows	Within a year	1-2 years	2–5 years	After 5 years			
Other payables	₩ 13,707,482	₩ 13,707,482	₩ 13,707,482	₩ -	₩ -	- ₩ -			
(in thousands of Korean won)	2018								
	Book amount	Contractual cash flows	Within a year	1-2 years	l amount 2–5 years	After 5 years			
Other payables	₩ 14,155,114	₩ 14,155,114	₩ 14,155,114	₩ -	₩ -	- ₩ -			
Other non-current payables	20,000	20,000		20,000		<u> </u>			
	₩ 14,175,114	₩ 14,175,114	₩ 14,155,114	₩ 20,000	₩ -	₩ -			

5. Fair value

(a) Financial instruments measured at fair value

Details of the financial instruments that are measured at fair value as at the end of the reporting period, are as follows:.

(in thousands of Korean won)	2019			2018				
		Carrying amount Fair value			Carrying amount		air value	
Financial assets:								
Debt instruments at fair value through profit or loss (current)	₩	57,361,189	₩	57,361,189	₩	60,037,512	₩	60,037,512
Debt instruments at fair value through profit or loss (non-current)		-		-		10,060,445		10,060,445
Equity instruments at fair value through profit or loss (non-current)		6,393,641		6,393,641		5,120,425		5,120,425
Equity instruments at fair value through other comprehensive income (non-current)		12,010,948		12,010,948		11,044,689		11,044,689
	₩	75,765,778	₩	75,765,778	₩	86,263,071	₩	86,263,071

(b) Fair Value Hierarchy

Items that are measured at fair value are categorized by the fair value hierarchy levels, and the defined levels are as follows:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1).
- All inputs other than quoted prices included in level 1 that are observable (either directly that is, prices, or indirectly that is, derived from prices) for the asset or liability (Level 2).
- Unobservable inputs for the asset or liability (Level 3).

Financial instruments that are measured subsequent to initial recognition at fair value at the end of the reporting period, are as follows:

(in thousands of Korean won)		2019							
		Level 1		Level 2		Level 3		Total	
Recurring fair value measurements Equity instruments at fair value									
through other comprehensive income	₩	1,907,648	₩	10,103,300	₩	-	₩	12,010,948	
Debt instruments at fair value through profit or loss		-		57,361,189		-		57,361,189	
Equity instruments at fair value through profit or loss		6,393,641				-		6,393,641	
	₩	8,301,289	₩	67,464,489	₩	-	₩	75,765,778	
(in thousands of Korean won)				20	018				
		Level 1		Level 2		Level 3		Total	
Recurring fair value measurements									
Equity instruments at fair value through other comprehensive income	₩	1,103,889	₩	9,940,800	₩	_	₩	11,044,689	
Debt instruments at fair value through profit or loss		-		70,097,957		-		70,097,957	
Equity instruments at fair value through profit or loss		5,120,425						5,120,425	
	₩	6,224,314	₩	80,038,757	₩	-	₩	86,263,071	

(c) Transfers Between Fair Value Hierarchy Levels of Recurring Fair Value Measurements

The Company's policy is to recognize transfers between levels of the fair value at the date of the event or change in circumstances that caused the transfer. There are no transfers between levels of each fair value hierarchy of financial instruments.

(d) Valuation Techniques and the Inputs

Valuation techniques and inputs used in levels 2 fair value measurements are as follows:

(In thousands of Korean won)			2019	
Fair value		Level	Valuation techniques	Inputs
Equity instruments at fair val	ue through othe	er compr	ehensive income	
Hybrid capital securities (consol bond)	₩ 10,103,300	2	Discounted cash flows model	Credit risk adjusted discount rate
Debt instruments at fair value	e through profit	or loss		
Derivative linked securities	6,595,414	2	Option pricing model	Underlying assets price, Credit risk adjusted discount rate, Volatility of underlying assets
Beneficiary certificates	50,765,775	Discounted cash flows model		Credit risk adjusted discount rate
(In thousands of Korean won)			2018	
	Fair value	Level	Valuation techniques	Inputs
Equity instruments at fair val	ue through othe	er compr	ehensive income	
Hybrid capital securities (consol bond)	₩ 9,940,800	2	Discounted cash flows model	Credit risk adjusted discount rate
Debt instruments at fair value	e through profit	or loss		
Derivative linked securities	20,037,512	2	Option pricing model	Underlying assets price, Credit risk adjusted discount rate, Volatility of underlying assets
Beneficiary certificates	50,060,445	2	Discounted cash flows model	Credit risk adjusted discount rate

6. Financial instruments

Carrying amounts of financial assets and liabilities by category as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean w	von)		2019		2018
Financial assets:					
Financial assets at fair value	Financial assets at fair value through profit or loss Financial assets at fair value through other comprehensive	₩	63,754,830	₩	75,218,382
	income		12,010,948		11,044,689
Financial assets at amortized cost	Cash and cash equivalents		37,634,922		60,612,932
	Short-term financial assets		95,000,000		70,000,000
	Long-term financial assets		-		10,000,000
	Trade receivables		16,973,995		19,027,301
	Other receivables		10,300,080		2,368,301
	Other non-current receivables		-		4,000,000
		₩	235,674,775	₩	252,271,605
(in thousands of Korean w	von)		2019		2018
Financial liabilities:					
Financial liabilities at amortized cost	Other payables	₩	13,707,482	₩	14,155,114
	Other non-current payables				20,000
		₩	13,707,482	₩	14,175,114

Net gains or losses on each category of financial instruments for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2018	2016
Financial assets measured at amortized cost			
		4 000 500	4 000 500
Interest income		1,866,589	1,800,599
Gains (losses) on foreign currency transaction		(627)	5,999
Losses on foreign currency translation		-	(142)
Financial liabilities measured at amortized cost			
Gains on foreign currency transaction		(1,751)	383
Gains on foreign currency translation		(98)	432
Debt instruments at fair value through other comprehensive income			
Reclassification to profit or loss(other			
comprehensive income, net of tax)		-	(745,480)
Gains on disposal		-	199,918
Interest income		-	81,739
Equity instruments at fair value through other comprehensive income			
Gains on valuation (other comprehensive income, net of tax)		732,424	600,031
Interest income		327,000	352,188
Debt instruments at fair value through profit or loss			
Gains on valuation		800,743	166,957
Gains on disposal		195,012	71,409
Interest income		2,392,249	2,569,086
Equity instruments at fair value through profit or loss			
Gains on valuation		1,273,216	126,886
Gains on disposal		-	
	₩	7,584,757	₩ 5,230,005

7. Financial Assets

7.1 Financial assets at fair value through profit or loss

Details of financial assets through profit or loss at the end of the reporting periods are as follows:

(in thousands of Korean won)	usands of Korean won) 2			2018
Current				
Derivative-linked securities	₩	6,595,414	₩	20,037,512
Beneficiary certificates		50,765,775		40,000,000
Non-current				
Beneficiary certificates		-		10,060,445
Listed securities		6,393,641		5,120,425
	₩	63,754,830	₩	75,218,382

Amounts recognized in profit or loss for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	_	2019		2018
Gain from equity instruments at fair value through profit or loss Gain from debt instruments at fair value through	₩	1,273,216	₩	126,886
profit or loss		3,388,004		2,807,452
	₩	4,661,220	₩	2,934,338

Changes in financial assets through profit or loss for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)						2019				
, ,		Beginning balance		Acquisition		Disposals		Valuation		Ending balance
Debt instruments Derivative-linked securities	₩	20.037.512	₩	10.000.000	₩	(23,537,512)	₩	95.414	₩	6.595.414
Beneficiary certificates	•••	50,060,445	••	10,000,000	••	(10,000,000)	•	705,330	••	50,765,775
Equity instruments										
Listed securities		5,120,425		-		-		1,273,216		6,393,641
	₩	75,218,382	₩	20,000,000	₩	(33,537,512)	₩	2,073,960	₩	63,754,830

(in thousands of Korean won)	2018								
	Beginning balance	Acquisition	Disposals	Valuation	Ending balance				
Debt instruments Derivative-linked securities	₩ 40,385,818	₩ 20,000,000	₩ (40,454,818) *	₩ 106,512 ₩	20,037,512				
Beneficiary certificates Equity instruments	100,000,000	90,000,000	(140,000,000)	60,445	50,060,445				
Listed securities		4,993,539		126,886	5,120,425				
	₩ 140,385,818	₩ 114,993,539	₩ (180,454,818)	₩ 293,843 ₩	75,218,382				

7.2 Financial assets at fair value through other comprehensive income

(a) Details of financial assets at fair value through other comprehensive income at the end of the reporting periods are as follows:

(in thousands of Korean won)		2019	2018		
Non-current					
Listed securities and others	₩	1,907,648	₩	1,103,889	
Hybrid capital securities (consol bond)		10,103,300		9,940,800	
	₩	12,010,948	₩	11,044,689	

Upon disposal of these equity investments, any balance in the accumulated other comprehensive income for these equity investments is reclassified to retained earnings and is not reclassified to profit or loss.

(b) Debt instruments at fair value through other comprehensive income

As at December 31, 2019 and 2018, there are no debt investments at fair value through other comprehensive income. Upon disposal of the debt investments, any balance within the accumulated other comprehensive income for these debt investments is reclassified to profit or loss.

(c) Changes in Financial assets at fair value through other comprehensive income for the years ended December 31, 2019, are as follows:

(in thousands of Korean won)		2019										
		eginning palance ¹	Disposals	Valuation		uation	Ending balance					
Equity instruments												
Listed securities and others Hybrid capital securities	₩	1,103,889	₩	-	₩	803,759	₩	1,907,648				
(consol bond)		9,940,800		_		162,500		10,103,300				
	₩	11,044,689	₩	_	₩	966,259	₩	12,010,948				

(in thousands of Korean won)	2018									
		eginning balance		Disposals	٧	aluation		Ending balance		
Equity instruments										
Listed securities and others	₩	824,791	₩	-	₩	279,098	₩	1,103,889		
Hybrid capital securities		0.400.000				540 500		0.040.000		
(consol bond)		9,428,300		-		512,500		9,940,800		
Debt instruments										
Government bonds		19,146,730		(18,163,247)		(983,483)		-		
	₩	29,399,821	₩	(18,163,247)	₩	(191,885)	₩	11,044,689		

8. Trade and Other Receivables

Details of trade and other receivables as at the end of the reporting period, are as follows:

(in thousands of Korean won)	2019									
	Gro	ess amount	Less: Provision impairment	Net amount						
Current										
Trade receivables	₩	16,973,995	₩		₩	16,973,995				
Other receivables		_				_				
Non-trade receivables		37,186		-		37,186				
Accrued income		2,060,694		-		2,060,694				
Deposits		2,200		-		2,200				
Short-term loans		8,200,000		_		8,200,000				
	₩	10,300,080	₩		₩	10,300,080				
Non-current										
Long-term loan	₩	-	₩	_	₩					

(in thousands of Korean won)	2018								
	Gro	ess amount	Less: Provisi impairme		Net amount				
Current									
Trade receivables	₩	19,027,301	₩		₩	19,027,301			
Other receivables		_				_			
Non-trade receivables		758,369		-		758,369			
Accrued income		1,592,332		-		1,592,332			
Deposits		17,600				17,600			
	₩	2,368,301	₩	-	₩	2,368,301			
Non-current									
Long-term loan	₩	4,000,000	₩		₩	4,000,000			

Trade receivables and other receivables above are classified as loan and receivables, and measured at amortized cost. There were no changes in provision for trade receivables and other receivables during the reporting period. The Company considers a change of credit grade about trade receivables from starting date for granting credit to the statements of financial position date to judge recoverability of trade receivables and others.

9. Other Assets

Details of other assets as at the end of the reporting period, are as follows:

(in thousands of Korean won)	2019					2018				
	C	Current	Non-current		Current		Non-curre			
Advance payments	₩	-	₩	-	₩	282,950	₩	-		
Prepaid expenses		10,312		-		11,699		-		
Others				650,018	-	-	-	650,018		
	₩	10,312	₩	650,018	₩	294,649	₩	650,018		

10. Property, Plant and Equipment

Details of property, plant and equipment as at the end of the reporting period, are as follows:

(in thousands of Korean won)	2019									
		Cost	Accumulated depreciation		umulated pairment loss	Book amount				
Land	₩	7,918,741	₩ -	₩	-	₩	7,918,741			
Buildings		25,308,592	(11,346,542)		-		13,962,050			
Structures		521,000	(241,327)		-		279,673			
Vehicles		200,354	(108,525)		-		91,829			
Supplies		894,093	(812,902)		-		81,191			
Construction in progress		301,888			(301,888)					
	₩	35,144,668	₩ (12,509,296)	₩	(301,888)	₩	22,333,484			

(in thousands of Korean won)	2018								
		Cost	Accumulated depreciation	Accumulated impairment loss	Вс	ook amount			
Land	₩	7,803,471	₩ -	₩ -	₩	7,803,471			
Buildings		25,146,610	(10,609,722)	-		14,536,888			
Structures		521,000	(225,303)	-		295,697			
Vehicles		200,354	(58,437)	-		141,917			
Supplies		859,893	(762,500)	-		97,393			
Construction in progress		301,888		(301,888)		-			
	₩	34,833,216	₩ (11,655,962)	₩ (301,888)	₩	22,875,366			

Changes in property, plant and equipment for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)			20	119		
	Opening net book amount	Acquisition	Disposal	Depreciation	Others ¹	Closing net book amount
Land	₩ 7,803,471	₩ -	₩ -	₩ -	₩ 115,270	₩ 7,918,741
Buildings	14,536,888	-	(11,620)	(628,154)	64,936	13,962,050
Structures	295,697	-	-	(16,024)	-	279,673
Vehicles	141,917	-	-	(50,088)	-	91,829
Supplies	97,393	34,200		(50,402)		81,191
	₩ 22,875,366	₩ 34,200	₩ (11,620)	₩ (744,668)	₩ 180,206	₩ 22,333,484

¹Consists of ₩ 180,206 thousand, a transfer from investment properties to property, plant and equipment.

(in thousands of Korean won)			20	18		
	Opening net book amount	Acquisition	Disposal	Depreciation	Others ¹	Closing net book amount
Land	₩ 10,546,728	₩ -	₩ -	₩ -	₩ (2,743,257)	₩ 7,803,471
Buildings	16,770,829	280,967	(28,479)	(645,502)	(1,840,927)	14,536,888
Structures	311,721	-	-	(16,024)	-	295,697
Vehicles	192,007	-	(1)	(50,089)	-	141,917
Supplies	126,282	46,600	-	(75,490)	1	97,393
Construction in progress	31,219				(31,219)	
	₩ 27,978,786	₩ 327,567	₩ (28,480)	₩ (787,105)	₩ (4,615,402)	₩ 22,875,366

¹ Consists of ₩ 4,615,403 thousand which is a transfer from investment properties to property, plant and equipment, and a transfer from construction in progress to buildings, ₩ 31,219 thousand.

11. Investment Properties

Details of investment properties as at the end of the reporting period, are as follows:

(in thousands of Korean won)	2019									
		Cost		ccumulated epreciation	Book amount					
Land	₩	18,290,638	₩	-	₩	18,290,638				
Buildings		28,091,635		(19,455,202)		8,636,433				
	₩	46,382,275	₩	(19,455,202)	₩	26,927,071				
(in thousands of Korean won)				2018						
		Cost		ccumulated epreciation	Во	ok amount				
Land	₩	18,405,908	₩	-	₩	18,405,908				
Buildings		28,279,158		(18,795,925)		9,483,233				
	₩	46,685,066	₩	(18,795,925)	₩	27,889,141				

Changes in investment properties for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)								
	Beginning balance		Depreciation		Others¹		Ending balance	
Land	₩	18,405,908	₩	-	₩	(115,270)	₩	18,290,638
Buildings		9,483,233		(781,864)		(64,936)		8,636,433
	₩	27,889,141	₩	(781,864)	₩	(180,206)	₩	26,927,071

 $^{^{1}}$ Consists of \forall 180,206 thousand, a transfer from investment properties to property, plant and equipment.

(in thousands of Korean won)	2018									
		eginning balance	Depreciation			Others ¹	Ending balance			
Land	₩	15,662,650	₩	-	₩	2,743,258	₩	18,405,908		
Buildings		8,375,001		(763,913)		1,872,145		9,483,233		
	₩	24,037,651	₩	(763,913)	₩	4,615,403	₩	27,889,141		

 $^{^{1}}$ Consists of \forall 4,615,403 thousand, a transfer from investment properties to property, plant and equipment.

Details of income and expenditure for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019	2018			
Rental sales	₩	5,479,944	₩	5,498,973		
Rental income		2,677,103		2,687,993		
Operating expenses		2,599,783		2,907,512		

Fair value of investment properties at the end of the reporting period, are as follows:

(in thousands of Korean won)		2019	2018			
Book amount	₩	26,927,071	₩	27,889,141		
Fair value		130,993,711		116,276,648		

12. Intangible Assets

Intangible assets as at the end of the reporting period, consist of:

(in thousands of Korean won)	2019									
		Cost		cumulated nortization	Book amount					
Industrial rights	₩	5,542,875	₩	(4,118,375)	₩	1,424,500				
Membership rights		5,337,671		-		5,337,671				
Construction in progress		2,805,685				2,805,685				
	₩	13,686,231	₩	(4,118,375)	₩	9,567,856				

(in thousands of Korean won)	2018										
		Cost	_	cumulated nortization	Book amount						
Industrial rights	₩	5,313,354	₩	(3,473,062)	₩	1,840,292					
Membership rights		5,337,671		-		5,337,671					
Construction in progress		2,211,114		<u>-</u>		2,211,114					
	₩	12,862,139	₩	(3,473,062)	₩	9,389,077					

Changes in intangible assets for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019											
		Beginning balance		Acquisition		Disposal		Amortization		Others ¹		Ending balance	
Industrial rights	₩	1,840,292	₩	89,815	₩	(170)	₩	(662,181)	₩	156,744	₩	1,424,500	
Membership rights		5,337,671		-		-		-		-		5,337,671	
Construction in progress		2,211,114		751,315				<u>-</u>		(156,744)		2,805,685	
	₩	9,389,077	₩	841,130	₩	(170)	₩	(662,181)	₩	-	₩	9,567,856	

¹ Consists of ₩ 156,744 thousand, a transfer from construction in progress to industrial rights.

(in thousands of Korean won)	2018												
		eginning balance	· ·				Amortization			Others ¹		Ending balance	
Industrial rights	₩	2,575,961	₩	14,850	₩	-	₩	(767,993)	₩	17,474	₩	1,840,292	
Membership rights		5,307,996		234,510		(204,835)		-		-		5,337,671	
Construction in progress		824,076		1,404,512		-		<u>-</u>		(17,474)		2,211,114	
	₩	8,708,033	₩	1,653,872	₩	(204,835)	₩	(767,993)	₩	-	₩	9,389,077	

¹ Consists of ₩ 17,474 thousand, a transfer from construction in progress to industrial rights.

13. Investments in Subsidiaries and Associates

Set out below are the subsidiaries and associates of the Company as at the end of the reporting period.

		tage of hip (%)	_	Closing				
Name of entity	2019	2018	Location	month	Main business			
Subsidiaries								
Hankook Atlas BX Co., Ltd. (formerly, Altas Bx)	74.9	74.9	Korea	December	Manufacturing and sales of storage batteries and dry cells			
Hankook Car & Life Co., Ltd. ¹ (formerly, HK AUTOMOTIVE)	100.0	100.0	Korea	December	Repairing automobiles and sales of parts			
Associates								
Hankook Tire & Technology Co., Ltd. ² (formerly, Hankook Tire)	30.67	30.2	Korea	December	Manufacturing, reproduction processing and sales of the automobile tires, tubes and accessories.			
Hankook Networks Co., Ltd. (formerly, EmFrontier, Inc.)	40.0	40.0	Korea	December	E-business and total systems management service			

¹ The Company additionally acquired 522,000 shares of its subsidiary, Hankook Car & Life Co., Ltd. through participating the issuance of new stocks. As at the end of the reporting period, the Company has 20,682,000 shares and investment money of ₩ 44,100 million.

Details of the Company's investments in subsidiaries and associates for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		20	19	2018					
	Investments in subsidiaries		Investments in associates		estments in bsidiaries	Investments in associates			
Beginning balance Acquisition of subsidiaries and	₩	30,229,979	₩ 1,964,392,002	₩	22,229,979	₩ 1,954,546,303			
associates		26,100,000	17,838,353		8,000,000	9,845,699			
Ending balance	₩	56,329,979	₩ 1,982,230,355	₩	30,229,979	₩ 1,964,392,002			

² The Company additionally acquired 587,304 shares of Hankook Tire & Technology Co., Ltd. for the period ended December 31, 2019, and the Company has 37,995,959 shares and the Company's effective percentage of ownership changed to 30.67%.

As at the end of the reporting period, the fair values of marketable investments in associates are as follows:

(in thousands of Korean won)		2019		2018
Hankook Atlas BX Co., Ltd.	₩	145,567,804	₩	148,131,620
Hankook Tire & Technology Co., Ltd.		1,274,764,424		1,501,957,498

14. Other Payables

Details of other payables as at the end of the reporting period, are as follows:

(in thousands of Korean won)	2019					2018					
	Current		Non-current			Current	Non-current				
Non-trade payables	₩	3,681,368	₩	-	₩	4,171,195	₩	-			
Accrued expenses		280,682		-		219,682		-			
Dividend payables		3,017		-		2,622		-			
Leasehold deposits received		9,742,415		_		9,761,615		20,000			
	₩	13,707,482	₩	-		14,155,114	₩ 20,000				

15. Other Liabilities

Details of current and non-current other liabilities as at the end of the reporting period, are as follows:

(in thousands of Korean won)		20		2018					
	C	urrent	Non-current		C	Current	Non-current		
Withholdings Other long-term employee	₩	420,075	₩	-	₩	264,958	₩	-	
benefits				73,121		-		41,973	
	₩	420,075	₩	73,121	₩	264,958	₩	41,973	

Changes in other long-term employee benefits for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)				20	19				
	_	inning lance	Profit or loss			ayment	Ending balance		
Other long-term employee benefits	₩	41,973	₩	31,148	₩	-	₩	73,121	
(in thousands of Korean won)				20	18				
	Beginning balance		Profit or loss		Payment			Ending palance	
Other long-term employee benefits	₩	257,657	₩	(207,919)	₩	(7,765)	₩	41,973	

16. Net Defined Benefit Liabilities

The Company operates a defined benefit pension plans for its employees with eligibility requirements. By applying the three-month average salary in the final work period service that the employee has been provided at the time of retirement, the employee has received a lump-sum payment under the scheme. Under the plan, the Company is exposed to the risk of the investment risk, interest rate risk and wage risk.

The most recent actuarial assessment of plan assets and defined benefit obligation was performed on December 31, 2019, by Samsung Securities Co., Ltd. Present value of the defined benefit obligation, its related current service cost and past service cost have been measured by the projected unit credit method.

Details of net defined benefit liabilities recognized in the statements of financial position at the end of the reporting periods, are as follows:

(in thousands of Korean won)		2019		2018
Present value of defined benefit obligations	₩	9,843,872	₩	6,900,298
Fair value of plan assets		(5,980,229)		(4,197,763)
Net defined benefit liabilities (assets)	₩	3,863,643	₩	2,702,535

The significant actuarial assumptions used in defined benefit obligations assessment at the end of the reporting periods, are as follows:

(in percentage)	2019	2018
Discount rate	2.7%	3.3%
Expected rate of salary increase	6.4%	6.6%

Movements in the defined benefit obligations and the fair value of plan assets for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019						
	defi	Present value of defined benefit obligations		ir value of an assets	Total		
Beginning balance	₩	6,900,298	₩	(4,197,763)	₩	2,702,535	
Current service cost		693,477		-		693,477	
Interest expense (income)		74,726		(122,660)		(47,934)	
		768,203		(122,660)		645,543	
Remeasurements: Return on plan assets (excluding amounts included in net interest) Actuarial gain from change in		-		(13,141)		(13,141)	
demographic assumptions Actuarial gain from change in financial assumptions		754 448,048		-		754 448,048	
Actuarial gain from experience adjustments		498,787		- (40.444)		498,787	
-		947,589		(13,141)		934,448	
Benefits payments		(561,557)		164,847		(396,710)	
Others	-	1,789,339		(1,811,512)		(22,173)	
Ending balance	₩	9,843,872	₩	(5,980,229)	₩	3,863,643	

(in thousands of Korean won)	2018					
	def	sent value of ined benefit bligations		air value of lan assets		Total
Beginning balance	₩	20,328,533	₩	(19,871,198)	₩	457,335
Current service cost		648,095		-		648,095
Interest expense (income)		191,785		(139,331)		52,454
		839,880		(139,331)		700,549
Remeasurements: Return on plan assets (excluding amounts included in net interest) Actuarial gain from change in demographic assumptions		-		131,436		131,436
Actuarial gain from change in financial assumptions Actuarial gain from experience adjustments		139,567 1,322,187		- -		139,567 1,322,187
		1,461,754		131,436		1,593,190
Benefits payments		(425,526)		376,987		(48,539)
Others		(15,304,343)		15,304,343		<u>-</u>
Ending balance	₩	6,900,298	₩	(4,197,763)	₩	2,702,535

When significant actuarial assumptions vary within a reasonable range with all other assumptions held constant at the end of the reporting periods, the effects on the defined benefit obligations are as follows:

(in thousands of Korean won)	2019			
		Increase		Decrease
1% change of discount rate	₩	(746,030)	₩	847,470
1% change of salary growth rate		827,141		(743,465)
(in thousands of Korean won)		20	18	
		Increase		Decrease
1% change of discount rate 1% change of salary growth rate	₩	(232,426) 266,684	₩	271,787 (232,773)

Amounts recognized in the statements of comprehensive income regarding defined benefit pension plans for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		
Current service cost	₩	693,477	₩	648,095
Interest cost		(47,934)		52,454
	₩	645,543	₩	700,549

Plan assets as at the end of the reporting period, consist of:

(in thousands of Korean won)	2019				20	018	
		Total	Composition		Total	Composition	
Debt instruments	₩	5,980,226	100.0%	₩	4,197,763	100.0%	
Cash and cash equivalents		3	0.0%			0.0%	
	₩	5,980,229	100.0%	₩	4,197,763	100.0%	

The expected maturity analysis of undiscounted pension benefits as at the end or the reporting period, is as follows:

(in thousands of Korean won)	2019									
		ss than 1 year		Between 1-2 years		Between 2-5 years	Over 5 years		Total	
Pension benefits	₩	546,417	₩	676,209	₩	3,042,403 ₩	± 20,759,66	3 ₩	25,024,692	

The weighted average duration of the defined benefit obligation is 8.3 years (2018: 11.1 years).

17. Share Capital

Details of share capital as at the end of the reporting period, are as follows:

(in Korean won, except for number of shares)	2019			2018		
Authorized (in shares)		250,000,000		250,000,000		
Par value	₩	500	₩	500		
Outstanding (in shares):						
Ordinary share		93,020,173		93,020,173		
Share capital: Ordinary share	₩	46,510,086,500	₩	46,510,086,500		

18. Other Paid-in-Capital

Details of other paid-in-capital as at the end of the reporting period, are as follows:

(in thousands of Korean won)		2019		2018
Share premium	₩	1,302,628,300	₩	1,302,628,300
Treasury shares		(11,092,609)		(11,092,609)
	₩	1,291,535,691	₩	1,291,535,691

As at December 31, 2019, the Company holds 1,325,090 ordinary shares in treasury, to stabilize the market price of its shares, and records treasury share as other paid-in capital. Further appropriation of them is not determined.

19. Retained Earnings and Dividends

Retained earnings as the end of the reporting period, consist of:

(in thousands of Korean won)		2019		2018
Legal reserve:				
Earned profit reserve 1	₩	24,761,716	₩	22,010,864
		24,761,716		22,010,864
Discretionary reserve:				
Reserve for revaluation ²		443,289,239		443,289,239
Dividend equalization reserve		60,000,000		60,000,000
Director's retirement bonus reserve		93,918,000		93,918,000
Voluntary reserve		110,000,000		110,000,000
		707,207,239		707,207,239
Unappropriated retained earnings		181,319,738		159,091,489
	₩	913,288,693	₩	888,309,592

¹ The Commercial Law of the Republic of Korea requires the Company to appropriate a portion of retained earnings as a legal reserve in an amount equal to a minimum of 10% of its cash dividends, until such reserve equals 50% of its share capital. The reserve is not available for the payment of cash dividends but may be transferred to ordinary share or used to offset accumulated deficit, if any, through a resolution of shareholders.

Changes in retained earnings for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
Beginning balance	₩	888,309,592	₩	867,838,106
Profit for the year		53,195,937		49,187,649
Dividend payments		(27,508,525)		(27,508,525)
Remeasurements of net defined benefit liabilities (assets)		(708,311)		(1,207,638)
Ending balance	₩	913,288,693	₩	888,309,592

² According to the past assets revaluation law, the Company conducted assets revaluation and appropriated revaluation gains for revaluation reserve. This revaluation surplus is not allowed to use as financial resources of dividends, but it is allowed to use only for capitalization or preservation of losses.

Dividend distribution to the Company's shareholders amounted to \forall 27,508,525 thousand (paid in 2017: \forall 27,508,525 thousand) for the year ended December 31, 2018 was paid during the period.

Details of separate statements of appropriation of retained earnings for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019	2018
Retained earnings before appropriation Unappropriated retained earnings carried over from		
prior year	₩ 128,832,111,837	₩ 111,111,478,125
Remeasurements of net defined benefit liabilities	(700 244 222)	(4 207 620 240)
(assets)	(708,311,232)	(1,207,638,219)
Profit for the period	53,195,937,259	49,187,649,351
	181,319,737,864	159,091,489,257
2. Transfers such as discretionary reserves		
3. Appropriation of retained earnings		
Earned profit reserves	-	2,750,852,520
Cash dividends (Dividends per share: 2019: ₩350 (70%)		
2018: ₩300 (60%)	32,093,279,050	27,508,524,900
	32,093,279,050	30,259,377,420
4. Unappropriated retained earnings to be carried		
forward	₩ 149,226,458,814	₩ 128,832,111,837

20. Other Components of Equity

Changes in other components of equity for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019							
	•	inning lance	Inc	rease ¹	Reclassificatio to profit or los			Ending balance
Changes in the fair value of Financial assets at fair value through other comprehensive income	₩	226,055	₩	732,424	₩	_	₩	958,479

¹Amount of tax effect is deducted.

(in thousands of Korean won)	201							
	Beginning balance		Increase ¹		Reclassification to profit or loss		Ending balance	
Changes in the fair value of Financial assets at fair value through other comprehensive income	₩	371,504	₩	600,031	₩	(745,480)	₩	226,055

¹ Amount of tax effect is deducted.

21. Operating income

Details of operating income for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019			2018
Rental sales	₩	5,479,944	₩	5,498,973
Training center sales		813		1,863
Service sales		6,916,986		4,145,421
Trademark right revenue		51,857,983		49,221,532
Dividend income		18,395,627		16,005,861
	₩	82,651,353	₩	74,873,650

22. Operating Expenses

Operating expenses for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019		2018
Payroll	₩	6,813,583	₩ 4,724,554
Post-employment benefits		632,234	648,590
Employee benefits		964,641	450,982
Training expenses		69,401	75,498
Travel expenses		262,367	221,934
Vehicles maintenance expenses		33,502	51,250
Insurance		56,100	54,573
Taxes and dues		1,009,369	1,036,257
Entertainment expenses		141,551	166,333
Supplies expenses		7,866	41,460
Publication expenses		90,989	87,396
Communication expenses		75,283	79,077
Utility expenses		860,898	875,723
Repairs expenses		189,206	292,497
Conference expenses		4,870	223
Service fees		3,445,044	3,733,791
Depreciation of investment property		781,863	763,913
Depreciation of property, plant and equipment		744,668	787,105
Amortization of intangible assets		662,181	767,993
Service expenses		62,531	367,593
Shared service expenses		1,384,516	1,540,117
Advertisement		5,926,892	3,693,501
Miscellaneous expenses		107,873	130,255
	₩	24,327,428	₩ 20,590,615

23. Finance Income and Finance Costs

Details of financial income and finance costs for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019		2018		
Finance income					
Interest income	₩	4,585,838	₩	4,803,612	
Gains on foreign currency transaction		3,506		5,142	
Gains on foreign currency translation Gains on valuation of debt instruments at fair value		-		31	
through profit or loss Gains on disposal of debt instruments at fair value		800,743		166,957	
through profit or loss Gains on valuation of equity instruments at fair		195,012		419,053	
value through profit or loss Gains on disposal of financial instruments at fair		1,273,217		126,886	
value through other comprehensive income		-		199,918	
	₩	6,858,316	₩	5,721,599	
Finance costs				_	
Losses on foreign currency transaction	₩	4,212	₩	6,513	
Losses on foreign currency translation Losses on disposal of debt instruments at fair value		-		173	
through profit or loss				347,644	
	₩	4,212	₩	354,330	

24. Other Non-operating Income and Expenses

Details of other non-operating income and expenses for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019		2018	
Other non-operating income				
Gains on foreign currency transaction	₩	5,186	₩	15,543
Gains on foreign currency translation		106		432
Rental income		2,677,103		2,687,993
Gains on disposal of property, plant and equipment		-		90,908
Miscellaneous gain		208,806		117,857
	₩	2,891,201	₩	2,912,733
Other non-operating expenses				_
Losses on foreign currency transaction	₩	6,858	₩	7,790
Losses on foreign currency translation		204		-
Losses on disposal of property, plant and				
equipment		11,620		28,479
Losses on disposal of intangible assets		170		1,835
Donation		3,141,900		2,133,480
Miscellaneous loss		39,377		23,582
	₩	3,200,129	₩	2,195,166

25. Cash Generated from Operations

Details of cash generated from operations for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019	2018		
Adjustments for:					
Income tax expense	₩	11,673,162	₩	11,180,223	
Losses on foreign currency translation		204		173	
Losses on disposal of property, plant and equipment		11,620		28,479	
Losses on disposal of intangible assets		170		1,835	
Depreciation of investment property		781,863		763,913	
Depreciation of property, plant and equipment		744,668		787,105	
Amortization of intangible assets		662,181		767,993	
Other long-term employee benefits		31,148		(207,919)	
Post-employment benefit obligations		645,543		700,549	
Interest income		(4,585,838)		(4,803,612)	
Dividend received		(18,395,627)		(16,005,861)	
Gains on foreign currency translation		(106)		(463)	
Gains on disposal of property, plant and equipment		-		(90,908)	
Gains on valuation of debt instruments at fair value through profit or loss		(854,884)		(166,957)	
Losses on valuation of debt instruments at fair value through profit or loss		54,141		-	
Gains on disposal of debt instruments at fair value through profit or loss		(195,012)		(419,053)	
Losses on disposal of debt instruments at fair value through profit or loss		-		347,644	
Gains on valuation of equity instruments at fair value through profit or loss		(1,273,217)		(126,886)	
Gains on disposal of financial instruments at fair value through other comprehensive income		-		(199,918)	
Miscellaneous gains				(64,304)	
	₩	(10,699,984)	₩	(7,507,967)	

(in thousands of Korean won)		2019	2018		
Changes in operating assets and liabilities:					
Decrease in trade receivables	₩	2,053,306	₩	7,620,733	
Decrease (increase) in non-trade receivables		725,449		(693,275)	
Decrease (increase) in advance payments		282,950		(282,950)	
Decrease (increase) in prepaid expenses		1,388		5,205	
Decrease (increase) in deposits		15,400		(17,600)	
Increase (decrease) in leasehold deposits received		(39,200)		880,704	
Decrease in non-trade payables		(305,294)		(136,586)	
Increase (decrease) in accrued expenses		61,000		(180,898)	
Increase (decrease) in withholdings		155,117		(2,704,760)	
Decrease in post-employment benefit obligation		(561,557)		(425,526)	
Decrease in pension plan assets		142,675		376,987	
Decrease in other long-term employee benefits				(7,765)	
	₩	2,531,234	₩	4,434,269	

The principal non-cash transaction for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019	2018		
Transfer of construction in progress to intangible assets	₩	156,744	₩	17,474	
Transfer of property, plant and equipment to investment properties		180,206		4,615,402	
Increase in non-trade payables in relation to acquisition of intangible assets		1,578		185,815	
Decrease in non-trade payables in relation to acquisition of property, plant and equipment		-		31,219	
Decrease in non-trade payables in relation to acquisition of intangible assets		185,815		77,677	
Reclassification of current portion of financial assets at fair value through profit or loss		10,765,774		-	
Reclassification of current portion of other receivables		4,000,000		-	
Decrease in non-trade receivables in relation to disposal of AFS financial assets		-		9,712,548	

As there are no cash flows from financing activities, except for dividends paid, changes in liabilities arising from financing activities are identical to the cash flows from financing activities in the statement of cash flows for the year ended December 31, 2019.

26. Tax Expense

Income tax expense for the years ended December 31, 2019 and 2018, consists of:

(in thousands of Korean won)		2019	2018		
Current tax:					
Current tax on profits for the year	₩	11,198,057	₩	11,878,007	
Adjustments in respect of prior years		(26,292)		211,833	
Deferred tax:					
Origination and reversal of temporary differences		509,096		(1,341,605)	
Charged or credited directly to equity		(7,698)		431,988	
Income tax expense	₩	11,673,163	₩	11,180,223	

The tax on the Company's profit before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to profits of the company as follows:

(in thousands of Korean won)		2019		2018
Profit before income tax expense	₩	64,869,100	₩	60,367,872
Tax at domestic tax rates applicable to profits in the respective countries		15,236,322		14,147,025
Tax effects of:				
Income not subject to tax		(3,776,099)		(3,000,578)
Expenses not deductible for tax purposes		29,837		36,763
Income tax refund		347,090		-
Others		(163,987)		(2,987)
		(3,563,159)		(2,966,802)
Income tax expense	₩	11,673,163	₩	11,180,223

The tax effect relating to components of other comprehensive income for the years ended December 31, 2019 and 2018, is as follows:

(in thousands of Korean won)				2019			2018					
	В	efore tax	Tax effect		1	After tax	Before tax	Т	ax effect	After tax		
Remeasurements of net defined benefit liabilities (assets) Loss on valuation of financial assets at fair value through other	₩	(934,448)	₩	226,137	₩	(708,311)	₩ (1,593,190)	₩	385,552	₩ (1,207,638)		
comprehensive income		966,259		(233,835)		732,424	(191,885)		46,436	(145,449)		
	₩	31,811	₩	(7,698)	₩	24,113	₩ (1,785,075)	₩	431,988	₩ (1,353,087)		

The analysis of deferred tax assets and liabilities as at December 31, 2019 and 2018, is as follows:

(in thousands of Korean won)		2019		2018
Deferred tax assets				
Deferred tax asset to be recovered after more than 12 months	₩	6,490,203	₩	6,418,302
Deferred tax asset to be recovered within 12 months		24,798		89,052
		6,515,001		6,507,354
Deferred tax liabilities				_
Deferred tax liability to be recovered after more than 12 months		63,925,859		63,517,328
Deferred tax liability to be recovered within 12 months		498,688		390,475
		64,424,547		63,907,803
Deferred tax liabilities, net	₩	(57,909,546)	₩	(57,400,449)

The movement in deferred tax assets and liabilities during the year, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

(in thousands of Korean won)	2019										
		Beginning balance		tement of fit or loss		Other prehensive ncome		Ending balance			
Deferred tax assets (liabilities)											
Unearned revenue	₩	(390,475)	₩	(108,213)	₩	-	₩	(498,688)			
Other long-term employee benefits		10,158		7,537		-		17,695			
Accrued expenses		24,797		-		-		24,797			
Non-trade receivables		64,254		(6,919)		-		57,335			
Property, plant and equipment		2,362,295		397,884		-		2,760,179			
Net defined benefit liabilities		654,014		(282,166)		226,137		597,985			
Financial assets at fair value through profit or loss		(138,702)		(408,530)		-		(547,232)			
Intangible assets		201,521		(16,703)		-		184,818			
Construction in progress		232,760		-		-		232,760			
Gain (loss) on valuation of financial assets at fair value through											
other comprehensive income		2,957,555		(84,289)		(233,835)		2,639,431			
Advanced depreciation provision	((2,556,024)		-		-		(2,556,024)			
Investments in subsidiaries and associates	16	60,822,602)						(60 833 603)			
assuciales				/E04 200\		(7,600)		(60,822,602)			
	۷۷ (5	7,400,449)		(501,399)		(7,698)		(57,909,546)			

(in thousands of Korean won)	2018										
	Beginning balance			ement of it or loss	Other comprehensive income			Ending balance			
Deferred tax assets (liabilities)											
Unearned revenue Other long-term employee	₩	(341,438)	₩	(49,037)	₩	-	₩	(390,475)			
benefits		62,353		(52,195)		-		10,158			
Accrued expenses		79,139		(54,342)		-		24,797			
Non-trade receivables		-		64,254		-		64,254			
Property, plant and equipment		2,335,374		26,921		-		2,362,295			
Net defined benefit liabilities Financial assets at fair value		(666,597)	935,059			385,552		654,014			
through profit or loss		(93,368)		(45,334)		-		(138,702)			
Intangible assets		201,521		-		-		201,521			
Construction in progress Gain (loss) on valuation of financial assets at fair value through		232,760		-		-		232,760			
other comprehensive income		2,826,828		84,291		46,436		2,957,555			
Advanced depreciation provision Investments in subsidiaries and		(2,556,024)		-		-		(2,556,024)			
associates	(60,822,602)						(60,822,602)			
	₩ (58,742,054)		909,617		431,988		(57,400,449)			

Details of unrecognized deductible (taxable) temporary differences as deferred tax assets (liabilities) as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019	2019		Remarks
Interests in subsidiaries and associates	₩	1,165,191,376	₩	1,165,191,376	No plan for disposal

Adoption of Korean IFRS 2123 Uncertainty over Income Tax Treatments

The amendment does not have a significant impact on the financial statements.

27. Related Party Transactions

Details of related parties as at December 31, 2019, are as follows:

Туре	Name of related parties
Individuals	Yang-Rai Cho, Hyun-Shick Cho, Hyun-Bum Cho Hankook Atlas BX Co., Ltd. (formerly, Atlas BX), Atlas BX Motorsports Co., Ltd.,
Subsidiaries	AtlasBX America Corporation, Hankook Car & Life Co., Ltd. (formerly, HK AUTOMOTIVE), JAX Motors Co., Ltd., HK Motors Co., Ltd., Han Automobile Co., Ltd., Wavers Corp.
Associates	Hankook Tire & Technology Co., Ltd. (formerly, Hankook Tire), Hankook Networks Co., Ltd. (formerly, EmFrontier)
Domestic subsidiaries of associates ¹	Hankook Engineering Works Co., Ltd. (formerly, Daehwa Engineering & Machinery), Hankook Precision Works Co., Ltd. (formerly, MK Technology), Hankook Donggeurami Partners Co., Ltd., KCG 1 Private Equity Fund Limited Partnership, Model Solution Co., Ltd
Overseas subsidiaries of associates	Hankook Tire America Corp., Hankook Tyre U.K. Ltd., Jiangsu Hankook Tire Co., Ltd., Hankook Tire China Co., Ltd., Shanghai Hankook Tire Sales Co., Ltd., Hankook Tire Netherlands B.V., Hankook Tire Japan Corp., Hankook Tire Canada Corp., Hankook Reifen Deutschland GmbH, Hankook Tire France SARL, Hankook Tire Italia S.R.L., Hankook Espana S.A., Hankook Tyre Australia Pty., Ltd., Hankook Tire Hungary Ltd., Hankook Tire Europe Holdings B.V, Hankook Tire Europe GmbH, Hankook Tire Budapest Kereskedelmi Kft, Hankook Tire DE Mexico, S.A. DE C.V., Chongqing Hankooktire Co., Ltd., Hankook Tire Rus LLC, PT. HANKOOKTIRE INDONESIA, MK Mold (Jiaxing) Co., LTD, Hankook Tire Singapore PTE., Ltd., Hankook Tire Malaysia SDN.BHD., Hankook Tire Sweden AB,Beijing Jielun Trading Company Co., Ltd., Hankook Lastikleri A.S., Hankook Tire Polska Sp. z o.o., Hankook Tire Thailand Co., Ltd., Hankook Tire America Holdings II, LLC, Hankook Tire America Holdings II, LLC, Hankook Tire America Holdings II, LLC, Hankook Tire Manufacturing Tenessee LP, Hankook Tire Ceska Republika s.r.o. MK Technology (CHONGQING) Mould Co., Ltd., Hankook Networks America, Inc (formerly, Emfrontier America), Hankook Tyre Australia Retail Pty., Ltd., JAX Quickfit Franchising Systems Unit Trust., JAX Quickfit Franchising Systems Pty Ltd., JAX Quickfit Properties Pty Ltd., Hankook Tire Latin America Distribution Center, S.A., Hankook Tire Ukraine LLC, ModelSolution Inc., Reifen-Muller KG, Reifen-Muller Runderneuerung BV, RM Verwaltungs GmbH, RU Verwaltungs GmbH, Hankook Tire D.O.O. Beograd, HANKOOK TIRE MIDDLE EAST AND AFRICA FZE, Hankook Tire Vietnam Co.
Domestic associate of associates	LTD, PT. HankookTire Sales Indonesia, Hankook Tire Austria GmbH Hanon Systems Co., Ltd. Peaches Group Korea., Co., Ltd., DAE MYONG TECH ONE Co., Ltd.
Other related parties ²	Shin-Yang Tourist Development, Shin-Yang World Leisure, FWS Investment Advisory, Daehwa Eng' & Machinery Jiaxing Co., Ltd., Anothen Geumsan Co., Ltd., YKT Co., Ltd., SP Team Co., Ltd., Seil Hwangyeong Co., Ltd., Doowon Holdings Co., Ltd., ARUM Dentistry Co., Ltd., (formerly, Doowon ID Co., Ltd.), SI Carbon Co., Ltd.

¹ In the case of Wavers Corp., although it is stated as the holding company's subsidiary, it is not stated in the affiliates because the Korea Fair Trade Committee's declaration of delaying its inclusion to the group until June 27, 2026, was applied.

Transactions between the Company and related parties for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019											
Notean worry	Name of entity		Operating income ¹		perating xpenses		Other income					
Subsidiaries	Hankook Atlas BX Co., Ltd. (formerly, Atlas BX)	₩	2,197,404	₩	-	₩	-					
	HK Motors, Co., Ltd. Hankook Car & Life Co., Ltd. (formerly, HK		-		-		143,444					
	AUTOMOTIVE) Hankook Tire & Technology		-		-		7,272					
Associates	Co., Ltd. (formerly, Hankook Tire) Hankook Networks Co.,		77,332,854		1,452,756		1,258,800					
Domestic subsidiaries of	Ltd. (formerly, EmFrontier) Hankook Donggeurami Partners Co., Ltd. and		-		63,111		-					
associates Overseas	othrers Hankook Tire Canada		5,780		83,498		2,580					
subsidiaries of associates Other related	Corp. and others Shin-Yang Tourist		-		95,029		-					
parties	Development and others		450				5,814					
		₩	79,536,488	₩	1,694,394	₩	1,417,910					

¹ Dividends received from the subsidiaries and associates are included.

² Although the entity is not the related party of the Company in accordance with Korean IFRS 1024, the entity belongs to the Large Enterprise Group to which the Company also belongs in accordance with the Monopoly Regulation and Fair Trade Act.

(in thousands of Korean won)			2018				
	Name of entity		Operating income ¹		perating xpenses		Other income
Subsidiaries	Atlas BX Co., Ltd. HK AUTOMOTIVE CO.,	₩	1,140,044	₩	-	₩	-
	LTD.		28,044		11,440		7,272
Associates	Hankook Tire Co., Ltd.		71,074,040		1,658,375		1,294,848
	EmFrontier, Inc.		-		46,360		-
Domestic subsidiaries of associates	Hankook Donggeurami Partners Co., Ltd. and othrers		6,368		111,059		2,580
Overseas subsidiaries of associates	Hankook Tire Canada Corp. and others		-		91,586		-
Other related parties	Shin-Yang Tourist Development and others				1,298,180		5,814
		₩	72,248,496	₩	3,217,000	₩	1,310,514

¹ Dividends received from the subsidiaries and associates are included.

Outstanding balances of receivables and payables at the end of the reporting period, are as follows:

(in thousands of									
Korean won)				2019					
	Name of entity		Trade receivables		Other receivables		on-trade syables	р	Other ayables
Subsidiaries	Hankook Atlas BX Co., Ltd. (formerly, Atlas BX)	₩	1,163,723	₩	-	₩	-	₩	-
	HK Motors Co., Ltd. Hankook Car & Life Co., Ltd. (formerly, HK		-		4,343,444		-		-
Associates	AUTOMOTIVE) Hankook Tire & Technology Co., Ltd. (formerly,		-		-		-		13,321
Associates	Hankook Tire) Hankook Networks Co., Ltd. (formerly, EmFrontier)		15,810,271		4,266		386,720 4,206		2,335,890
Domestic subsidiaries of associates	Hankook Donggeurami Partners Co., Ltd. and others		_		748		1,093		4.650
Overseas subsidiaries of associates	Hankook Tire Canada Corp. and others		-		-		7,954		-
Other related parties	Shin-Yang Tourist Development and others				<u>-</u>		<u>-</u>		105,503
		₩	16,973,994	₩	4,348,458	₩	399,973	₩	2,459,364

(in thousands of Korean won)	2018												
Koleali Woll)	Name of entity	Trade receivables		Other receivables		Non-trade payables		p	Other ayables				
Subsidiary	HK AUTOMOTIVE CO., LTD.	₩	-	₩	-	₩	-	₩	13,321				
Associates	Hankook Tire Co., Ltd.		19,027,301		376,599		622,344		2,370,090				
	EmFrontier, Inc.		-		-		4,236		-				
Domestic subsidiaries of associates	Hankook Donggeurami Partners Co., Ltd. and others		-		-		66		4,650				
Overseas subsidiaries of associates	Hankook Tire Canada Corp. and others		-		_		7,447		-				
Other related parties	Shin-Yang Tourist Development and others		-		-		-		105,503				
•	·	₩	19,027,301	₩	376,599	₩	634,093	₩	2,493,564				

Loans to related parties for the years ended December 31, 2019, are as follows:

(in thousands	s of Korean won)	2019										
		Beginning balance	Increase			Decrease	Ending balance		ng balance			
Subsidiary	HK Motors Co., Ltd	₩	_ +	₩	4,200,000	₩	-	₩	4,200,000			

Dividend income and contributions in cash from/to related parties for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)			20	19		2018				
	Name of entity		Dividend income	Contributions in cash			Dividend income	Contributions in cash		
Subsidiaries	Hankook Atlas BX Co., Ltd. (formerly, Atlas BX) Hankook Car & Life Co.,	₩	1,139,474	₩	-	₩	1,139,474	₩	-	
Associate	Ltd. (formerly, HK AUTOMOTIVE) Hankook Tire & Technology Co., Ltd. (formerly,		-		26,100,000		-		8,000,000	
	Hankook Tire)		16,833,895		17,838,353		14,865,008		9,845,699	
		₩	17,973,369	₩	43,938,353	₩	16,004,482	₩	17,845,699	

Compensations for key management for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019	2018		
Short-term benefits	₩	2,266,066	₩	1,915,252	
Post-employment benefits		308,921		207,247	
	₩	2,574,987	₩	2,122,499	

Key management refers to the directors (registered and non-registered) and audit committee members who have significant authority and responsibility in respect to planning, operating and controlling of the Company's business activities.

28. Contingencies and Commitments

Details of outstanding credit facility agreements of the Company at the end of the reporting period, are as follows:

(in thousands on h	s on Korean won) 2019		2018					
			mitment mount	Korean won		nmitment mount		Korean won
Purchase card agreements	Shinhan Bank	KRW	5,000,000 ₩	5,000,000	KRW	10,000,000	₩	10,000,000
General loans agreements	Woori Bank	KRW	5,000,000	5,000,000	KRW	5,000,000		5,000,000
		KRW	10,000,000 ₩	10,000,000	KRW	15,000,000	₩	15,000,000

As at December 31, 2019, the Company entered into supply and demand contracts with Hankook Tire & Technology Co., Ltd., a related party, to provide trademark license and supporting work regarding planning and investment and to be provided with several finance, accounting and legal support. In addition, the Company entered into a demand contract to be provided with maintenance service for the Company's information system with Hankook Networks Co., Ltd., an associate.

As at December 31, 2019, the Company is currently accused of one pending litigation (litigation value: \forall 100 million). As at December 31, 2019, the Company cannot reasonably estimate the impact from the result of the case on its financial statements.

29. Operating Segment Information

The Company had a single operating segment and does not disclose information by business segment.

The Company derives the following types of revenue:

(in thousands of Korean won)		2019	2018		
Service sales	₩	12,397,743	₩	9,646,257	
Trademark right revenue		51,857,983		49,221,532	
Dividend income		18,395,627		16,005,861	
	₩	82,651,353	₩	74,873,650	

Revenue from external customers broken down by location of the Company for the years ended December 31, 2019 and 2018, are shown as follows:

(in thousands of Korean won)		2019		2018
Korea (headquarter)	₩	82,651,353	₩	74,873,650

Details of external customers, who contribute more than 10% of the Company's revenue for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019		2018
A Company	₩	77,332,854	₩	71,074,040

30. Earnings Per Share

The Company's basic earnings per share attributable to equity holders of Parent Company for the years ended December 31, 2019 and 2018, are computed as follows:

(in Korean won, except for number of shares)		2019		2018
Profit attributable to the ordinary equity holders ¹ Weighted-average number of ordinary shares	₩	53,195,937,259	₩	49,187,649,351
outstanding (in share) ²		91,695,083		91,695,083
Basic earnings per share	₩	580	₩	536

¹ As there are no adjustments during the reporting period, profit attributable to the ordinary equity holders of Parent Company is identical to profit attributable to owners of the Parent Company in the statements of comprehensive income.

The Company did not issue any potential ordinary shares. Therefore, basic earnings per share is identical to diluted earnings per share.

² The Company's outstanding ordinary shares excluding the number of treasury share acquired are weighted averaged.

31. Credit risk

The Company is exposed to credit risk if the counterparty does not make payment by the due date.

- Payment of trade receivables by payment term for the customer
- Contractual cash flow of debt instruments at amortized costs
- Contractual cash flow of debt instruments at fair value through other comprehensive income

A. Trade receivables

The Company applies the simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables.

To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. Loss allowance was not recognized at the end of the reporting period and no related loss was recognized as 'operating expenses' in profit or loss for the years ended December 31, 2019 and 2018.

Gross book amount of trade receivables, the maximum exposure amount, is \forall 16,973,995 thousand at the reporting period (2018: \forall 19,027,301 thousand).

B. Other financial assets at amortized cost

Other financial assets at amortized cost include government bonds, loans to related parties, and other receivables. Loss allowance for Other financial assets amortized cost was not recognized at the end of the reporting period and no related loss was recognized as 'operating expenses' in profit or loss for the years ended December 31, 2019 and 2018.

All of the financial assets at amortized costs are considered to have low credit risk, and the loss allowance recognized during the period was, therefore, limited to 12 months expected losses. Management consider 'low credit risk' for government bonds Other instruments are considered to be low credit risk when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term.

C. Debt investments at fair value through other comprehensive income

Debt investments at fair value through other comprehensive income include government bonds, corporate bonds and trade receivables subject to be sold. The loss allowance for debt investments at fair value through other comprehensive income is recognized in profit or loss and reduces the fair value loss otherwise recognized in other comprehensive income. Loss allowance for Debt investments at fair value through other comprehensive income was not recognized at the end of the reporting period and no related loss was recognized as ' finance costs' in profit or loss for the years ended December 31, 2019 and 2018.

All of the debt investments at fair value through other comprehensive income are considered to have low credit risk, and the loss allowance recognized during the period was, therefore, limited to 12 months expected losses. Other instruments are considered to be low credit risk when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term.

32. Changes in Accounting Policies

As explained in Note 2.2, the Company has adopted Korean IFRS 1116, retrospectively, from January 1, 2019, but has not restated comparatives for the 2018 reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are, therefore, recognized in the statement of financial position on January 1, 2019.

(a) Adjustments recognized on the adoption of Korean IFRS 1116 Lease

On adoption of Korean IFRS 1116, the Company measured lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of Korean IFRS 1017. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee's incremental borrowing rate as at January 1, 2019. The lessee's weighted average incremental borrowing rate applied to the lease liabilities on January 1, 2019 was 2.1%.

(b) Practical expedients applied

In applying the Korean IFRS 1116 for the first time, the Company has used the following practical expedients permitted by the standard:

• the accounting for operating leases with a remaining lease term of less than 12 months as at January 1, 2019, as short-term leases

The Company has also elected not to reassess whether a contract is, or contains a lease at the date of initial application. Instead, for contracts entered into before the transition date, the Group relied on its assessment made applying Korean IFRS 1017 and Interpretation 2104 *Determining whether an Arrangement contains a Lease*.

(c) Measurement of lease liabilities

(in thousands of Korean won)

2019

Operating lease commitments disclosed as at December 31, 2018	₩	15,192
Discounted using the lessee's incremental borrowing rate of at the date of initial application		15,025
Add: finance lease liabilities recognized as at December 31, 2018		-
Less: short-term leases not recognized as a liability		(11,495)
Less: low-value leases not recognized as a liability Add/(less): adjustments as a result of a different treatment of extension and termination options		(3,530)
Lease liability recognized as at January 1, 2019		_

(d) Adjustments recognized in the statement of financial position as at January 1, 2019

The change in accounting policy did not affect any items in the statement of financial position on January 1, 2019.

The each amount included in Operating expense as Low value leases & Shor-term Leases expense are 3,150 thousand & 11,609 thousand in 2019, total cash outflow by leases is 14,759 thousand.

(e) Lessor accounting

The Company did not need to make any adjustments to the accounting for assets held as lessor as a result of the adoption of Korean IFRS 1116.

Report on Independent Auditor's Audit of Internal Control over Financial Reporting

(English Translation of a Report Originally Issued in Korean)

To the Board of Directors and Shareholders of Hankook Technology Group Co., Ltd.

Opinion on Internal Control over Financial Reporting

We have audited Hankook Technology Group Co., Ltd.'s (the Company) Internal Control over Financial Reporting as of December 31, 2019, based on *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting.*

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, based on *Conceptual Framework for Designing and Operating Internal Control over Financial Reporting.*

We also have audited, in accordance with Korean Standards of Auditing, the separate financial statements of the Company, which comprise the separate statement of financial position as at December 31, 2019, and the separate statement of comprehensive income, separate statement of changes in equity and separate statement of cash flow for the year then ended, and notes to the separate financial statements including a summary of significant accounting polices, and our report dated March 19, 2020 expressed an unqualified opinion.

Basis for Opinion on Internal Control over Financial Reporting

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

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

Management is responsible for designing, implementing and maintaining effective internal control over financial reporting, and for its assessment and the effectiveness of internal control over financial reporting, included in the accompanying *Internal Control over Financial Reporting Operating Status Report by CEO & Internal Accounting Manager*.

Those charged with governance have the responsibilities for overseeing internal control over financial reporting.

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

Our responsibility is to express opinion on the Company's internal control over financial reporting based on our audit. We conducted the audit in accordance with Korean Standards on Auditing. 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.

An 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 auditor's judgment, including the assessment of the risks that a material weakness exists. An audit includes obtaining an understanding of internal control over financial reporting and evaluating the design and operating effectiveness of internal control over financial reporting based on the assessed risk.

Definition and Inherent Limitations of Internal Control over Financial Reporting

An entity's internal control over financial reporting is a process effected by those charged with governance, management, and other personnel, designed to provide reasonable assurance regarding the preparation of reliable financial statements in accordance with International Financial Reporting Standards as adopted by the Republic of Korea. An entity'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 entity; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with International Financial Reporting Standards as adopted by the Republic of Korea, and that receipts and expenditures of the entity are being made only in accordance with authorizations of management and those charged with governance; and (3) provide reasonable assurance regarding prevention, or timely detection and correction of unauthorized acquisition, use, or disposition of the entity'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 and correct, misstatements. Also, projections of any assessment 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.

Others

The accompanying *Internal Control over Financial Reporting Operating Status Report by CEO* & *Internal Accounting Manager* states that, during 2019, the Company's management discovered material weakness regarding lack of entity-level control on managements' fraud that occurred prior to 2018. As at December 31, 2019, such weakness was assessed to be remediated through appropriate planning and execution of remediation plans during the current year.

The engagement partner on the audit resulting in this independent auditor's report is Keun-young, Chung, Certified Public Accountant.

Samil PriceWaterhouseCoopers

Seoul, Korea March 19, 2020

This report is effective as of March 19, 2020, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the Company's internal control over financial reporting thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

Report on the Effectiveness of Internal Control over Financial Reporting

Internal Control over Financial Reporting ("ICFR") Operating Status Report by CEO & Internal Accounting Manager

To the Shareholders, Board of Directors, and Audit Committee of Hankook Technology Group Co., Ltd.

We, as the Chief Executive Officer and the Internal Accounting Manager of Hankook Technology Group Co., Ltd. ("the Company"), assessed operating status of the Company's Internal Control over Financial Reporting ("ICFR") for the year ending December 31, 2019.

Design and operation of ICFR is the responsibility of the Company's management, including the Chief Executive Officer and the Internal Accounting Manager (collectively, "We", "Our" or "Us").

We evaluated whether the Company effectively designed and operated its ICFR to prevent and detect errors or frauds which may cause a misstatement in financial statements to ensure preparation and disclosure of reliable financial information.

We used the 'Conceptual Framework for Designing and Operating Internal Control over Financial Reporting' established by the Operating Committee of Internal Control over Financial Reporting in Korea (the "ICFR Committee")' as the criteria for design and operation of the Company's ICFR. And we conducted an evaluation of ICFR based on the 'Management Guideline for Evaluating and Reporting Effectiveness of Internal Control over Financial Reporting' established by the ICFR Committee.

Based on our assessment, the Company's ICFR is designed and operated effectively as of December 31, 2019 in accordance with the 'Conceptual Framework for Designing and Operating Internal Control over Financial Reporting'.

However, it was confirmed that the following material weakness was found during the term, but proper remediation plans were established and implemented within this year to correct it all.

- < description of material weakness >
- Lack of Entity-level control related to the fraud of management prior to the prior term
- < description of remediation plans >
- Investigation using independent external experts, strengthening ethical oaths, implementing ethical training for executives, supplementing and promoting internal whistleblowing systems, establish immediate reporting procedures for audit committees, and establish an organization under the audit committees, etc.

We have confirmed that this report is not falsely written or marked, and that it does not omit what needs to be written or marked. In addition, we confirmed that no contents that cause serious misunderstanding were written or marked in the report contents, and with sufficient care, we checked and reviewed the contents of the report in person.

February 28, 2020

Cho, Hyun Shick

Chief Executive Officer

Won, Jong Pil

Internal Accounting Manager

<Attachment>

Contents of material weakness discovered during the current term and remediation during the current term

(1) Lack of Entity-level control related to the fraud of management prior to the prior term

The company was not designing and operating sufficient and appropriate controls in relation to the irregularities involving management. This represents an important vulnerability to monitoring, a controlled environment associated with potential management fraud.

The company has taken the following steps during 2019 to correct critical vulnerabilities related to the controlled environment and monitoring.

①The Board of Audit and Inspection appointed an independent external expert to investigate the fact that the company's management was indicted by the prosecution on charges of business violation (hereinafter "event") as follows:

- The identification of facts about an event
- Is there any effect on the company's accounting for transactions with the parties during the period during which the event occurred?
- Whether similar cases have occurred with other suppliers during the period during which the event occurred
- Has there been a similar case since the period during which the incident occurred?
- Were there any other potential illegalities or improper accounting practices?
- Propose improvement plan for internal control defects found in the investigation
 - ②The CEO vowed to conduct a re-examination of the compliance process to employees through internal communication and practical measures to strengthen it.

- ③All executives, team leaders, accounting, purchasing and HR employees, including top executives, have completed ethical training, and have made pledges to practice compliance and ethical management.
- The company has created an environment in which the internal complaint system, in which executives and employees can express concerns about accounting, financial reporting, ethics code and other legal violations, can be effectively activated.
- (5) The company has established a process to report immediately to the Audit Committee on important events, such as irregularities by management.
- ©The Board of Audit and Inspection conducted an independent evaluation of the internal accounting management system through the selection of independent external experts and reorganized the internal control team into an organization directly under the Board of Audit and Inspection.