

**Hankook Tire & Technology Co., Ltd.
and Subsidiaries
(formerly, Hankook Tire Co., Ltd.
and Subsidiaries)
Consolidated Financial Statements
December 31, 2019 and 2018**

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Index

December 31, 2019 and 2018

	Page(s)
Independent Auditor’s Report	1 - 4
Consolidated Financial Statements	
Consolidated Statements of Financial Position	5
Consolidated Statements of Comprehensive Income	6
Consolidated Statements of Changes in Equity	7
Consolidated Statements of Cash Flows	8
Notes to the Consolidated Financial Statements	9 - 93



Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

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

Opinion

We have audited the accompanying consolidated financial statements of Hankook Tire & Technology Co., Ltd. and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as at December 31, 2019 and 2018, and the consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

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

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 Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the ethical requirements of the Republic of Korea that are relevant to our audit of the consolidated 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 consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Valuation of Finished Goods Inventories

Key Audit Matter

As disclosed in Note 10 to the consolidated financial statements, the Group's finished goods amount to ₩1,725,394 million as at December 31, 2019, representing 17.0% of total assets which is significant in the consolidated financial statements. Inventories initially measured at cost recognize impairment loss if those inventories are damaged, or if they have become obsolete, or if their estimated net realizable value is less than the cost. We have determined that valuation of finished goods inventories is a key audit matter because the determination of the net realizable value of the finished goods inventories involves the significant level of management's judgements.

How our audit addressed the Key Audit Matter

We have performed the following audit procedures in relation to the above key audit matter:

- We reviewed appropriateness of accounting policy on valuation of finished goods inventories.
- We assessed design and effectiveness of major internal controls on net realizable value and valuation process of obsolescence of finished goods inventories.
- We tested the accuracy and completeness of aging data for finished goods inventories through an audit sampling.
- We tested whether the Group's actual recent selling price is consistent with the estimated selling price used in calculation of net realizable value of finished goods inventories through an audit sampling.
- We recalculated valuation allowance of finished goods prepared by the Group.

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 consolidated financial statements may differ from those generally accepted and applied in other countries.

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

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

In preparing the consolidated financial statements, management is responsible for assessing the Group'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 Group or to cease operations.

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

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated 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 consolidated 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 consolidated 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, but not for the purpose of expressing an opinion on the

effectiveness of the entity's internal control.

- 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 Group'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 consolidated 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 Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

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 consolidated 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 Sung Woo, Choi, Certified Public Accountant.

Seoul, Korea
March 19, 2020

<p>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 accompanying consolidated 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 have to be revised to reflect the impact of such subsequent events or circumstances, if any.</p>

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Consolidated Statements of Financial Position
December 31, 2019 and 2018

<i>(in thousands of Korean won)</i>	Notes	2019	2018
Assets			
Current assets			
Cash and cash equivalents	6	₩ 877,600,276	₩ 611,977,139
Short-term financial assets	6	33,134,195	27,568,027
Trade and other receivables	6,9,41	1,376,866,042	1,332,681,424
Inventories	10	1,725,393,475	1,598,471,564
Other financial assets	5,6,8,11	27,136,911	28,742,241
Other current assets	12	73,583,919	53,747,755
		<u>4,113,714,818</u>	<u>3,653,188,150</u>
Non-current assets			
Long-term financial assets	6	17,000	59,288
Long-term trade and other receivables	6,9	18,954,627	1,086,846
Financial assets at fair value through other comprehensive income	5,6,7	40,314,271	46,083,106
Financial assets at fair value through profit or loss	5,6,7	8,140,000	1,500,000
Investments in associates	13	1,106,250,141	1,085,601,269
Property, plant and equipment	15	4,105,500,675	4,225,226,632
Investment properties	17	99,021,025	107,340,268
Intangible assets	18	340,516,293	366,016,747
Other financial assets	5,6,8,11	77,380,199	28,076,264
Other non-current assets	12	71,249,799	83,060,507
Deferred tax assets	35	183,549,055	199,203,170
		<u>6,050,893,085</u>	<u>6,143,254,097</u>
Total assets		<u>₩ 10,164,607,903</u>	<u>₩ 9,796,442,247</u>
Liabilities			
Current liabilities			
Trade and other payables	6,19,41	₩ 883,812,360	₩ 931,208,622
Borrowings	6,20	1,062,142,319	843,802,336
Current tax liabilities		65,650,814	113,084,279
Provisions	21	45,974,307	45,338,531
Other financial liabilities	5,6,8,22	3,743,853	11,230,588
Other current liabilities	23	69,760,589	77,969,623
		<u>2,131,084,242</u>	<u>2,022,633,979</u>
Non-current liabilities			
Borrowings	6,20	656,849,030	788,579,777
Net defined benefit liabilities	24	12,507,985	11,907,587
Provisions	21	24,090,109	27,829,813
Other financial liabilities	5,6,22	26,126,463	26,551,060
Other non-current liabilities	23	90,709,651	89,047,737
Deferred tax liabilities	35	36,023,309	39,579,326
		<u>846,306,547</u>	<u>983,495,300</u>
Total liabilities		<u>2,977,390,789</u>	<u>3,006,129,279</u>
Equity			
Share capital	25	61,937,535	61,937,535
Other paid-in capital	26	2,971,745,781	2,971,745,781
Other components of equity	28	(220,620,981)	(264,043,086)
Retained earnings	27	4,343,703,619	3,995,902,869
Equity attributable to owners of the Parent Company		<u>7,156,765,954</u>	<u>6,765,543,099</u>
Non-controlling interest		<u>30,451,160</u>	<u>24,769,869</u>
Total equity		<u>7,187,217,114</u>	<u>6,790,312,968</u>
Total liabilities and equity		<u>₩ 10,164,607,903</u>	<u>₩ 9,796,442,247</u>

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

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Consolidated Statements of Comprehensive Income
Years Ended December 31, 2019 and 2018

<i>(in thousands of Korean won, except per share data)</i>	Notes	2019		2018	
Sales	29,39,42	₩	6,883,268,577	₩	6,795,088,816
Cost of sales	29,36,42		(4,961,117,130)		(4,691,443,619)
Gross profit			1,922,151,447		2,103,645,197
Selling and administrative expenses	30,26		(1,183,210,435)		(1,209,646,385)
Research and development expenses	36		(194,976,181)		(191,348,211)
Operating profit			543,964,831		702,650,601
Finance income	31		81,413,987		82,358,445
Finance costs	32		(170,121,275)		(139,228,507)
Other non-operating income	33		214,011,365		159,477,564
Other non-operating expense	34		(125,358,049)		(145,560,211)
Gain on investments in associates, net	13		45,972,850		38,002,359
Profit before income tax			589,883,709		697,700,251
Income tax expense	35		(160,269,175)		(167,319,566)
Profit for the year		₩	429,614,534	₩	530,380,685
Other comprehensive income					
<i>Items that will not be reclassified to profit or loss</i>					
Financial assets at fair value through other comprehensive income		₩	(5,967,847)	₩	(8,964,269)
Remeasurements of net defined benefit liabilities			(14,519,224)		4,209,587
Remeasurements of net defined benefit liabilities of associates			(1,459,434)		(152,985)
<i>Items that may be subsequently reclassified to profit or loss</i>					
Cash flow hedges			6,246,556		(5,432,248)
Share of other comprehensive income of associates			6,124,556		(7,050,524)
Exchange differences on translating foreign operations			37,196,134		(28,060,455)
Other comprehensive income for the year, net of tax			27,620,741		(45,450,894)
Total comprehensive income for the year		₩	457,235,275	₩	484,929,791
Profit for the year is attributable to:					
Owners of the Parent Company		₩	419,513,115	₩	522,214,845
Non-controlling interests			10,101,420		8,165,838
Total comprehensive income for the year is attributable to:					
Owners of the Parent Company		₩	446,956,561	₩	477,044,923
Non-controlling interests			10,278,713		7,884,868
Earnings per share					
Basic and diluted earnings per share	37	₩	3,387	₩	4,216

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

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Consolidated Statements of Changes in Equity
Years Ended December 31, 2019 and 2018

(in thousands of Korean won)	Notes	Other paid-in capital				Retained earnings	Other components of equity	Total	Non-controlling interest	Total equity
		Share capital	Share premium	Consolidated capital surplus	Treasury shares					
Balance as at January 1, 2018		W 61,937,535	W 2,993,465,738	W -	W (1,088,018)	W 3,518,984,934	W (214,629,001)	W 6,358,671,188	W 14,835,057	W 6,373,506,245
Annual dividends		-	-	-	-	(49,541,072)	-	(49,541,072)	(6,686,600)	(56,227,672)
Repurchase obligation of treasury shares		-	-	(20,631,939)	-	-	-	(20,631,939)	0	(20,631,939)
Business combination		-	-	-	-	-	-	-	8,736,544	8,736,544
Total comprehensive income for the year		-	-	-	-	522,214,845	-	522,214,845	8,165,838	530,380,683
Profit for the year		-	-	-	-	522,214,845	-	522,214,845	8,165,838	530,380,683
Remeasurements of net defined benefit liabilities of associates		-	-	-	-	(152,985)	-	(152,985)	0	(152,985)
Cash flow hedges	28	-	-	-	-	-	(5,432,248)	(5,432,248)	0	(5,432,248)
Loss on valuation of equity instruments at fair value	28	-	-	-	-	-	(8,966,804)	(8,966,804)	2,535	(8,964,269)
Share of other comprehensive income	28	-	-	-	-	-	(7,050,524)	(7,050,524)	0	(7,050,524)
Exchange differences on translating foreign operations	28	-	-	-	-	-	(27,964,509)	(27,964,509)	(95,946)	(28,060,455)
Remeasurements of net defined benefit liabilities		-	-	-	-	4,397,148	-	4,397,148	(187,560)	4,209,588
Balance at December 31, 2018		W 61,937,535	W 2,993,465,738	W (20,631,939)	W (1,088,018)	W 3,995,902,870	W (264,043,086)	W 6,765,543,100	W 24,769,868	W 6,790,312,968
Balance as at January 1, 2019		W 61,937,535	W 2,993,465,738	W (20,631,939)	W (1,088,018)	W 3,995,902,870	W (264,043,086)	W 6,765,543,100	W 24,769,868	W 6,790,312,968
Annual dividends		-	-	-	-	(55,733,706)	-	(55,733,706)	(4,597,423)	(60,331,129)
Total comprehensive income for the year		-	-	-	-	419,513,115	-	419,513,115	10,101,420	429,614,535
Profit for the year		-	-	-	-	419,513,115	-	419,513,115	10,101,420	429,614,535
Remeasurements of net defined benefit liabilities of associates		-	-	-	-	(1,459,434)	-	(1,459,434)	-	(1,459,434)
Cash flow hedges	28	-	-	-	-	-	6,246,556	6,246,556	-	6,246,556
Loss on valuation of equity instruments at fair value through other comprehensive income	28	-	-	-	-	-	(5,965,451)	(5,965,451)	(2,396)	(5,967,847)
Share of other comprehensive income	28	-	-	-	-	-	6,124,556	6,124,556	-	6,124,556
Exchange differences on translating foreign operations	28	-	-	-	-	-	37,016,444	37,016,444	179,690	37,196,134
Remeasurements of net defined benefit liabilities		-	-	-	-	(14,519,224)	-	(14,519,224)	-	(14,519,224)
Balance at December 31, 2019		W 61,937,535	W 2,993,465,738	W (20,631,939)	W (1,088,018)	W 4,343,703,621	W (220,620,981)	W 7,156,765,956	W 30,451,159	W 7,187,217,115

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

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Consolidated Statements of Cash Flows
Years Ended December 31, 2019 and 2018

<i>(in thousands of Korean won)</i>	Notes	2019	2018
Cash flows from operating activities			
Cash generated from operating activities			
Profit for the year		₩ 429,614,534	₩ 530,380,684
Adjustments	40	893,585,517	843,913,869
Changes in operating assets and liabilities	40	<u>(334,973,785)</u>	<u>(96,352,334)</u>
		988,226,266	1,277,942,219
Interest income received		16,480,771	12,321,532
Interest expense paid		(57,061,362)	(54,136,553)
Dividends received		34,618,354	33,416,876
Income tax paid		<u>(221,916,635)</u>	<u>(146,004,124)</u>
Net cash inflow from operating activities		<u>760,347,394</u>	<u>1,123,539,950</u>
Cash flows from investing activities			
Net change in short-term financial assets		(5,044,465)	(23,048,765)
Net change in long-term financial assets		44,085	3,553
Payments for financial assets at fair value through profit or loss		(6,640,000)	(61,500,000)
Proceeds from disposal of financial assets at fair value through profit or loss		-	60,223,202
Payments for equity instruments at fair value through other comprehensive income		-	(52,724,875)
Proceeds from disposal of equity instruments at fair value through other comprehensive income		1,884	-
Payments for debt instruments at fair value through other comprehensive income		-	(458,810)
Proceeds from disposal of debt instruments at fair value through other comprehensive income		4,916	439,192
Payments for property, plant and equipment	15	(272,210,898)	(323,635,831)
Proceeds from disposal of property, plant and equipment	15	47,804,081	18,852,879
Payments for intangible assets	18	(7,389,732)	(5,327,536)
Proceeds from disposal of intangible assets	18	1,035,208	1,150,856
Payments for investment properties	17	(63,452)	-
Proceeds from disposal of investment properties	17	39,064,712	651,468
Settlement of derivatives		(46,243,942)	(10,065,392)
Net changes in other financial assets		9,996,291	(548,904)
Proceeds from disposal of other investment assets		-	464,540
Payments for investments in subsidiaries		-	(199,296,228)
Payments for investments in associates		<u>(1,666,142)</u>	<u>-</u>
Net cash outflow from investing activities		<u>(241,307,454)</u>	<u>(594,820,651)</u>
Cash flows from financing activities			
Net changes in short-term borrowings	40	(106,334,090)	(81,597,132)
Repayments of long-term borrowings	40	-	(110,011,000)
Issuance of debentures	40	-	316,598,145
Repayments of debentures	40	-	(536,028,600)
Repayments of lease liabilities	40	(54,425,569)	-
Repayments of current portion of long-term borrowings	40	(23,712,400)	(120,254,714)
Dividends paid to owners of the Parent Company	40	(55,733,706)	(49,541,072)
Increase in financial liabilities to non-controlling interests	40	-	4,750,000
Dividends paid to non-controlling interests	40	<u>(4,597,423)</u>	<u>(6,686,600)</u>
Net cash outflow from financing activities		<u>(244,803,188)</u>	<u>(582,770,973)</u>
Net increase (decrease) in cash and cash equivalents		<u>274,236,752</u>	<u>(54,051,674)</u>
Cash and cash equivalents at the beginning of the year		611,977,140	694,151,216
Effects of exchange rate changes on cash and cash equivalents		<u>(8,613,616)</u>	<u>(28,122,402)</u>
Cash and cash equivalents at the end of the year		<u>₩ 877,600,276</u>	<u>₩ 611,977,140</u>

The above consolidated statements of cash flows should be read in conjunction with the accompanying notes.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

1. General Information

General information of Hankook Tire & Technology Co.,Ltd. (the Company), that is a controlling company in accordance with Korean IFRS 1110 *Consolidated Financial Statements*, and its subsidiaries (collectively referred to as the "Group") is as follows:

1.1 The Company

The Group was spun off from Hankook Technology Group Co.,Ltd. (formerly, Hankook Tire Worldwide Co., Ltd.) on September 1, 2012 to manufacture and sell tires, tubes and alloy wheels. The Group's headquarters is located at Kangnam-Gu, Seoul, and eight manufacturing factories are located in Korea, China, Hungary, Indonesia and USA, including its subsidiaries. On October 4, 2012, the Group was relisted on the Korea stock exchange.

On February 28, 2019, the Board of Directors resolved to change its corporate name from Hankook Tire Co., Ltd. to Hankook Tire & Technology Co.,Ltd. The Company changed its name on May 8, 2019, according to the approval of general meeting of shareholders on March 28, 2019.

As at December 31, 2019 and 2018, the Group's shareholders are as follows:

	2019		2018	
	Number of shares	Percentage of ownership (%)	Number of shares	Percentage of ownership (%)
Hankook Technology Group Co., Ltd. (formerly, Hankook Tire Worldwide Co., Ltd.)	37,995,959	30.67	37,408,655	30.20
Yang Rai Cho	7,019,903	5.67	7,019,903	5.67
Hyun Bum Cho	2,561,241	2.07	2,561,241	2.07
Hyun Shick Cho	799,241	0.65	799,241	0.65
Others ¹	75,498,725	60.94	76,086,029	61.41
	<u>123,875,069</u>	<u>100</u>	<u>123,875,069</u>	<u>100</u>

¹ Including 22,388 treasury shares as at December 31, 2019.

1.2 Consolidated Subsidiaries

Details of the consolidated subsidiaries as of December 31, 2019 and 2018, are as follows:

Name of entity	Location	Main business	Ownership interest held by the Group (%)		Closing month
			2019	2018	
Hankook Engineering Works Co., Ltd. (formerly, Daehwa Engineering & Machinery Co.,Ltd.)	Korea	Manufacture of tire and tube manufacturing machine	95.0	95.0	December
Hankook Tire America Corp.	USA	Sales of tires	100.0	100.0	December

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

Name of entity	Location	Main business	Ownership interest held by the Group (%)		Closing month
			2019	2018	
Hankook Tyre U.K. Ltd.	United Kingdom	Sales of tires	100.0	100.0	December
Jiangsu Hankook Tire Co., Ltd.	China	Manufacture and sales of tires	100.0	100.0	December
Hankook Tire China Co., Ltd.	China	Manufacture and sales of tires	100.0	100.0	December
Shanghai Hankook Tire Sales Co., Ltd.	China	Sales of tires	100.0	100.0	December
Hankook Tire Netherlands B.V.	Netherlands	Sales of tires	100.0	100.0	December
Hankook Tire Japan Corp.	Japan	Sales of tires	100.0	100.0	December
Hankook Tire Canada Corp.	Canada	Sales of tires	100.0	100.0	December
Hankook Reifen Deutschland GmbH	Germany	Sales of tires	100.0	100.0	December
Hankook Tire France SARL	France	Sales of tires	100.0	100.0	December
Hankook Espana S. A.	Spain	Sales of tires	100.0	100.0	December
Hankook Tyre Australia Pty., Ltd.	Australia	Sales of tires	100.0	100.0	December
Hankook Tire Europe Holdings B.V.	Netherlands	Building European governance	100.0	100.0	December
Hankook Tire Hungary Ltd.	Hungary	Manufacture and sales of tires	100.0	100.0	December
Hankook Tire Budapest Kereskedelmi Kft	Hungary	Sales of tires	100.0	100.0	December
Hankook Tire Italia S.R.L.	Italy	Sales of tires	100.0	100.0	December
Hankook Tire Europe GmbH	Germany	Support to sales of tires	100.0	100.0	December
Hankook Tire Rus LLC	Russia	Sales of tires	100.0	100.0	December
Hankook Tire DE Mexico, S.A. DE C.V.	Mexico	Sales of tires	100.0	100.0	December
Chongqing Hankooktire Co., Ltd.	China	Manufacture and sales of tires	100.0	100.0	December
PT. HANKOOKTIRE INDONESIA.	Indonesia	Manufacture and sales of tires	99.9	99.9	December
MK Mold (Jiaxing) Co., LTD.	China	Manufacture and sales of tire mold	50.1	50.1	December
Hankook Precision Works Co., Ltd. (formerly, MK Technology Co., Ltd.)	Korea	Manufacture and sales of tire mold	50.1	50.1	December
Hankook Tire Singapore PTE., Ltd.	Singapore	Trade and consulting	100.0	100.0	December
Hankook Tire Malaysia SDN.BHD.	Malaysia	Sales of tires	100.0	100.0	December
Hankook Tire India llp	India	Sales of tires	100.0	100.0	December
Hankook Tire Sweden AB	Sweden	Sales of tires	100.0	100.0	December
Beijing Jielun Trading Company Co.,Ltd.	China	Sales of tires	100.0	100.0	December
Hankook Lastikleri A.S.	Turkey	Sales of tires	100.0	100.0	December
Hankook Tire Polska Sp. z o.o.	Poland	Sales of tires	100.0	100.0	December

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

Name of entity	Location	Main business	Ownership interest held by the Group (%)		Closing month
			2019	2018	
Hankook Tire Thailand Co.,Ltd.	Thailand	Sales of tires	99.9	99.9	December
Hankook Tire de Colombia Ltda.	Colombia	Sales of tires	100.0	100.0	December
Hankook Tire Manufacturing Tennessee LP	USA	Manufacture and sales of tires	100.0	100.0	December
Hankook Tire America Holdings I, LLC	USA	Building American governance	100.0	100.0	December
Hankook Tire America Holdings II, LLC	USA	Building American governance	100.0	100.0	December
MK Technology (CHONGQING) Mould Co., Ltd.	China	Manufacture and sales of tire mold	50.1	50.1	December
Hankook Tire Ceska Republika s.r.o.	Czech	Sales of tires	100.0	100.0	December
Hankook Donggeurami Partners Co., Ltd.	Korea	Facilities management service, baking	100.0	100.0	December
Hankook Tyre Australia Retail Pty., Ltd.	Australia	Distribution of tires	100.0	100.0	December
JAX Quickfit Franchising Systems Unit Trust.	Australia	Distribution of tires	100.0	100.0	December
JAX Quickfit Franchising Systems Pty Ltd.	Australia	Distribution of tires	100.0	100.0	December
JAX Quickfit Properties Pty Ltd.	Australia	Distribution of tires	100.0	100.0	December
Hankook Tire Latam, S.A.	Panama	Trade and consulting	100.0	100.0	December
Hankook Tire Latin America Distribution Center, S.A.	Panama	Sales of tires	100.0	100.0	December
Hankook Tire Ukraine LLC	Ukraine	Sale of tires	100.0	100.0	December
KCG 1 Private Equity Fund Limited Partnership	Korea	Collective investment	80.0	80.0	December
Model Solution Co.,Ltd.	Korea	Manufacture of injection molds	75.0	75.0	December
ModelSolution Inc.	USA	Computer printing	75.0	75.0	December
Reifen-Muller KG	Germany	Distribution of tires	100.0	100.0	December
Reifen-Muller GmbH & Co. Runderneuerungswerk KG	Germany	Distribution of tires	100.0	100.0	December
Rm Verwaltungs GmbH	Germany	Building European governance	100.0	100.0	December
RU Verwaltungs GmbH	Germany	Building European governance	100.0	-	December
Hankook Tire D.O.O. Beograd	Serbia	Sale of tires	100.0	-	December
Hankook Tire Middle East and Africa FZE	United Arab Emirates	Sale of tires	100.0	-	December
Hankook Tire Vietnam. Co., Ltd.	Vietnam	Sale of tires	100.0	-	December
PT. HANKOOK TIRE SALES INDONESIA	Indonesia	Sale of tires	100.0	-	December
Hankook Tire Austria GmbH	Austria	Sale of tires	100.0	-	December

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

1.3 Changes in Scope for Consolidation

Subsidiaries newly included in the consolidation during the year ended December 31, 2019, are as follow, and there are no subsidiaries excluded from consolidation:

Name of subsidiary	Reason
RU Verwaltungs GmbH	Newly established
Hankook Tire D.O.O. Beograd	Newly established
Hankook Tire Middle East and Africa FZE	Newly established
Hankook Tire Vietnam. Co., Ltd.	Newly established
PT. HANKOOK TIRE SALES INDONESIA	Newly established
Hankook Tire Austria GmbH	Newly established

2. Significant Accounting Policies

The principal accounting policies applied in the preparation of these consolidated 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 Group 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 consolidated 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 Group's financial position, financial performance or cash flows, is not presented in the accompanying consolidated financial statements.

The consolidated financial statements of the Group 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.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

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

The Group has applied the following standards and amendments for the first time for their annual reporting period commencing January 1, 2019.

(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 Group has changed accounting policy. The Group 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 Group 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 44.

(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*

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

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 of 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 enactment 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.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

2.2.2 New standards and interpretations not yet adopted by the Group

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 Group.

(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 Group. These amendments should be applied for annual periods beginning on or after January 1, 2020, with early adoption permitted. The Group 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, with early adoption permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

2.3 Consolidation

The Group has prepared the consolidated financial statements in accordance with Korean IFRS 1110 *Consolidated Financial Statements*.

(a) Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

The acquisition method of accounting is used to account for business combinations by the Group. The consideration transferred is measured at the fair values of the assets transferred, and identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The Group recognizes any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets. All other non-controlling interests are measured at fair values, unless otherwise required by

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

other standards. Acquisition-related costs are expensed as incurred.

The excess of consideration transferred, amount of any non-controlling interest in the acquired entity and acquisition-date fair value of any previous equity interest in the acquired entity over the fair value of the net identifiable assets acquired is recorded as goodwill. If those amounts are less than the fair value of the net identifiable assets of the business acquired, the difference is recognized directly in the profit or loss as a bargain purchase.

Intercompany transactions, balances and unrealized gains on transactions between group companies are eliminated. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interest to reflect their relative interest in the subsidiary. Any difference between the amount of the adjustment to non-controlling interest and any consideration paid or received is recognized in a separate reserve within equity attributable to owners of the Parent Company.

When the Group ceases to consolidate for a subsidiary because of a loss of control, any retained interest in the subsidiary is remeasured to its fair value with the change in carrying amount recognized in profit or loss.

(b) Associates

Associates are entities over which the Group has significant influence but not control or joint control. Investments in associates are accounted for using the equity method of accounting, after initially being recognized at cost. Unrealized gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. If the Group's share of losses of an associate equals or exceeds its interest in the associate (including long-term interests that, in substance, form part of the Group's net investment in the associate), the Group discontinues recognizing its share of further losses. After the Group's interest is reduced to zero, additional losses are provided for, and a liability is recognized, only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate. If there is objective evidence of impairment for the investment in the associate, the Group recognizes the difference between the recoverable amount of the associate and its book amount as impairment loss. If an associate uses accounting policies other than those of the Group for like transactions and events in similar circumstances, if necessary, adjustments shall be made to make the associate's accounting policies conform to those of the Group when the associate's financial statements are used by the Group in applying the equity method.

2.4 Foreign Currency Translation

(a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which each entity operates (the "functional

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

currency'). The consolidated financial statements are presented in Korean won, which is the Group'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. They are deferred in other comprehensive income if they relate to qualifying cash flow hedges and qualifying effective portion of net investment hedges, or are attributable to monetary part of the net investment in a foreign operation.

Foreign exchange gains and losses that relate to borrowings are presented in the statement of profit or loss, within finance costs. All other foreign exchange gains and losses are presented in the statement of profit or loss within 'other income or other expenses'.

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 held at fair value through other comprehensive income are recognized in other comprehensive income.

(c) Translation to the presentation currency

The results and financial position of foreign operations that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each statement of financial position presented are translated at the closing rate at the end of the reporting period,
- income and expenses for each statement of profit or loss are translated at average exchange rates, and
- All resulting exchange differences are recognized in other comprehensive income.

When the Company ceases to control a subsidiary, exchange differences that were recorded in equity are recognized in the consolidated statements of comprehensive income as part of the gain or loss on sale.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the Group, and translated at the closing rate at the end of the reporting period.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

2.5 Financial Assets

(a) Classification

The Group 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 Group'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 Group 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 Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income.

(b) Measurement

At initial recognition, the Group 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 Group's business model for managing the asset and the cash flow characteristics of the asset. The Group 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

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

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 'other income or expenses' and impairment losses are presented in 'other expenses'.

- 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 'other income or expenses' in the year in which it arises.

B. Equity instruments

The Group subsequently measures all equity investments at fair value. Where the Group'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 'other income and expenses' 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 Group 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 Group applies the simplified approach, which requires expected lifetime credit losses to be recognized from initial recognition of the receivables.

(d) Recognition and Derecognition

Regular way purchases and sales of financial assets are recognized or derecognized on trade-date, the date on which the Group 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 Group has transferred substantially all the risks and rewards of ownership.

If a transfer does not result in derecognition because the Group has retained substantially all the risks and rewards of ownership of the transferred asset, the Group continues to recognize the

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

transferred asset in its entirety and recognizes a financial liability for the consideration received. The Group 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 statements 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 Group 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 as 'other non-operating income (expenses)' or 'finance income (costs)' based on the nature of transactions. The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income, and the ineffective portion is recognized in other non-operating income. The effective portion of changes in the fair value of derivatives, previously deferred in other comprehensive income, is reclassified from equity to profit or loss when interest expenses of the borrowings are recognized and repayments of the borrowings are made.

2.7 Trade Receivables

Trade receivables are recognized initially at the amount of consideration that is unconditional, unless they contain significant financing components when they are recognized at fair value. Trade receivables are subsequently measured at amortized cost using the effective interest method, less loss allowance. (Note 9)

2.8 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the following method:

Type of inventory	Costing method
Finished goods and work in process	Weighted-average method
Raw materials, merchandise and supplies	Moving-weighted average method
Materials in transit	Specific identification method

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

2.9 Non-current Assets (or Disposal Group) Held for sale

Non-current assets (or disposal group) are classified as held for sale when their carrying amount will be recovered principally through a sale transaction rather than through continuing use and a sale is considered highly probable. The assets are measured at the lower amount between their carrying amount and the fair value less costs to sell.

2.10 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 straight-line method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives as follows:

	Useful lives
Buildings	13 - 60 years
Structures	2~50
Machinery	2~18
Vehicles	2~10
Tools, furniture and fixtures	2~30
Molds	8

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

2.11 Borrowing Costs

General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalized during the period of time that is required to complete and prepare the asset for its intended use or sale. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization. Other borrowing costs are expensed in the period in which they are incurred.

2.12 Government Grants

Grants from the government are recognized at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions. Government grants related to assets are presented in the statement of financial position either by deducting the grant in arriving at the carrying amount of the asset, and government grants related to costs are deferred and recognized in the profit or loss over the period necessary to match them with the costs that they are intended to compensate.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

2.13 Intangible Assets

Goodwill is measured as described in Note 2.3.(a), and carried at cost less accumulated impairment losses.

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

Software development costs that are internally generated by the Group are recognized as intangible assets when the criteria including technical feasibility and probability of generating future economic benefits are met. Membership rights are regarded as intangible assets with indefinite useful life and not amortized because there is no foreseeable limit to the period over which the assets are expected to be utilized. The Group amortizes intangible assets with a limited useful life using the straight-line method over the following periods:

	Useful lives
Industrial property rights	5 - 10 years
Other intangible assets and others	3 - 50 years

2.14 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 Group depreciates investment properties, except for land, using the straight-line method over their useful lives of 40 years.

2.15 Impairment of Non-financial Assets

Goodwill and 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. Other assets are tested for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. 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.

2.16 Trade and Other Payables

These amounts represent liabilities for goods and services provided to the Group prior to the end of reporting period which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition. Trade and other payables are presented as current liabilities, unless payment is not due within 12 months after the reporting period. They are recognized initially at their fair value and subsequently measured at amortized cost using the effective interest method.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

2.17 Financial Liabilities

(a) Classification and measurement

The Group'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 Group 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.

2.18 Financial Guarantee Contracts

Financial guarantee contracts are recognized as a financial liability at the time the guarantee is issued. The liability is initially measured at fair value, subsequently at the higher of following and recognized in the statement of financial position within 'other financial liabilities'.

- the amount determined in accordance with the expected credit loss model under Korean IFRS 1109 *Financial Instruments* and
- the amount initially recognized less, where appropriate, the cumulative amount of income recognized in accordance with Korean IFRS 1115 *Revenue from Contracts with Customers*

2.19 Provisions

Provisions for service warranties, make good obligation, and legal claims are recognized when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. Provisions are measured at the present value of management's best estimate of the

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

expenditure required to settle the present obligation at the end of the reporting period, and the increase in the provision due to the passage of time is recognized as interest expense.

2.20 Current and Deferred Tax

The tax expense for the period consists of current and deferred tax. Current 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 tax expense of 2019 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 Group 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 consolidated 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 Group 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 Group 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 Group 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 where the entity has a legally enforceable right to offset and intends either to settle on a net basis.

2.21 Employee Benefits

(a) Post-employment benefits

The Group operates both defined contribution and defined benefit pension plans.

For defined contribution plans, the Group pays contribution to publicly or privately administered

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

pension insurance plans on mandatory, contractual or voluntary basis. The Group has no further payment obligation once the contribution have been paid. The contribution are recognized as employee benefit expense when they are due.

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 Group 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 Group 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.

2.22 Revenue Recognition

(a) Identification of performance obligation

For the product sales contract, the Group separates contracts to identify a performance obligation from service rendered, apart from sales of goods or products. The Group determines standard warranty coverage periods per product and customer considering warranty periods required by law and others when entering into contracts with customers for the sales of products. If the Group provides an extended warranty beyond the standard warranty coverage period or a customer has the option to purchase an additional warranty separately, the warranty is recognized as revenue by identifying a separate performance obligation.

(b) Performance obligation at point in time

Revenue from sale of goods is recognized when products are delivered to the purchaser. Delivery occurs when the goods have been transferred to the specific location, the risks of obsolescence and loss have been transferred to the purchaser, and either the purchaser has accepted the goods in accordance with the sales contract, the acceptance provisions have lapsed, or the Group has

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

objective evidence that all criteria for acceptance have been satisfied.

The products are often sold with volume discounts and customers have a right to return faulty products. Accumulated experience is used to estimate and provide for the discounts and returns. The volume discounts are assessed based on anticipated annual purchases. The Group recognizes provisions for product warranties based on reasonable expectation reflecting warranty obligation rates incurred historically.

(c) Significant financial components

In general, the period between when the Group transfers a promised good or service to a customer and when the customer pays for that good or service is one year or less. In this case, the Group applies a practical expedient that does not adjust the promised amount of consideration for the effects of a significant financing component.

2.23 Lease

As explained in Note 2.2 above, the Group has changed its accounting policy for leases. The impact of the new accounting policies is disclosed in Note 44.

As at December 31, 2018, leases of property, plant and equipment where the Group, 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 Group 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 Group 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 Group leases various warehouses, equipment and cars. Lease contracts are typically made for fixed periods of 3 to 8 years, but may have extension options as described in (a) below.

a) Extension and termination options

Extension and termination options are included in a number of property and equipment leases across the Group. These terms are used to maximize operational flexibility in terms of managing contracts. The majority of extension and termination options held are exercisable only by the Group and not by the respective lessor.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

Contracts may contain both lease and non-lease components. The Group allocates the consideration in the contract to the lease and non-lease components based on their relative stand-alone 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 Group.

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 Group (the lessee) under residual value guarantees
- The exercise price of a purchase option if the Group (the lessee) is reasonably certain to exercise that option, and
- Payments of penalties for terminating the lease, if the lease term reflects the Group (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 Group:

- 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

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

for leases held by corporation, a subsidiary of the Group, which does not have recent third-party financing, and

- makes adjustments specific to the lease, for example term, country, currency and security.

The Group 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 office furniture

2.24 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.

2.25 Approval of Issuance of the Financial Statements

The consolidated financial statements 2019 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

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

The preparation of financial statements requires the Group to make estimates and assumptions concerning the future. Management also needs to exercise judgement in applying the Group'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) Estimated goodwill impairment

The Group tests whether goodwill has suffered any impairment on an annual basis. The recoverable amount of a cash generating unit (CGU) is determined based on value-in-use calculations (Note 18).

(b) Income taxes

The Group'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 Group is liable to pay additional income tax calculated based on the tax laws. The new tax system is effective for three years from 2015. Accordingly, the measurement of current and deferred income tax is affected by the tax effects from the new tax system. As the Group's income tax is dependent on the investments, increase in wages and dividends, there is an uncertainty measuring the final tax effects.

(c) 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 Group 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).

(d) Impairment of financial assets

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

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

(e) 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 24).

(f) Provisions

The Group recognizes provision for warranty on products sold. The Group accrues provision for warranty based on the best estimate of amounts necessary to settle future and existing claims. The amounts are estimated based on past experience.

(g) Valuation of inventories

Inventories are stated at the lower of cost and net realizable value. Estimates of net realizable value are based on the most reliable evidence available at the time the estimates are made, of the amount the inventories are expected to realize. These estimates take into consideration fluctuations of price or cost directly relating to past experience, current market conditions and events occurring after the end of the period to the extent that such events confirm conditions existing at the end of the period.

(h) Lease

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option.

Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated). (Note 16)

4. Financial Risk Management

(a) Capital management

The Group manages its capital to ensure that entities under the Group will be able to continue while maximizing the return to shareholders through the optimization of its debt and equity balance. The Group's overall strategy remains unchanged from that of the prior periods. The Group 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 consolidated financial statements. The Group is not subject to any externally imposed capital requirements.

The debt ratios as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>		2019		2018
Total liabilities	₩	2,977,390,790	₩	3,006,129,279
Total equity		7,187,217,114		6,790,312,968
Debt ratio		41.43%		44.3%

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

(b) The significant accounting policies and methods (including recognition, measurement and related gain and loss recognition) adopted for the Group's financial assets, financial liabilities and equity are detailed in Note 2. Financial instrument category for financial assets and financial liabilities at the end of the reporting period are detailed in Note 6.

(c) Financial risk management

1) Purpose of financial risk management

The Group 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 Group manages operations, organizes the approach to financial market and controls the financial risks related to operations of the Group through internal risk reports, which analyze the scope and degree of each risk factor.

The Group uses derivative financial instruments to hedge these risks. The use of derivatives is decided in the observance of the Group's policies approved by the Board of 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 Group does not trade the financial instruments, including derivatives for the purpose of speculation.

The finance department of the Group reports the details quarterly to Financial Risk Management Committee that monitors whether the Group continues to comply with the risk management policies and the current risk management system works appropriately for the risks that the Group is exposed to.

2) Market risk

The Group's activities are mainly exposed to financial risks of changes in currency and interest rates. The Group makes various derivative contracts to manage the interest rate risk and foreign currency rate risk.

a) Foreign currency risk management

The Group is exposed to foreign exchange risk arising from foreign currency transactions. Currency exposures are managed within approved policy parameters by utilizing currency forward contracts.

The sensitivity analysis includes outstanding monetary items denominated in foreign currencies, and foreign exchange translations are adjusted based on assumption that Korean won has weakened/strengthened by 10% at the end of the reporting period. The sensitivity analysis includes monetary items denominated in foreign currencies.

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

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

<i>(in thousands of Korean won)</i>		2019		2018
Weakened	₩	14,447,183	₩	29,409,090
Strengthened		(14,447,183)		(29,409,090)

In order to reduce the impact of changes in exchange rates on future cash flows, the Group entered into foreign currency forward contracts. The outstanding forward contracts as at December 31, 2019 are as follows:

<i>(in thousands of Korean won, USD, THB, MYR, INR)</i>	Maturity date	Selling currency (A)	Selling amount	Contract exchange rate(B/A)	Buying Currency (B)	Contractual inflow amount
BNP Paribas and others	2020-09-29	USD	170,000	1,174	KRW	199,577,300
MUFG and others	2020-03-31	THB	41,802	30	USD	1,378
JPM-MY and others	2020-07-01	MYR	39,870	4	USD	9,524
JPM	2020-06-17	INR	58,971	73	USD	810

b) Interest rate risk

Interest rate risk is defined as the risk that the interest income or expenses arising from the Group'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 Group monitors a fluctuation of domestic and foreign interest rates and establishes alternatives.

The table below summarizes the impact of increases/decreases of interest rate in borrowings with floating interest rate on the Group's pre-tax profit for the year. The analysis is based on the assumption that the interest rate has increased/decreased by 10 basis point with all other variables held constant.

<i>(in thousands of Korean won)</i>			Impact on profit before tax	
			2019	2018
10 bp	Increase	₩	447,802	₩ 31,254
	Decrease		(447,802)	(31,254)

The Group is applying cash flow hedge accounting by entering into currency swap contracts, which uses fixed exchange rates when repaying the principal of foreign debentures. The outstanding currency swap contract at December 31, 2019 is as follows:

<i>(in thousands of USD)</i>	Contract amount	Agreed Interest rate(%)	Interest rate of Korean won payment (%)	Interest rate of USD receipt (%)	Contract date	Contract maturity
Korea Development Bank	USD 300,000	1061.5~1071.9	2.61~2.64	3.50	2018.01.25~ 2018.01.30	2023-01-30

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

In relation to the above contract, gain on valuation amounting ₩6,246,556 thousand (Note 8) after tax effect is recognized in other comprehensive income, and gains on valuation amounting ₩317,000 thousand is recognized in profit or loss for the year ended December 31, 2019.

c) Other price risks

The Group is exposed to equity securities price risks arising from its equity investments. Equity investments are held for strategic rather than trading purposes. The Group 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 equity securities price has increased/decreased by 5%, the Group's other comprehensive income would be increased/decreased by ₩1,970,711 thousand (2018: ₩2,258,809 thousand) due to changes in financial assets at fair value.

3) Credit risk management

Credit risk refers to risk of financial losses to the Group when the counterpart defaults on the obligations of the contracts. The Group has adopted a policy of only dealing with creditworthy counterparties and obtaining sufficient collateral, where appropriate, as a means of mitigating the risk of financial loss from defaults. The Group only deals with the customers rated higher than investment grade by the independent credit rating agencies. If those grades are not available, customers' credit is evaluated upon their other financial information, sales figures and other factors posted publicly. The Group regularly monitors customers' credit ratings, checks on the credit risk exposure and readjusts deposit or aggregate amount of transactions. The aggregate risks are allocated to total portfolio of approved customers for diversification effect that are reviewed and approved annually by Financial Risk Management Committee.

Credit ratings of trade receivables are evaluated constantly and credit guarantee contracts are made, if necessary. The maximum exposure to credit risk is not disclosed as the book amount of financial assets exposed to credit risk are the best presentation of the maximum exposure to credit risk.

4) Liquidity risk management

The Group has established an appropriate liquidity risk management framework for the management of the Group'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 Group 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. Note 41 explains details of unused balances of credit facility agreements entered through the Group's discretion to reduce the liquidity risk.

a) Details of liquidity and interest rate risk

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

The table below discloses remaining contractual maturity of non-derivative financial liabilities and derivatives which will be settled net in cash in detail. Derivatives which will be settled net in cash consist of interest swap contract to manage interest risk of the Group. The table below is prepared based on undiscounted cash flow of non-derivative financial liabilities. Contractual maturity is based on the earliest day when the payment can be claimed to the Group.

	2019					
	Book amount	Contractual cash flows		Residual amount		
				Within 1 year	1 to 2 years	2 to 5 years
Trade payables	₩ 348,487,484	₩ 348,487,484	₩ 348,487,484	₩ -	₩ -	₩ -
Non-trade payables	276,751,745	276,751,745	276,751,745	-	-	-
Accrued expenses	258,552,547	258,552,547	258,552,547	-	-	-
Dividends payable	20,584	20,584	20,584	-	-	-
Leasehold deposits received	2,860,871	2,860,871	2,543,147	317,724	-	-
Short-term borrowings	710,936,751	712,369,247	712,369,247	-	-	-
Long-term borrowings	104,024,000	106,010,090	59,236,247	46,773,843	-	-
Debentures	595,252,876	634,081,212	263,225,965	12,156,900	358,698,347	-
Lease liabilities	308,777,722	368,342,567	47,206,873	148,930,316	172,205,378	-
	<u>₩ 2,605,664,580</u>	<u>₩ 2,707,476,347</u>	<u>₩ 1,968,393,839</u>	<u>₩ 208,178,783</u>	<u>₩ 530,903,725</u>	<u>₩ -</u>

	2018					
	Book amount	Contractual cash flows		Residual amount		
				Within 1 year	1 to 2 years	2 to 5 years
Trade payables	₩ 423,316,782	₩ 423,316,782	₩ 423,316,782	₩ -	₩ -	₩ -
Non-trade payables	282,179,726	282,179,726	282,179,726	-	-	-
Accrued expenses	225,694,136	225,694,136	225,694,136	-	-	-
Dividends payable	17,978	17,978	17,978	-	-	-
Leasehold deposits received	3,941,121	3,941,121	2,772,000	1,149,121	20,000	-
Short-term borrowings	811,473,548	813,286,898	813,286,898	-	-	-
Long-term borrowings	238,447,415	269,728,022	35,002,868	67,342,139	74,266,145	93,116,869
Debentures	582,461,150	645,225,850	17,312,550	263,133,175	364,780,125	-
	<u>₩ 2,567,531,856</u>	<u>₩ 2,663,390,513</u>	<u>₩ 1,799,582,938</u>	<u>₩ 331,624,435</u>	<u>₩ 439,066,270</u>	<u>₩ 93,116,869</u>

As at December 31, 2019, gross settlement contracts consist of currency forward contract, which will be settled within 11 months. This contract is not included in above table and non-discounted contractual cash inflow/outflow from the contract is as follows:

(in thousands of Korean won)	2019		2018	
Contractual cash inflow	₩	213,137,205	₩	669,324,249
Contractual cash outflow		210,640,116		673,762,619

5. Fair Value

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

For the year ended December 31, 2019, there were no changes in business environment and economic environment that have significant impacts on the fair value of assets and liabilities of the Group.

5.1 Fair Value of Financial Instruments by Category

Carrying amount and fair value of financial instruments by category as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019		2018	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets				
Financial assets at fair value through other comprehensive income	₩ 40,314,271	₩ 40,314,271	₩ 46,083,106	₩ 46,083,106
Financial assets at fair value through profit or loss	8,140,000	8,140,000	1,500,000	1,500,000
Financial derivative assets	32,931,747	32,931,747	13,256,235	13,256,235
Financial liabilities				
Debentures	595,252,876	618,096,646	582,461,150	603,073,987
Financial derivative liabilities	1,200,706	1,200,706	8,458,588	8,458,588

Financial assets including trade and non-trade receivables, and financial liabilities at amortized cost whose carrying amount is a reasonable approximation of fair value are excluded from the fair value disclosures.

5.2 Fair value Hierarchy

Items that are measured at fair value or for which the fair value is disclosed 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).

Fair value hierarchy classifications of the financial instruments that are measured at fair value or its fair value is disclosed as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019			
	Level 1	Level 2	Level 3	Total
Recurring fair value measurements				
Equity instruments at fair value through other	₩ 40,314,271	₩ -	₩ -	₩ 40,314,271

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

<i>(in thousands of Korean won)</i>	2019			
comprehensive income				
Financial assets at fair value through profit or loss	-	-	8,140,000	8,140,000
Financial derivative assets	-	32,931,747	-	32,931,747
Financial derivative liabilities	₩ -	₩ 1,200,706	₩ -	₩ 1,200,706

<i>(in thousands of Korean won)</i>	2019			
	Level 1	Level 2	Level 3	Total
Recurring fair value measurements				
Equity instruments at fair value through other comprehensive income	₩ 46,083,106	₩ -	₩ -	₩ 46,083,106
Financial assets at fair value through profit or loss	-	-	1,500,000	1,500,000
Financial derivative assets	-	13,256,235	-	13,256,235
Financial derivative liabilities	-	8,458,588	-	8,458,588

5.3 Transfers Between Fair Value Hierarchy Levels of Recurring Fair Value Measurements

The Group'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 were no transfers between levels of each fair value hierarchy of financial instrument during the reporting period.

5.4 Valuation Technique and the Inputs

Valuation techniques and inputs used in level 2 and level 3 fair value measurements are as follows:

<i>(in thousands of Korean won)</i>	2019			
	Fair value	Level	Valuation techniques	Inputs
Financial derivative assets				
Currency swap	28,787,418	2	Discounted cash flow model	Discount rate, exchange rate
Currency forward contract	4,144,329	2	Discounted cash flow model	Discount rate, exchange rate
Financial derivative liabilities				
Currency forward contract	1,200,706	2	Discounted cash flow model	Discount rate, exchange rate
Financial assets at fair value through other comprehensive income				
Beneficiary certificates	8,140,000	3	Transaction costs	-

<i>(in thousands of Korean won)</i>	2018			
	Fair value	Level	Valuation techniques	Inputs
Financial derivative assets				
Interest rate swap	₩ 1,513,022	2	Option pricing model	Underlying asset price, credit risk adjusted discount rate,

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

				underlying asset variability
Currency swap	7,722,999	2	Discounted cash flow model	Discount rate, exchange rate
Currency forward contract	4,020,214	2	Discounted cash flow model	Discount rate, exchange rate
Financial derivative liabilities				
Currency forward contract	8,458,588	2	Discounted cash flow model	Discount rate, exchange rate
Financial assets at fair value through other comprehensive income				
Beneficiary certificates	1,500,000	3	Transaction costs	-

6. Financial Instrument by Category

6.1 Carrying Amounts of Financial Instruments by Category

Categorizations of financial assets and liabilities as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)

		2019	2018
Financial assets			
Financial assets at fair value	Financial assets at fair value through other comprehensive income	₩ 40,314,271	₩ 46,083,106
	Financial assets at fair value through profit or loss	8,140,000	1,500,000
Financial assets at amortized cost	Financial derivative assets	32,931,747	13,256,235
	Cash and cash equivalents	877,600,276	611,977,139
	Short-term financial assets	33,134,195	27,568,027
	Trade receivables (current)	1,257,025,698	1,225,997,611
	Trade receivables (non-current)	3,462,263	1,074,226
	Non-trade receivables (current)	117,375,414	100,549,606
	Non-trade receivables (non-current)	15,492,364	12,620
	Accrued income	2,464,930	6,134,208
	Deposits provided (current)	2,601,026	2,531,493
	Deposits provided (non-current)	11,300,731	11,381,846
Other financial assets	Short-term loans	14,682,866	21,789,271
	Long-term loans	5,743,251	7,859,660
	Long-term financial assets	17,000	59,288
	Lease receivables (current)	5,708,689	-
	Lease receivables (non-current)	31,548,799	-
		₩ 2,459,543,520	₩ 2,077,774,336

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

(in thousands of Korean won)

		2019	2018
Financial liabilities			
Financial liabilities at			
fair value	Financial derivative liabilities	₩ 1,200,706	₩ 8,458,588
Financial liabilities	Trade payables	348,487,484	423,316,782
at amortized cost	Non-trade payables	276,751,745	282,179,726
	Accrued expenses	258,552,547	225,694,136
	Dividends payable	20,584	17,978
	Borrowings (current)	755,446,937	290,372,264
	Borrowings (non-current)	391,595,044	683,309,149
	Leasehold deposits received (current)	2,543,147	2,772,000
	Leasehold deposits received (non-current)	317,724	1,169,121
	Facility guarantee deposits	426,800	-
	Non-controlling interests	4,750,000	4,750,000
	Collateral loan on trade receivables ¹	263,171,646	543,863,284
	Other financial liabilities	20,631,939	20,631,939
Other financial liabilities	Lease liabilities (current)	43,523,736	9,566,788
	Lease liabilities (non-current)	265,253,986	105,270,628
		<u>₩ 2,632,674,025</u>	<u>₩ 2,601,372,383</u>

¹ The associated liability is measured in such a way that the net carrying amount of the transferred asset and the associated liability is the amortized cost of the rights and obligations retained by the transferor as the transferred asset is measured at amortized cost.

6.2 Net Gains or Losses by Category of Financial Instruments

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)

		2019	2018
Financial derivative assets, liabilities			
	Gains (losses) on valuation of derivatives	₩ 3,974,672	₩ (6,266,974)
	Losses on transaction of derivatives	(43,982,060)	(11,676,859)
	Cash flow hedges (after tax other comprehensive income)	6,246,556	(5,432,248)
Equity instruments at fair value through other comprehensive income			
	Losses on valuation (after tax other comprehensive income)	(5,967,847)	(8,964,269)
Debt instruments at fair value through other			

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

comprehensive income		
Losses on disposal	(1,949)	(19,618)
Financial assets at amortized cost		
Interest income	14,075,343	13,614,025
Gains on foreign currency transaction	105,540,974	44,486,232
Gains(Losses) on foreign currency translation	284,128	(6,418,534)
Impairment loss	(6,356,557)	(2,324,635)
Other financial assets		
Interest income	1,734,071	-
Financial liabilities at amortized cost		
Interest expense	(47,715,834)	(57,031,424)
Losses on foreign currency transaction	(46,937,260)	(33,576,665)
Gains on foreign currency translation	4,025,436	8,050,826
Other financial liabilities		
Interest expense	(9,615,433)	-
Losses on foreign currency transaction	(29,489,809)	-
Losses on foreign currency translation	(457,460)	-
	<u>₩ (54,643,029)</u>	<u>₩ (65,560,143)</u>

7. Financial Assets

7.1 Financial Assets at Fair Value through Profit or Loss

(a) Equity instruments at fair value through profit or loss

There are no equity instruments at fair value through profit or loss held by the Group as at December 31, 2019.

(b) Debt instruments at fair value through profit or loss

Debt instruments at fair value through profit or loss as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019	2018
Non-current		
Beneficiary certificates	<u>₩ 8,140,000</u>	<u>₩ 1,500,000</u>
	<u>₩ 8,140,000</u>	<u>₩ 1,500,000</u>

7.2 Financial Assets at Fair Value through Other Comprehensive Income

(a) Equity instruments at fair value through other comprehensive income

Equity instruments at fair value through other comprehensive income as at December 31, 2019 and 2018, are as follows:

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

<i>(in thousands of Korean won)</i>	2019		2018	
Non-current				
Listed shares and others	₩	40,314,271	₩	46,083,106
	₩	40,314,271	₩	46,083,106

Upon disposal of these equity investments, 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

There are no debt instruments at fair value through other comprehensive income held by the Group as at December 31, 2019. Upon disposal of the debt instruments, the accumulated other comprehensive income is reclassified to profit or loss.

8. Derivative Financial Instruments

Details of derivative financial instruments not applying hedge accounting as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019		2018	
	Assets	Liabilities	Assets	Liabilities
Interest rate swap	₩ -	₩ -	₩ 1,513,022	₩ -
Currency forward contracts	4,144,329	1,200,706	4,020,214	8,458,588
	₩ 4,144,329	₩ 1,200,706	₩ 5,533,236	₩ 8,458,588

Details of derivative financial instruments applying cash flow hedge accounting as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019		2018	
	Assets	Liabilities	Assets	Liabilities
Cash flow hedges (currency swap) ¹	₩ 28,787,418	₩ -	₩ 7,722,999	₩ -

¹ As a result of applying cash flow hedge accounting, recognized in other comprehensive income after tax for the year ended December 31, 2019 is as follows:

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

(in thousands of
Korean won)

		2019		
Changes in value of derivative (after tax)	Line items in the statements of profit or loss	Reclassified amount in profit or loss(after tax)	Recognized amount in other comprehensive income (after tax)	
₩ 15,041,878	Interest expense and Foreign exchange differences	₩ (8,795,322)	₩ 6,246,556	

(in thousands of
Korean won)

		2018		
Changes in value of derivative (after tax)	Line items in the statements of profit or loss	Reclassified amount in profit or loss(after tax)	Recognized amount in other comprehensive income (after tax)	
₩ 7,144,201	Interest expense and Foreign exchange differences	₩ (12,576,449)	₩ (5,432,248)	

9. Trade and Other Receivables

Details of trade and other receivable as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)

		2019		
		Gross amount	Less: Loss allowance	Net amount
Current				
Trade receivables	₩	1,265,490,381	₩ (8,464,683)	₩ 1,257,025,698
Non-trade receivables		117,480,491	(105,078)	117,375,413
Accrued income		2,464,930	-	2,464,930
	₩	<u>1,385,435,802</u>	<u>₩ (8,569,761)</u>	<u>₩ 1,376,866,041</u>
Non-Current				
Trade receivables	₩	3,462,263	-	₩ 3,462,263
Non-trade receivables		15,492,364	-	15,492,364
	₩	<u>18,954,627</u>	<u>-</u>	<u>₩ 18,954,627</u>

(in thousands of Korean won)

		2018		
		Gross amount	Less: Loss allowance	Net amount
Current				
Trade receivables	₩	1,235,154,547	₩ (9,156,936)	₩ 1,225,997,611
Non-trade receivables		100,656,817	(107,211)	100,549,606
Accrued income		6,134,208	-	6,134,208
	₩	<u>1,341,945,572</u>	<u>₩ (9,264,147)</u>	<u>₩ 1,332,681,425</u>
Non-Current				
Trade receivables	₩	1,074,226	-	₩ 1,074,226

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

Non-trade receivables	12,620	-	12,620
	₩ 1,086,846	₩ -	₩ 1,086,846

Movements on the provision for impairment of trade receivables and other receivables for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)

	2019		
	Trade receivables	Non-trade receivables	Total
Beginning balance	₩ 9,156,936	₩ 107,211	₩ 9,264,147
Net impairment loss	1,923,931	(2,373)	1,921,558
Write-offs	(2,586,098)	240	(2,585,858)
Exchange differences	(30,086)	-	(30,086)
Ending balance	₩ 8,464,683	₩ 105,078	₩ 8,569,761

(in thousands of Korean won)

	2018		
	Trade receivables	Non-trade receivables	Total
Beginning balance	₩ 7,391,101	₩ 111,068	₩ 7,502,169
Business combination and others	651,344	-	651,344
Impairment loss	1,744,311	15,324	1,759,635
Write-offs	(135,934)	(24,284)	(160,218)
Exchange differences	(493,886)	5,103	(488,783)
Ending balance	₩ 9,156,936	₩ 107,211	₩ 9,264,147

Credit risk and loss allowance

The above trade and other receivables are measured at amortized cost. Changes in loss allowance of trade and other receivables for the year ended December 31, 2019 are not significant. The Group considers changes in credit ratings of trade receivables from the commencement date of the credit granting to the end of the reporting period in determining the recoverability of the trade receivables.

10. Inventories

Details of inventories as at December 31, 2019 and 2018 are as follows:

(in thousands of Korean won)

	December 31, 2019			2019	
	Acquisition cost	Inventory valuation	Inventory valuation allowance	Exchange differences	Valuation loss (reversal)
Finished goods	₩ 1,237,842,447	₩ 1,214,516,173	₩ 23,326,274	₩ 1,071,531	₩ 14,300,429
Work in process	43,797,863	43,797,863	-	-	-
Raw materials	314,012,980	314,012,980	-	-	-

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

Supplies	43,890,567	43,890,567	-	-	-
Materials in transit	109,175,891	109,175,891	-	-	-
	<u>₩ 1,748,719,748</u>	<u>₩ 1,725,393,474</u>	<u>₩ 23,326,274</u>	<u>₩ 1,071,531</u>	<u>₩ 14,300,429</u>

<i>(in thousands of Korean won)</i>	December 31, 2018			2018	
	Acquisition cost	Inventory valuation	Inventory valuation allowance	Exchange differences	Valuation loss (reversal)
Finished goods	₩ 1,095,625,846	₩ 1,087,671,532	₩ 7,954,314	₩ 227,888	₩(23,343,343)
Work in process	43,102,021	43,102,021	-	-	-
Raw materials	324,527,075	324,527,075	-	-	(847,353)
Supplies	37,914,898	37,914,898	-	-	-
Materials in transit	105,256,039	105,256,039	-	-	-
	<u>₩ 1,606,425,879</u>	<u>₩ 1,598,471,565</u>	<u>₩ 7,954,314</u>	<u>₩ 227,888</u>	<u>₩(24,190,696)</u>

The Group recognizes loss from inventory valuation and inventory shrinkage as expenses in the year in which the loss occurs. In addition, reversal of inventory write-downs due to an increase in the net realizable value of inventory assets is deducted from cost of sales recognized as an expense in the year in which the reversal occurs.

11. Other Financial Assets

Details of other financial assets as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019		2018	
	Current	Non-current	Current	Non-current
Loans	₩ 14,682,866	₩ 5,743,251	₩ 21,789,271	₩ 7,859,660
Guarantee deposits provided	2,601,026	11,300,731	2,531,493	11,381,846
Financial derivative assets	4,144,329	28,787,418	4,421,477	8,834,758
Lease receivables	5,708,690	31,548,799	-	-
	<u>₩ 27,136,911</u>	<u>₩ 77,380,199</u>	<u>₩ 28,742,241</u>	<u>₩ 28,076,264</u>

Movements on the provision for impairment of loans for the years ended December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019		2018	
Beginning Balance	₩ 565,000	₩ -	-	-
Additional provisions (reversed)	4,435,000	565,000	-	-
Write-offs	-	-	-	-
Ending Balance	<u>₩ 5,000,000</u>	<u>₩ 565,000</u>	-	-

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

12. Other Assets

Details of other assets as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019		2018	
	Current	Non-current	Current	Non-current
Advance payments	₩ 8,587,700	₩ 49,093,050	₩ 9,188,610	₩ 52,150,587
Prepaid expenses	20,177,604	21,960,167	19,170,698	30,761,742
Net defined benefit assets	-	49,364	-	-
Others	44,818,615	147,218	25,388,446	148,178
	<u>₩ 73,583,919</u>	<u>₩ 71,249,799</u>	<u>₩ 53,747,754</u>	<u>₩ 83,060,507</u>

13. Investment in Associates

Details of the Group's investment in associates as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	Closing month	Location	Number of shares	Percentage of ownership (%)	2019	
					Acquisition cost	Book amount
Hanon Systems Co., Ltd. ^{1,2}	December	Korea	104,031,000	19.50	₩ 1,061,740,386	₩1,104,583,999
Peaches Group Korea Co., Ltd. ^{2,3}	December	Korea	974	6.26	519,412	519,412
DAE MYONG TECH ONE Co., Ltd.	December	Korea	980	49.00	1,147,000	1,147,000
					<u>₩1,063,406,528</u>	<u>₩1,106,250,141</u>

<i>(in thousands of Korean won)</i>	Closing month	Location	Number of shares	Percentage of ownership (%)	2018	
					Acquisition cost	Book amount
Hanon Systems Co., Ltd. ¹	December	Korea	104,031,000	19.50	₩ 1,061,740,386	₩ 1,085,601,269

¹ As at December 31, 2019, the fair value of marketable investment in associates is ₩1,159,945,650 thousand (2018: ₩1,123,534,800 thousand).

² Although the Group's equity interest in this entity is less than 20%, the investment was classified as investment in associates as the Group has authority to most of the associate's business operation (election of directors, etc.) by a contract between shareholders.

³ As a redeemable convertible preference share, with the ability to exercise significant influence, it was classified as investment in associates. However, as a debt instrument, the equity method of accounting is not applied.

The table below provides summarized financial information for those associates that are material to the Group and received dividends from the associates.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

(in thousands of Korean won)	2019						
	Assets	Liabilities	Equity	Sales	Profit for the year	Total comprehensive income	Dividend received
Hanon Systems Co., Ltd.	₩7,082,369,013	₩4,744,866,816	₩2,337,502,197	₩7,154,152,589	₩322,613,423	₩354,824,443	₩33,289,920
DAE MYONG TECH ONE Co., Ltd.	₩4,395,186	₩2,058,513	₩2,336,673	₩ -	₩ (2,258)	₩ (2,258)	₩ -

(in thousands of Korean won)	2018						
	Assets	Liabilities	Equity	Sales	Profit for the year	Total comprehensive income	Dividend received
Hanon Systems Co., Ltd.	₩5,355,780,832	₩3,224,124,651	₩2,131,656,181	₩5,937,585,420	₩283,697,420	₩232,201,224	₩33,289,290

Details of the valuation of equity-accounted investees of the Group as of December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)		2019	2018
Hanon Systems Co., Ltd.	Beginning balance	₩ 1,085,601,269	₩ 1,090,392,140
	Share of profit of associates accounted for using the equity method	45,972,850	38,002,359
	Net defined benefit liabilities	(1,780,089)	(201,827)
	Cash flow hedges	(1,284,943)	(6,952,219)
	Exchange differences on translating foreign operations	9,068,562	(2,563,044)
	Dividend	(33,289,920)	(33,289,920)
	Others	296,270	213,780
	Ending balance	<u>₩ 1,104,583,999</u>	<u>₩ 1,085,601,269</u>

14. Investment in Subsidiaries

The summarized financial information of the subsidiaries as at and for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019			
	Assets	Liabilities	Sales	Profit (loss) for the year
Hankook Tire America Corp.	1,005,348,130	624,792,022	1,701,358,270	(11,956,017)
Hankook Tire Canada Corp.	68,603,366	45,273,229	149,835,807	427,563
Hankook Tire DE Mexico, S.A. DE C.V.	78,324,712	73,605,680	119,647,605	1,411,073
Hankook Tire de Colombia Ltda.	13,647,253	11,998,764	42,436,892	347,411
Hankook Tire Manufacturing Tennessee LP	737,451,435	680,316,455	309,044,918	(48,281,707)
Hankook Tire America Holdings I, LLC	1,893,261	-	-	(358)
Hankook Tire America Holdings II, LLC	186,438,433	-	-	(358)
Hankook Tire Latin America	26,984,203	28,311,149	44,452,046	(265,306)

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

(in thousands of Korean won)

	2019			
	Assets	Liabilities	Sales	Profit (loss) for the year
Distribution Center, S.A.				
Hankook Tire Latam, S.A.	209,295	113,084	371,238	15,666
Hankook Tire Europe Holdings B.V.	545,323,457	4,341	-	170,152,227
Hankook Tire Netherlands B.V.	126,954,737	102,661,354	270,874,418	590,771
Hankook Tyre U.K. Ltd.	138,192,707	119,040,071	212,375,808	1,101,959
Hankook Reifen Deutschland GmbH	286,121,429	246,512,165	473,618,159	9,662,541
Hankook Tire France S.A.R.L.	82,040,003	67,807,489	213,739,284	1,377,952
Hankook Tire Italia S.R.L.	138,561,567	120,443,038	181,279,767	1,102,082
Hankook Espana S.A.	56,184,809	39,465,475	141,665,078	2,569,559
Hankook Tire Europe GmbH	491,774,159	344,752,931	22,976,832	7,876,328
Hankook Tire Hungary Ltd.	1,263,036,346	110,098,269	766,160,205	134,696,813
Hankook Tire Budapest Kereskedelmi Kft	47,649,312	36,812,699	90,153,841	(294,562)
Hankook Tire Rus LLC	72,984,704	70,000,543	151,469,030	(859,053)
Hankook Tire Sweden AB	29,988,146	27,774,301	46,844,155	(474,567)
Hankook Lastikleri A.S.	43,149,541	44,078,456	69,423,299	(1,727,548)
Hankook Tire Polska Sp. z o.o.	36,300,263	29,635,924	85,151,560	751,694
Hankook Tire Ceska Republika s.r.o.	28,755,855	24,349,619	79,956,337	371,522
Hankook Tire Ukraine LLC	893,687	392,295	1,325,269	54,388
Hankook Tire Japan Corp.	15,283,557	14,565,151	31,192,336	862,762
Hankook Tyre Australia Pty. Ltd.	50,341,717	43,929,512	93,035,735	1,078,261
PT. HANKOOK TIRE INDONESIA	634,743,169	84,166,428	455,856,996	10,101,574
Hankook Tire Thailand Co., Ltd.	6,428,449	4,288,381	21,735,761	1,621,102
Hankook Tires India llp.	3,281,866	2,741,241	4,762,653	(502,634)
Hankook Tire Malaysia SDN.BHD.	10,014,476	17,165,747	29,610,558	(1,421,335)
Hankook Tire Singapore PTE., Ltd.	170,742,238	162,890,871	4,648,959	1,689,369
Hankook Tyre Australia Retail Pty., Ltd. (*)	114,173,290	57,896,735	21,681,484	1,618,174
Hankook Tire China Co., Ltd.	1,009,142,574	111,283,925	589,389,508	34,436,473
Jiangsu Hankook Tire Co., Ltd.	621,706,072	85,810,570	488,767,849	13,216,327
Shanghai Hankook Tire Sales Co., Ltd.	615,227,987	590,005,736	808,638,545	15,170,199
Chongqing Hankooktire Co., Ltd.	472,867,694	312,814,377	344,371,575	11,320,994
Beijing Jielun Trading Company Co., Ltd.	2,019,032	2,217,338	38,756,000	(148,666)
Hankook Precision Works Co., Ltd. (formerly, MK Technology)	117,140,381	12,648,947	111,892,816	13,718,962
MK Mold (Jiaxing) Co., LTD.	23,242,899	2,060,362	17,758,680	4,093,963
MK Technology (CHONGQING) Mould Co., Ltd.	1,486,946	29,682	2,573,131	169,481
Model Solution Co., Ltd.	45,174,156	20,360,668	60,564,179	7,603,316
ModelSolution Inc.	1,582,356	1,566,784	3,508,579	(1,248,135)
Hankook Engineering Works (formerly, Daehwa Engineering & Machinery Co., Ltd.)	45,459,468	10,218,249	46,906,373	(6,784,659)
Hankook Donggeurami Partners Co., Ltd.	1,706,417	1,401,575	4,991,142	(173,802)
KCG 1 Private Equity Fund limited partnership	23,418,855	1,975	-	737,769
Reifen-Muller KG	239,869,354	198,479,134	294,801,425	(2,708,060)
Reifen-Muller GmbH & Co.	25,738,129	21,461,900	20,569,584	4,522,239

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

<i>(in thousands of Korean won)</i>	2019			
	Assets	Liabilities	Sales	Profit (loss) for the year
Runderneuerungswerk KG				
RM Verwaltungs GmbH	157,761	87,508	236,163	30,467
RU Verwaltungs GmbH	160,873	108,596	268,599	19,953
Hankook Tire D.O.O. Beograd	279,230	449,924	410,096	(184,229)
Hankook Tire Austria GmbH	11,032,213	12,075,997	1,603,638	(1,062,737)
Hankook Tire Middle East and Africa FZE	21,858,130	23,642,682	19,723,022	(2,379,089)
Hankook Tire Vietnam. Co., Ltd.	1,119,822	235,304	177,108	(172,489)
PT. HANKOOK TIRE SALES INDONESIA	12,064,575	11,833,623	10,353,375	11,993

¹ Financial information including JAX Quickfit Franchising Systems Unit Trust., JAX Quickfit Franchising Systems Pty Ltd., JAX Quickfit Properties Pty Ltd., which are 100% owned by Hankook Tyre Australia Retail Pty., Ltd.

<i>(in thousands of Korean won)</i>	2018			
	Assets	Liabilities	Sales	Profit (loss) for the year
Hankook Tire America Corp.	₩862,437,042	₩476,638,057	₩1,644,470,779	₩ (11,130,064)
Hankook Tire Canada Corp.	75,148,548	53,960,025	173,385,768	3,187,389
Hankook Tire DE Mexico, S.A. DE C.V.	66,684,160	63,615,486	112,333,529	1,205,415
Hankook Tire de Colombia Ltda.	12,412,662	11,139,383	37,468,456	252,945
Hankook Tire Manufacturing Tennessee LP	775,138,012	673,648,786	208,225,078	(39,454,635)
Hankook Tire America Holdings I, LLC	1,893,256	-	-	(331)
Hankook Tire America Holdings II, LLC	186,438,428	-	-	(331)
Hankook Tire Latin America Distribution Center, S.A.	18,866,967	19,893,922	44,065,019	(1,127,359)
Hankook Tire Latam, S.A.	179,524	101,639	341,499	16,228
Hankook Tire Europe Holdings B.V.	376,358,481	178,179	-	65,284,315
Hankook Tire Netherlands B.V.	120,268,746	96,896,629	284,367,304	2,535,113
Hankook Tyre U.K. Ltd.	129,270,990	112,474,765	218,162,361	(175,736)
Hankook Reifen Deutschland GmbH	299,297,279	269,718,665	551,735,005	1,486,246
Hankook Tire France SARL	68,748,894	56,067,704	192,476,378	2,578,821
Hankook Tire Italia S.R.L.	141,081,956	124,299,016	200,405,241	1,356,640
Hankook Espana S.A.	60,379,050	46,414,276	148,305,537	2,754,122
Hankook Tire Europe GmbH	409,540,927	270,345,968	25,768,678	719,953
Hankook Tire Hungary Ltd.	1,343,618,627	140,744,705	862,180,158	204,251,556
Hankook Tire Budapest Kereskedelmi Kft	42,503,340	31,208,503	80,970,485	480,504
Hankook Tire Rus LLC	55,608,192	52,307,577	148,826,146	(1,887,035)
Hankook Tire Sweden AB	23,279,274	20,572,989	46,920,673	471,814
Hankook Lastikleri A.S.	22,547,568	28,131,180	59,971,951	(5,699,573)
Hankook Tire Polska Sp. z o.o.	38,708,664	32,945,051	85,646,420	1,626,343
Hankook Tire Ceska Republika s.r.o.	35,868,965	31,797,263	95,885,800	519,532
Hankook Tire Ukraine LLC	714,531	348,799	1,201,983	17,372

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

(in thousands of Korean won)

	2018			
	Assets	Liabilities	Sales	Profit (loss) for the year
Hankook Tire Japan Corp.	12,130,012	13,376,679	31,878,140	820,104
Hankook Tyre Australia Pty., Ltd.	41,271,206	36,086,145	93,671,831	(882,835)
PT. HANKOOKTIRE INDONESIA.	637,785,376	115,574,625	448,039,372	24,730,324
Hankook Tire Thailand Co., Ltd.	5,975,929	5,502,886	21,337,592	(17,728)
Hankook Tires India Iip.	3,746,071	2,730,808	3,996,119	(23,089)
Hankook Tire Malaysia SDN.BHD.	9,480,207	14,949,453	34,172,767	544,614
Hankook Tire Singapore PTE., Ltd.	158,867,188	152,905,529	5,658,332	539,738
Hankook Tyre Australia Retail Pty., Ltd. ¹	71,522,469	18,384,638	24,870,202	1,741,438
Hankook Tire China Co., Ltd.	1,039,465,607	177,364,578	658,445,916	46,821,218
Jiangsu Hankook Tire Co., Ltd.	642,138,522	123,516,888	548,351,675	7,435,910
Shanghai Hankook Tire Sales Co., Ltd.	501,611,628	491,579,991	873,783,383	4,483,471
Chongqing Hankooktire Co., Ltd.	515,794,841	369,548,781	389,450,791	24,695,125
Beijing Jielun Trading Company Co., Ltd.	2,486,870	2,538,086	35,875,980	(274,422)
Hankook Precision Works Co., Ltd. (formerly, MK Technology)	108,118,451	8,196,737	87,221,146	14,278,987
MK Mold (Jiaxing) Co., LTD.	23,861,258	2,112,923	18,941,550	4,568,939
MK Technology (CHONGQING) Mould Co., Ltd.	1,307,503	39,615	3,461,941	118,201
Model Solution Co., Ltd.	41,207,294	21,453,211	35,517,745	5,524,795
ModelSolution Inc.	2,734,131	1,505,726	1,235,998	(538,573)
Hankook Engineering Works (formerly, Daehwa Engineering & Machinery Co., Ltd.)	61,006,141	18,243,915	69,994,598	(1,762,290)
Hankook Donggeurami Partners Co., Ltd.	2,026,692	1,479,557	4,849,861	250,112
KCG 1 Private Equity Fund limited partnership	22,397,307	1,975	-	(302,031)
Reifen-Muller KG	202,000,211	170,517,093	99,862,114	5,735,451
Reifen-Muller GmbH & Co. Runderneuerungswerk KG	25,133,690	13,299,882	6,678,493	2,057,646
RM Verwaltungs GmbH	42,985	3,591	12,635	7,528

15. Property, Plant and Equipment

Details of the book amount of property, plant and equipment as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)

	2019			
	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book amount
Land	₩ 397,854,036	₩ -	₩ -	₩ 397,854,036
Buildings	2,123,682,070	(563,498,299)	(6,582,035)	1,553,601,736
Structures	125,234,536	(68,600,707)	-	56,633,829
Machinery and equipment	4,947,875,290	(3,758,675,408)	-	1,189,199,882

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

Vehicles	104,629,430	(57,314,774)	-	47,314,656
Tools, furniture and fixtures	1,268,175,370	(845,951,438)	(1,962,103)	420,261,829
Machinery in transit	6,817,866	-	-	6,817,866
Construction in progress	162,393,982	-	-	162,393,982
Operating lease	7,772	(1,706)	-	6,066
Right-of-use assets	311,642,162	(40,225,368)	-	271,416,794
	<u>₩ 9,448,312,514</u>	<u>₩ (5,334,267,700)</u>	<u>₩ (8,544,138)</u>	<u>₩ 4,105,500,676</u>

(in thousands of Korean won)

	2018			
	Acquisition cost	Accumulated depreciation	Accumulated impairment loss	Book amount
Land	₩ 403,234,312	₩ -	₩ -	₩ 403,234,312
Buildings	2,217,149,723	(505,465,971)	(22,411)	1,711,661,341
Structures	123,094,006	(63,560,827)	-	59,533,180
Machinery and equipment	4,824,457,962	(3,437,013,003)	-	1,387,444,958
Vehicles	100,605,568	(51,613,944)	-	48,991,624
Tools, furniture and fixtures	1,224,275,067	(771,865,675)	(1,934,446)	450,474,946
Machinery in transit	10,029,816	-	-	10,029,816
Construction in progress	153,856,454	-	-	153,856,454
	<u>₩ 9,056,702,909</u>	<u>₩ (4,829,519,420)</u>	<u>₩ (1,956,857)</u>	<u>₩ 4,225,226,631</u>

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

(in thousands of Korean won)

	2019								
	Beginning balance	Change in accounting policies	Beginning balance after adjustment	Acquisition	Disposal	Depreciation	Transfer	Exchange differences	Ending balance
Land	₩403,234,312	₩ -	₩ 403,234,312	₩ 269,598	₩ (6,251,231)	₩ -	₩ 76	₩ 601,281	₩ 397,854,036
Buildings	1,711,661,341	(114,240,881)	1,597,420,460	2,950,441	(8,911,017)	(59,027,240)	1,881,878	19,287,215	1,553,601,737
Structures	59,533,180	-	59,533,180	1,473,757	(47,783)	(5,271,360)	438,743	507,292	56,633,829
Machinery and equipment	1,387,444,958	-	1,387,444,958	46,518,268	(7,131,800)	(362,573,070)	93,860,908	31,080,617	1,189,199,881
Vehicles	48,991,624	-	48,991,624	7,555,214	(609,725)	(11,440,038)	1,555,715	1,261,865	47,314,655
Tools, furniture and fixtures	450,474,947	-	450,474,947	49,579,088	(14,443,682)	(115,333,700)	44,314,539	5,670,638	420,261,830
Machinery in transit	10,029,816	-	10,029,816	9,107,347	(49,232)	-	(12,340,051)	69,987	6,817,867
Construction in progress	153,856,454	-	153,856,454	147,268,284	(15,155)	-	(138,655,014)	(60,588)	162,393,981
Operating lease	-	-	-	-	-	(1,706)	7,772	-	6,066

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

Right-of-use assets	-	295,494,528	295,494,528	22,434,100	(436,198)	(51,559,227)	-	5,483,591	271,416,794
	₩4,225,226,632	₩ 181,253,647	₩4,406,480,279	₩ 287,156,079	₩ (37,895,823)	₩ (605,206,341)	₩ (8,935,434)	₩63,901,898	₩ 4,105,500,676

(in thousands of Korean won)

	2018							
	Beginning balance	Business combination and others	Acquisition	Disposal	Depreciation	Transfer	Exchange differences	Ending balance
Land	₩ 322,027,220	₩ 12,783,803	₩ 206,893	₩ (545,235)	₩ -	₩ 67,644,668	₩ 1,116,963	₩ 403,234,312
Buildings	1,629,179,759	129,883,937	5,691,526	(671,843)	(60,279,205)	4,760,279	3,096,888	1,711,661,341
Structures	63,893,206	-	805,843	(31,478)	(5,204,084)	481,703	(412,010)	59,533,180
Machinery and equipment	1,629,170,558	10,677,471	46,052,662	(4,366,328)	(372,757,977)	60,742,472	17,926,100	1,387,444,958
Vehicles	48,911,134	3,489,588	3,967,049	(149,801)	(9,637,106)	1,117,656	1,293,104	48,991,624
Tools, furniture and fixtures	463,401,750	2,813,728	62,038,905	(15,703,846)	(110,374,603)	46,790,938	1,508,074	450,474,946
Machinery in transit	12,580,498	-	7,729,165	-	-	(10,285,190)	5,343	10,029,816
Construction in progress	148,206,233	1,914	192,413,233	-	-	(186,078,039)	(686,887)	153,856,454
	₩4,317,370,358	₩ 159,650,441	₩ 318,905,276	₩ (21,468,531)	₩ (558,252,975)	₩ (14,825,513)	₩ 23,847,575	₩ 4,225,226,631

Line items including depreciation in the statements of profit or loss for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	2019	2018
Cost of sales	₩ 498,820,312	₩ 498,276,174
Selling and administrative expenses (including research and development cost)	106,386,029	59,976,801
	₩ 605,206,341	₩ 558,252,975

Pledged assets as collaterals

As at December 31, 2019, a certain portion of the Group's property, plant and equipment (land, buildings and machinery) is pledged as collaterals for its credit line and others (Note 41).

16. Lease

(a) Amounts recognized in the consolidated statement of financial position

The consolidated statement of financial position shows the following amounts relating to leases:

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

<i>(in thousands of Korean won)</i>	December 31, 2019		January 1, 2019 ¹	
Right-of-use assets ²				
Land	₩	10,373,752	₩	10,490,702
Buildings		241,992,296		265,110,329
Machinery and equipment		5,848,058		6,618,833
Tools, furniture and fixtures		5,503,159		5,509,218
Vehicles		8,362,312		8,508,259
	₩	<u>272,079,577</u>	₩	<u>296,237,342</u>

¹ The beginning balance reflects the amount reclassified by applying Korean IFRS 1116 (Note 44)

²Included in the line item 'Property, plant and equipment', and 'Investment properties' in the statement of financial position. (Notes 15 and 17)

<i>(in thousands of Korean won)</i>	December 31, 2019		January 1, 2019	
Lease liabilities ²				
Current	₩	43,523,736	₩	49,297,896
Non-current		265,253,986		283,013,510
	₩	<u>308,777,722</u>	₩	<u>332,311,406</u>

¹ The beginning balance reflects the amount reclassified by applying Korean IFRS 1116 (Note 44)

²Included in the line item 'borrowings' in the statement of financial position. (Note 20)

(b) Amounts recognized in the consolidated statement of profit or loss

The consolidated statement of profit or loss shows the following amounts relating to leases:

(in thousands of Korean won) **2019**

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

Depreciation of right-of-use assets		
Land	₩	376,711
Buildings		45,745,518
Machinery and equipment		1,022,043
Tools, furniture and fixtures		349,294
Vehicles		4,244,566
	₩	51,738,132
<hr/>		
Interest expense relating to lease liabilities	₩	9,648,818
Expense relating to short-term leases		1,866,192
Expense relating to leases of low-value assets		1,237,363
Expense relating to variable lease payments not included in lease liabilities		71,832,804

The total cash outflow for leases in 2019 is ₩139,004,601 thousand.

(c) Change in right-of-use assets

(in thousands of Korean won)

		Change in accounting							
	Beginning balance	policies	Acquisition	Disposal	Depreciation	Others	Ending balance		
Land	₩	-	₩ 10,490,702	₩ 260,923	₩	-	₩ (376,710)	₩ (1,163)	₩ 10,373,752
Buildings		-	265,110,329	17,781,038	(373,085)	(45,745,518)	5,219,531		241,992,296
Machinery and equipment		-	6,618,833	323,117	-	(1,022,043)	(71,849)		5,848,058
Tools, furniture and fixtures		-	5,509,218	148,706	-	(349,294)	194,528		5,503,159
Vehicles		-	8,508,259	4,019,189	(63,113)	(4,244,565)	142,543		8,362,313

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

₩	-	₩ 296,237,342	₩ 22,532,974	₩ (436,198)	₩ (51,738,132)	₩ 5,483,591	₩ 272,079,577
---	---	---------------	--------------	-------------	----------------	-------------	---------------

(d) The total of future minimum lease payments to the lessor at the end of the reporting period are as follows:

<i>(in thousands of Korean won)</i>	2019
Total minimum lease payments	
Within one year	₩ 45,526,496
Later than one year but not later than five years	146,962,784
Later than five years	165,605,015
	358,094,296
	49,316,576
Unrealized finance expense	
Net minimum lease payments	
Within one year	43,523,736
Later than one year but not later than five years	133,295,929
Later than five years	131,958,054
	₩ 308,777,720

(e) As at December 31, 2019, total future minimum sublease receipts under non-cancellable subleases amount to ₩ 43,715,832 thousand. The lease agreements do not include terms of renewal or purchase options, and there are no other restrictions imposed under lease arrangements relating to dividends, additional debt and further leasing.

(f) Details of the financial lease receivables at the end of the reporting period are as follows:

<i>(in thousands of Korean won)</i>	2019
Financial lease receivables_ buildings	₩ 37,257,488

(g) The gross investment amount of the financial lease receivables provided and the present value of the minimum lease payment at the end of this year are as follows:

<i>(in thousands of Korean won)</i>	2019
-------------------------------------	-------------

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

		Gross investment		Present Value of minimum lease payment
Within one year	₩	6,222,646	₩	6,133,147
Later than one year but not later than five years		23,567,179		21,065,760
Later than five years		13,926,007		10,058,582
	₩	<u>43,715,832</u>	₩	<u>37,257,488</u>

(h) Details of the unearned finance income of finance lease provided at the end of the reporting period are as follows:

(in thousands of Korean won)

		2019
Lease gross investment	₩	43,715,832
Lease net investment		
Present value of minimum lease payment		37,257,488
Present value of guaranteed residual values	₩	<u>-</u>
		37,257,488
Unearned finance income	₩	6,458,344

17. Investment Properties

Details of investment properties as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)

	2019		
	Acquisition cost	Accumulated depreciation	Book amount
Land	₩ 75,838,560	₩ -	₩ 75,838,560
Buildings	40,293,826	(17,774,143)	22,519,683
Right-of-use assets	841,688	(178,905)	662,783
	<u>₩ 116,974,074</u>	<u>₩ (17,953,048)</u>	<u>₩ 99,021,026</u>

(in thousands of Korean won)

	2018		
	Acquisition cost	Accumulated depreciation	Book amount
Land	₩ 83,287,549	₩ -	₩ 83,287,549
Buildings	41,817,799	(17,765,080)	24,052,719
	<u>₩ 125,105,348</u>	<u>₩ (17,765,080)</u>	<u>₩ 107,340,268</u>

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

(in thousands of Korean won)

	2019						
	Beginning	Change in	Beginning	Aquisition	Depreciation	Others	Ending

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

	balance	accounting policies	balance after adjustment				balance
Land	83,287,549	-	83,287,549	-	-	(7,448,990)	75,838,560
Buildings	24,052,719	-	24,052,719	63,453	(1,009,926)	(586,563)	22,519,683
Right-of-use assets	-	742,814	742,814	98,874	(178,905)	-	662,783
	<u>107,340,268</u>	<u>742,814</u>	<u>108,083,082</u>	<u>162,327</u>	<u>(1,188,831)</u>	<u>(8,035,553)</u>	<u>99,021,026</u>

(in thousands of Korean won)

	2018				
	Beginning balance	Business combination and others	Depreciation	Others	Ending balance
Land	₩ 83,654,643	₩ -	₩ -	₩ (367,094)	₩ 83,287,549
Buildings	25,049,660	112,805	(1,034,476)	(75,270)	24,052,719
	<u>₩ 108,704,303</u>	<u>₩ 112,805</u>	<u>₩ (1,034,476)</u>	<u>₩ (442,364)</u>	<u>₩ 107,340,268</u>

For the year ended December 31, 2019, depreciations of investment property are included in selling and administrative expenses.

Fair value of investment properties as at December 31, 2019 is ₩278,927,896 thousand (2018: ₩256,948,027 thousand).

18. Intangible Assets

Details of intangible assets as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)

	2019			
	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book amount
Industrial rights	₩ 14,704,295	₩ (12,393,625)	₩ -	₩ 2,310,670
Other intangible assets	134,555,350	(100,787,685)	(42,724)	33,724,941
Goodwill	153,006,019	-	(5,672,380)	147,333,639
Land-use rights	69,758,908	(12,175,300)	-	57,583,608
Customer value and others	108,343,034	(14,354,067)	-	93,988,967
Construction in progress	5,574,468	-	-	5,574,468
	<u>₩ 485,942,074</u>	<u>₩ (139,710,677)</u>	<u>₩ (5,715,104)</u>	<u>₩ 340,516,293</u>

(in thousands of Korean won)

	2018			
	Acquisition cost	Accumulated amortization	Accumulated impairment loss	Book amount
Industrial rights	₩ 13,883,727	₩ (11,285,914)	₩ -	₩ 2,597,813
Other intangible assets	129,413,568	(90,698,177)	(109,695)	38,605,696
Goodwill	151,932,499	-	(5,846,120)	146,086,379
Land-use rights	67,594,929	(9,562,029)	-	58,032,900
Customer value and others	107,508,493	(2,252,596)	-	105,255,897

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

Construction in progress	4,807,752	-	-	4,807,752
	₩ 475,140,968	₩ (113,798,716)	₩ (5,955,815)	₩ 355,386,437

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

(in thousands of Korean won)

	Beginning balance	Acquisition	Disposal	Amortization	Others	Exchange differences	Ending balance
Industrial rights	2,597,813	254,459	(9,420)	(1,133,274)	600,419	672	2,310,669
Other intangible assets	38,605,696	3,228,705	(932,988)	(12,622,432)	5,171,311	274,649	33,724,941
Goodwill ¹	146,086,379	-	-	-	-	1,247,260	147,333,639
Land-use rights	58,032,900	-	-	(2,000,063)	-	1,550,771	57,583,608
Brand and customer relationship	105,255,897	-	-	(9,488,314)	(2,668,260)	889,644	93,988,967
Construction in progress	4,807,752	3,906,568	(126,156)	-	(3,024,057)	10,361	5,574,468
	<u>355,386,437</u>	<u>7,389,732</u>	<u>(1,068,564)</u>	<u>(25,244,083)</u>	<u>79,413</u>	<u>3,973,357</u>	<u>340,516,293</u>

(in thousands of Korean won)

	2018							
	Beginning balance	Business combination and others	Acquisition	Disposal	Amortization	Others	Exchange differences	Ending balance
Industrial rights	₩ 2,498,606	₩ 542	₩ 295,809	₩ -	₩ (1,100,882)	₩ 902,889	₩ 849	₩ 2,597,813
Other intangible assets	53,033,666	1,023,283	1,324,232	(1,159,037)	(15,495,279)	2,917,234	(3,038,403)	38,605,696
Goodwill ¹	51,424,168	95,681,581	-	-	-	-	(1,019,370)	146,086,379
Land-use rights	59,094,589	-	-	-	(1,898,726)	-	837,037	58,032,900
Brand and customer relationship	25,338,715	79,597,052	-	-	(1,246,533)	-	1,566,663	105,255,897
Construction in progress	4,138,356	30,801	3,707,495	(358,589)	-	(2,693,493)	(16,818)	4,807,752
	<u>₩ 195,528,100</u>	<u>₩ 176,333,259</u>	<u>₩ 5,327,536</u>	<u>₩ (1,517,626)</u>	<u>₩ (19,741,420)</u>	<u>₩ 1,126,630</u>	<u>₩ (1,670,042)</u>	<u>₩ 356,386,437</u>

¹ The Group acquired the tire distribution department of Model Solution Co., Ltd. and Reifen-Muller during the year ended December 31, 2018 and recognized goodwill amounting to ₩42,415,368 thousand and ₩53,266,213 thousand, respectively (Note 38).

Impairment Tests for Goodwill

Goodwill is allocated to each of the CGUs identified for each consolidated entity. Details of goodwill of each consolidated entity as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)

	2019	2018
--	------	------

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

Hankook Tyre Australia Retail Pty., Ltd.	₩	23,316,869	₩	22,883,614
Model Solution Co., Ltd.		42,327,228		42,415,368
Reifen-Muller KG		54,057,334		53,394,276
	₩	<u>119,701,431</u>	₩	<u>118,693,257</u>

Goodwill impairment reviews are undertaken annually. Goodwill related to MK technology Co., Ltd. amounts to ₩27,632,207 thousand is not allocated, because it is considered as a sole cash-generating unit. As a result of impairment test, it is considered that the carrying value of cash generating units does not exceed the recoverable amount.

The recoverable amounts of cash-generating units have been determined based on value-in-use calculations. These calculations use pre-tax cash flow projections based on business plan approved by management covering a five-year period. Cash flows beyond the five-year period are extrapolated using the estimated growth rate which does not exceed the long-term average growth rate for the industry in which the Group operated.

Management determined the estimated pre-tax cash flow based on past performance and its expectations of market development. Value in use is measured by applying the discount rates reflecting specific risks relating to the relevant consolidated entity. The key assumptions used as at December 31, 2019, are as follows:

<i>(in percentage, %)</i>	Annual growth rate for sales	Discount rate	Long-term growth rate
Hankook Tyre Australia Retail Pty., Ltd	8.33%	11.60%	2.50%
Model Solution Co., Ltd.	4.37%	8.32%	1.00%
Reifen-Muller KG	1.84%	5.63%	1.00%

19. Trade and Other Payables

Details of trade and other payables as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>		2019		2018
Trade payables	₩	348,487,484	₩	423,316,782
Non-trade payables		276,751,745		282,179,726
Accrued expenses		258,552,547		225,694,136
Dividends payable		20,584		17,978
	₩	<u>883,812,360</u>	₩	<u>931,208,622</u>

20. Borrowings

Details of borrowings as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean</i>	2019	2018
--------------------------------	-------------	-------------

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

	won)					
	Current	Non-current	Current	Non-current	Current	Non-current
Short-term borrowings	₩ 710,936,751	₩ -	₩ 811,473,548	₩ -		
Long-term borrowings	57,712,000	46,312,000	22,762,000	100,848,000		
Lease liabilities	43,523,736	265,253,986	9,566,788	105,270,628		
Debentures	249,969,832	345,283,044	-	582,461,150		
	<u>₩ 1,062,142,319</u>	<u>₩ 656,849,030</u>	<u>₩ 843,802,336</u>	<u>₩ 788,579,778</u>		

Details of short-term borrowings as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	Lender	Annual interest rate(%)	2019	2018
General loans	BMG and others	2.17	₩ 392,912,665	₩ 169,909,279
Transfer of trade receivables ¹	Woori Bank and others	3.93	263,171,646	543,863,284
Usance	BNP Paribas and others	2.13	54,852,440	97,700,985
			<u>₩ 710,936,751</u>	<u>₩ 811,473,548</u>

¹ As transfer of trade receivables does not meet derecognition criteria, financial liabilities are recognized and secured by the Group's trade receivables (Note 41(4)).

Details of long-term borrowings of the Group as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	Lender	Maturity date	Annual interest rate(%)	2019		2018	
				Current	Non-current	Current	Non-current
Long-term borrowings in local currency	KEB Hana Bank	2020.5.16	3.12	₩11,400,000	₩ -	400,000	₩11,400,000
Long-term borrowings in foreign currency	BTMU and others	2021.9.30	1.98	46,312,000	46,312,000	22,362,000	89,448,000
				<u>₩57,712,000</u>	<u>₩ 46,312,000</u>	<u>₩22,762,000</u>	<u>₩100,848,000</u>

Details of debentures as at December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)	Issue date	Payment date	Annual interest rate(%)	2019		2018	
				Current	Non-current	Current	Non-current
The 83-2nd debentures	2015.03.12	2020.03.12	2.23	250,000,000	-	-	250,000,000
Long-term debentures in foreign			3.50	-	347,340,000	-	335,430,000

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

currency	2018.1.30	2023.01.30				
Less: discount on borrowings			(30,168)	(2,056,956)	-	(2,968,850)
			<u>249,969,832</u>	<u>345,283,044</u>	<u>-</u>	<u>582,461,150</u>

21. Provisions

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

(in thousands of
Korean won)

		2019				
	Beginning balance	Recognized in profit or loss	Used during the year	Exchange differences		Ending balance
Provision for product liabilities	9,231,830	(651,690)	(530,775)	-		8,049,365
Provision for product warranties	55,181,785	25,373,800	(19,223,159)	13,563		61,345,989
Other provisions	8,754,730	104,026	(8,192,221)	2,527		669,062
	<u>₩ 73,168,345</u>	<u>₩ 24,826,136</u>	<u>₩ (27,946,155)</u>	<u>₩ 16,090</u>		<u>₩ 70,064,416</u>

(in thousands of
Korean won)

		2018				
	Beginning balance	Business combination	Recognized in profit or loss	Used during the year	Exchange differences	Ending balance
Provision for product liabilities	₩ 4,473,763	₩ -	₩ 13,701,182	₩ (8,943,115)	₩ -	₩ 9,231,830
Provision for product warranties	49,633,975	33,101	23,847,544	(18,313,490)	(19,345)	55,181,785
Other provisions	1,015,670	-	8,022,153	(287,377)	4,284	8,754,730
	<u>₩ 55,123,408</u>	<u>₩ 33,101</u>	<u>₩ 45,570,879</u>	<u>₩ (27,543,982)</u>	<u>₩ (15,061)</u>	<u>₩ 73,168,345</u>

Details of emission permits and quantity estimated in 2017, 2018 and 2019, are as follows:

<i>(unit: tCO₂-eq)</i>	2017	2018²	2019³
At January 1	44,657	51,555	45,258
Allocation with nil consideration	504,442	504,902	496,077
Surrendered to the government ¹	(497,544)	(511,199)	(511,199)
Carry forward	51,555	45,258	30,136
At December 31	<u>51,555</u>	<u>45,258</u>	<u>30,136</u>

¹ The quantity of surrendered to the government for the year ended December 31, 2018 is actual

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

and settled quantity, and for 2019 is an estimated quantity.

² The quantity of surrendered to the government for the year ended December 31, 2018 was 511,199 tCO₂eq in September 2019. And the excess of 45,258 tCO₂eq, compared to the allocated emissions, was carried forward to 2019.

³ Considering that the quantity of surrendered to the government for 2019 is the same as the previous year, it is expected that the allocation will not be exceeded.

In 2019, there is no emission right that the Company additionally purchased from the market and there is no recognized emission liability as greenhouse gas emission estimated by management is 511,199 tCO₂eq.

22. Other Financial Liabilities

Details of other financial liabilities as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019		2018	
	Current	Non-current	Current	Non-current
Leasehold deposits received	₩ 2,543,147	₩ 317,724	₩ 2,772,000	₩ 1,169,121
Financial derivative liabilities	1,200,706	-	8,458,588	-
Financial liabilities to non-controlling interests ¹	-	4,750,000	-	4,750,000
Other financial liabilities ²	-	20,631,939	-	20,631,939
Others	-	426,800	-	-
	<u>₩ 3,743,853</u>	<u>₩ 26,126,463</u>	<u>₩ 11,230,588</u>	<u>₩ 26,551,060</u>

¹ As the existence term of KCG 1 Private Equity Fund limited partnership that the Group invested in is limited; therefore, non-controlling interests were classified as financial liabilities for the year ended December 31, 2019.

² The Group recognized an obligation to purchase its share capital as financial liabilities upon the acquisition of Model Solution Co., Ltd. and the related amount was deducted from other paid-in capital. (Note 41).

23. Other Liabilities

Details of other liabilities as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019		2018	
	Current	Non-current	Current	Non-current
Advance received	₩ 22,790,022	₩ -	₩ 18,589,033	₩ -
Withholdings	30,012,858	-	37,908,541	-
Unearned revenue ¹	16,189,077	68,556,913	20,789,411	69,148,695

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

Long-term employee liabilities	-	20,710,356	-	18,072,850
Others	768,632	1,442,382	682,638	1,826,192
	<u>₩ 69,760,589</u>	<u>₩ 90,709,651</u>	<u>₩ 77,969,623</u>	<u>₩ 89,047,737</u>

¹Chongqing Hankooktire Co., Ltd. and Hankook Tire Manufacturing Tennessee LP of the Group received government grants from state and local governments for the purpose of providing land free-of charge and subsidies for acquisition of tangible assets, and recognized the grants as deferred revenue.

24. Net defined benefit liabilities

24.1 Defined Benefit Plan

Details of net defined benefit liabilities (assets) recognized in the statements of financial position as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>		2019		2018
Present value of defined benefit obligations	₩	470,879,296	₩	426,292,800
Fair value of plan assets		(458,420,675)		(414,385,213)
Net defined benefit liabilities	₩	<u>12,458,621</u>	₩	<u>11,907,587</u>

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

<i>(in thousands of Korean won)</i>		2019		
		Present value of defined benefit obligations	Fair value of plan assets	Total
Beginning balance	₩	426,292,800	₩ (414,385,213)	₩ 11,907,587
Current service cost		53,618,590	-	53,618,590
Interest expense (income)		13,152,274	(12,779,641)	372,633
		<u>66,770,864</u>	<u>(12,779,641)</u>	<u>53,991,223</u>
Remeasurements:				
Return on plan assets (excluding amounts included in net interest)		-	3,685,755	3,685,755
Actuarial loss (gain) from change in demographic assumptions		633,854	-	633,854
Actuarial loss (gain) from change in financial assumptions		18,182,131	-	18,182,131
Actuarial loss (gain) from experience adjustments		(2,599,548)	-	(2,599,548)
		<u>16,216,437</u>	<u>3,685,755</u>	<u>19,902,192</u>

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

Employers' contributions	-	(66,483,448)	(66,483,448)
Benefit payments	(36,012,286)	29,091,240	(6,921,046)
Others(affiliate transfer effect included)	(2,388,519)	2,450,632	62,113
Ending balance	₩ 470,879,296	₩ (458,420,675)	₩ 12,458,621

(in thousands of Korean won)

	2018		
	Present value of defined benefit obligations	Fair value of plan assets	Total
Beginning balance	₩ 380,159,219	₩ (386,581,452)	₩ (6,422,233)
Current service cost	52,982,854	-	52,982,854
Interest expense (income)	14,715,968	(14,206,053)	509,915
	67,698,822	(14,206,053)	53,492,769
Remeasurements:			
Return on plan assets (excluding amounts included in net interest)	-	6,966,785	6,966,785
Actuarial gain from change in demographic assumptions	(591,580)	-	(591,580)
Actuarial gain from change in financial assumptions	20,897,020	-	20,897,020
Actuarial gain from experience adjustments	(33,438,613)	-	(33,438,613)
	(13,133,173)	6,966,785	(6,166,388)
Employers' contributions	-	(30,343,821)	(30,343,821)
Benefit payments	(31,428,304)	29,872,717	(1,555,587)
Others(affiliate transfer effect included)	15,469,358	(15,262,276)	207,082
Changes in scope of consolidation	7,526,878	(4,831,113)	2,695,765
Ending balance	₩ 426,292,800	₩ (414,385,213)	₩ 11,907,587

The significant actuarial assumptions used in defined benefit obligations assessment as at December 31, 2019 and 2018, are as follows:

(in percentage, %)	2019	2018
Discount rate	2.14%~8.25%	2.5%~8.5%
Salary growth rate	3.0%~10.0%	3.0%~10.0%

While holding all other assumptions constant, if significant actuarial assumptions vary within a reasonable range, the effects on the defined benefit obligations are as follows.

(in thousands of Korean won)

	2019	
	Increase	Decrease

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

1% change of discount rate	₩	(47,100,115)	₩	55,270,613
1% change of salary growth rate		54,246,983		(47,188,882)

(in thousands of Korean won)

		2018		
		Increase	Decrease	
1% change of discount rate	₩	(41,200,757)	₩	48,822,139
1% change of salary growth rate		48,082,360		(41,396,478)

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

(in thousands of Korean won)

		2019		2018
Current service cost	₩	53,618,590	₩	52,982,854
Interest cost		372,633		509,915
	₩	<u>53,991,223</u>	₩	<u>53,492,769</u>

Plan assets as at December 31, 2019 and 2018, consist of:

(in thousands of Korean won)	2019		2018	
	Amount	Composition	Amount	Composition
Debt instruments	₩ 432,054,794	94.25%	₩ 395,959,208	95.60%
Cash and cash equivalents	95,681	0.02%	8,317,311	2.00%
Others	26,270,200	5.73%	10,108,694	2.40%
	<u>₩ 458,420,675</u>	<u>100.00%</u>	<u>₩ 414,385,213</u>	<u>100.00%</u>

The Group reviews the funding level on an annual basis and has a policy of eliminating deficit from the fund. Expected contributions to post-employment benefit plans for the year ending December 31, 2019, are ₩66,400,545 thousand(2018: ₩62,549,410 thousand).

The expected maturity analysis of undiscounted pension benefits as at December 31, 2019, is as follows:

(in thousands of Korean won)	2019				
	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years	Total
Pension benefits	₩ 20,701,789	33,715,134	98,897,707	1,700,237,975	1,853,552,605

The weighted average duration of the defined benefit obligation is 11.15 years.

24. 2 Defined Contribution Plan

The expense recognized in the current year in relation to defined contribution plan was ₩ 2,565,180 thousand (2018: ₩2,606,783 thousand).

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

25. Share Capital

Details of share capital as at December 31, 2019 and 2018, are as follows:

<i>(in Korean won, except for number of shares)</i>	2019	2018
Authorized (in shares)	250,000,000	250,000,000
Par value	₩ 500	₩ 500
Outstanding (in shares):		
Ordinary shares	<u>123,875,069</u>	<u>123,875,069</u>
Share capital:		
Ordinary shares	<u>₩ 61,937,534,500</u>	<u>₩ 61,937,534,500</u>

26. Other Paid-in Capital

Details of other paid-in capital as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019	2018
Share premium	₩ 2,993,465,738	₩ 2,993,465,738
Other capital surplus ¹	(20,631,939)	(20,631,939)
Treasury shares ²	<u>(1,088,018)</u>	<u>(1,088,018)</u>
	<u>₩ 2,971,745,781</u>	<u>₩ 2,971,745,781</u>

¹The Group recognized an obligation to purchase its share capital as financial liabilities upon the acquisition of Model Solution Co., Ltd. and the related amount was deducted from other paid-in capital. (Note 41).

²During 2012, the Group acquired 22,388 treasury shares through a spin-off. Further appropriation of them is not determined.

27. Retained Earnings and Dividends

Details of retained earnings as at December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019	2018
Legal reserve:		
Surplus reserve	<u>₩ 38,847,014</u>	<u>₩ 29,724,643</u>
	<u>38,847,014</u>	<u>29,724,643</u>
Voluntary reserve:		
Dividend equalization reserve	70,000,000	60,000,000
Director's retirement bonus reserve	5,000,000	5,000,000
Voluntary reserve	<u>72,000,000</u>	<u>60,665,845</u>
	147,000,000	125,665,845
Unappropriated retained earnings	<u>4,157,856,606</u>	<u>3,840,512,381</u>
	<u>₩ 4,343,703,620</u>	<u>₩ 3,995,902,869</u>

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

Dividend distributed to the Group's ordinary shareholders amounted to ₩55,733,706 thousand (2018: ₩49,541,072 thousand) for the year ended December 31, 2018, was paid in April, 2019. Dividend distributed to non-controlling interests is ₩4,597,423 thousand (2018: ₩6,686,600 thousand), was paid in April, 2019.

28. 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				
	Beginning balance	Increase (Decrease) ¹	Reclassification to profit or loss	Reclassification to non-controlling interests	Ending balance
Gain (loss) on valuation of financial assets at fair value through other comprehensive income	₩ (7,142,902)	₩ (5,967,847)	₩ -	₩ 2,396	₩ (13,108,353)
Cash flow hedge	₩ (5,432,248)	₩ 15,041,878	₩ (8,795,322)	₩ -	₩ 814,308
Exchange differences on translating foreign operations	₩ (244,060,142)	₩ 37,196,134	₩ -	₩ (179,690)	₩ (207,043,698)
Share of other comprehensive income of associates	₩ (7,407,794)	₩ 6,124,556	₩ -	₩ -	₩ (1,283,238)
	₩ (264,043,086)	₩ 52,394,721	₩ (8,795,322)	₩ (177,294)	₩ (220,620,981)

¹ The amount of tax effect is deducted.

(in thousands of Korean won)

	2018						
	Beginning balance	Changes in accounting policy	Beginning balance (adjusted)	Increase (Decrease) ¹	Reclassification to profit or loss	Non-controlling interests	Ending balance
Changes in the fair value of available-for-sale financial assets	₩ 1,823,902	₩ (1,823,902)	₩ -	₩ -	₩ -	₩ -	₩ -
Gain (loss) on valuation of financial assets at fair value through other comprehensive income	-	1,823,902	1,823,902	(8,964,269)	-	(2,535)	(7,142,902)
Cash flow hedge	-	-	-	7,144,201	(12,576,449)	-	(5,432,248)
Exchange							

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

differences on translating foreign operations	(216,095,633)	-	(216,095,633)	(28,060,455)	-	95,946	(244,060,142)
Share of other comprehensive income of associates	<u>(357,269)</u>	<u>-</u>	<u>(357,269)</u>	<u>(7,050,524)</u>	<u>-</u>	<u>-</u>	<u>(7,407,793)</u>
	₩		₩	₩	₩	₩	₩
	<u>₩(214,629,000)</u>	<u>-</u>	<u>₩ (214,629,000)</u>	<u>₩(36,931,047)</u>	<u>₩ (12,576,449)</u>	<u>₩ 93,411</u>	<u>₩ (264,043,085)</u>

¹ The amount of tax effect is deducted.

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

29. Sales and Cost of Sales

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

<i>(in thousands of Korean won)</i>	2019	2018
Sales of goods	₩ 6,760,422,634	₩ 6,753,437,495
Sale of finished goods	7,173,521,127	7,171,013,137
Sale discount	(54,487,377)	(78,499,010)
Sales incentive	(358,611,116)	(339,076,632)
Rendering of services	122,845,943	41,651,320
Rental sales	2,204,822	2,683,681
Service sales	120,641,121	38,967,639
	<u>₩ 6,883,268,577</u>	<u>₩ 6,795,088,815</u>

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

<i>(in thousands of Korean won)</i>	2019	2018
Cost of finished goods sold	₩ 4,858,968,007	₩ 4,698,120,019
Cost of rendering services	90,454,681	17,327,933
Custom duties reimbursed	(4,434,712)	(1,816,187)
(Reversal of) Loss on valuation of inventories and others	16,129,155	(22,188,146)
	<u>₩ 4,961,117,131</u>	<u>₩ 4,691,443,619</u>

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

30. Selling and Administrative Expenses

Details of selling and administrative expenses for the years ended December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019		2018	
Salaries	₩	236,984,332	₩	204,447,573
Post-employment benefits		14,554,727		12,011,310
Service expenses		35,928,992		40,933,801
Employee welfare benefits		44,181,915		41,102,503
Utility expenses		5,560,337		4,707,143
Supplies expenses		2,529,950		2,795,052
Repairs expenses		6,648,741		6,258,799
Test expenses		15,934,434		14,911,338
Overseas branch maintenance expenses		9,181,796		10,212,449
Travel expenses		14,364,553		15,240,783
Training expenses		1,954,744		1,906,332
Communication expenses		3,873,209		3,716,329
Entertainment expenses		3,384,744		3,765,072
Vehicles maintenance expenses		4,897,776		4,066,236
Publication expenses		1,211,180		1,165,623
Commission fees		71,930,409		61,417,335
Rental expenses		4,506,023		36,289,330
Depreciation of property, plant and equipment		80,034,295		34,090,492
Depreciation of investment property		1,185,722		1,034,476
Amortization of intangible assets		23,003,621		17,584,161
Insurance		10,657,913		8,278,473
Taxes and dues		24,537,785		24,438,993
Impairment loss on receivables		1,923,931		1,744,311
Conference expenses		1,095,680		1,177,876
Brand loyalty expenses		51,331,462		49,351,955
SSC service fee		7,004,768		4,117,377
Travel and transportation expenses		163,506,177		222,071,324
Advertising		196,978,609		222,084,431
Other export expenses		12,779,390		12,380,102
Packing charges		8,131,460		8,774,491
Sales damage expenses		24,722,110		37,548,726
Foreign market development expenses		72,003		92,734
Storage charges		95,707,232		98,904,890
Other expenses		2,910,415		1,024,565
	₩	<u>1,183,210,435</u>	₩	<u>1,209,646,385</u>

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

31. Finance Income

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

<i>(in thousands of Korean won)</i>	2019		2018	
Interest income	₩	15,809,414	₩	13,614,025
Gains on valuation of derivatives		5,176,426		4,711,764
Gains on transaction of derivatives		2,100		706,708
Gains on foreign currency translation		18,965,958		22,069,293
Gains on foreign currency transaction		41,458,087		41,256,655
Others		2,002		-
	₩	<u>81,413,987</u>	₩	<u>82,358,445</u>

32. Finance Costs

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

<i>(in thousands of Korean won)</i>	2019		2018	
Interest expense	₩	57,331,267	₩	57,031,424
Loss on disposal of debt instruments at fair value through other comprehensive income		1,949		19,618
Losses on valuation of derivatives		-		10,918,804
Losses on transaction of derivatives		43,705,526		14,012,484
Losses on foreign currency transaction		61,301,329		52,895,323
Losses on foreign currency translation		7,781,205		4,350,854
	₩	<u>170,121,275</u>	₩	<u>139,228,507</u>

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

33. Other Non-operating Income

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

<i>(in thousands of Korean won)</i>	2019		2018	
Royalty income	₩	300,239	₩	476,809
Dividend income		1,328,434		126,956
Commission income		3,678,879		4,387,024
Rental income		725,767		809,382
Gains on foreign currency translation		17,990,936		18,214,089
Gains on foreign currency transaction		115,451,680		106,498,485
Gains on disposal of property, plant and equipment		24,386,988		4,911,675
Gain on disposal of investment properties		31,099,041		211,241
Gains on insurance settlements		319,451		11,864
Gains on transaction of derivatives		268,916		4,232,125
Gains on valuation of derivatives		753		49,378
Other		18,460,281		19,548,536
	₩	<u>214,011,365</u>	₩	<u>159,477,564</u>

34. Other Non-operating Expenses

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

<i>(in thousands of Korean won)</i>	2019		2018	
Donation	₩	1,678,200	₩	3,283,242
Losses on foreign currency transaction		66,494,532		83,950,250
Losses on foreign currency translation		25,323,585		34,300,236
Losses on disposal of trade receivables		31,504		3,838
Losses on disposal of investment property		69,881		-
Losses on disposal of property, plant and equipment		14,042,536		7,764,647
Impairment loss on property, plant and equipment		6,558,511		-
Losses on abandonment of property, plant and equipment		5		14,517
Losses on disposal of intangible assets		33,356		8,181
Losses on valuation of derivative instruments		1,202,508		109,312
Losses on derivative instruments transactions		547,549		2,603,209
Other impairment losses		4,432,626		580,324
Other		4,943,256		12,942,455
	₩	<u>125,358,049</u>	₩	<u>145,560,211</u>

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

35. Tax Expense and Deferred Tax

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

<i>(in thousands of Korean won)</i>	2019	2018
Current tax:		
Current tax on profit for the year	₩ 139,574,467	₩ 188,464,740
Deferred tax:		
Origination and reversal of temporary differences	19,909,147	(33,992,962)
Changes in tax credit	785,561	12,847,788
Income tax expense	<u>₩ 160,269,175</u>	<u>₩ 167,319,566</u>

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

<i>(in thousands of Korean won)</i>	2019	2018
Profit before income tax expense	₩ 589,883,709	₩ 697,700,249
Tax calculated at statutory tax rates applicable to profits in the respective countries	135,911,884	153,519,692
Tax effects of:		
Income not subject to tax	(5,179,333)	(3,162,080)
Expenses not deductible for tax purposes	3,630,505	7,610,933
Tax credit and other	(1,122,079)	(2,861,903)
Others	27,028,197	12,212,924
Subtotal	<u>24,357,292</u>	<u>13,799,874</u>
Income tax expense	<u>₩ 160,269,176</u>	<u>₩ 167,319,566</u>
Effective tax rate	<u>27.2%</u>	<u>24.0%</u>

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

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

<i>(in thousands of Korean won)</i>	2019			2018		
	Before tax	Tax effect	After tax	Before tax	Tax effect	After tax
Remeasurements of net defined benefit liabilities	₩ (19,902,193)	₩ 5,382,970	₩ (14,519,223)	₩ 6,166,386	₩ (1,956,799)	₩ 4,209,587
Remeasurements of net defined benefit liabilities of associates	(1,945,912)	486,478	(1,459,434)	(201,827)	48,842	(152,985)
Gain (loss) on valuation of financial assets at fair value through other comprehensive income	(7,957,129)	1,989,282	(5,967,847)	(11,604,099)	2,639,830	(8,964,269)
Cash flow hedge	8,615,939	(2,369,383)	6,246,556	(7,492,756)	2,060,508	(5,432,248)
Exchange differences on translating foreign operations	37,196,133	-	37,196,133	(28,060,455)	-	(28,060,455)
Share of other comprehensive income of associates	8,166,075	(2,041,519)	6,124,556	(9,515,263)	2,464,739	(7,050,524)
	<u>₩ 24,172,913</u>	<u>₩ 3,447,828</u>	<u>₩ 27,620,741</u>	<u>₩ (50,708,014)</u>	<u>₩ 5,257,120</u>	<u>₩ (45,450,894)</u>

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

<i>(in thousands of Korean won)</i>	2019	2018
Deferred tax asset(liabilities) to be recovered within 12 months	₩ 23,115,297	₩ 88,023,310
Deferred tax asset(liabilities) to be recovered after more than 12 months	124,410,448	71,600,534
	<u>₩ 147,525,745</u>	<u>₩ 159,623,844</u>

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

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:

<i>(in thousands of Korean won)</i>	2019			
	Beginning balance	Statement of profit or loss	Other comprehensive income	Ending balance
Property, plant and equipment	₩ 16,048,443	₩ 9,231,360	₩ -	₩ 25,279,803
Inventories	1,385,235	302,444	-	1,687,680
Accrued income	(55,504)	(53,738)	-	(109,243)
Derivatives	3,079,606	(572,914)	(2,369,383)	137,309
Long-term employee benefit	4,594,612	429,402	-	5,024,014
Other Provision	16,920,504	306,147	-	17,226,651
Post-employment benefit obligation	(3,913,172)	(3,168,089)	4,653,792	(2,427,469)
Accrued expense	6,886,378	1,029,137	-	7,915,515
Advanced depreciation provision for non-depreciable assets	(16,658,884)	861,014	-	(15,797,870)
Advanced depreciation provision for depreciable assets	(274,780)	30,182	-	(244,598)
Gains and losses on foreign currency translation	216	-	-	216
Others	6,374,887	964,674	2,262,757	9,602,318
Deferred tax asset(liabilities) of subsidiaries	30,328,608	(31,432,083)	1,145,543	42,068
Deferred tax asset(liabilities) related with consolidation adjustment	<u>61,888,795</u>	<u>2,163,317</u>	<u>1,726,240</u>	<u>65,778,352</u>
	₩ 126,604,944	₩ (19,909,147)	₩ 7,418,949	₩ 114,114,746
Tax credit and tax reduction	<u>33,018,900</u>	<u>(785,561)</u>	<u>1,177,661</u>	<u>33,411,000</u>
	<u>₩ 159,623,844</u>	<u>₩ (20,694,708)</u>	<u>₩ 8,596,610</u>	<u>₩ 147,525,746</u>

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

<i>(in thousands of Korean won)</i>	2018				
	Beginning balance	Business combination and others	Statement of profit or loss	Other comprehensive income	Ending balance
Property, plant and equipment	₩ 1,229,068	₩ -	₩ 14,819,375	₩ -	₩ 16,048,443
Inventories	1,498,824	-	(113,589)	-	1,385,235
Accrued income	(12,560)	-	(42,944)	-	(55,504)
Derivatives	652,978	-	366,121	2,060,507	3,079,606
Long-term employee benefit	4,752,922	-	(158,310)	-	4,594,612
Other Provision	14,578,139	-	2,342,365	-	16,920,504
Post-employment benefit obligation	(4,222,429)	-	2,155,983	(1,846,726)	(3,913,172)
Accrued expense	5,138,963	-	1,747,415	-	6,886,378
Advanced depreciation provision for non- depreciable assets	(17,210,321)	-	551,437	-	(16,658,884)
Advanced depreciation provision for depreciable assets	(304,962)	-	30,182	-	(274,780)
Gains and losses on foreign currency translation	216	-	-	-	216
Others	1,067,314	-	2,263,989	3,043,584	6,374,887
Deferred tax asset(liabilities) of subsidiaries	(16,324,584)	15,584,207	19,160,155	11,908,830	30,328,608
Deferred tax asset(liabilities) related with consolidation adjustment	88,081,137	(20,642,289)	(9,129,216)	3,579,163	61,888,795
	₩ 78,924,705	₩ (5,058,082)	₩ 33,992,963	₩ 18,745,358	₩ 126,604,944
Tax credit and tax reduction	44,152,284	-	(12,847,788)	1,714,404	33,018,900
	₩ 123,076,989	₩ (5,058,082)	₩ 21,145,175	₩ 20,459,762	₩ 159,623,844

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

<i>(in thousands of Korean won)</i>	2019	2018	Remarks
Investments in subsidiaries	₩ 2,636,876,801	₩ 2,406,771,228	No plan to dispose the investments

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

36. Expenses by Nature

Expenses by nature for the years ended December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	2019	2018
Changes in inventories:		
Finished goods	₩ (126,844,641)	₩ (139,905,967)
Work in process	(695,842)	(2,481,323)
Supplies	(5,975,669)	(6,909,769)
Raw materials	10,514,095	30,927,985
Purchase of raw materials and others	2,687,549,936	2,584,087,829
Employees benefits	1,082,674,944	1,067,246,159
Depreciation ¹	606,395,172	559,287,450
Amortization	25,244,083	19,741,420
Commission fees	131,234,700	121,039,401
Others	1,929,206,969	1,859,405,030
	<u>₩ 6,339,303,746</u>	<u>₩ 6,092,438,215</u>

¹ Depreciation of investment properties are included.

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

37. Earnings per Share

The basic and diluted earnings per share for the years ended December 31, 2019 and 2018, are computed as follows:

<i>(in Korean won)</i>	2019	2018
Profit for the year attributable to the ordinary equity holders of the Parent Company	₩ 419,513,114,714	₩ 522,214,845,405
Weighted-average number of ordinary shares outstanding (in shares) ¹	<u>123,852,681</u>	<u>123,852,681</u>
Basic and diluted earnings per share ²	<u>₩ 3,387</u>	<u>₩ 4,216</u>

¹ Weighted average number of ordinary shares outstanding is calculated as outstanding ordinary shares divided by outstanding period, excluding number of treasury shares.

² Basic and diluted earnings per share are the same because there is no potentially dilutive ordinary share issued by the Group.

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

38. Business Combination

During 2018, a subsidiary of the Group obtained control by entering into a contract for acquiring 100% of issued shares of Reifen-Muller which is a tire distributor in Germany in order to strengthen its global distribution business and secure a distribution business model in Germany, a leading automobile market. Companies to be acquired are Reifen-Muller KG, a sales distribution affiliate of Reifen-Muller and Reifen-Muller GmbH & Co. Runderneuerungswerk KG that is engaged in recycling and sales of tire for truck. The goodwill arising from the acquisition is attributable to the economies of scale expected from combining the subsidiary of the Group and the operations of Reifen-Muller. The Group recognized the goodwill of ₩ 64,025million in 2018 related to the business combination, but the amount has adjusted in 2019 according to the final valuation results. The Group's financial statements of previous year have partially adjusted accordingly, but total equity has not changed. Details of the purchase consideration, the assets and liabilities recognized as a result of the acquisition, and goodwill at the acquisition date are as follows:

<i>(in thousands of Korean won)</i>	Amount
Consideration Transferred	₩ 137,877,651
Recognized amounts of identifiable assets acquired and liabilities assumed	
Cash and cash equivalents	5,134,295
Trade and other receivables	30,809,813
Inventories	50,123,635
Other current assets	16,524,208
Long-term trade and other receivables	12,848
Property, plant and equipment	138,784,454
Intangible assets	478,652
Customer relationship and others	53,177,052
Other financial assets	2,330
Deferred tax assets	13,913,963
Trade and other payables	(41,714,372)
Short-term borrowings	(45,013,221)
Income tax payables	(13,635,964)
Long-term borrowings	(107,982,960)
Post-employment benefits obligations	(1,009,529)
Provisions	(33,101)
Other non-current liabilities	(31,295)
Deferred tax liabilities	(14,929,370)
Net identifiable assets acquired	84,611,439
Goodwill	53,266,213
	<u>₩ 137,877,651</u>

At the end of the previous year, the results of the fair value valuation for identifiable asset/liabilities for allocation of the consideration have not been confirmed, and the allocation activities of the consideration received have been completed during the current term.

In May 2018, the Group acquired 75% of issued shares of Model Solution Co., Ltd. and obtained

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

control. The goodwill of ₩42,415,368 thousand arising from the acquisition is attributable to economies of scale expected from combining the Group and the operations of Model Solution Co., Ltd. The recognized goodwill will not be deductible for tax purpose. Details of the purchase consideration, the assets and liabilities recognized as a result of the acquisition, and goodwill at the acquisition date are as follows:

(in thousands of Korean won)

	Amount
Consideration Transferred	₩ 68,625,000
Recognized amounts of identifiable assets acquired and liabilities assumed	
Cash and cash equivalents	2,072,128
Trade and other receivables	5,400,392
Inventories	1,755,636
Other current assets	200,849
Financial assets at fair value through other comprehensive income	500
Property, plant and equipment	20,865,986
Investment properties	112,805
Intangible assets	575,974
Customer relationship and others	26,420,000
Other financial assets	398,480
Other non-current assets	662,187
Deferred tax assets	1,190,859
Trade and other payables	(4,021,585)
Short-term borrowings	(400,000)
Current income tax liabilities	(487,092)
Other financial liabilities	(3,936)
Other current liabilities	(465,771)
Long-term payables	(11,400,000)
Net defined benefit liabilities	(1,686,236)
Deferred tax liabilities	(6,245,000)
Net identifiable assets acquired	34,946,176
Non-controlling interests	(8,736,544)
Goodwill	42,415,368
	₩ 68,625,000

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

39. Operating Segment Information

The Group has a single operating segment subject to Korean IFRS 1108 *Segment Reporting*; therefore, no operating segment information is disclosed.

The Group is mainly operating in five geographical regions. Net sales information by geographical region for the years ended December 31, 2019 and 2018, are as follows:

(in thousands of Korean won)

	2019		2018	
	Amount	Ratio (%)	Amount	Ratio (%)
North America	₩ 1,927,416,583	28.00%	₩ 1,960,436,752	28.85%
South and Central America	251,818,105	3.66%	248,783,491	3.66%
Asia, except Korea	1,304,057,291	18.95%	1,341,310,989	19.74%
Europe	2,479,166,025	36.02%	2,302,815,426	33.89%
Domestic	920,810,573	13.38%	941,742,157	13.86%
	₩ 6,883,268,577	100.00%	₩ 6,795,088,816	100.00%

There is no external customer, who contributes more than 10% of the Group's total revenue for the years ended December 31, 2019 and 2018.

At the end of the reporting period, non-current assets broken down by location of the assets are shown as follows:

(in thousands of Korean won)

	2019	2018
North America	₩ 593,469,884	₩ 609,017,216
South and Central America	2,773,947	1,132,395
Asia, except Korea	1,518,428,807	1,658,078,712
Europe	675,179,849	644,899,622
Domestic	1,826,435,305	1,857,885,898
	₩ 4,616,287,792	₩ 4,771,013,843

Financial assets, deferred tax assets, investment in subsidiaries and net defined benefit assets are excluded from non-current assets.

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

40. Cash Generated from Operations

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

<i>(in thousands of Korean won)</i>	2019	2018
Adjustments:		
Income tax expense	₩ 160,269,175	₩ 167,319,566
Gain on investments in associates	(45,972,850)	(38,002,359)
Interest income	(15,809,414)	(13,614,025)
Interest expense	57,331,267	57,031,424
Dividend income	(1,328,434)	(126,956)
Gains on foreign currency translation	(36,956,895)	(40,283,382)
Losses on foreign currency translation	33,104,790	38,651,090
Losses on disposal of debt instruments at fair value through other comprehensive income	64	19,618
Losses (gains) on valuation of inventories	14,300,429	(24,190,696)
Losses on abandonment of inventories	2,197,773	2,116,410
Losses on disposal of trade receivables	31,504	3,838
Impairment loss on trade receivables	1,923,931	1,744,311
Other impairment loss	4,432,626	580,324
Gains on disposal of property, plant and equipment	(24,386,988)	(4,911,675)
Losses on disposal of property, plant and equipment	14,042,536	7,764,647
Losses on abandonment of property, plant and equipment	5	14,517
Impairment loss on property, plant and equipment	6,558,511	-
Losses on disposal of intangible assets	33,356	8,181
Reversal of impairment loss of intangible assets	(68,333)	(24,000)
Gains on disposal of investment properties	(31,099,041)	(211,241)
Loss on disposal of investment properties	69,881	-
Gains on valuation of financial liabilities to non-controlling interests	-	358,589
Depreciation of property, plant and equipment	605,206,341	558,252,974
Depreciation of investment properties	1,188,831	1,034,476
Amortization of intangible assets	25,244,083	19,741,420
Casualty loss	95,419	-
Increase in other provisions	104,026	70,600
Sales damage expense	24,722,110	37,549,927
Employee welfare benefit	4,352,203	1,579,687
Post-employment benefit	53,991,223	53,492,770
Gains on valuation of derivatives	(5,177,179)	(4,761,142)
Losses on valuation of derivatives	1,202,508	11,028,116
Gains on transaction of derivatives	(271,016)	(4,938,834)

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

Losses on transaction of derivatives		44,253,076		16,615,693
	₩	<u>893,585,518</u>	₩	<u>843,913,869</u>
<i>(in thousands of Korean won)</i>		2019		2018
Changes in operating assets and liabilities:				
Increase in trade receivables	₩	(19,420,291)	₩	(51,218,263)
Increase in other receivables		(19,086,358)		(52,720,934)
Increase in inventories		(101,675,265)		(40,220,597)
Decrease (increase) in other financial assets		157,766		(1,144,355)
Decrease in other assets		3,337,836		34,160,913
Increase (decrease) in trade payables		(112,199,044)		5,648,924
Increase in other payables		28,502,689		25,057,925
Decrease in provision		(27,575,414)		(19,592,064)
Decrease in other financial liabilities		(1,080,250)		(177,826)
Increase (decrease) in other liabilities		(12,632,535)		35,753,348
Payment of post-employment benefits		(35,706,305)		(31,470,370)
Increase in plan assets		<u>(37,596,614)</u>		<u>(429,039)</u>
	₩	<u>(334,973,785)</u>	₩	<u>(96,352,338)</u>

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

<i>(in thousands of Korean won)</i>		2019		2018
Transfer of construction in progress to property, plant and equipment	₩	138,655,014	₩	173,411,502
Transfer of construction in progress to loans		-		13,793,168
Changes in non-trade payables in relation to acquisition of fixed assets		(9,375,792)		(6,645,416)
Capitalized borrowing costs		1,886,890		1,914,862

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

Changes in liabilities arising from financial activities for the years ended December 31, 2019 and 2018, are as follows:

<i>(in thousands of Korean won)</i>	Short-term borrowings¹	Long-term borrowings	Debentures	Lease Liabilities	Non-controlling interests	Dividend payables	Total
At January 1, 2019	₩ 843,802,336	₩ 206,118,628	₩ 582,461,150	₩ 114,837,416	₩ 4,750,000	₩ 17,978	₩1,751,987,508
Changes in accounting policy	(9,566,788)	(105,270,628)	-	217,473,990	-	-	102,636,574
Exchange differences	6,434,894	3,488,800	11,975,686	7,639,167	-	-	29,538,547
Cash flows	(130,046,491)	-	-	(54,425,568)	-	(60,331,129)	(244,803,188)
Amortization cost for debentures	-	-	816,040	-	-	-	816,040
Other (Declared dividends and others)	-	-	-	23,252,716	-	60,333,735	83,586,451
Transfer	58,024,800	(58,024,800)	-	-	-	-	-
At December 31, 2019	₩ 768,648,751	₩ 46,312,000	₩ 595,252,876	₩ 308,777,721	₩ 4,750,000	₩ 20,584	₩1,723,761,923

¹Includes current portion of long-term borrowings.

<i>(in thousands of Korean won)</i>	Short-term borrowings¹	Long-term borrowings	Debentures	Non-controlling interests	Dividend payables	Total
At January 1, 2018	₩ 984,116,462	₩ 214,280,000	₩ 775,063,062	₩ -	₩ 24,314	₩1,973,483,838
Business combinations	45,413,221	119,382,960	-	-	-	164,796,180
Exchange differences	(7,304,651)	5,895,818	23,363,826	-	-	21,954,994
Cash flows	(201,851,847)	(110,011,000)	(219,430,455)	4,750,000	(56,227,672)	(582,770,974)
Amortization cost for debentures	-	-	3,464,717	-	-	3,464,716
Other (Declared dividends and others)	-	-	-	-	56,221,336	56,221,336
Transfer	23,429,150	(23,429,150)	-	-	-	-
At December 31, 2018	₩ 843,802,336	₩ 206,118,628	₩ 582,461,150	₩ 4,750,000	₩ 17,978	₩1,637,150,090

¹Includes current portion of long-term borrowings.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

41. Contingencies and Commitments

Pledged assets as collaterals

As at December 31, 2019, a certain portion of the Group's land, buildings, machinery and equipment is pledged as collaterals for borrowings as follows:

(in thousands of Korean won, USD, CNY and RUB)

	Pledged assets	Pledged amounts	
The Korea Development Bank and others	Land, buildings, machinery and short-term financial assets	KRW	274,780,000
		USD	153,200
		CNY	276,270
		RUB	60,000

Buildings, inventories, machinery and others are insured against a general liability insurance policy.

The beneficial interest of insurance for buildings and machinery is pledged as collateral for the Group's borrowings (The Korea Development Bank: ₩122,000,000 thousand and USD 110,000 thousand; Woori Bank: ₩138,140,000 thousand and USD 43,200 thousand; Hana Bank: ₩14,640,000 thousand; Bank of China: CNY 276,270 thousand; Alfa-Nedvizhimost LLC: RUB 60,000 thousand).

The Group is insured against potential future claims that may occur under the Product Liability Act in the Republic of Korea that was effective since July 1, 2002, which penalizes a manufacturer or seller when a product is defective and causes injury or damage to a person or property. The Group recognizes the best estimate amounting to ₩ 8,049,365 thousand, which is expected to be paid, as provision for product liabilities (Note 21).

For the purpose of providing tires in India and UN Corp., the Group provided a payment guarantee to Bureau of Indian Standards through Shinhan Bank New Delhi branch for up to USD 120,000 and provide a guarantee to UN Corp. through Shinhan Bank GS Tower branch for up to USD 144,792.

Transfer of trade receivables

Trade receivables that are transferred to financial institutions, but not matured, at the end of the reporting period, are as follows:

<i>(in thousands of Korean won)</i>	2019	2018
Collateral loan on trade receivables	₩ 263,171,646	₩ 543,863,284

The Group recognized trade receivables with recourse which were transferred to financial institutions, but not yet matured, as short-term borrowings (Note 20).

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

Purchase agreement

At the end of the reporting period, the Group has purchase agreements on raw rubber materials with several suppliers, including Southland, which are usually renewed annually. In addition, the Group has supply contracts with Hankook Technology Group Co.,Ltd., one of its related parties, to be provided with trademark license and business support and to provide administrative work including finance, accounting, and legal affairs. Moreover, at the end of the reporting period, the Group has a long-term contract with Hankook Networks Co.,Ltd., one of its related parties, to be provided with maintenance service for the Group's information system.

Financing arrangements

Details of the Group's financing arrangements at the end of the reporting period, are as follows:

<i>(in thousands of Korean won)</i>		2019	2018
Comprehensive limit agreements on discount trade receivable in foreign currencies and others	Total limit	₩ 4,243,274,940	₩ 4,585,968,455
	Used	645,933,505	1,264,893,391
	Unused	3,597,341,435	3,321,075,064

Seoul Guarantee Insurance Co., Ltd. has provided guarantee amount to ₩12,185,285 thousand (2018:₩1,038,386 thousand) for performance guarantee and others.

Pending litigations

As at December 31, 2019, the Group has nine pending lawsuits in relation to overtime charges and related additional wage claims with current or retired employees, and the lawsuits are in process of second trial for partial or entire lost. As a result of second trial, the Group recognized the principal obligated for the payment as other provisions amounting to ₩284,913 thousand, and this amount is subject to change as a result of litigation.

Additionally, the Group has many outstanding cases as a defendant or as a plaintiff. The ultimate outcome of these cases cannot be predicted reasonably. Management does not expect the outcome of the cases will have a material effect on the Group's financial position.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

Co-investment agreement of shares acquisition

The Group acquired 20,806,200 shares of Hanon Systems Co., Ltd.(19.49% of ownership) from VIHI LLC, the largest shareholder of Hanon Systems Co., Ltd.

a) Details of Shares Purchase Agreement

- Seller: Visteon Corp. and VIHI LLC
- Purchaser: Hahn & Co. Auto Holdings LLC and Hankook Tire Co., Ltd.
- Contract date: 2014.12.17
- Closing date of deal: 2015.06.10
- Number of shares to be purchased per purchaser
 - (i) Hahn & Co. Auto Holdings LLC: 53,913,800 shares (50.50% of ownership)
 - (ii) Hankook Tire Co., Ltd.: 20,806,200 shares (19.49% of ownership)

b) Contract between shareholders

The purchasers above, the Group and Hahn & Co. Auto Holdings LLC entered into a contract between shareholders that includes the followings:

- Hahn & Co. Auto Holdings LLC's drag-along right
- The Company's right of first refusal
- The Company's tag-along right

Agreements related to shares acquisition

The Group acquired 140,735 shares (75% of ownership) of Model Solution Co., Ltd. from Monet Holdings (45,035 shares) and Laird Holding Limited (95,700 shares), shareholders of Model Solution Co., Ltd. In addition, the Group entered into a contract between shareholders with Monet Holdings in relation to investments in Model Solution Co., Ltd.

a) Details of Shares of Purchase Agreement

- Seller: Laird Holding Limited, Monet Holdings (Domestic PEF)
- Purchaser: Hankook Tire Co., Ltd.
- Contract date: 2018. 05. 31

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

b) Contract between shareholders

Type	Name of related parties
Limit on transfer of shares	<p>1. Hankook Tire Co., Ltd. requires prior written consent if transfer of shares will not maintain the largest shareholder status. However, this condition will not apply an year after IPO of Model Solution Co., Ltd.</p> <p>2. Monet Holdings is limited to transfer the shares to an entity involves in the same business area or a competitor without prior consent of Hankook Tire Co., Ltd.</p>
Tag-along right	Monet Holdings has tag-along right for the transfer of rights of Hankook Tire Co., Ltd, but except for the transfer of shares that are less than 15% of total issued shares to strategic investors who engage in business with strategic objectives and synergies or the transfer of shares that maintain largest shareholder status within 1 year after IPO of Model Solution Co., Ltd..
Right of first refusal	Hankook Tire Co., Ltd has right of first refusal if Monet Holdings sells the shares to a third party.
Drag-along right	Monet Holdings has a drag-along right requesting to sell jointly all shares held by Hankook Tire Co., Ltd on the same terms and conditions as Model Solution Co., Ltd. if Hankook Tire Co., Ltd deliberately avoids IPO of Model Solution.
Put option ¹	If IPO is not made within an agreed period, Monet Holdings has a put option to sell all shares of Hankook Tire Co., Ltd. held by Monet Holdings and its selling price is the number of shares held by Monet Holdings multiplied by the amount that selling price of a share determined in shares of purchase agreement concluded on May 31, 2018.

¹ The Group recognized present value of exercise price of put option related to above shares of purchase agreement as financial liabilities and deducted the same amount from its own equity.

The Group has requested a review system of the legality before taxation for the certain items of taxation amount received in relation to the tax investigation regarding its income tax in respect of the financial years from 2013 to 2017 and it is under review by the National Tax Service. The final result of this review and its impact cannot be predicted at the end of the reporting period.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

42. Related Party Transactions

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

Type	Name of related parties
Individuals	Yang-Rai Cho, Hyun-Shick Cho, Hyun-Bum Cho
Holding company ¹	Hankook Technology Group Co., Ltd. (formerly, Hankook Tire Worldwide Co., Ltd.)
Holding company's subsidiaries and associates ²	Hankook AtlasBX Co., Ltd. (formerly, AtlasBX Co., Ltd.), AtlasBX Motorsports Co., Ltd., AtlasBX America Corporation, Hankook Car & Life Co., Ltd. (formerly, HK Automotive Co., Ltd.), JAX motors Co., Ltd. (formerly, Flying Motors Co., Ltd.), HK Motors Co., Ltd., Han Automobile.Co, Hankook Networks Co., Ltd. (formerly, EmFrontier, Inc.), Hankook Networks America Inc. (formerly, EmFrontier America Inc.), Wavers Co., Ltd.
Domestic associates	Hanon Systems Co., Ltd., Peaches Group Korea Co., Ltd., DAE MYONG TECH ONE Co.,Ltd.
Other related parties ³	Shin-Yang Tourist Development, Shin-Yang World Leisure, FWS Investment Advisory, Daehwa Eng' & Machinery Jiaxing Co., Ltd., Another WTE Co., Ltd., H-2 WTE Co., Ltd., Another Geumsan Co., Ltd., YKT Co., Ltd., SPTeam Co.,Ltd., Seil Hwangyeong Co.,Ltd., Doowon Holdings Co.,Ltd., Arum Dentistry Co., Ltd. (formerly, Doowon ID Co.,Ltd.), SI Carbon Co.,Ltd.

¹ The entity has a significant influence on the Group.

² In the case of WAVUS Co., Ltd., it was listed as a subsidiary of the holding company, but it was not included in the affiliated companies under the Fair Trade Act as of the end of the reporting period, subject to the suspension of affiliate transfers until June 27, 2026 by the Fair Trade Commission.

³ Although the entity is not the related party of the Group in accordance with Korean IFRS 1024, the entity belongs to the Large Enterprise Group to which the Group also belongs in accordance with the Monopoly Regulation and Fair Trade Act.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

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

a) Sales and others

(in thousands of Korean won)

	2019			2018		
	Sales	Others	Total	Sales	Others	Total
Hankook Technology Group Co.,Ltd.	₩ 85,360	₩ 1,555,610	₩ 1,640,970	₩ 111,059	₩ 1,749,961	₩ 1,861,020
Hankook Atlas BX Co.	36	1,034,839	1,034,875	35,111	938,262	973,373
Atlas BX Motorsports Co., Ltd	112,572	-	112,572	-	-	-
Hankook Atlasbx America Corporation	-	56,107	56,107	-	30,541	30,541
HK Motors Co.	-	2,314	2,314	-	-	-
Hankook Car & Life Co., Ltd.	-	177,742	177,742	-	113,854	113,854
Hanon Systems Co., Ltd.	26,188	-	26,188	25,234	-	25,234
Hankook Networks Co.,Ltd.	688	52,189	52,877	28	58,680	58,708
Daehwa Eng'& Machinery Jiaxing Co., Ltd.	-	394,504	394,504	285,720	569,052	854,772
Han Automobile.Co,	77	-	77	-	-	-
Anothen Geumsan Co., Ltd.	713	-	713	-	-	-
Arum Dentistry Co., Ltd.	561	-	561	-	-	-
	<u>₩ 226,195</u>	<u>₩ 3,273,305</u>	<u>₩ 3,499,500</u>	<u>₩ 457,152</u>	<u>₩3,460,350</u>	<u>₩3,917,502</u>

b) Purchases and others

(in thousands of Korean won)

	2019			2018		
	Purchases	Others ¹	Total	Purchases	Others ¹	Total
Hankook Technology Group Co.,Ltd. ²	₩ -	₩ 58,995,261	₩ 58,995,261	₩ -	₩ 57,512,827	₩ 57,512,827
Hankook Atlas BX Co.	4,701,212	2,394	4,703,606	21,193,594	-	21,193,594
Atlas BX Motorsports Co., Ltd	-	1,032,419	1,032,419	-	684,784	684,784
HK Motors Co., Ltd.	-	4,683,598	4,683,598	-	92,498	92,498
Hankook Car & Life Co., Ltd.	-	597	597	-	2,313	2,313
Hankook Networks Co.,Ltd.	-	24,964,572	24,964,572	-	28,499,718	28,499,718
Hankook Networks America Inc.	-	907,058	907,058	-	514,070	514,070
Daehwa Eng'& Machinery Jiaxing Co., Ltd.	-	13,896,139	13,896,139	-	14,513,145	14,513,145
Shin-Yang Tourist Development	-	34,109	34,109	-	148,316	148,316
	<u>₩ 4,701,212</u>	<u>₩ 104,516,147</u>	<u>₩ 109,217,359</u>	<u>₩21,193,594</u>	<u>₩101,967,671</u>	<u>₩123,161,265</u>

¹ Sales rebates and other paid to related parties, which are sales deductible items, are presented as purchases and others.

² The Group entered into service supporting agreement and trademark license agreement with Hankook Technology Group Co.,Ltd.

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

Outstanding balances of receivables and payables as at December 31, 2019 and 2018, are as follows:

a) Receivables and others

(in thousands of Korean won)

	2019			2018		
	Trade receivables	Non-trade receivables	Total	Trade receivables	Non-trade receivables	Total
Hankook Technology Group Co.,Ltd.	₩ 9,004	₩ 2,730,589	₩ 2,739,593	₩ 66	₩ 3,004,532	₩ 3,004,598
Hankook Atlas BX Co.	-	321,022	321,022	-	423,756	423,756
Hankook Car & Life Co., Ltd.	-	10,141	10,141	-	-	-
Hankook Networks Co.,Ltd.	678	14,923	15,601	-	-	-
Hanon Systems Co., Ltd.	-	-	-	2,462	-	2,462
Daehwa Eng'& Machinery Jiaxing Co., Ltd.	-	301,140	301,140	-	440,293	440,293
Shin-Yang Tourist Development	-	400,000	400,000	-	400,000	400,000
	<u>₩ 9,682</u>	<u>₩ 3,777,815</u>	<u>₩ 3,787,497</u>	<u>₩ 2,528</u>	<u>₩ 4,268,581</u>	<u>₩ 4,271,109</u>

b) Payables and others

(in thousands of Korean won)

	2019			2018		
	Trade payable	Non-trade payables	Total	Trade payable	Non-trade payables	Total
Hankook Technology Group Co.,Ltd.	₩ -	₩ 17,242,460	₩ 17,242,460	₩ -	₩ 19,403,900	₩19,403,900
Hankook Atlas BX Co.	2,418,970	191,028	2,609,998	4,388,721	176,116	4,564,837
Atlas BX Motorsports Co., Ltd	-	26,398	26,398	-	-	-
HK Motors Co., Ltd.	-	1,243,932	1,243,932	-	34,228	34,228
Hankook Networks Co.,Ltd.	-	7,372,115	7,372,115	-	8,561,919	8,561,919
Hankook Networks America Inc.	-	39,423	39,423	-	-	-
Daehwa Eng'& Machinery Jiaxing Co., Ltd.	-	1,748,351	1,748,351	-	2,537,287	2,537,287
Shin-Yang Tourist Development	-	82,583	82,583	-	4,620	4,620
	<u>₩ 2,418,970</u>	<u>₩ 27,946,290</u>	<u>₩ 30,365,260</u>	<u>₩ 4,388,721</u>	<u>₩ 30,718,070</u>	<u>₩ 30,718,070</u>

Fund transactions with related parties for the years ended December 31, 2019 and 2018, are as follows:

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

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

<i>(in thousands of Korean won)</i>		2019			
		Dividend income	Dividend paid	Lease payments	Contributions in cash and others
Parent company	Hankook Technology Group Co., Ltd.	₩ -	₩ 16,833,895	₩ 2,807,268	₩ -
	Hanon Systems Co., Ltd.	33,289,920	-	-	-
	Peaches Group Korea co., Ltd., DAE MYONG TECH ONE Co.,Ltd.	-	-	-	519,142
Associates		-	-		1,147,000
		₩ 33,289,920	₩ 16,833,895	₩ 2,807,268	₩ 1,666,142

<i>(in thousands of Korean won)</i>		2018			
		Dividend income	Dividend paid	Lease payments	Contributions in cash and others
Parent company	Hankook Technology Group Co., Ltd.	₩ -	₩ 14,865,008	₩ -	₩ -
	Hanon Systems Co., Ltd.	33,289,920	-	-	-
	Peaches Group Korea co., Ltd., DAE MYONG TECH ONE Co.,Ltd.	-	-	-	-
Associates		-	-		-
		₩ 33,289,920	₩ 14,865,008	₩ -	₩ -

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

<i>(in thousands of Korean won)</i>	2019	2018
Salaries	₩ 10,442,280	₩ 10,563,556
Post-employment benefits	1,540,649	1,860,976
	<u>₩ 11,982,929</u>	<u>₩ 12,424,532</u>

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

43. Credit Risk

The Group is exposed to credit risk when the following payments are not made from the counterparty by the payment date.

- Payment of trade receivables within the payment terms by customer.
- Contractual cash flows of debt instruments measured at amortized cost
- Contractual cash flow of debt instruments at fair value through other comprehensive income

Trade receivables

The Group 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.

Other financial assets measured at amortized cost

All of the other 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 loss. Management considers '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.

44. Changes in accounting policy

As explained in Note 2.2, the Group 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 consolidated statement of financial position on January 1, 2019. Details of adjustments recognized on adoption of Korean IFRS 1116 *Lease* are as follows:

On adoption of Korean IFRS 1116, the Group recognized 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 2.8%.

For leases previously classified as 'finance leases', the Group recognized the carrying amount of the lease asset and lease liability immediately before transition as the carrying amount of the right-of-use asset and the lease liability at the date of initial application. The measurement principles of Korean IFRS 1116 are only applied after that date.

(a) Practical expedients applied

Hankook Tire & Technology Co., Ltd. and Subsidiaries

Notes to the Consolidated Financial Statements

December 31, 2019 and 2018

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

- the use of a single discount rate to a portfolio of leases with reasonably similar characteristics
- reliance on previous assessments on whether leases are onerous – there were no onerous contracts as at January 1, 2019
- 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 exclusion of initial direct costs for the measurement of the right-of-use asset at the date of initial application, and
- the use of hindsight in determining the lease term where the contract contains options to extend or terminate the lease

The Group 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*.

(b) Measurement of lease liabilities

<i>(in millions of Korean won)</i>	2019
Operating lease commitments as of December 31, 2018	W 262,309,256
Discounted using the lessee's incremental borrowing rate of at the date of initial application	207,701,172
Add: finance lease liabilities recognized as at December 31, 2018	114,837,416
Less: short-term leases not recognized as a liability	(1,861,537)
Less: low-value leases not recognized as a liability	(739,257)
Add/(less): adjustments as a result of a different treatment of extension and termination options	12,373,612
Lease liability recognized as at January 1, 2019	332,311,406
Of which are:	
Current lease liabilities	49,297,896

Hankook Tire & Technology Co., Ltd. and Subsidiaries
Notes to the Consolidated Financial Statements
December 31, 2019 and 2018

Non-current lease liabilities	283,013,510
	₩ 332,311,406
	332,311,406

(c) Measurement of right-of-use assets

The associated right-of-use assets for property leases were measured on a retrospective basis as if the Korean IFRS 1116 had always been applied. Other right-of use assets were measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognized in the consolidated statement of financial position as at December 31, 2018. There were no onerous lease contracts that would have required an adjustment to the right-of-use assets at the date of initial application.

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

The change in accounting policy affected the following items in the consolidated statement of financial position on January 1, 2019:

- right-of-use assets: increase by ₩296,237,342 thousand
- Other assets: decrease by ₩5,260,921 thousand
- property, plant and equipment: decrease by ₩114,240,881 thousand
- lease receivables: increase by ₩40,738,450 thousand
- lease liabilities: increase by ₩217,473,990 thousand