HYUNDAI HEAVY INDUSTRIES HOLDINGS CO., LTD.

Separate Financial Statements

December 31, 2020 and 2019

(With Independent Auditors' Report Thereon)

Contents

KPMG SAMJONG

KPMG SAMJONG Accounting Corp.
152, Teheran-ro, Gangnam-gu, Seoul 06236
(Yeoksam-dong, Gangnam Finance Center 27th Floor)
Republic of Korea

Tel +82 (2) 2112 0100
Fax +82 (2) 2112 0101
www.kr.kpmg.com

Independent Auditors' Report

Based on a report originally issued in Korean

To the Shareholders and Board of Directors of

Hyundai Heavy Industries Holdings Co., Ltd.:

Opinion

We have audited the separate financial statements of Hyundai Heavy Industries Holdings Co., Ltd. ("the Company"), which comprise the separate statements of financial position as of December 31, 2020 and 2019, the separate statements of comprehensive income (loss), changes in equity and cash flows for the years then ended, and notes, comprising significant accounting policies and other explanatory information.

In our opinion, the accompanying separate financial statements present fairly, in all material respects, the separate financial position of the Company as of December 31, 2020 and 2019, and its separate financial performance and its separate cash flows for the years then ended in accordance with Korean International Financial Reporting Standards ("K-IFRS").

We also have audited, in accordance with Korean Standards on Auditing (KSAs), the Company's Internal Control over Financial Reporting as of December 31, 2020 based on the criteria established in Conceptual Framework for Designing and Operating Internal Control over Financial Reporting issued by the Operating Committee of Internal Control over Financial Reporting in the Republic of Korea, and our report dated March 17, 2021 expressed an unmodified opinion on the effectiveness of the Company's internal control over financial reporting.

Basis for Opinion

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

Emphasis of Matter

Without qualifying our opinion, we draw attention to following:
As described in Notes 1 and Note 38 to the separate financial statements, the Company established a new subsidiary (Hyundai Robotics Co., Ltd.) through a split-off the entire robot-related business except for investment segment in May 1, 2020 and converted to a holding company.

Key Audit Matter

Key audit matter is that matter that, in our professional judgment, was of most significance in our audit of the separate financial statements as of and for the year ended December 31, 2020. This matter was addressed in the context of our audit of the separate financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on this matter.

Assessment of impairment on investments in subsidiaries and associates

The management examines the possibility of impairment at the end of each reporting period and estimates the recoverable amount if there are any indicators of such impairment. As described in *Note 4(10)* to the separate financial statements, an impairment loss is recognized when the carrying amount exceeds the recoverable amount.

As of the December 31, 2020, the management estimates an impairment assessment on investment stocks with long-term impairment, such as a drop in stock prices and deteriorating earnings. For the impairment assessment, the recoverable amount of the target company was estimated, the recoverable amount is determined by the larger of the value-in-use and net fair value. Considering significant degree of judgment in estimating the recoverable amount, the likelihood of management bias and potential effects of the impairment on the financial statements, we identified the assessment of impairment of investments in subsidiaries and associates as a key audit matter.

The primary procedures we performed to address this key audit matter included the following:

- Testing the effectiveness of the design, implementation and operation of the management review control over the Company's impairment assessment process.
- Assessing the qualification and independence of the external valuation specialist engaged by the Company for the impairment assessment.
- Engaging our valuation specialists to assist us in evaluating the key assumptions used to determine the value-in-use which included the discount rate the valuation methodology and others.
- Comparing and analyzing the financial data used for impairment assessment and mid- to long-term business plans confirmed by the management.
- Comparing and analyzing the future cash flows forecasts prepared in prior year with the current year's performance to assess the Company's ability to accurately forecast.
- Evaluating the reliability of key assumptions used to estimate net fair value and the accuracy of calculations.

Other Matter

The procedures and practices utilized in the Republic of Korea to audit such separate financial statements may differ from those generally accepted and applied in other countries.

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

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

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

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

Auditors' Responsibilities for the Audit of the Separate Financial Statements

Our objectives are to obtain reasonable assurance about whether the separate financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with KSAs will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these separate financial statements.

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

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

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

The engagement partner on the audit resulting in this independent auditors' report is Won-Pyo Jeon.

KPMG Samjong Accounting Corp.

Seoul, Korea
March 17, 2021

This report is effective as of March 17, 2021, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying separate financial statements and notes thereto. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

HYUNDAI HEAVY INDUSTRIES HOLDINGS CO., LTD.

Separate Statements of Financial Position

As of December 31, 2020 and 2019

(In thousands of won)	***Note***		**2020**	**2019**
Assets				
Cash and cash equivalents	4,5,34,35	₩	295,436,714	962,120,992
Trade and other receivables	8,34,35,37		2,464,413	106,814,174
Contract assets	8,26,35		-	49,831,442
Inventories	9		-	46,871,732
Other current assets	10		1,607,350	12,040,149
Total current assets			299,508,477	1,177,678,489
Investments in subsidiaries and associates	11,12		7,241,055,619	7,164,677,735
Long-term financial assets	5,6,7,34,35		2,000	2,000
Long-term trade and other receivables	8,34,35,37		160,541	1,214,936
Property, plant and equipment	13		33,420,521	65,496,453
Right-of-use assets	14		125,257,126	128,112,880
Intangible assets	15		26,879,750	46,723,952
Other non-current assets	10		1,575,000	-
Total non-current assets			7,428,350,557	7,406,227,956
Total assets		₩	7,727,859,034	8,583,906,445

See accompanying notes to the separate financial statements

HYUNDAI HEAVY INDUSTRIES HOLDINGS CO., LTD.

Separate Statements of Financial Position, Continued

As of December 31, 2020 and 2019

(In thousands of won)	***Note***		**2020**	**2019**
Liabilities				
Short-term financial liabilities	5,16,21,34,35	₩	417,061,898	1,266,590,694
Trade and other payables	17,34,35,37		13,443,757	48,550,599
Short-term contract liabilities	26		1,206,996	15,343,910
Derivative liabilities	21,34,35		440,395	158,779
Current portion of lease liabilities	20,35		1,685,730	2,414,702
Short-term provisions	19		-	5,585,456
Current income tax liabilities			8,797,176	200,697,224
Total current liabilities			442,635,952	1,539,341,364
Long-term financial liabilities	5,16,34,35		1,573,796,432	1,018,455,688
Trade and other payables	17,34,35		-	27,885
Long-term contract liabilities	26		21,486,679	21,892,096
Liabilities for defined benefit plans	18		6,400,303	8,098,057
Derivatives liabilities	21,34,35		722,682	701,100
Long-term provisions	19		-	4,291,445
Non-current lease liabilities	20,35		125,829,803	125,543,346
Deferred tax liabilities	31		24,150,494	23,345,872
Total non-current liabilities			1,752,386,393	1,202,355,489
Total liabilities			2,195,022,345	2,741,696,853
Equity				
Common stock	22		81,433,085	81,433,085
Capital surplus	22		3,090,277,464	3,090,453,701
Capital adjustments	23		(489,546,525)	(489,546,525)
Accumulated other comprehensive income	24		(907,200)	(670,705)
Retained earnings	25		2,851,579,865	3,160,540,036
Total equity			5,532,836,689	5,842,209,592
Total liabilities and equity		₩	7,727,859,034	8,583,906,445

See accompanying notes to the separate financial statements

HYUNDAI HEAVY INDUSTRIES HOLDINGS CO., LTD.

Separate Statements of Comprehensive Income (Loss)

For the years ended December 31, 2020 and 2019

(In thousands of won, except share information)	**Note**		**2020**	**2019**
Sales	26,37	₩	375,932,399	492,651,093
Cost of sales	28,37		50,643,617	193,286,568
Gross profit			325,288,782	299,364,525
Selling, general and administrative expenses	27,28,34		24,474,800	51,723,552
Operating profit	5		300,813,982	247,640,973
Finance income	21,29,34		24,007,599	31,370,828
Finance costs	29,34		62,038,809	110,227,537
Other non-operating income	30		93,886	773,235,619
Other non-operating expenses	30		166,439,293	132,493,288
Profit before income tax			96,437,365	809,526,595
Income tax expense	31		10,004,732	218,668,297
Profit for the year			86,432,633	590,858,298
Other comprehensive loss	21,24,34			
Items that are or may be reclassified subsequently to profit:				
Effective portion of changes in fair value of cash flow hedges			(236,495)	(2,166,447)
Total items that are or may be reclassified subsequently to profit			(236,495)	(2,166,447)
Items that will not be reclassified to profit or loss:				
Actuarial losses			(625,270)	(1,270,075)
Total items that will not be reclassified to profit or loss			(625,270)	(1,270,075)
Other comprehensive income or loss for the year, net of income tax			(861,765)	(3,436,522)
Total comprehensive income for the year		₩	85,570,868	587,421,776
Earnings per share	32			
Basic earnings per share (in won)		₩	6,075	40,410

See accompanying notes to the separate financial statements

HYUNDAI HEAVY INDUSTRIES HOLDINGS CO., LTD.

Separate Statements of Changes in Equity

For the years ended December 31, 2020 and 2019

(In thousands of won)

		Common stock	Capital surplus	Capital adjustments	Accumulated other comprehensive income	Retained earnings	Total equity
Balance at January 1, 2019	₩	81,433,085	3,090,453,701	(489,546,525)	1,495,742	2,841,453,004	5,525,289,007
Total comprehensive income (loss) for the year							
Profit for the year		-	-	-	-	590,858,298	590,858,298
Effective portion of changes in fair value of cash flow hedges		-	-	-	(2,166,447)	-	(2,166,447)
Actuarial losses		-	-	-	-	(1,270,075)	(1,270,075)
Transactions with owners of the Company, recognized directly in equity							
Dividends		-	-	-	-	(270,501,191)	(270,501,191)
Balance at December 31, 2019	₩	81,433,085	3,090,453,701	(489,546,525)	(670,705)	3,160,540,036	5,842,209,592
Balance at January 1, 2020	₩	81,433,085	3,090,453,701	(489,546,525)	(670,705)	3,160,540,036	5,842,209,592
Total comprehensive income (loss) for the year							
Profit for the year		-	-	-	-	86,432,633	86,432,633
Effective portion of changes in fair value of cash flow hedges		-	-	-	(236,495)	-	(236,495)
Actuarial losses		-	-	-	-	(625,270)	(625,270)
Transactions with owners of the Company, recognized directly in equity							
Dividends		-	-	-	-	(270,501,192)	(270,501,192)
Acquisition of treasury stock		-	-	(124,266,342)	-	-	(124,266,342)
Retirement of treasury stock		-	-	124,266,342	-	(124,266,342)	-
Other		-	(176,237)	-	-	-	(176,237)
Balance at December 31, 2020	₩	81,433,085	3,090,277,464	(489,546,525)	(907,200)	2,851,579,865	5,532,836,689

See accompanying notes to the separate financial statements

HYUNDAI HEAVY INDUSTRIES HOLDINGS CO., LTD.

Separate Financial Statements of Cash Flows

For the years ended December 31, 2020 and 2019

(In thousands of won)	***Note***		**2020**	**2019**
Cash flows from operating activities				
Profit for the year		₩	86,432,633	590,858,298
Adjustments			(94,576,411)	(539,335,977)
Cash generated from operations	33		(8,143,778)	51,522,321
Interest received			2,539,572	2,786,981
Interest paid			(58,548,661)	(71,993,824)
Dividends received			310,784,039	228,877,463
Income taxes paid			(201,902,403)	(389,192)
Net cash provided by operating activities			44,728,769	210,803,749
Cash flows from investing activities				
Proceeds from collection of short-term other receivables			533,121	-
Proceeds from collection of long-term other receivables			1,144,249	140,000
Proceeds from investments in subsidiaries and associates			19,487,227	1,374,912,396
Proceeds from sale of property, plant and equipment			2,300	4,800
Acquisition of short-term other receivables			(609,700)	-
Acquisition of long-term other receivables			(992,500)	(166,859)
Acquisition of investments in subsidiaries and associates			(17,129,100)	(64,354,950)
Changes from split-off			(80,026,365)	-
Acquisition of property, plant and equipment			(20,520,114)	(13,981,551)
Acquisition of intangible assets			(3,212,718)	(36,561,404)
Net cash provided by (used in) investing activities			(101,323,600)	1,259,992,432
Cash flows from financing activities				
Proceeds from short-term financial liabilities			186,149,196	2,171,141,654
Proceeds from long-term financial liabilities			864,300,310	728,834,240
Repayment of short-term financial liabilities			(1,264,864,099)	(3,199,874,055)
Repayment of long-term financial liabilities			-	(50,000,000)
Payment of lease liabilities			(929,735)	(1,811,538)
Acquisition of treasury stock			(124,266,342)	-
Payment of dividends			(270,478,777)	(270,476,930)
Net cash used in financing activities			(610,089,447)	(622,186,629)
Effects of exchange rate changes on cash and cash equivalents			-	(66,000)
Net increase (decrease) in cash and cash equivalents			(666,684,278)	848,543,552
Cash and cash equivalents at January 1			962,120,992	113,577,440
Cash and cash equivalents at December 31		₩	295,436,714	962,120,992

See accompanying notes to the separate financial statements

1. Reporting Entity

Hyundai Heavy Industries Holdings Co., Ltd. (the "Company") was incorporated on April 1, 2017 through the split-off KOREA SHIPBUILDING & OFFSHORE ENGINEERING CO., LTD. (formerly Hyundai Heavy Industries Co., Ltd.) and is engaged in the manufacturing robots for industrial and LCD, investment business and others. The head office of the Company is located in Seoul, Republic of Korea.

As of December 31, 2020, the Company's major shareholders consist of Mong-Joon Chung (26.60%), National Pension Service Investment Management (10.72%), Ki-Sun Chung (5.26%), etc.

The Company established a new subsidiary "Hyundai Robotics Co., Ltd." through a split-off the entire robot-related business except for investment segments, in May 1, 2020 and converted to a holding company.

2. Basis of Preparation

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

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

The separate financial statements were authorized for issue by the Board of Directors on February 4, 2021 and will be submitted for approval to the stockholders' meeting to be held on March 25, 2021.

(1) Basis of measurement

The separate financial statements have been prepared on a historical cost basis except for the following material items in the statement of financial position:

- Derivative financial instruments are measured at fair value
- Financial assets at FVTPL are measured at fair value
- Liabilities for defined benefit plans are recognized at the net of the total present value of defined benefit obligations less the fair value of plan assets

(2) Functional and presentation currency

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

(3) Use of estimates and judgments

The preparation of the separate financial statements in conformity with K-IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

2. Basis of Preparation, Continued

(3) Use of estimates and judgments, continued

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

For the period ended December 31, 2020, the spread of the COVID-19 pandemic has materially affected the global economy. This may have negative impacts on productivity, decrease or delay in recognition of sales, or collection of outstanding accounts receivable, which could negatively affect the Company's financial position and financial performance. The significant accounting estimates and assumptions used in preparing the separate financial statements of the Company may be adjusted due to changes uncertainty under COVID-19. The ultimate impact from COVID-19 on the Company's business, financial position and financial performance may differ from the estimates recognized in the accompanying separate financial statements.

(i) Judgments

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the separate financial statements is included in the following notes:

- Note 11 – Classification of Subsidiaries - Whether or not the Company actually hold control;
- Note 20 – lease term - whether the Company is reasonably certain to exercise extension options; and
- Note 31 – Recognition of deferred tax liabilities - Possibility of disposal of subsidiaries investments

(ii) Assumptions and estimation uncertainties

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are included in the following notes:

- Note 11, 12 and 15 – Impairment test - key assumptions underlying recoverable amounts, including the recoverability of investments in subsidiaries, investments in associates and intangible assets;
- Note 18 – Measurement of defined benefit obligations - key actual assumptions;
- Notes 19, 36 – Recognition and measurement of provisions and contingencies - key assumptions about the likelihood and magnitude of an outflow of resources;
- Note 31 – Measurement of deferred tax

(iii) Measurement of fair value

A number of the Company's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities. The Company has an established control framework with respect to the measurement of fair values. This includes a valuation team that has overall responsibility for overseeing all significant fair value measurements, including Level 3 fair values, and reports directly to the CFO.

The valuation team regularly reviews significant unobservable inputs and valuation adjustments. If third party information, such as broker quotes or pricing services, is used to measure fair values, then the valuation team assesses the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of K-IFRS, including the level in the fair value hierarchy in which such valuations should be classified.

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

2. Basis of Preparation, Continued

(3) Use of estimates and judgements, continued

(iii) Measurement of fair value, continued

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

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

If the inputs used to measure the fair value of an asset or a liability might be categorized in different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement. The Company recognizes transfers between levels of the fair value hierarchy at the end of the reporting period during which the change has occurred.

Further information about the assumptions made in measuring fair values is included in *Note 35.*

3. Changes in Accounting Policies

The Company has initially adopted standards and amendments from January 1, 2020. These amendment which are effective from January 1, 2020 have no significant effect on the Company's separate financial statements.

(i) K-IFRS No. 1103 '*Business Combinations*' amendment (Definition of a business)

The amendment to K-IFRS No. 1103 specifies that, to be considered a business, an integrated set of activities and assets must include, at minimum, an input and a substantive process that together significantly contribute to the ability to create output. It is also clarified that a business need not include all the inputs or processes to create output. This amendment has no significant effect on the Company's separate financial statements.

(ii) K-IFRS No. 1107 '*Financial Instruments: Disclosures*', K-IFRS No. 1109 '*Financial Instruments*', K-IFRS No. 1039 '*Financial Instruments: Recognition and Measurement*' amendments (Interest rate benchmark reform)

These amendments to K-IFRS No. 1109 and K-IFRS No. 1039 provide an exception for all hedging relationships directly affected by interest rate benchmark reform. A hedging relationship is affected by interest rate benchmark reform if the reform gives rise to uncertainties about the timing or the amount of interest rate benchmark-based cash flows of the hedged item or the hedging instrument. The Company has interest rate hedging relationships, but the amendments have no significant effect on its separate financial statements.

3. Changes in Accounting Policies, Continued

(iii) K-IFRS No. 1001 '*Presentation of Financial Statements*', K-IFRS No. 1008 '*Accounting Policies, Changes in Accounting Estimates and Errors*' amendments (Definition of material)

These amendments provide a new definition of material. According to the new definition, 'information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general-purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity'.

These amendments clarify that material is determined by the nature or size of the information, individually or in combination with other information, in the context of its financial statements. The information is material if it is reasonably expected that the misstatement of information will influence the decisions of the primary users. These amendments have no significant effect on the Company's separate financial statements.

(iv) COVID-19-Related Rent Concession (Amendment to K-IFRS No. 1116 '*Lease*')
These amendments introduce a practical expedient for lessees – i.e. a lessee is not required to assess whether eligible rent concessions that are a direct consequence of COVID-19 pandemic are lease modification. These rent concessions have to meet all of the criteria to qualify for the practical expedient, and if they were not lease modifications, a lessee that applies the practical expedient accounts for them in accordance with other applicable guidance. This amendment is effective for periods beginning on or after June 1, 2020, with earlier application permitted. This amendment has no significant impact on the Company's separate financial statements

(v) Conceptual Framework for Financial Reporting (2018)

The conceptual framework is not an accounting standard, and any contents of the conceptual framework overrides any accounting standards or its requirements. The purpose of the conceptual framework is to assist the Korea Accounting Standards Board to establish and amend K-IFRS and help preparers to develop consistent accounting policies when there are no accounting standards to apply. It also assists all parties to understand and interpret the accounting standards.

The revised conceptual framework includes some new concepts, suggests changes to the definition and recognition criteria of assets and liabilities, and clarifies some important concepts. This amendment has no significant effect on the Company's separate financial statements.

4. Significant Accounting Policies

The significant accounting policies applied by the Company in the preparation of its separate financial statements are included below and the Company has consistently applied the accounting policies to all period presented in these separate financial statements, changes in accounting policies described in *Note 3*.

(1) Subsidiaries and Equity-accounted investees in the separate financial statements

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

(2) Cash and cash equivalents

Cash and cash equivalents comprise cash balances and call deposits with maturities of three months or less from the acquisition date that are subject to an insignificant risk of changes in their fair value, and are used by the Company in the management of its short-term commitments. Equity investments are excluded from cash equivalents unless they are, in substance, cash equivalents, for example in the case of preference shares when it has a short maturity with a specified redemption date.

Cash and cash equivalents as of December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Cash	₩	-	36
Current deposit		-	138
MMDA and others		295,437	961,947
	₩	295,437	962,121

(3) Inventories

The cost of inventories is based on the moving-average method with the exception of cost of materials-in-transit, which is determined on the specific identification method. Cost of inventories includes expenditures incurred in acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition.

Inventories are measured at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses. The amount of any write-down of inventories to net realizable value and all losses of inventories are recognized as an expense in cost of sales in the period in which the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realizable value, are recognized as a reduction in the amount of inventories recognized as an expense in cost of sales in the period in which the reversal occurs.

4. Significant Accounting Policies, Continued

(4) Non-derivative financial assets

1) Recognition and Initial Measurements

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

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

2) Classification and subsequent measurement

(i) Financial assets
On initial recognition, a financial asset is classified as measured at: amortized cost; FVOCI-debt investment; FVOCI – equity investment; or FVTPL.

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

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL:
- It is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:
- It is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- Its contractual terms give rise on specified dates to cash flows that are solely payment of principal and interest on the principal amount outstanding.

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

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

4. Significant Accounting Policies, Continued

(4) Non-derivative financial assets, continued

2) Classification and subsequent measurement, continued

(ii) Financial assets – Business model assessment

The Company makes an assessment of the objective of the business model in which a financial asset is held at portfolio level because this best reflects the way the business is managed, and information is provided to management. The information considered includes:

- The stated policies and objectives for the portfolio and the operation of those policies in practice. These include whether management's strategy focuses on earning contractual interest income, maintaining a particular interest rate profile, matching the duration of the financial assets to the duration of any related liabilities or expected cash outflows or realizing cash flows through the sale of the assets;
- How the performance of the portfolio is evaluated and reported to the Company's management;
- The risks that affect the performance of business model (and the financial assets held within that business model) and how those risks are managed;
- How managers of the business are compensated – e.g. whether compensation is based on the fair value of the assets managed or the contractual cash flows collected; and
- The frequency, volume and timing of sales of financial assets in prior periods, the reasons for such sales and expectations about future sales activity.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with the Company's continuing recognition of the assets.

Financial assets that are held for trading or are managed and whose performance is evaluated on a fair value are measured at FVTPL.

(iii) Financial assets – Assessment whether contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, 'principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and cost (e.g. liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Company considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition.

In making this assessment, the Company considers:
- Contingent events that would change the amount or timing of cash flow;
- Terms that may adjust the contractual coupon rate, including variable-rate features;
- Prepayment and extension features; and
- Terms that limit the Company's claim to cash flows from specified assets

4. Significant Accounting Policies, Continued

(4) Non-derivative financial assets, continued

2) Classification and subsequent measurement, continued

(iii) Financial assets – Assessment whether contractual cash flows are solely payments of principal and interest, continued

A prepayment feature is consistent with the solely payments of principal and interest criterion if the prepayment amount substantially represents unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for early termination of the contract.

Additionally, for a financial asset acquired at a discount or premium to its contractual par amount, a feature that permits or requires prepayment at an amount that substantially represents the contractual par amount plus accrued (but unpaid) contractual interest (which may also include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

(iv) Financial assets: Subsequent measurement and gains and losses

Financial assets at FVTPL	These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss.
Financial assets at amort ized cost	These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognized in profit and loss. Any gain or loss on derecognition is recognized in profit or loss
Debt investments at FVOCI	These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognized in profit and loss. Other net gain and losses are recognized in OCI. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.
Equity investments at FVOCI	These assets are subsequently measured at fair value. Dividends are recognized as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognized in OCI and are never reclassified to profit or loss.

4. Significant Accounting Policies, Continued

(4) Non-derivative financial assets, continued

3) Derecognition

The Company derecognizes a financial asset when the contractual rights to the cash flow from financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which the Company neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset

The Company enters into transactions whereby it transfers assets recognized in its statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets. In these cases, the transferred assets are not derecognized.

4) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, the Company currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

4. Significant Accounting Policies, Continued

(5) Derivative financial instruments

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

1) Hedge accounting
The Company holds forward exchange contracts, interest rate swaps and other derivative contracts to manage interest rate risk, foreign exchange risk. The Company designated derivatives as hedging instruments to hedge the risk of changes in the fair value of assets, liabilities or firm commitments (a fair value hedge) and foreign currency risk of highly probable forecasted transactions or firm commitments (a cash flow hedge).

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

(i) Fair value hedge

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

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

(ii) Cash flow hedge

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

If the hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, terminated, exercised, or the designation is revoked, then hedge accounting is discontinued prospectively. The cumulative gain or loss on the hedging instrument that has been recognized in other comprehensive income is reclassified to profit or loss in the periods during which the forecasted transaction occurs.

2) Other derivative financial instruments
Changes in the fair value of other derivative financial instrument not designated as a hedging instrument are recognized immediately in profit or loss.

4. Significant Accounting Policies, Continued

(6) Impairment of financial assets

(i) Financial instruments and contract assets

The Company recognized loss allowances for expected credit losses ("ECL") on;

- financial assets measured at amortized cost; and
- contract assets defined in K-IFRS No.1115

The Company measures loss allowances at an amount equal to lifetime ECLs, except for the following, which are measured at 12-month ECLs;

- debt securities that are determined to have low credit risk at the reporting date; and
- other debt securities and bank balances for which credit risk (i.e. the risk of default occurring over the expected life of the financial instrument) has not increased significantly since initial recognition

Loss allowances for trade receivables and contract assets are always measured at an amount equal to lifetime ECLs.

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Company considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Company's historical experience and informed credit assessment and including forward-looking information.

The Company considers a financial asset to be in default when:

- the borrower is unlikely to pay its credit obligations to the Company in full, without recourse by the Company to actions such as realizing security (if an is held); or
- past due of the financial asset is significantly increased

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument.

12-month ECLs are the portion of ECLs that result from default events that are possible within the 12 months after the reporting date (or a shorter period if the expected life of the instrument is less than 12 months).

4. Significant Accounting Policies, Continued

(6) Impairment of financial assets, continued

(ii) Measurement of ECLs

ECLs are probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cast flows that the Company expects to receive). ECLs are discounted at the effective interest rate of financial assets.

The longest period considered in measuring ELCs is the maximum contract period during which the Company is exposed to credit risk.

(iii) Credit-impaired financial assets

At each reporting date, the Company assesses whether financial assets carried at amortized cost and debt securities at FVOCI are credit-impaired. A financial asset is 'credit-impaired' when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable data:

- significant financial difficulty of the borrower or issuer;
- a breach of contract such as a default or being past due;
- the restructuring of a loan or advance by the Company on terms that the Company would not consider otherwise;
- it is probable that the borrower will enter bankruptcy or other financial reorganization; or
- the disappearance of an active market for a security because of financial difficulties.

(iv) Presentation of allowance for ECL in the statement of financial position

Loss allowance for financial assets measured at amortized cost and contract assets are deducted from the gross carrying amount of the assets and presented separately using an allowance account. Impairment losses related to trade and other receivables and contract assets, from the materiality perspective, were included in 'Selling, general and administration expenses' or 'Other non-operating expenses' in the separate statements of comprehensive income, instead of being presented as a separate account. Also, impairment losses on other financial assets are included in 'Finance costs' and not presented as a separate account.

Loss allowances for financial assets measured at amortized cost are deducted from the gross carrying amount of the assets. For debt securities at FVOCI, the loss allowance is charged to profit or loss and is recognized in OCI.

4. Significant Accounting Policies, Continued

(6) Impairment of financial assets, continued

(v) Write-off

The gross carrying amount of a financial asset is written off when the Company has no reasonable expectation of recovering a financial asset in its entirety or a portion thereof. The Company expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with the Company's procedures for recovery of amounts due.

(7) Property, plant and equipment

Property, plant and equipment are initially measured at cost and after initial recognition, are carried at cost less accumulated depreciation and accumulated impairment losses. The cost of property, plant and equipment includes expenditures arising directly from the construction or acquisition of the asset, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located. Subsequent to initial recognition, an item of property, plant and equipment shall be carried at its cost less any accumulated depreciation and any accumulated impairment losses.

Property, plant and equipment, except for land, are depreciated on a straight-line basis over estimated useful lives that appropriately reflect the pattern in which the asset's future economic benefits are expected to be consumed. A component that is significant compared to the total cost of property, plant and equipment is depreciated over its separate useful life. Gains and losses on disposal of an item of property, plant and equipment are determined by comparing the proceeds from disposal with the carrying amount of property, plant and equipment and are recognized in profit or loss.

The useful lives of property, plant and equipment are as follows:

	Useful lives (years)
Buildings	45
Structures	40
Machinery	10~19
Vehicles	5~14
Tools, furniture and fixtures	3~9

Depreciation methods, useful lives and residual values are reviewed at the end of each reporting period and adjusted, if appropriate. The change is accounted for as a change in an accounting estimate.

4. Significant Accounting Policies, Continued

(8) Intangible assets

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

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

The useful lives of intangible asset are as follows:

	Useful lives (years)
Capitalized development costs	5
Trademark rights	Indefinite

Useful lives and the amortization methods for intangible assets with finite useful lives are reviewed at the end of each reporting period. The useful lives of intangible assets that are not being amortized are reviewed at the end of each reporting period to determine whether events and circumstances continue to support indefinite useful life assessments for those assets. Changes are accounted for as changes in accounting estimates.

(i) Research and development
Expenditures on research activities, undertaken with the prospect of gaining new scientific or technical knowledge and understanding, are recognized in profit or loss as incurred. Development expenditures are capitalized only if development costs can be measured reliably, the product or process is technically and commercially feasible, future economic benefits are probable, and the Company intends to and has sufficient resources to complete development and to use or sell the asset. Other development expenditures are recognized in profit or loss as incurred.

(ii) Subsequent expenditures
Subsequent expenditures are capitalized only when they increase the future economic benefits embodied in the specific asset to which it relates. All other expenditures, including expenditures on internally generated goodwill and brands, are recognized in profit or loss as incurred.

(9) Capitalized borrowing costs

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

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

4. Significant Accounting Policies, Continued

(10) Impairment of non-financial assets

The carrying amounts of the Company's non-financial assets, other than assets arising from contract assets recognized from revenue from customers, employee benefits, inventories, deferred tax assets and non-current assets held for sale, are reviewed at the end of the reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Intangible assets that have indefinite useful lives or that are not yet available for use, irrespective of whether there is any indication of impairment, are tested for impairment annually by comparing their recoverable amount to their carrying amount.

For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets ("CGUs"). The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell.

The value in use is estimated by applying a pre-tax discount rate that reflect current market assessments of the time value of money and the risks specific to the asset or CGU for which estimated future cash flows have not been adjusted, to the estimated future cash flows expected to be generated by the asset or CGU.

An impairment loss is recognized in profit or loss if the carrying amount of an asset or a CGU exceeds its recoverable amount.

Any impairment identified at the CGU level will reduce the carrying amount of the assets in the CGU on a pro rata basis. An impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount.

An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

(11) Non-derivative financial liabilities

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

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

(ii) Other financial liabilities
Non-derivative financial liabilities other than financial liabilities at fair value through profit or loss are classified as other financial liabilities. At the date of initial recognition, other financial liabilities are measured at fair value minus transaction costs that are directly attributable to the acquisition. Subsequent to initial recognition, other financial liabilities are measured at amortized cost using the effective interest method.

(iii) Elimination of financial liabilities
The Company derecognizes a financial liability from the separate statement of financial position when it is extinguished (i.e. when the obligation specified in the contract is discharged, cancelled or expires).

(12) Employee benefits

(i) Short-term employee benefits

Short-term employee benefits are employee benefits that are due to be settled within 12 months after the end of the period in which the employees render the related service. When an employee has rendered service to the Company during an accounting period, the Company recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service.

(ii) Other long-term employee benefits

Other long-term employee benefits include employee benefits that are settled beyond 12 months after the end of the period in which the employees render the related service. The Company's net obligation in respect of long-term employee benefits is the amount of future benefit that employees have earned in return for their service in the current and prior periods. That benefit is discounted to determine its present value. Remeasurements are recognized in profit or loss in the period in which they arise.

(iii) Retirement benefits: defined benefit plans

The Company's net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current period, discounting that amount and deducting the fair value of any plan assets.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method. When the calculation results in a potential asset for the Company, the recognized asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan. To calculate the present value of economic benefits, consideration is given to any applicable minimum funding requirements.

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in OCI. The Company determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset), taking into account any changes in the net defined benefit liability (asset) during the period as a result of contributions and benefit payments.

Net interest expense and other expenses related to defined benefit plans are recognized in profit or loss. When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognized immediately in profit or loss. The Company recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

(iv) Termination benefits

Termination benefits are expensed at the earlier of when the Company can no longer withdraw the offer of those benefits and when the Company recognizes costs for a restructuring. If benefits are not expected to be settled wholly within 12 months of the end of the reporting period, then they are discounted.

4. Significant Accounting Policies, Continued

(13) Provisions

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

The risks and uncertainties that inevitably surround many events and circumstances are taken into account in reaching the best estimate of a provision. Where the effect of the time value of money is material, provisions are determined at the present value of the expected future cash flows.

Where some or all of the expenditures required to settle a provision are expected to be reimbursed by another party, the reimbursement shall be recognized when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation. The reimbursement shall be treated as a separate asset.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimates. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision is reversed.

The Company generally provides a warranty relating to product defects for a specified period of time after sales and accrues estimated costs as provision for product warranty, which may occur due to product liability suits. A provision shall be used only for expenditures for which the provision was originally recognized.

A provision for onerous contracts is measured at the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract, if unavoidable costs arising from the contractual obligations exceed the benefits expected to arise from the contract. Before a provision is established, the Company recognizes any impairment loss on the assets associated with that contract.

(14) Foreign currencies

Transactions in foreign currencies are translated to the respective functional currencies of the Company at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are retranslated to the functional currency using the reporting date's exchange rate. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are retranslated to the functional currency at the exchange rate at the date that the fair value was determined.

Foreign currency differences arising on retranslation are recognized in profit or loss, except for differences arising on the retranslation of available-for-sale equity instruments, a financial liability designated as a hedge of the net investment in a foreign operation, or qualifying cash flow hedges, which are recognized in other comprehensive income. Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction.

(15) Equity capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issuance of ordinary shares and share options are recognized as a deduction from equity, net of any tax effects.

When the Company repurchases its share capital, the amount of the consideration paid is recognized as a deduction from equity and classified as treasury shares. The profits or losses from the purchase, disposal, reissue, or retirement of treasury shares are not recognized as current profit or loss. If the Company acquires and retains treasury shares, the consideration paid or received is directly recognized in equity.

4. Significant Accounting Policies, Continued

(16) Revenue from contracts with customers

(i) Supply goods
In addition to the supply of goods (robot sales), the Company manufactures and supplies the installation service of the robot, and in the case of general contracts, it does not correspond to the performance obligation satisfied over time, so the Company recognizes revenue from the contracts as performance obligation at a point in time. The time when performance obligations are fulfilled is when the assets held by the sector are transferred to the customer and controlled by the customer, and the right to claim payment, ownership, physical possession, transfer of significant risks and rewards, and whether or not the customer's acquisition is taken as an indicator before control we are determining when to fulfill our performance obligations.

(ii) Dividends
Dividends from subsidiaries and associates are recognized in profit or loss when the right to receive them is established.

(iii) Construction contracts
The Company recognizes revenue from construction contracts at the end of each reporting period according to the progress of the transaction. The progress rate is determined based on the cumulative input cost, which is the degree of work execution.

(iv) Service
In the case of a contract that lends intangible rights, it is a performance obligation satisfied over time, and the Company applies a practical expedient that recognizes revenue at the amount of the claim.

(17) Lease

At inception of a contract, the Company assesses whether a contract is, or contains a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Company uses the definition of a lease in *K-IFRS No.1116*.

(i) As a lessee

At commencement or on modification of a contract that contains a lease component, the Company allocates the consideration in the contract to each lease component on the basis of tis relative stand-alone prices. However, for the leases of property the Company has elected not to separate non-lease components and account for the lease and non-lease components as a single lease component.

The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

4. Significant Accounting Policies, Continued

(17) Lease, continued

(i) As a lessee, continued

The right-of-use asset is subsequently depreciated using the straight-line method from the commencement date to the end of the lease term, unless the lease transfers ownership of the underlying asset to the Company by the end of the lease term or the cost of the right-of-use asset will be depreciated over the useful life of the underlying asset, which is determined on the same basis as those of property and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate as the discount rate.

The Company determines its incremental borrowing rate by obtaining interest rates from various external financing sources and makes certain adjustments to reflect the terms of the lease and type of the asset leased.

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

- fixed payments, including in-substance fixed payments;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable under a residual value guarantee; and
- the exercise price under a purchase option that the Company is reasonably certain to exercise, lease payments in an optional renewal period if the Company is reasonably certain to exercise an extension option, and penalties for early termination of a lease unless the Company is reasonably certain not to terminate early.

The lease liability is measured at amortized cost using the effective interest method. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, if there is a change in the Company's estimate of the amount expected to be payable under a residual value guarantee, if the Company changes its assessment of whether it will exercise a purchase, extension or termination option or if there is a revised in-substance fixed lease payment.

When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero. The Company presents right-of-use assets that do not meet the definition of investment property in 'property, plant and equipment' and lease liabilities in 'lease liabilities' in the statement of financial position.

- *Short-term leases and lease of low-value assets*

The Company has elected to recognize right-of-use assets and lease liabilities for lease of low-value assets and short-term leases, including buildings and fixtures. The Company recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

4. Significant Accounting Policies, Continued

(17) Lease, continued

(ii) As a lessor

At inception or on modification of a contract that contains a lease component, the Company allocates the consideration in the contract to each lease component on the basis of their relative stand-alone prices.

When the Company acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease.

To classify each lease, the Company makes an overall assessment of whether the lease transfers substantially all of the risks and rewards incidental to ownership of the underlying asset. If this is the case, then the lease is a finance lease; if not, then it is an operating lease. As part of this assessment, the Company considers certain indicators such as whether the lease is for the major part of the economic life of the asset.

When the Company is an intermediate lessor, it accounts for its interests in the head lease and the sub-lease separately. It assesses the lease classification of a sub-lease with reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. If a head lease is a short-term lease to which the Company applies the exemption described above, then it classifies the sub-lease as an operating lease.

If an arrangement contains lease and non-lease components, then the Company applies *K-IFRS No.1115* to allocate the consideration in the contract.

The Company applies the derecognition and impairment requirements in K-IFRS No.1109 to the net investment in the lease (See *Note 4(6)*). The Company further regularly reviews estimated unguaranteed residual values used in calculating the gross investment in the lease.

The Company recognizes lease payments received under operating leases as income on a straight-line basis over the lease term as part of 'other revenue'.

(18) Finance income and finance costs

The Company's finance income and finance costs are as follows:

- interest income;
- interest expense;
- the net gain or loss on financial assets at FVTPL;
- the net gain or loss on derivative financial instruments at FVOCI; and
- the foreign currency gain or loss on financial assets and financial liabilities

Interest income or expense is recognized using the effective interest method.

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

4. Significant Accounting Policies, Continued

(19) Income taxes

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that they relate to a business combination, or items recognized directly in equity or in other comprehensive income.

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

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

The Company recognizes a deferred tax asset for unused tax loss, tax credit and deductible temporary differences, to the extent that it is probable that taxable profit will be available against which the unused tax loss, tax credit and deductible temporary differences can be utilized. Future taxable profit is determined by the reversal of the related taxable temporary difference. If the taxable temporary difference is not sufficient to fully recognize the deferred tax asset, the reversal of the current temporary differences and the Company's business plan will be considered for future taxable profit.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and reduces the carrying amount to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized.

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

Deferred tax assets and liabilities are offset only if there is a legally enforceable right to offset the related current tax liabilities and assets, and they relate to income taxes levied by the same tax authority and they intend to settle current tax liabilities and assets on a net basis.

4. Significant Accounting Policies, Continued

(20) Earnings per Share

The Company presents basic earnings per share (EPS) data for its ordinary shares. Basic EPS is calculated by dividing the profit or loss attributable to ordinary stockholders of the Company by the weighted average number of ordinary shares outstanding during the period, adjusted for own shares held.

(21) Operating segments

The Company discloses information related to its operating segments on its separate financial statements in accordance with *K-IFRS No.1108, 'Operating Segments'*.

(22) New standards and interpretations not yet adopted

A number of new standards are effective for annual periods beginning after January 1, 2020 and earlier application is permitted; however, the Company has not early adopted the new or amended standards in preparing these separate financial statements.

- Interest Rate Benchmark Reform – Phase 2 (Amendments to *K-IFRS No.1109 'Financial Instruments'*, *K-IFRS No.1039 'Financial Instruments: Recognition and Measurement'*, *K-IFRS No.1107 'Financial Instruments: Disclosures'*, *K-IFRS No.1104 'Insurance Contracts'* and K-IFRS *No.1116 'Leases').*

The following amended standards and interpretation are not expected to have a significant impact on the Company's separate financial statements:

- COVID-19-Related Rent Concessions (Amendment to *K-IFRS No. 1116 'Leases'*).
- Property, Plant and Equipment : Proceeds before Intended Use (Amendments to *K-FIRS No. 1016 'Property, Plant and Equipment'*)
- Reference to Conceptual Framework (Amendment to *K-IFRS No. 1103 'Business Combinations')*
- Classification of Liabilities as Current or Non-current (Amendment to *K-IFRS No. 1001 'Presentation of Financial Statements'*).
- *K-IFRS No. 1117 'Insurance Contracts'* and Amendments to *K-IFRS No. 1117 ' Insurance Contracts'*.

5. Risk Management

The Company has exposure to the following risks from its use of financial instruments:

- Credit risk;
- Liquidity risk; and
- Market risk

This note presents information about the Company's exposure to each of the above risks, the Company's objectives, policies and processes for measuring and managing risk, and the Company's management of capital. Further quantitative disclosures are included throughout these separate financial statements.

(1) Financial risk management

1) Risk management framework

The Board of Directors has overall responsibility for the establishment and oversight of the Company's risk management framework.

The Company's risk management policies are established to identify and analyze the risks faced by the Company, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Company's activities. The Company, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Company's Audit Committee oversees how management monitors compliance with the Company's risk management policies and procedures, and reviews the adequacy of the risk management framework in relation to the risks faced by the Company. The Company's Audit Committee is assisted in its oversight role by Internal Audit. Internal Audit undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Audit Committee.

2) Credit risk

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

(i) Trade and other receivables and contract assets

The Company's exposure to credit risk is influenced mainly by the individual characteristics of each customer.

The Company establishes credit limits for each customer and each new customer is analyzed quantitatively and qualitatively before determining whether to utilize third party guarantees, insurance or factoring as appropriate.

The Company accounts for expected credit losses and their changes at the end of each reporting period in order to reflect changes in the credit risk since initial recognition of the financial asset in accordance with the expected credit loss model in relation to the impairment of the financial asset.

(ii) Investments

The Company limits its exposure to credit risk by investing only in liquid securities and only with counterparties that have high credit ratings. Management actively monitors credit ratings and given that the Company only has invested in securities with high credit ratings, does not expect a significant risk that any counterparty fails to meet its obligations.

(iii) Guarantees

The Company provides financial guarantees to subsidiaries, associates and third parties if necessary.

5. Risk Management, Continued

(1) Financial risk management, continued

3) Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Company's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Company's reputation.

The Company has historically been able to satisfy its cash requirements from cash flow from operations and debt and equity financing. To the extent that the Company does not generate sufficient cash flow from operations to meet its capital requirements, the Company may rely on other financing activities, such as external long-term borrowings and offerings of debt securities, equity-linked and other debt securities.

4) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange rates, interest rates and equity prices will affect the Company's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return.

The Company buys and sells derivatives, and also incurs financial liabilities, in order to manage market risks. All such transactions are carried out within the guidelines set by the Company. Generally, the Company seeks to apply hedge accounting in order to manage volatility in profit or loss.

- Interest rate risk

The Company hedges interest rate risk using interest rate swap for variable interest borrowings. As a result, the risk that changes in the value of variable interest-bearing bonds and loans will affect the Company's profit or loss is avoided.

5. Risk Management, Continued

(2) Capital management

The management's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Company monitors the liability to equity ratio and net borrowing to equity ratio, which the Company defines as total liabilities divided by total equity and net borrowing divided by total equity.

The Company's liability to equity ratio and net borrowing to equity ratio as of December 31, 2020 and 2019 are as follows:

(In millions of won, except equity ratio)		2020	2019
Total liabilities	₩	2,195,022	2,741,697
Total equity		5,532,837	5,842,210
Cash and deposits(*1)		295,439	962,123
Borrowings(*2)		1,963,516	2,241,236
Liability to equity ratio		39.67%	46.93%
Net borrowing to equity ratio(*3)		30.15%	21.89%

(*1) Cash and deposits consist of cash and cash equivalents and long-term financial instruments.
(*2) Discount on debentures is deducted from the par value of debentures.
(*3) Net borrowing represents borrowings net of cash and deposits.

The interest coverage ratio and basis of calculation for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won, except ratio)		2020	2019
A. Operating profit	₩	300,814	247,641
B. Interest		59,461	84,700
Interest coverage ratio (A/B)		5.06	2.92

6. Long-term Financial Assets

Long-term financial assets as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)		2020	2019
Financial instruments	₩	2	2

7. Restricted Financial Instruments

Financial instruments, which are restricted in use, as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)

Description		2020	2019	Restrictions
Long-term financial instruments	₩	2	2	Guarantee deposits for checking accounts

8. Trade and Other Receivables

(1) Trade and other receivables as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)		2020		2019	
		Current	Non-current	Current	Non-current
Trade receivables:					
Trade receivables	₩	-	-	104,039	-
Allowance for doubtful accounts		-	-	(2,263)	-
		-	-	101,776	-
Other receivables:					
Other account receivable		2,132	-	4,782	-
Accrued income		223	-	255	-
Guarantee deposits		109	161	1	1,215
		2,464	161	5,038	1,215
	₩	2,464	161	106,814	1,215

8. Trade and Other Receivables, Continued

(2) Contract assets as of December 31, 2019 is summarized as follows:

(In millions of won)		2019
Contract assets	₩	50,498
Allowance for doubtful accounts		(667)
	₩	49,831

9. Inventories

Inventories as of December 31, 2019 is summarized as follows:

(In millions of won)		2019		
		Acquisition cost	**Provision for inventory valuation**	**Carrying amount**
Merchandise	₩	3,843	(432)	3,411
Finished goods		3,129	-	3,129
Work-in-progress		22,093	(3,497)	18,596
Raw materials		21,680	(685)	20,995
Materials-in-transit		741	-	741
	₩	51,486	(4,614)	46,872

Losses on valuation of inventory amounting to ₩626 million and losses on valuation of inventory amounting to ₩2,670 million were added to the cost of sales for the years ended December 31, 2020 and 2019 respectively.

10. Other Assets

Other current assets as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)		2020		2019
		Current	**Non-current**	**Current**
Advance payments	₩	-	-	6,493
Prepaid expenses		1,607	1,575	5,547
	₩	1,607	1,575	12,040

11. Investments in Subsidiaries

(1) Investments in subsidiaries as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won, except percentage of ownership)

			2020		2019	
Company	**Location**	**Main business**	**Ownership (%)**	**Carrying amount**	**Ownership (%)**	**Carrying amount**
Hyundai Oilbank Co., Ltd.	Korea	Manufacturing of petroleum products	74.13	₩ 2,403,518	74.13	₩ 2,403,518
Hyundai Global Service Co., Ltd.	Korea	Engineering service	100.00	125,295	100.00	125,295
Hyundai Electric & Energy Systems Co., Ltd.(*1)	Korea	Manufacture and sale of electronic and electric products	37.22	323,348	37.22	323,348
Hyundai Construction Equipment Co., Ltd.(*1)	Korea	Manufacture and sale of machinery equipment for construction	33.12	427,819	33.12	584,358
Hyundai Future Partners Co., Ltd.	Korea	Management consulting business	100.00	5,000	100.00	5,000
Hyundai Robotics Investment (Shanghai) Co.,Ltd.(*2)	China	Sale of robot and service	-	-	100.00	10,121
Hyundai LNS Co.,Ltd.(*3)	Korea	Sale of logistics automation facilities	-	-	-	-
Hyundai Robotics Co., Ltd.(*4,5)	Korea	Manufacturing of industrial robots	90.00	237,038	-	-
Avikus Co., Ltd.(*6)	Korea	Development and sale of software for maritime autonomous surface ships	100.00	6,000	-	-
				₩ 3,528,018		₩ 3,451,640

(*1) Although ownership is less than 50%, as a result of comprehensive consideration of the stockholders' meeting and the shareholding structure of the two companies, the Company judged that it was decided that a majority of the voting rights could be exercised.
(*2) For the year ended December 31, 2020, the Company acquired an additional interest in Hyundai Robotics Investment (Shanghai) Co., Ltd. through participation in paid-in capital increase and sold entire interest to Hyundai Robotics Co., Ltd.
(*3) For the year ended December 31, 2020, the Company acquired 80.10% interest in Hyundai LNS Co., Ltd. through participation in new establishment, which was incorporated as a subsidiary, and sold entire interest to Hyundai Robotics Co., Ltd. (See *Note 37*)
(*4) Hyundai Robotics Co., Ltd. was newly established by split-off the entire robot-related business except for investment segment, in May 1, 2020. (See *Note 38*)
(*5) Hyundai Robotics Co., Ltd., a subsidiary, decided to issue a capital increase by allocation to a third party at board of director meeting on June 16. 2020. The procedures for paid-in capital increase has been completed and the Company's share ratio changed from 100% to 90%.
(*6) For the year ended December 31, 2020, the Company established a subsidiary Avikus Co., Ltd.

11. Investments in Subsidiaries, Continued

(2) Changes in investments in subsidiaries for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019
Beginning balance	₩	3,451,640	4,066,560
Additional acquisition		18,716	64,355
Disposal		(21,250)	(551,228)
Impairment		(156,539)	(128,047)
Changes from the split-off		235,451	-
Ending balance	₩	3,528,018	3,451,640

(3) Impairment assessment

The Company assesses at the end of reporting period to determine whether there is any indication of impairment. If any such indication exists, the Company estimate the recoverable amount of the asset.

1) Hyundai Oilbank Co., Ltd.
The recoverable amount of investments in subsidiaries as of December 31, 2020, was measured based on the calculation of the value in use. The value in use is measured by applying discount rate to future cash flow to be derived from continuing use of the asset. The recoverable amount of investments in subsidiaries is measured by the calculation of the value in use, and the value in use is calculated by estimating future cash flow based on 5-year business plan approved by the segment management.

Assumptions used in calculating the value in use as of December 31, 2020, are as follows:

(In percent)

	2020
Discount rate	8.07%
Period covered by cash flow forecast	5 years
Permanent growth rate	1.0%

The value in use as of December 31, 2020, was calculated by the following key assumptions.

(i) Discount rate is the weighted average of equity and debt and estimated by applying cost of equity using risk-free interest rate reflecting the credit quality of country at the assessment date and the beta of the company in the same industry and corporate bond rate considering the credit quality of the segment.
(ii) Future cash flow is estimated based on experience, oil price estimate of external appraisers, material operational consequence and business plan, and reflected inflation rate and investment plan.

As of December 31, 2020, the Company evaluated impairment loss of the subsidiary investment, so that no impairment loss was recognized as the book value of subsidiary investments didn't exceed the recoverable amount.

11. Investments in Subsidiaries, Continued

(3) Impairment assessment, continued

2) Hyundai Electric & Energy Systems Co., Ltd.
The recoverable amount of investments in subsidiaries as of December 31, 2020, was measured based on the calculation of the value in use. The value in use is measured by applying discount rate to future cash flow to be derived from continuing use of the asset. The recoverable amount of investments in subsidiaries is measured by the calculation of the value in use, and the value in use is calculated by estimating future cash flow based on 5-year business plan approved by the segment management.

Assumptions used in calculating the value in use as of December 31, 2020, are as follows:

(In percent)

	2020
Discount rate	10.75%
Period covered by cash flow forecast	5 years
Permanent growth rate	1.0%

The value in use as of December 31, 2020, was calculated by the following key assumptions.

(i) Discount rate is the weighted average of equity and debt and estimated by applying cost of equity using risk-free interest rate reflecting the credit quality of country at the assessment date and the beta of the company in the same industry and weighted average borrowing rate of the segment.
(ii) Future cash flow is estimated based on experience, material operational consequence and business plan, and reflected inflation rate and investment plan.

As of December 31, 2020, the Company evaluated impairment loss of the subsidiary investment, so that no impairment loss was recognized as the book value of subsidiary investments didn't exceed the recoverable amount.

11. Investments in Subsidiaries, Continued

(3) Impairment assessment, continued

3) Hyundai Construction Equipment Co., Ltd.

The recoverable amount of investments in subsidiaries as of December 31, 2020, was measured based on the calculation of the value in use. The value in use is measured by applying discount rate to future cash flow to be derived from continuing use of the asset. The recoverable amount of investments in subsidiaries is measured by the calculation of the value in use, and the value in use is calculated by estimating future cash flow based on 5-year business plan approved by the segment management.

Assumptions used in calculating the value in use as of December 31, 2020, are as follows:

(In percent)

	2020
Discount rate	10.56%
Period covered by cash flow forecast	5 years
Permanent growth rate	1.0%

The value in use as of December 31, 2020, was calculated by the following key assumptions.

(i) Discount rate is the weighted average of equity and debt and estimated by applying cost of equity using risk-free interest rate reflecting the credit quality of country at the assessment date and the beta of the company in the same industry and corporate bond rate considering the credit quality of the segment.
(ii) Future cash flow is estimated based on experience, forecast of external research institution, material operational consequence and business plan, and reflected inflation.

For the year ended December 31, 2020, the recoverable amount was estimated based on value in use as signs of asset impairment were found in the Hyundai Construction Equipment Co., Ltd. The amount exceeding recoverable amount was recognized as an impairment loss.

The details of the impairment assessment of subsidiary investments are as follows:

(In millions of won)

Company		2020 Carrying amount	Recoverable amount	Impairment loss
Hyundai Construction Equipment Co., Ltd.	₩	584,358	427,819	(156,539)

12. Investments in Associates

(1) Investments in associates as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won, except percentage of ownership)

			2020		2019	
Company	**Location**	**Main business**	**Ownership (%)**	**Carrying amount**	**Ownership (%)**	**Carrying amount**
Korea Shipbuilding & Offshore Engineering Co., Ltd.	Korea	Non-financial holding company	30.95	₩ 3,713,038	30.95	₩ 3,713,038

(2) Impairment assessment

For the year ended December 31, 2020, the impairment test on Kora Shipbuilding & Offshore Engineering Co., Ltd. was performed due to the indication of impairment. The recoverable amount is estimated based on present value of future cash flow (value in use) and net fair value. The recoverable amount of investments in associates was based on the CGU of subsidiaries of Korea Shipbuilding & Offshore Engineering Co., Ltd. The value in use of CGU is affected by key assumptions such as discount rate and permanent growth rate used in the discount cash flow methods.

Assumptions used in the estimate of the recoverable amount are as follows:

(In percent)

	2020
Discount rate	8.01% ~ 12.86%
Period covered by cash flow forecast	5 years
Permanent growth rate	1.0%

The value in use was calculated by the following key assumptions.

(i) Cash flow estimates of each subsidiary is based on experience, 5-year business plan considering material operation consequence and external forecast data. Cash flow estimates after the forecast period are based on permanent growth.

(ii) The weighted average of equity and debt and estimated by applying cost of equity using risk-free interest rate reflecting the credit quality of country at the assessment date and the beta of the company in the same industry and corporate bond rate considering the credit quality of the company.

As of December 31, 2020, the Company evaluated impairment loss of the associate investment, so that no impairment loss was recognized as the book value of associate investments didn't exceed the recoverable amount.

13. Property, Plant and Equipment

(1) Changes in property, plant and equipment for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020							
		Land	Buildings	Structures	Machinery and equipment	Vehicles	Tools, furniture and fixtures	Construction in-progress	Total
Beginning balance	₩	22,286	17,783	466	6,884	297	8,980	8,800	65,496
Acquisitions and other		-	385	56	86	46	1,218	24,643	26,434
Disposals		-	-	-	-	(5)	(8)	-	(13)
Depreciation		-	(144)	(1)	(172)	(13)	(799)	-	(1,129)
Changes from the split-off		(22,286)	(18,024)	(521)	(6,798)	(325)	(9,127)	(286)	(57,367)
Ending balance	₩	-	-	-	-	-	264	33,157	33,421
Acquisition cost		-	-	-	-	-	319	33,157	33,476
Accumulated depreciation		-	-	-	-	-	(55)	-	(55)

(In millions of won)		2019							
		Land	Buildings	Structures	Machinery and equipment	Vehicles	Tools, furniture and fixtures	Construction in-progress	Total
Beginning balance	₩	22,286	16,985	464	5,904	231	7,362	1,119	54,351
Acquisitions and other		-	1,208	4	1,536	99	3,534	7,681	14,062
Disposals		-	-	-	(72)	-	(3)	-	(75)
Depreciation		-	(410)	(2)	(484)	(33)	(1,913)	-	(2,842)
Ending balance	₩	22,286	17,783	466	6,884	297	8,980	8,800	65,496
Acquisition cost		22,286	19,088	470	8,222	487	17,284	8,800	76,637
Accumulated depreciation		-	(1,305)	(4)	(1,338)	(190)	(8,304)	-	(11,141)

(2) Construction-in-progress is related to the construction of R&D Center as of December 31, 2020.
(3) The cumulative amount of borrowing costs capitalization for the construction of R&D center is ₩460 million and the capitalization rate is 3.05%.

14. Right-of-use Assets

Changes in right-of-use assets for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020		
		Land	Buildings	Total
Beginning balance	₩	123,735	4,378	128,113
Additions and adjustment		971	5,693	6,664
Derecognition		-	(5,265)	(5,265)
Depreciation		-	(898)	(898)
Changes from the split-off		-	(3,357)	(3,357)
Ending balance	₩	124,706	551	125,257

(In millions of won)		2019		
		Land	Buildings	Total
Beginning balance	₩	-	1,424	1,424
Additions and adjustment		123,735	9,232	132,967
Derecognition		-	(4,556)	(4,556)
Depreciation		-	(1,722)	(1,722)
Ending balance	₩	123,735	4,378	128,113

15. Intangible Assets

(1) Changes in intangible assets for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020		
		Development costs	**Trademark rights**	**Total**
Beginning balance	₩	19,844	26,880	46,724
Acquisition and replacement		3,213	-	3,213
Amortization		(275)	-	(275)
Impairment(*)		(768)	-	(768)
Changes from the split-off		(22,014)	-	(22,014)
Ending balance	₩	-	26,880	26,880
Acquisition cost		-	26,880	26,880
Accumulated amortization		-	-	-
Accumulated impairment loss		-	-	-

(*) The Company recognized impairment losses for development costs about development of built-in robot for the year ended December 31, 2020.

(In millions of won)		2019		
		Development costs	**Trademark rights**	**Total**
Beginning balance	₩	13,721	-	13,721
Acquisition and replacement		9,682	26,880	36,562
Impairment(*)		(1,679)	-	(1,679)
Amortization		(1,880)	-	(1,880)
Ending balance	₩	19,844	26,880	46,724
Acquisition cost		45,242	26,880	72,122
Accumulated amortization		(23,115)	-	(23,115)
Accumulated impairment loss		(2,283)	-	(2,283)

(*) The Company discontinued develop projects and recognized impairment losses for development costs (about Development of large serial robot and others) that are unlikely to generate future economic benefits for the years ended December 31, 2019.

(2) Intangible asset depreciation expenses incurred for the years ended December 31, 2020 and 2019 are included as manufacturing costs.

16. Short-term and Long-term Financial Liabilities

(1) Short-term and long-term financial liabilities as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)

		2020		2019	
		Current	Non-current	Current	Non-current
Borrowings	₩	130,000	1,070,000	1,142,927	380,000
Debentures		260,000	505,000	80,000	640,000
Discount on debentures		(280)	(1,204)	(147)	(1,544)
Financial liabilities measured at FVTPL		27,342	-	43,811	-
	₩	417,062	1,573,796	1,266,591	1,018,456

(2) Short-term borrowings as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)

Type of borrowing	Lender	Annual Interest rate (%)		2020	2019
General loan	Daegu Bank and others	2.26~3.11	₩	80,000	320,000
Commercial paper	Hi Investment & Securities Co., Ltd.	3.75		50,000	130,000
Usance L/C	KEB Hana Bank and others	-		-	11,052
Short-Term Bond	Hi Investment & Securities Co., Ltd. and others	-		-	350,000
				130,000	811,052
Current portion of long-term borrowings				-	331,875
			₩	130,000	1,142,927

(3) Long-term borrowings as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)

Type of borrowing	Lender	Annual Interest rate (%)		2020	2019
General loan	Korea Development Bank and others	2.31~3.60	₩	1,070,000	711,875
Current portion of long-term borrowings				-	(331,875)
			₩	1,070,000	380,000

16. Short-term and Long-term Financial Liabilities, Continued

(4) Debentures as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)

Description	Issue	Maturity	Annual interest rate (%)		2020	2019	Guarantee
1 th-2 debenture	2015.03.03	2022.03.03	3.05	₩	70,000	70,000	debenture
3 th-1 debenture	2018.12.06	2020.12.06	2.81		-	80,000	debenture
3 th-2 debenture	2018.12.06	2021.12.06	3.12		220,000	220,000	debenture
4 th-1 debenture	2019.04.11	2021.04.09	2.51		40,000	40,000	debenture
4 th-2 debenture	2019.04.11	2022.04.11	2.70		160,000	160,000	debenture
5 th debenture	2019.06.04	2024.06.04	3.25		150,000	150,000	debenture
6 th debenture	2020.06.24	2023.06.23	3.70		45,000	-	debenture
7 th debenture	2020.10.16	2023.10.16	2.81		80,000	-	debenture
					765,000	720,000	
Discount on bonds					(1,484)	(1,691)	
Current portion of bonds payable					(260,000)	(80,000)	
Current portion of discount in bonds payable					280	147	
				₩	503,796	638,456	

(5) Aggregate maturities of the Company's borrowings and debentures as of December 31, 2020 are summarized as follows:

(In millions of won)

Periods		2020		
		Borrowings	Debentures	Total
Less than 1 year	₩	130,000	260,000	390,000
1 ~ 5 years		1,020,000	505,000	1,525,000
More than 5 years		50,000	-	50,000
	₩	1,200,000	765,000	1,965,000

16. Short-term and Long-term Financial Liabilities, Continued

(6) Changes in liabilities arising from financing activities for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)

			2020			
			Liabilities			Derivative liabilities (asset) used for hedging
			Borrowings	Debentures	Total	interest rate swaps - asset
Beginning balance		₩	1,522,927	718,308	2,241,235	(859)
Cash flows from financing activities	Borrowing		926,149	124,300	1,050,449	-
	Repayment		(1,184,864)	(80,000)	(1,264,864)	-
Non-cash flows	The effects of changes in foreign exchange rates		856	-	856	-
	Amortization of bond discounts		-	908	908	-
	Changes in fair value		-	-	-	(304)
Changes from the split-off			(65,068)	-	(65,068)	-
Ending Balance		₩	1,200,000	763,516	1,963,516	(1,163)

(In millions of won)

			2019			
			Liabilities			Derivative liabilities used for hedging
			Borrowings	Debentures	Total	interest rate swaps - asset
Beginning balance		₩	1,766,837	802,969	2,569,806	1,918
Cash flows from financing activities	Borrowing		2,551,142	348,835	2,899,977	-
	Repayment		(2,794,974)	(454,900)	(3,249,874)	-
Non-cash flows	The effects of changes in foreign exchange rates		(78)	19,433	19,355	-
	Amortization of bond discounts		-	1,971	1,971	-
	Changes in fair value		-	-	-	(2,777)
Ending Balance		₩	1,522,927	718,308	2,241,235	(859)

17. Trade and Other Payables

Trade and other payables as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)

		2020	2019	
		Current	Current	Non-current
Trade payables	₩	8,722	24,529	-
Other accounts payable		415	12,039	-
Accrued expenses		4,260	11,959	-
Dividends payable		47	24	-
Guarantee deposit		-	-	28
	₩	13,444	48,551	28

18. Employee Benefits

(1) Recognized liabilities for defined benefit obligations as of December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019
Present value of defined benefit obligations	₩	8,002	18,651
Fair value of plan assets		(1,602)	(10,553)
	₩	6,400	8,098

(2) Plan assets as of December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019
Retirement pension(*)	₩	1,602	10,514
Transfer to National Pension Fund		-	39
	₩	1,602	10,553

(*) The retirement pension is invested in interest guaranteed instrument as of December 31, 2020.

(3) Expenses recognized in profit or loss for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019
Current service costs	₩	1,622	1,899
Interest expenses on obligations		106	275
Expected return on plan assets		(90)	(220)
	₩	1,638	1,954

18. Employee Benefits, Continued

(4) Changes in the defined benefit obligations for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019
Beginning balance	₩	18,651	17,826
Current service costs		1,622	1,899
Interest expenses on obligations		106	275
Benefits paid		(1,321)	(3,858)
Transfers from related parties		793	967
Actuarial losses in other comprehensive income (loss):			
Financial assumption		420	461
Experience adjustment		346	1,081
Change from the split-off		(12,615)	-
Ending balance	₩	8,002	18,651

(5) Changes in the fair value of plan assets for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019
Beginning balance	₩	10,553	8,565
Benefits paid		(245)	(2,147)
Contributions paid into the plan		950	4,000
Expected return on plan assets		90	220
Actuarial loss in other comprehensive income		(36)	(85)
Changes from the split-off		(10,030)	-
Others		320	-
Ending balance	₩	1,602	10,553

The Company reviews the level of the fund each year, and takes the policy to preserve fund in the event of a loss to the fund.

(6) Expected payment date of the defined benefit obligations as of December 31, 2020 are as follows:

(In millions of won)

		Within 1 year	1 ~ 5years	5 ~ 10years	More than 10 years	Total
Expected payment	₩	83	346	574	4,550	5,553

18. Employee Benefits, Continued

(7) Principal actuarial assumptions as of December 31, 2020 and 2019 are as follows:

	2020	2019
Discount rate	2.60%	2.36%
Future salary growth rate	3.58%	1.11%~2.60%
Future mortality (Males, at age 45)	0.20%	0.20%

(8) Weighted average durations of defined benefit obligations as of December 31, 2020 and 2019 are as follows:

(In years)	2020	2019
Weighted average durations	14.20	11.80

(9) Reasonably possible changes as of December 31, 2020 and 2019 to the relevant actuarial assumption would have affected the defined benefit obligation by the amounts shown below.

(In millions of won)		2020		2019	
		Increase	Decrease	Increase	Decrease
Discount rate (1% movement)	₩	(216)	261	(1,210)	1,448
Future salary growth (1% movement)		245	(209)	1,306	(1,122)

19. Provisions

Changes in provisions for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020		
		Provision for product warranty	Provision for construction loss	Total
Beginning balance	₩	9,742	135	9,877
Additions		922	62	984
Utilization		(1,311)	-	(1,311)
Changes from the split-off		(9,353)	(197)	(9,550)
Ending balance	₩	-	-	-

(In millions of won)		2019		
		Provision for product warranty	Provision for construction loss	Total
Beginning balance	₩	6,024	-	6,024
Additions		8,033	135	8,168
Utilization		(4,315)	-	(4,315)
Ending balance	₩	9,742	135	9,877
Current		5,451	135	5,586
Non-current		4,291	-	4,291

20. Lease Liabilities

(1) Changes in lease liabilities for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019
Beginning balance	₩	127,958	1,424
Additions and adjustment		6,664	132,480
Payment of lease liabilities		(2,288)	(3,098)
Termination of lease liabilities		(5,294)	(4,581)
Interest on lease liabilities		3,865	1,733
Changes from the split-off		(3,389)	-
Ending balance	₩	127,516	127,958
Current		1,686	2,415
Non-current		125,830	125,543

(2) Cash outflow for lease liabilities as of December 31, 2020, are as follows:

(In millions of won)

		Carrying amount	Contractual cash flow	Less than 6 months	6 to 12 months	1 to 3 years	More than 3 years
Lease liabilities	₩	127,516	215,532	189	1,543	2,896	210,904

(3) Short-term lease and leases of low-value assets

The Company has elected practical expedient not to recognize right-of-use assets and lease liabilities for leases of low-value assets and short-term leases.

(4) Cash outflows for leases for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)

		Carrying amount	
		2020	2019
Payment of lease liabilities	₩	2,288	1,811
Short-term lease payment(*)		75	29
Leases payment of low-value assets(*)		25	44
Prepaid lease		-	487
Total	₩	2,388	2,371

(*) Included in cost of sales and selling, general and administrative expenses.

(5) Sub-Lease

The Company has provided sub-leases of some buildings, these contracts were classified as operating leases.

For the years ended December 31, 2020 and 2019, the Company provided sub-leases to Hyundai Future Partners Inc. and Korea Shipbuilding & Offshore Engineering Co., Ltd. The company recognized revenue of ₩35 million and ₩46 million.

21. Derivative Financial Instruments

The Company has entered into derivative instrument contracts with various banks to hedge the risk related to changes in interest rates and other risk. Derivatives are measured at fair value by using the forward exchange rate presented by contract counterparty and others. In addition, the Company has assessed the fair value as of December 31, 2020, as it satisfies the requirements for the intrinsic derivatives of the sell-off rights granted to stocks. The evaluation details as of December 31, 2020, are as follows:

(1) The description of derivative instrument and hedge accounting

Hedge accounting	Type	Description
Cash flow hedge	Interest rate swaps contracts	Hedges cash flow risk on interest rate fluctuation

(2) As of December 31, 2020, details of the derivatives entered into by the Company as follows:

(In millions of won)

Description	Type	Currency		Contract amount	Average maturities	Number of contracts
		Sell	Buy			
Cash flow hedge	Interest rate swaps contracts	3.28%	CD+1.45%	₩ 40,000	2024.06.11	1
For trading	Rights to request the sale(*1)	KRW	KRW	234,544	(*2)	1

(*1) The Company has granted a call option to Aramco Overseas Company B.V., which participated in the sale of its interest in Hyundai Oil Bank, a subsidiary (See *Note 36*).
(*2) Within 5 years from the date of issue. (or before IPO)

21. Derivative Financial Instruments, Continued

(3) Book value related to derivatives as of December 31, 2020 is as follows:

(In millions of won)

			Derivatives				Financial assets or liabilities at fair value through profit or loss			
			Assets		Liabilities		Assets		Liabilities	
Description	Type		Current	Non-current	Current	Non-current	Current	Non-current	Current	Non-current
Cash flow hedge	Interest rate swaps contracts	₩	-	-	440	723	-	-	-	-
For trading	Rights to request the sale (call option)		-	-	-	-	-	-	27,342	-
		₩	-	-	440	723	-	-	27,342	-

21. Derivative Financial Instruments, Continued

(4) Gain and loss on valuation and transaction of derivatives for the year ended December 31, 2020 are as follows:

(In millions of won)

Description	Type		Sales	Finance income	Finance costs	Other non-operating income	Other non-operating expenses	Other comprehensive income (loss)
Cash flow hedge	Interest rate swaps contracts	₩	-	-	-	-	-	(303)
For trading	Foreign exchange forward contracts		-	16,469	-	-	-	-
		₩	-	16,469	-	-	-	(303)

For the year ended December 31, 2020, the Company applies cash flow hedge accounting, for which the Company accounted the effective portion of the hedge amounting to (-)₩303 million, after netting off deferred tax effect of ₩67 million as gain (loss) on valuation of derivatives in accumulated other comprehensive income (loss).

The expected period of exposure to cash flow risk, where cash flow hedge accounting is applied, is approximately 4 years.

22. Capital and Capital Surplus

(1) Capital

The Company is authorized to issue 160,000,000 shares of capital stock (par value ₩5,000), and as of December 31, 2020 the number of issued common shares is 15,798,617 shares. For the year ended December 31, 2020, the Company retired 488,000 shares of treasury stocks. Due to retirement of shares, the total par value of shares issued does not agree with paid-in capital by ₩2,440 million.

(2) Capital surplus

Capital surplus as of December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Paid-in-capital in excess of par value	₩	3,090,454	3,090,454
Other capital surplus		(177)	-
Total	₩	3,090,277	3,090,454

23. Capital Adjustment

Capital adjustments consist of treasury stock. Treasury stocks as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)	2020			2019		
	Number of shares (in shares)		Book value	Number of shares (in shares)		Book value
Treasury stock(*)	1,664,931	₩	489,547	1,664,931	₩	489,547

(*) The fair value of Treasury stock amounts to ₩472,008 million and ₩562,747 million as of December 31, 2020 and 2019.

24. Accumulated Other Comprehensive Income

(1) Accumulated other comprehensive income as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)

		2020	2019
Loss on valuation of derivatives	₩	(907)	(671)

(2) Other comprehensive loss for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020			2019		
		Before tax amount	Tax effect	After tax amount	Before tax amount	Tax effect	After tax amount
Loss on valuation of derivatives	₩	(303)	67	(236)	(2,777)	611	(2,166)
Defined benefit plan actuarial losses		(802)	177	(625)	(1,628)	358	(1,270)
	₩	(1,105)	244	(861)	(4,405)	969	(3,436)

25. Retained Earnings

(1) Retained earnings as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)		2020	2019
Voluntary reserves	₩	219,186	219,186
Legal reserve(*)		40,717	27,050
Unappropriated retained earnings		2,591,677	2,914,304
	₩	2,851,580	3,160,540

(*) The Korean Commercial Code requires the Company to accumulate legal reserve an amount equal to at least 10% of cash dividends paid for each accounting period until the reserve reaches 50% of outstanding share capital and the Company had reached 50% of capital. The Legal reserve cannot be used for cash dividend purposes, but can only be used for capital transfer or loss compensation.

(2) Changes in retained earnings for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Beginning balance	₩	3,160,540	2,841,453
Profit for the year		86,432	590,858
Actuarial gains and losses		(625)	(1,270)
Dividends		(270,501)	(270,501)
Retirement of treasury stocks		(124,266)	-
Ending balance	₩	2,851,580	3,160,540

(3) Statements of appropriation of retained earnings for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
I. Unappropriated retained earnings			
Unappropriated retained earnings to be carried from previous year	₩	2,630,137	2,324,716
Actuarial loss		(625)	(1,270)
Retirement of treasury stocks		(124,266)	-
Profit for the year		86,432	590,858
		2,591,678	2,914,304
II. Transfer from voluntary reserves			
Substitution		-	-
III. Total (I + II)		2,591,678	2,914,304
IV. Appropriation of retained earnings			
Legal reserve		-	13,666
Voluntary reserve		-	-
Dividend		261,473	270,501
		261,473	284,167
V. Unappropriated retained earnings to be carried over to subsequent year	₩	2,330,205	2,630,137

26. Revenue

(1) Revenue streams

(In millions of won)		2020	2019
Revenue from contracts with customers	₩	65,148	263,774
Dividend profits		310,784	228,877
	₩	375,932	492,651

(2) Division of revenue

Regional information on revenue from contracts with customers is as follows:

(In millions of won)		2020	2019
Region:			
Republic of Korea	₩	29,223	147,323
North America		120	302
Asia		32,765	104,449
Europe		2,926	10,991
Others		114	709
	₩	65,148	263,774

(3) Timing of revenue recognition
Revenue form contracts with customers is divided into revenue recognized at a point in time and over time. Timing of revenue from contracts with customers is as follows:

(In millions of won)		2020	2019
Timing of revenue recognition			
Products transferred at a point in time	₩	55,651	256,358
Products and services transferred over time		9,497	7,416
	₩	65,148	263,774

(4) Contract balances
Receivables, contract assets and contract liabilities from contracts with customers as of December 31, 2020 and 2019 are as follows:

(In millions of won)		2020		2019	
		Current	Non-current	Current	Non-current
Trade Receivables	₩	-	-	101,776	-
Contract Assets		-	-	49,831	-
Contract Liabilities		1,207	21,487	15,344	21,892

(5) Construction contracts
Changes in order contracts for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Beginning balance	₩	15,950	-
New contract		17,494	18,078
Sales		(3,432)	(2,128)
Changes from the split-off		(30,012)	-
Ending balance	₩	-	15,950

26. Revenue, Continued

(6) Performance obligations and revenue recognition policies

1) Nature and timing of satisfaction of performance obligations

The Company has main business segment until the split-off date as follows: Robot segment which engages in the manufacturing and sale of industrial and LCD robots.

Contracts in Robot segment require an installment service at a customer site, as well as manufacturing and delivery of Robot (goods) until the split-off date. Generally, the contracts do not meet the conditions of 'the performance obligation satisfied over time', therefore, revenue from those contracts is recognized at a point in time.

The timing of satisfaction of performance obligations is when the goods are delivered to customers and the customers obtain control of the goods. The determination of the timing when the control is transferred to customer, is based on the entity's right to payment, the legal title, the physical possession, the significant risks and rewards of ownership and the acceptance by the customer.

Generally, the performance obligation is satisfied when the terms of trade such as CIF, FOB and DDP are met for transfer of the legal title in exports sales and when the product is delivered physically to customer in domestic sales respectively.

In the case of special contracts, the Company itself has no alternative use, and if the contract is terminated for the reasons of the customer or another party, the cost and expected profits can be charged for the part that has already been completed. You may be able to claim the insufficient amount after reselling the asset. Therefore, if an asset made by an entity has no substitute for the entity itself, and the entity has an enforceable claim for payment that has been completed so far, it is regarded as the performance obligation satisfied over time according to *K-IFRS No.1115*.

If the performance obligation is satisfied over time, the timing of performance is determined according to the progress measurement method that indicates the performance of the Company when control of the goods or services is transferred to the customer.

If performance is not reasonably measured, performance is measured within the cost incurred. The timing of the performance is determined as the timing of the input of the cost, according to the input method that recognizes revenue based on the input of the Company to fulfill the performance obligation compared to the total input expected to fulfill the performance obligation.

26. Revenue, Continued

(6) Performance obligations and revenue recognition policies, continued

2) Significant payment terms

For standard supply contracts in Robot segment, the consideration is generally paid within 60 days to 180 days from the date of the invoice until the split-off date. For multiple-element arrangements and turn-key contracts, the payment consists of retainer, intermediate payment and balance.

Standard supply contracts have no significant financing component. For multiple-element arrangements and turn-key contracts, the Company elects a practical expedient that do not adjust the promised amount of consideration for the effects of a significant financing component as the expectation on the period between when the Company transfers a promised good or service to a customer and when the customer pays for that good or service is one year or less.

3) Warranties

The length of the warranties varies across products and contracts, generally, the Company provides a warranty of 12 to 36 months after delivery of the product until the split-off date. The length is within the those of industries. A specified period described in warranty pasts, then the charge for A/S is not free. The warranties provide the assurance that a product complies with agreed-upon specifications only, and therefore, are not identified as a distinct performance obligation.

4) Determination method for transaction price, estimation of variable consideration, etc.

For the standard supply contract in Robot which forms a single performance obligation, the allocation of transaction price is not needed until the split-off date. However, for revenue recognition in the multiple-element arrangement or turn-key contract, the Company needs to allocate the transfer price to each of identified performance obligations.

The Company applies the adjusted market assessment approach which allocates the transaction price based on the estimated stand-alone selling price until the split-off date. If the stand-alone selling price is not directly observable, transaction price is determined by the expected cost-plus-a-margin approach by forecasting expected cost of satisfying a performance obligation and then adding an appropriate margin.

In Robot segment, return or refund occurs rarely until the split-off date as the product is a custom-designed robot for most customers. The estimates of expected returns are zero or minimal.

27. Selling, General and Administrative Expenses

Selling, general and administrative expenses for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019
Salaries	₩	6,310	11,302
Bonus		1,170	3,496
Post-employment benefit costs		1,219	2,630
Employee welfare		1,923	3,986
Depreciation		910	1,707
Bad debt expenses		1,261	2,330
Ordinary development costs		1,200	2,912
Advertising		580	1,698
Warranty expenses		922	8,033
Insurance		27	52
Office equipment		36	82
Supplies		30	37
Travel		399	1,367
Service contract expenses		194	741
Rent		188	143
Data processing		291	592
Entertainment		276	383
Taxes and dues		1,427	278
Commissions		4,663	6,279
Automobile maintenance		135	282
Sales commissions		1,199	2,666
Others		115	728
	₩	24,475	51,724

28. Nature of Expenses

The classification of expenses by nature for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019
Changes in inventories	₩	(12,320)	8,979
Purchase of inventories		49,531	141,088
Depreciation		1,129	2,842
Depreciation of right-of-use assets		898	1,722
Amortization		768	1,880
Employee benefits		13,377	32,049
Other expenses		21,735	56,450
	₩	75,118	245,010

Total expenses consist of cost of sales and selling, general and administrative expenses.

29. Finance Income and Finance Costs

Finance income and finance costs for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Finance income:			
Interest income	₩	2,541	2,965
Gain on valuation of financial instruments measured at fair value through profit or loss		16,469	-
Gain on disposal of financial instruments assets measured at fair value through profit or loss		-	414
Gain on foreign currency translation		-	727
Gain on foreign currency transactions		4,998	5,953
Gain on derivatives transactions		-	21,312
	₩	24,008	31,371
Finance costs:			
Interest expense	₩	59,461	84,700
Loss on foreign currency translation		-	1,171
Loss on foreign currency transactions		2,578	24,357
	₩	62,039	110,228

30. Other Non-operating Income and Other Non-operating Expenses

Other non-operating income and other non-operating expenses for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Other non-operating income:			
Gain on disposal of property, plant and equipment	₩	-	1
Gain on disposal of right-of-use assets		30	25
Gain on disposal of investments in subsidiaries		-	772,999
Miscellaneous income		64	211
	₩	94	773,236
Other non-operating expenses:			
Commissions	₩	7,251	624
Loss on sale of property, plant and equipment		11	71
Impairment loss on intangible assets		275	1,679
Impairment loss on investments in subsidiaries		156,539	128,047
Donation		2,300	1,437
Miscellaneous expenses		63	635
	₩	166,439	132,493

31. Income Tax Expense

(1) The components of income tax expense for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Current tax expense	₩	-	201,682
Adjustment for prior periods		10,002	-
Origination and reversal of temporary differences		804	16,017
Changes from the split-off		(1,045)	-
Income tax recognized in other comprehensive income		244	969
Total income tax expense	₩	10,005	218,668

(2) Income tax recognized directly in other comprehensive income for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Losses on valuation of derivatives	₩	67	611
Actuarial gains and losses		177	358
Income tax recognized directly in other comprehensive income	₩	244	969

Income taxes related to gains/losses on valuation of derivatives and defined benefit plan actuarial gains/losses are recognized in other comprehensive income and retained earnings.

(3) Reconciliation of effective tax rate for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Profit before income tax	₩	96,437	809,527
Income tax using the Company's statutory tax rate		22,876	212,258
Adjustment for:			
-Tax effect of non-deductible expenses		574	218
-Tax effect of non-taxable income		(61,347)	(54,817)
-Tax credits		-	(1,176)
-Tax effect of tax rate fluctuations		-	2,466
- Current adjustments for prior periods		-	24,503
- Temporary differences of deferred tax not recognized		39,592	35,212
- Adjustment for prior periods		10,002	-
- Changes from the split-off		(1,045)	-
- Others		(647)	4
Income tax expense	₩	10,005	218,668
Effective tax rate		10.37%	27.01%

31. Income Tax Expense, Continued

(4) Deferred tax expenses by origination and reversal of deferred tax assets and liabilities and temporary differences for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Deferred tax liabilities at the end of the period	₩	(24,150)	(23,346)
Deferred tax liabilities at the beginning of the period		(23,346)	(7,329)
Deferred tax effects by origination and reversal of temporary differences	₩	804	16,017

(5) As of December 31, 2020, the tax effects of temporary difference were calculated using the enacted statutory tax rate for the fiscal period when the temporary differences are expected to be reversed.

(6) The Company sets off a deferred tax asset against a deferred tax liability only if it relates to income taxes levied by the same taxation authority and has a legally enforceable right to set off current tax assets against current tax liabilities.

(7) Changes in deferred tax assets (liabilities) for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020		
		Beginning balance	**Change**	**Ending balance**
Derivatives	₩	9,828	(3,813)	6,015
Investments in subsidiaries and associates(*)		(37,603)	-	(37,603)
Property, plant and equipment		(484)	479	(5)
Defined benefit obligations		(97)	630	533
Foreign currency evaluation		96	(96)	-
Others		4,516	(5,678)	(1,162)
		(23,744)	(8,478)	(32,222)
Loss carried forward		-	7,986	7,986
Carried forward tax credit		398	(312)	86
	₩	(23,346)	(804)	(24,150)

(*) As of December 31, 2020, the tax effects of temporary difference were calculated using the enacted statutory tax rate for the fiscal period when the temporary differences are expected to be reversed.

(In millions of won)		2019		
		Beginning balance	**Change**	**Ending balance**
Derivatives	₩	600	9,228	9,828
Investments in subsidiaries and associates(*)		(16,463)	(21,140)	(37,603)
Property, plant and equipment		(352)	(132)	(484)
Defined benefit obligations		-	(97)	(97)
Foreign currency evaluation		(4,410)	4,506	96
Others		2,976	1,540	4,516
		(17,649)	(6,095)	(23,744)
Loss carried forward		9,828	(9,828)	-
Carried forward tax credit		492	(94)	398
	₩	(7,329)	(16,017)	(23,346)

(*) As of December 31, 2019, the tax effects of temporary difference were calculated using the enacted statutory tax rate for the fiscal period when the temporary differences are expected to be reversed.

31. Income Tax Expense, Continued

(8) Timing of recover and settlement of deferred tax assets (liabilities) as of December 31, 2020 and 2019, are as follow:

(In millions of won)

		2020	2019
Deferred tax assets (liabilities)			
Deferred tax assets that are expected to settle within 1 year	₩	9,876	6,530
Deferred tax liabilities that are expected to settle after 1 year		(34,026)	(29,876)
	₩	(24,150)	(23,346)

(9) The details of temporary difference that is not recognized as deferred tax liabilities as of December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019	Reason
Deferred tax liabilities				
Investments in subsidiaries and associates	₩	(256,320)	(295,912)	Not recognized in accordance with paragraph 15, 39, 44 of the *K-IFRS No. 1012* and they will not be disposed
Treasury stock		(69,218)	(69,218)	Not recognized in accordance with paragraph 15 of the *K-IFRS No. 1012*

(10) The details of loss carried forward recognized as deferred tax assets as of December 31, 2020 is as follows:

(In millions of won)

		2020	Expire date
Loss carried forward	₩	36,299	Within 2035

32. Earnings per Share

(1) Basic earnings per share for the years ended December 31, 2020 and 2019 are as follows:

		2020	2019
Profit for the year *(In millions of won)*	₩	86,432	590,858
Weighted average number of ordinary shares outstanding *(In thousands of shares)(*)*		14,228	14,622
Earnings per share *(In won)*	₩	6,075	40,410

(*) Weighted average number of ordinary shares

(In shares)	2020		
	Number of shares outstanding	**Weighted average**	**Weighted average number of shares outstanding**
Beginning balance	14,621,686	366/366	14,621,686
Acquisition of treasury stocks	(488,000)	(*)	(393,535)
Weighted average number of ordinary shares outstanding			14,228,151

(*) The Company acquired treasury stocks for the year ended December 31, 2020 and calculated weighted average number of ordinary shares outstanding at the date of acquisition.

(In shares)	2019		
	Number of shares outstanding	**Weighted average**	**Weighted average number of shares outstanding**
Beginning balance	14,621,686	365/365	14,621,686
Weighted average number of ordinary shares outstanding			14,621,686

(2) As the Company has no dilutive securities for the years ended December 31, 2020 and 2019, diluted earnings per share have not been calculated.

33. Cash flow from Operations

(1) Cash generated from operations for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019
Profit for the year	₩	86,433	590,858
Adjustments for:			
Post-employment benefit costs		1,638	1,954
Depreciation		2,027	4,564
Amortization		768	1,880
Bad debt expenses		1,261	2,330
Finance income		(19,010)	(3,728)
Finance costs		59,461	105,341
Dividend profits (sales)		(310,784)	(228,877)
Other non-operating income		(30)	(773,025)
Other non-operating expenses		156,825	137,965
Tax expenses (income)		10,005	218,668
Changes in assets and liabilities:			
Trade receivables		24,895	(8,036)
Contract assets		806	(25,678)
Other receivables		1,112	(4,731)
Inventories		(12,320)	8,818
Derivatives		-	(11,518)
Other current assets		(6,122)	8,858
Trade payables		(6,338)	15,198
Other payables		(3,399)	(6,270)
Contract liabilities		6,541	26,010
Benefits paid		(1,321)	(3,858)
Succession of Benefits		793	967
Plan assets		(1,057)	(1,853)
Provisions		(327)	(4,315)

(2) Significant transactions that do not involve cash inflows and outflows operations for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Reclassification of construction-in-progress	₩	278	687
Reclassification of current portion of long-term borrowings		-	411,728
Reclassification of current portion of bond		259,605	79,853
Recognition of right-of-use assets and lease liabilities		6,664	133,904
Transfer of assets from the split-off		287,785	-
Transfer of liabilities from the split-off		132,360	-
Changes in liabilities related to acquisition of property, plant and equipment		5,374	-
Changes in liabilities related to repayment of lease liabilities		1,354	-

34. Categories of Financial Instruments and Income and Costs by Categories

(1) Categories of financial instruments as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)

		2020				
		Carrying amounts				
		Fair value-hedging instruments	Financial Instruments measured at FVTPL	Financial Instruments measured at amortized cost	Total	Fair values
Assets carried at amortized cost:						
Cash and cash equivalents	₩	-	-	295,437	295,437	-
Financial instruments		-	-	2	2	-
Trade and other receivables		-	-	2,625	2,625	-
Financial assets total		-	-	298,064	298,064	-
Liabilities carried at fair value:						
Financial liabilities measured at FVTPL		-	27,342	-	27,342	27,342
Derivative liabilities		1,163	-	-	1,163	1,163
Liabilities carried at amortized cost:						
Borrowings and Debentures		-	-	1,963,516	1,963,516	-
Trade and other payables		-	-	13,444	13,444	-
Lease liabilities		-	-	127,516	127,516	-
Financial liabilities total	₩	1,163	27,342	2,104,476	2,132,981	28,505

(In millions of won)

		2019				
		Carrying amounts				
		Fair value-hedging instruments	Financial Instruments measured at FVTPL	Financial Instruments measured at amortized cost	Total	Fair values
Assets carried at amortized cost:						
Cash and cash equivalents	₩	-	-	962,121	962,121	-
Financial instruments		-	-	2	2	-
Trade and other receivables		-	-	108,029	108,029	-
Financial assets total		-	-	1,070,152	1,070,152	-
Liabilities carried at fair value:						
Financial liabilities measured at FVTPL		-	43,811	-	43,811	43,811
Derivative liabilities		860	-	-	860	860
Liabilities carried at amortized cost:						
Borrowings and Debentures		-	-	2,241,235	2,241,235	-
Trade and other payables		-	-	48,578	48,578	-
Lease liabilities		-	-	127,958	127,958	-
Financial liabilities total	₩	860	43,811	2,417,771	2,462,442	44,671

34. Categories of Financial Instruments and Income and Costs by Categories, Continued

(2) Financial instruments income and costs by categories for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020			
		Fair value-hedging instruments	Financial Instruments measured at FVTPL	Financial Instruments measured at amortized cost	Total
Selling, general and administrative expenses					
Bad debt expenses	₩	-	-	(1,261)	(1,261)
Finance income					
Interest income		-	-	2,541	2,541
Gain on disposal of financial assets measured at FVTPL		-	16,469	-	16,469
Gain on foreign currency transactions		-	-	4,998	4,998
		-	16,469	7,539	24,008
Finance costs					
Interest expense		-	-	(59,461)	(59,461)
Loss on foreign currency transactions		-	-	(2,578)	(2,578)
		-	-	(62,039)	(62,039)
Other comprehensive loss					
Loss on valuation of derivatives		(236)	-	-	(236)
	₩	(236)	16,469	(55,761)	(39,528)

34. Categories of Financial Instruments and Income and Costs by Categories, Continued

(2) Financial instruments income and costs by categories for the years ended December 31, 2020 and 2019 are as follows, continued:

(In millions of won)

		2019			
		Fair value-hedging instruments	Financial Instruments measured at FVTPL	Financial Instruments measured at amortized cost	Total
Selling, general and administrative expenses					
Bad debt expenses	₩	-	-	(2,330)	(2,330)
Finance income					
Interest income		-	-	2,965	2,965
Gain on disposal of financial assets measured at FVTPL		-	414	-	414
Gain on derivatives transactions		-	21,312	-	21,312
Gain on foreign currency translation		-	-	727	727
Gain on foreign currency transactions		-	-	5,953	5,953
		-	21,726	9,645	31,371
Finance costs					
Interest expense		-	-	(84,700)	(84,700)
Loss on foreign currency translation		-	-	(1,171)	(1,171)
Loss on foreign currency transactions		-	-	(24,357)	(24,357)
		-	-	(110,228)	(110,228)
Other comprehensive loss					
Loss on valuation of derivatives		(2,166)	-	-	(2,166)
	₩	(2,166)	21,726	(102,913)	(83,353)

35. Financial Instruments

(1) Credit risk

(i) Exposure to credit risk

The carrying amount of financial assets and contract assets represents the maximum credit exposure. The maximum exposure to credit risk as of December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Cash and cash equivalents	₩	295,437	962,121
Financial instruments		2	2
Trade receivables and other receivables		2,625	108,029
Contract asset		-	49,831
	₩	298,064	1,119,983

The maximum exposure to credit risk for financial instruments measured at amortized cost (including contract assets) at the reporting date by geographic region are as follows:

(In millions of won)		2020	2019
Korea	₩	2,627	100,722
North America		-	147
Asia		-	52,414
Europe		-	4,540
Others		-	39
	₩	2,627	157,862

(ii) Impairment loss

The aging of loans and receivables and the related allowance for impairment as of December 31, 2020 and 2019 are as follows:

(In millions of won)		2020		2019	
		Gross	Impairment	Gross	Impairment
Not past due	₩	2,627	-	92,006	(95)
Past due up to 6 months		-	-	44,219	(298)
Past due 6~12 months		-	-	16,268	(327)
Past due 1~3 years		-	-	7,276	(1,186)
More than three years		-	-	1,023	(1,024)
	₩	2,627	-	160,792	(2,930)

35. Financial Instruments, Continued

(1) Credit risk, continued
(ii) Impairment loss, continued

The movement in the allowance for impairment in respect of financial instruments measured at amortized cost (including contract assets) for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Beginning balance	₩	2,930	600
Impairment loss recognized		1,261	2,330
Write-offs		(55)	-
Changes from the split-off		(4,136)	-
Ending balance	₩	-	2,930

The allowance accounts in respect of financial instruments measured at amortized cost (including contract assets) are used to record impairment losses unless the Company is satisfied that all collection measures have been exhausted. At that point, the amounts are considered irrecoverable and are written off against the financial asset directly.

For the years ended December 31, 2020 and 2019, there is no impairment losses and impairment reversals that occur in other receivables.

35. Financial Instruments, Continued

(2) Liquidity risk

(i) The contractual maturities of financial liabilities, including estimated interest payments and excluding the impact of netting agreements as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)

		2020					
		Carrying amount	**Contractual cash flow**	**6 months or less**	**6~12 months**	**1~3 years**	**More than 3 years**
Non-derivative financial liabilities:							
Borrowings	₩	1,200,000	1,293,628	149,586	17,308	837,015	289,719
Debentures		763,516	807,720	49,681	231,072	374,509	152,458
Trade and other payables		13,444	13,444	13,444	-	-	-
Lease liabilities		127,516	215,532	189	1,543	2,896	210,904
Derivative financial liabilities:							
Financial liabilities measured at FVTPL		27,342	27,342	27,342	-	-	-
Derivative contracts		1,163	1,178	228	214	625	111
	₩	2,132,981	2,358,844	240,470	250,137	1,215,045	653,192

It is not expected that the cash flows included in the maturity analysis could occur significantly earlier, or at significantly different amounts.

(In millions of won)

		2019					
		Carrying amount	**Contractual cash flow**	**6 months or less**	**6~12 months**	**1~3 years**	**More than 3 years**
Non-derivative financial liabilities:							
Borrowings	₩	1,522,927	1,577,889	815,893	352,919	220,257	188,820
Debentures		718,309	772,850	10,696	90,642	514,566	156,946
Trade and other payables		48,578	48,578	48,550	-	28	-
Lease liabilities		127,958	219,668	932	2,218	5,310	211,208
Derivative financial liabilities:							
Financial liabilities measured at FVTPL		43,811	43,811	43,811	-	-	-
Derivative contracts		860	886	65	95	441	285
	₩	2,462,443	2,663,682	919,947	445,874	740,602	557,259

It is not expected that the cash flows included in the maturity analysis could occur significantly earlier, or at significantly different amounts.

35. Financial Instruments, Continued

(2) Liquidity risk, continued

(ii) The periods in which the cash flows associated with cash flow hedges are expected to occur as of December 31, 2020 and 2019 are summarized as follows:

(In millions of won)		2020				
		Carrying amount	**Expected cash flows**	**6 months or less**	**6~12 months**	**1~5 years**
Interest rate swaps contracts						
Liabilities	₩	(1,163)	(1,178)	(228)	(214)	(736)

(In millions of won)		2019				
		Carrying amount	**Expected cash flows**	**6 months or less**	**6~12 months**	**1~3 years**
Interest rate swaps contracts						
Liabilities	₩	(860)	(886)	(65)	(95)	(726)

(3) Currency risk

(i) Exposure to currency risk

The Company's exposure to foreign currency risk based on notional amounts as of December 31, 2020 and 2019 are as follows:
- 2020

As of December 31, 2020 the Company has no assets and liabilities in foreign currency.

- 2019

(In millions of won)		2019				
		USD	**EUR**	**CNY**	**JPY**	**Total**
Cash and cash equivalents	₩	15,987	-	-	-	15,987
Financial Instruments measured at amortized cost		43,962	4,587	10,802	5	59,356
Trade and other payables		(6,931)	-	(734)	(2,743)	(10,408)
Borrowings		-	-	-	(11,052)	(11,052)
Gross statement of financial position exposure		53,018	4,587	10,068	(13,790)	53,883
Net exposure	₩	53,018	4,587	10,068	(13,790)	53,883

35. Financial Instruments, Continued

(3) Currency risk, continued

(ii) Sensitivity analysis

A weakening of the won, as indicated below, against the USD, EUR, CNY, JPY as of December 31, 2019 would have increased (decreased) profit or loss by the amounts shown below. This analysis is based on foreign currency exchange rate variances that the Company considered to be reasonably possible at the reporting date. The analysis assumes that all other variables, in particular interest rates, remain constant. The changes in profit or loss are as follows:

(In millions of won)		**Profit or loss**
		2019
USD (3 percent strengthening)	₩	1,591
EUR (3 percent strengthening)		138
CNY (3 percent strengthening)		302
JPY (3 percent strengthening)		(414)

A strengthening of the won against the above currencies as of December 31, 2019 would have had the equal but opposite effect on the above currencies to the amounts shown above, assuming all other variables remain constant.

(4) Interest rate risk

(i) The interest rate profile of the Company's interest-bearing financial instruments as of December 31, 2020 and 2019 are as follows:

(In millions of won)		**2020**	**2019**
Fixed rate instruments:			
Financial assets	₩	180,002	961,947
Financial liabilities		(1,358,400)	(1,561,052)
		(1,178,398)	(599,105)
Variable rate instruments:			
Financial assets		115,437	-
Financial liabilities		(606,600)	(681,875)
	₩	(491,163)	(681,875)

(ii) Interest rate risk arises from savings and borrowings with floating interest rates. The Company properly hedges the risk borrowings with floating interest rates through interest rate swaps. Interest rate swap contracts as of December 31, 2020 are as follows (See *Note 21*):

(In millions of won)

Counterparties		**Amount**	**Interest rate**		**Expiration date**
Woori Bank	₩	40,000	Receives floating interest rate Pays fixed interest rate	CD+1.45% 3.28%	2024.06.11

35. Financial Instruments, Continued

(4) Interest rate risk, continued

(iii) Cash flow sensitivity analysis for variable rate instruments
A change of 100 basis points in interest rates as of December 31, 2020 and 2019 would have increased (decreased) equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular foreign currency rates, remain constant. The changes in equity and profit or loss are as follows:

(In millions of won)		Profit or loss	
		100 bp increase	100 bp decrease
2020			
Variable rate instruments	₩	(4,912)	4,912
Interest rate swaps		400	(400)
Net cash flow sensitivity	₩	(4,512)	4,512
2019			
Variable rate instruments	₩	(6,819)	6,819
Interest rate swaps		400	(400)
Net cash flow sensitivity	₩	(6,419)	6,419

35. Financial Instruments, Continued

(5) Fair values

(i) Fair values versus carrying amounts
The fair values of financial assets and liabilities, together with the carrying amounts shown in the statement of financial position as of December 31, 2020 and 2019, are as follows:

(In millions of won)

		2020				
		Carrying amounts				
		Fair value-hedging instruments	Financial Instruments measured at FVTPL	Financial Instruments measured at amortized cost	Total	Fair values
Assets carried at amortized cost:						
Cash and cash equivalents	₩	-	-	295,437	295,437	-
Financial Instruments		-	-	2	2	-
Trade and other receivables		-	-	2,625	2,625	-
Financial assets total		-	-	298,064	298,064	-
Liabilities carried at fair value:						
Derivative liabilities		1,163	-	-	1,163	1,163
Financial liabilities measured at FVTPL		-	27,342	-	27,342	27,342
Liabilities carried at amortized cost:						
Borrowings and Debentures		-	-	1,963,516	1,963,516	-
Trade and other payables		-	-	13,444	13,444	-
Lease liabilities		-	-	127,516	127,516	-
Financial liabilities total	₩	1,163	27,342	2,104,476	2,132,981	28,505

(In millions of won)

		2019				
		Carrying amounts				
		Fair value-hedging instruments	Financial Instruments measured at FVTPL	Financial Instruments measured at amortized cost	Total	Fair values
Assets carried at amortized cost:						
Cash and cash equivalents	₩	-	-	962,121	962,121	-
Financial Instruments		-	-	2	2	-
Trade and other receivables		-	-	108,029	108,029	-
Financial assets total		-	-	1,070,152	1,070,152	-
Liabilities carried at fair value:						
Derivative liabilities		860	-	-	860	860
Financial liabilities measured at FVTPL		-	43,811	-	43,811	43,811
Liabilities carried at amortized cost:						
Borrowings and Debentures		-	-	2,241,235	2,241,235	-
Trade and other payables		-	-	48,578	48,578	-
Lease liabilities		-	-	127,958	127,958	-
Financial liabilities total	₩	860	43,811	2,417,771	2,462,442	44,671

35. Financial Instruments, Continued

(5) Fair values, continued

(ii) Fair value hierarchy
The Company classified fair value measurements in accordance with the fair value hierarchy which reflects the significance of the inputs used in fair value measurements.

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

The financial instruments carried at fair value, by fair value hierarchy as of December 31, 2020 and 2019 are as follows:

(In millions of won)

		Level 1	Level 2	Level 3	Total
2020					
Derivative liabilities	₩	-	1,163	-	1,163
Financial liabilities measured at FVTPL		-	-	27,342	27,342
2019					
Derivative liabilities	₩	-	860	-	860
Financial liabilities measured at FVTPL		-	-	43,811	43,811

The fair value of financial instruments traded in active markets is based on quoted market prices at the end of reporting period. A market is regarded as active if quoted prices are readily and regularly available from an exchange, dealer, broker, industry group, pricing service, or regulatory agency, and those prices represent actual and regularly occurring market transactions on an arm's length basis. The quoted market price used for financial assets held by the Company is the current bid price. These instruments are included in level 1. Instruments included in level 1 are comprised primarily of listed equity investments.

The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined by using valuation techniques. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fairly value an instrument are observable, the instrument is included in level 2.

If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3.

Specific valuation techniques used to value financial instruments include:
- Quoted market prices or dealer quotes for similar instruments.
- The fair value of forward foreign exchange contracts is determined using forward exchange rates at the end of reporting period, with the resulting value discounted back to present value.
- Other techniques, such as discounted cash flow analysis, are used to determine fair value for the remaining financial instruments.

35. Financial Instruments, Continued

(6) The valuation of the fair value hierarchy Level 2 and inputs description
The valuation techniques and input variables used in measuring Level 2 fair values as of December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019	Valuation techniques	Input variables
Derivatives liabilities:					
Interest rate swaps	₩	1,163	860	Cash flow discount model	Discount rate and others

(7) The valuation of the fair value hierarchy Level 3 and inputs description

(i) The following table shows a breakdown of the total gains (losses):

Change in assets and liabilities recognized in respect of Level 3 fair values for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Beginning balance	₩	43,811	-
Acquisition		-	43,811
Gain (loss) on valuation		(16,469)	-
Ending balance	₩	27,342	43,811

(ii) The valuation techniques and input variables used in measuring Level 3 fair values as of December 31, 2020 and 2019 are as follows:

(In millions of won)

		2020	2019	Valuation techniques	Significant but unobservable inputs
Financial liabilities at fair value through profit or loss	₩	27,342	43,811	Binomial model	Weighted average capital cost, permanent growth rate

On the other hand, if the other input variables are kept constant for the fair value of these stocks held, the fair value of the financial liabilities at fair value through profit or loss is measured if one of the significant but unobservable input variables fluctuates reasonably on the reporting date. The effects of additional profit or loss affected by the fluctuation are as follows:

(In millions of won)

Input variables(*)	Volatility		Positive volatility	Negative volatility
Weighted average capital cost	1%	₩	13,014	(23,015)
Permanent growth rate	1%		10,647	(17,728)

(*) The amount of change in the fair value of derivative liabilities was calculated by increasing or decreasing the significant but unobservable input among the input variables for calculating the fair value of the underlying asset.

36. Commitments and Contingencies

(1) In accordance with Article 530, paragraph 9.1 of the Commercial law, Korea Shipbuilding & Offshore Engineering Co.,Ltd. and newly-split company (Hyundai Electric & Energy Systems Co., Ltd., Hyundai Construction Equipment Co., Ltd. and Hyundai Heavy Industries Holdings Co., Ltd.) are liable to refund jointly the debts of Korea Shipbuilding & Offshore Engineering Co.,Ltd. before the split-off.

(2) In accordance with Article 530, paragraph 9.1 of the Commercial law, Hyundai Heavy Industries Holdings Co., Ltd. and newly-split company (Hyundai Robotics Co., Ltd.) are liable to refund jointly the debts of Hyundai Heavy Industries Holdings Co., Ltd. before the split-off.

(3) As of December 31, 2020, the Company has entered into a general loan agreement with the Korea Development Bank and others for a total limit of ₩1,400,000 million. Additionally the Company has entered into an agreement of derivative deposit exemption totaling USD 80,000 thousand with KEB Hana bank and a derivative agreement for a total limit of USD 1,000 thousand with Woori bank.

(4) As of December 31, 2020 the Company has been provided ₩2,275 million in connection with the Global R&D Center developing guarantees.

(5) As of December 31, 2020, the Company has entered into a contract with shareholders that grants call options to Aramco Overseas Company B.V., 2.9% of the interest in Hyundai Oilbank Co., Ltd.

Date of issue	December 17, 2019
Quantity	7,107,390 shares (2.9%)
Exercise period	Within 5 years from the date of issue (or before IPO)
Exercise price	₩33,000 per share

37. Related Parties

(1) As of December 31, 2020, related parties with the Company are as follows:

Subsidiaries	**Main business**
Hyundai Oilbank Co., Ltd.	Manufacturing of petroleum products
Hyundai Oil Terminal Co., Ltd.	Shipbuilding
Hyundai and Shell Base Oil Co., Ltd.(*)	Manufacturing of base oil
Hyundai Chemical Co., Ltd.	Crude oil refining business
Hyundai OCI Co., Ltd.	Manufacturing of other basic chemicals
Hyundai Oilbank (Shanghai) Co., Ltd.	Trade petrochemical products
Hyundai Oil Singapore Pte. Ltd.	Trade crude oil and petrochemical products, chartering
MS Dandy Ltd.	Ship rental service
Grande Ltd.	Ship rental service
Hyundai Global Service	Engineering services
Hyundai Global Service Europe B.V	Engine A/S
Hyundai Global Service America Co., Ltd.	Engine A/S
Hyundai Global Service Singapore Pte. Ltd.	Engine A/S
Hyundai Global Service Colombia S.A.S.	Engine A/S
Hyundai Electric & Energy Systems Co., Ltd.	Sale and manufacture of industrial electric equipment
Hyundai Technologies Center Hungary kft.	Research and development of technology
Hyundai Electric Switzerland AG.	Research and development of technology
Hyundai Power Solution India Private Ltd.	Electric construction and power equipment
Hyundai Heavy Industries (China) Electric Co., Ltd.	Sale and manufacture of distribution panel
Hyundai Heavy Industries (Shanghai) R&D Co., Ltd.	Research and development of technology
Hyundai Electric Arabia L.L.C Co.	Customer support service
Hyundai Power Transformers USA Inc.	Sale and manufacture of industrial electric equipment
Hyundai Electric America Corporation.	Sale of transformers
Hyundai Construction Equipment Co., Ltd.	Sale and manufacture of machinery equipment for construction
Hyundai Core Motion Co., Ltd.	Hydraulic equipment manufacturing
HHI China Investment Co., Ltd.	Holding company
Hyundai Financial Leasing Co., Ltd.	Finance and operating leases
Hyundai (Jiangsu) Construction Machinery Co., Ltd.	Sale and manufacture of machinery equipment for construction
Changzhou Hyundai Hydraulic Machinery Co., Ltd.	Sale and manufacture of hydraulic cylinders
Weihai Hyundai Wind Power Technology Co., Ltd.	Sale and manufacture of facilities for wind power generation
MingHa (Changzhou) Machinery Co., Ltd.	Sale and manufacture of machinery equipment for construction
Hyundai Construction Equipment America, Inc.	Sale of machinery equipment for construction
Hyundai Construction Equipment Europe N.V	Sale of machinery equipment for construction
Hyundai Construction Equipment India Private Ltd.	Sale and manufacture of machinery equipment for construction
PT Hyundai Machinery Indonesia	Sale of machinery equipment for construction
Hyundai Future Partners Co., Ltd.	Management consulting business
Hyundai Robotics Co., Ltd.	Manufacturing of industrial robots
Hyundai Robotics Investment (Shanghai) Co., Ltd.	Sale of robot and service
Hyundai LNS Co.,Ltd	Other engineering services
Avikus Co., Ltd.	Development and sale of software for maritime autonomous surface ships
Joint ventures	**Main business**
Hyundai Cosmo Co., Ltd.	Manufacturing of other basic chemicals
Asan Kakao Medical Data Co., Ltd.	Application software development and supply
Haning Hagong Hyundai Robotics. Co., Ltd.	Sale of robot and service
Associates	**Main business**
Korea Shipbuilding & Offshore Engineering Co., Ltd.	Holding company
Koramco Enenrgy Plus Reit Co., Ltd. and 4 companies	Real estate rent and others
Others (large-scale corporate conglomerate, etc.)	**Main business**
Hyundai Heavy Industries Co., Ltd.	Manufacture of ships, marine structures, plants and engines, etc.
Hyundai Samho Heavy Industries Co., Ltd.	Shipbuilding
Hyundai Mipo Dockyard Co., Ltd.	Shipbuilding
Other related parties of Korea Shipbuilding & Offshore Engineering Co., Ltd	Other business

(*) Hyundai and Shell Base Oil Co.,Ltd. has been changed from a joint ventures to a subsidiary due to the change in certain decisions in accordance with shareholders agreement.

37. Related Parties, Continued

(2) Transactions with related parties

1) Significant transactions for the years ended December 31, 2020 and 2019 with related parties are as follows:

(In millions of won)

		2020					
Description		**Revenue and other**			**Purchases and other**		
		Sales	**Other sales**	**Dividend profits**	**Purchase of raw materials**	**Purchase of others**	**Acquisition of property, plant and equipment**
Subsidiaries:							
Hyundai Oilbank Co., Ltd.	₩	-	-	150,784	250	-	-
Hyundai Global Service Co., Ltd.		-	516	160,000	-	-	-
Hyundai Electric & Energy Systems Co., Ltd.		304	-	-	50	6	-
Hyundai Power Transformers USA Inc.		-	93	-	-	-	-
Hyundai Construction Equipment Co., Ltd.		410	-	-	-	260	35
HHI China Investment Co., Ltd.		-	-	-	23	-	-
Hyundai (Jiangsu) Construction Machinery Co., Ltd.		-	261	-	-	-	-
Hyundai Robotics Co., Ltd.(*)		-	135	-	-	-	-
Hyundai Robotics Investment (Shanghai) Co., Ltd.		1,687	-	-	79	1,099	-
Others.		-	67	-	-	-	-
		2,401	1,072	310,784	402	1,365	35
Associates							
Korea Shipbuilding & Offshore Engineering Co., Ltd.		4	203	-	375	4,415	-
Other related parties (large-scale corporate conglomerate, etc.):							
Hyundai Heavy Industries Co., Ltd.		-	-	-	1	2,518	-
Hyundai Samho Heavy Industries Co., Ltd.		-	2,031	-	-	-	-
Hyundai Mipo Dockyard Co., Ltd.		-	1,383	-	-	-	-
Hyundai Heavy Industries Mos Co., Ltd.		-	-	-	142	-	-
Hyundai Energy Solutions Co., Ltd.		265	183	-	-	-	-
Hyundai Heavy Industries Sports Co. Ltd.		-	-	-	-	500	-
Others		-	83	-	-	-	-
		265	3,680	-	143	3,018	-
	₩	2,670	4,955	310,784	920	8,798	35

(*) Financial information after acquisition of control.

37. Related Parties, Continued

(2) Transactions with related parties, continued

1) Significant transactions for the years ended December 31, 2020 and 2019 with related parties are as follows, continued:

In addition to the above transaction the Company acquired 80.10% interest in Hyundai LNS Co.,Ltd. for ₩6,008 million through new establishment and incorporated as a subsidiary. The Company raised paid-in capital of Hyundai Robotics Investment (Shanghai) Co.,Ltd. for ₩5,121 million. For the year ended December 31, 2020 the Company acquired 100% interest in Avikus Co., Ltd. for ₩6,000 million through new establishment and incorporated as a subsidiary.

For the year ended December 31, 2020 the Company sold entire interest in Hyundai LNS Co.,Ltd. and Hyundai Robotics Investment (Shanghai) Co.,Ltd. to Hyundai Robotics Co., Ltd. for ₩5,308 million and ₩14,179 million respectively.

Additionally for the year ended December 31, 2020 the Company established Hyundai Robotics Co., Ltd., by split-off the entire robot-related business except for certain segments such as investment, in May 1, 2020 and the Company's share ratio changed from 100% to 90% by third party allocation paid-in capital increase.

37. Related Parties, Continued

(2) Transactions with related parties, continued

1) Significant transactions for the years ended December 31, 2020 and 2019 with related parties are as follows, continued:

(In millions of won)

Description		2019					
		Revenue and other			Purchases and other		
		Sales	Other sales	Dividend profits	Purchase of raw materials	Purchase of others	Acquisition of property, plant and equipment
Subsidiaries:							
Hyundai Construction Equipment Co., Ltd.	₩	733	-	5,546	-	500	-
Hyundai Oilbank Co., Ltd.		-	-	223,332	208	-	-
Hyundai Electric & Energy Systems Co., Ltd.		-	-	-	528	2	-
Hyundai Core Motion Co., Ltd.		-	66	-	-	-	-
Hyundai Future Partners Co., Ltd.		-	16	-	-	-	-
Hyundai Global Service Co., Ltd.		-	232	-	-	-	-
HHI China Investment Co., Ltd.		856	-	-	131	1,162	-
Hyundai Financial Leasing Co., Ltd.		-	8	-	-	-	-
Hyundai Jiangsu Construction Machinery Co., Ltd.		-	294	-	-	-	-
Hyundai Heavy Industries (China) Electric Co., Ltd.		-	38	-	-	-	-
Hyundai Robotics Investment (Shanghai) Co., Ltd.		21,464	-	-	376	1,419	-
		23,053	654	228,878	1,243	3,083	-
Associates							
Korea Shipbuilding & Offshore Engineering Co., Ltd.		-	1,346	-	387	4,854	1,401
Other related parties (large-scale corporate conglomerate, etc.):							
Hyundai Energy Solutions Co., Ltd.		59	201	-	-	-	-
Hyundai Heavy Industries Mos Co., Ltd.		-	-	-	228	-	-
Hyundai Heavy Industries Co., Ltd.		-	1,806	-	22	373	-
Hyundai Heavy Industries Power Systems Co., Ltd.		-	16	-	-	-	-
Yantai Hyundai Moon Heavy Industries Co., Ltd.		-	23	-	-	-	-
		59	2,046	-	250	373	-
	₩	23,112	4,046	228,878	1,880	8,310	1,401

37. Related Parties, Continued

(2) Transactions with related parties, continued

In addition to the above transaction, The Company acquired an additional 1.15% share of its subsidiary Hyundai Electric & Energy Systems Co.,Ltd. through participation in paid-in capital increase and in-house purchase.

In addition, The Company acquired 100% share in Hyundai Future Partners Co., Ltd. and Hyundai Robotics Investment (Shanghai) Co., Ltd. through new establishment and participation in paid-in capital increase and transferred them to subsidiaries.

2) Outstanding balances as of December 31, 2020 and 2019 with related parties are as follows:

(In millions of won)		2020	
		Trade receivables and other receivables	**Trade payables and other payables**
		Other receivable	**Trade payables**
Subsidiaries:			
Hyundai Robotics Co., Ltd.	₩	33	-
Associates:			
Korea Shipbuilding & Offshore Engineering Co., Ltd.		-	530
Other related parties			
Hyundai Heavy Industries Co., Ltd.		-	19
Hyundai Samho Heavy Industries Co., Ltd.		489	-
		489	19
	₩	522	549

37. Related Parties, Continued

(2) Transactions with related parties, continued

2) Outstanding balances as of December 31, 2020 and 2019 with related parties are as follows, continued:

(In millions of won)		2019			
		Trade receivables and other receivables		Trade payables and other payables	
		Trade receivables	Other receivable	Trade payables	Other payable
Subsidiaries:					
Hyundai Electric & Energy System Co., Ltd.	₩	-	-	-	17
Hyundai Construction Equipment Co., Ltd.		806	-	-	550
Hyundai Core Motion Co., Ltd.		-	73	-	-
Hyundai Future Partners Co., Ltd.		-	1	-	7
Hyundai Global Service Co., Ltd.		-	255	-	-
Hyundai Financial Leasing Co., Ltd.		-	8	-	-
Hyundai Jiangsu Construction Machinery Co., Ltd.		-	294	-	-
Hyundai Heavy Industries (China) Electric Co., Ltd.		-	38	-	-
HHI China Investment Co., Ltd.		142	-	-	-
Hyundai Robotics Investment (Shanghai) Co., Ltd.		10,890	-	-	563
		11,838	669	-	1,137
Associates:					
Korea Shipbuilding & Offshore Engineering Co., Ltd.		-	1,449	116	3,963
Other related parties					
Hyundai Energy Solutions Co., Ltd.		-	231	-	4,613
Hyundai Heavy Industries MOS Co., Ltd.		-	-	21	-
Hyundai Heavy Industries Co., Ltd.		-	2,368	5	170
Hyundai Heavy Industries Power Systems Co., Ltd.		-	18	-	-
Yantai Hyundai Moon Heavy Industries Co., Ltd.		-	23	-	-
		-	2,640	26	4,783
	₩	11,838	4,758	142	9,883

3) There are no guarantees or guarantees provided by and to related parties as of December 31, 2020.

4) Compensation for key management of the Company for the years ended December 31, 2020 and 2019 are as follows:

(In millions of won)		2020	2019
Short-term employee benefits	₩	612	962
Post-employment benefits		124	200
	₩	736	1,162

Key management is defined as directors and internal auditors who have important roles and responsibilities involving the planning, operation and control of the Company.

38. Split-off

(1) The Company established a new subsidiary, Hyundai Robotics Co., Ltd. by split-off the entire robot-related business except for certain segments such as investment in May 1, 2020.

	Contents	
Dividing method	Split-off	
Dividing company	Existing entity	Hyundai Heavy Industries Holdings Co., Ltd.
	Newly established entity	Hyundai Robotics Co., Ltd.
Split-off schedule	Resolution date of the board meeting	2019.12.13
	General meeting of shareholders	2020.03.25
	Split-off date	2020.05.01

(2) Property transferred to the newly established entity and its value

The amount of assets and liabilities transferred to the newly established entity through split-off was based on the taking-over lists attached to the split-off plan approved by meeting of shareholders on March 25, 2020, and added or subtracted properties' changes that occurred in operating segments took-over by the division until the split-off date.

(3) Accounting for the split-off

(i) The amount of assets and liabilities transferred to the newly established entity through split-off was recorded at the carrying amount before the split-off.

(ii) Only items of deferred tax assets and liabilities that were possible to take-over under the *Corporate Tax Act* were transferred to the newly established entity.

(4) Matters about the succession of rights and obligations, etc.

In principle, if all positive or negative properties, other rights and obligations (including rights and obligations under public law), and property-valued facts (including licensing, labor relations, contract relations, litigations, etc.) of the dividing company are related to the split-off target operating segments, they shall be vested in the newly established entity. If not, they shall be vested in the existing entity.

(5) Matters about the Company's responsibilities for split-off

The existing entity and newly established entity were divided by a special resolution of general meeting of shareholders according to the provisions of *Article 530, paragraph 3.1 of the Commercial Law*, and both entities are responsible for jointly repaying the debts of Hyundai Heavy Industries Holdings Co., Ltd. before the split-off according to the provisions of *Article 530 paragraph 9.1 of the Commercial Law*.

38. Split-off, Continued

(6) The details of assets and liabilities transferred to the newly established entity at the date of split-off are as follows:

(In millions of won)		Amount
Cash and cash equivalents	₩	80,026
Trade and other receivables		79,950
Contract assets		48,390
Inventories		59,192
Other current assets		15,567
Total current assets		283,125
Long-term trade and other receivables		903
Property, plant and equipment		57,367
Right-of-use assets		3,357
Intangible assets		22,014
Deferred tax assets		1,045
Total non-current assets		84,686
Total assets		367,811
Short-term financial liabilities		15,068
Trade and other payables		29,927
Contract liabilities		21,841
Current portion of lease liabilities		1,610
Provisions		5,619
Total current liabilities		74,065
Long-term financial liabilities		50,000
Liabilities for defined benefit plans		2,585
Provisions		3,931
Current portion of lease liabilities		1,779
Total non-current liabilities		58,295
Total liabilities		132,360
Total equity		-
Book value of net assets transferred (Investments in subsidiaries)	₩	235,451

39. Subsequent Events

(1) The board of directors decided to acquire shares of Doosan Infra-core Co., Ltd. in February 5, 2021 and has entered into a contract with Doosan Heavy Industries & Construction Co., Ltd. in February 5, 2021.
(2) The board of directors decided to split their ordinary shares by lowering the par value from ₩5,000 to ₩1,000. The stock split is scheduled for April 12, 2021.
(3) The Company established Hyundai Genuine Co., Ltd. and incorporated as a subsidiary in February 2021.
(4) The board of directors decided to sell a part of shares of Hyundai Global Service Co., Ltd. in February 23, 2021.

KPMG SAMJONG

KPMG SAMJONG Accounting Corp.
152, Teheran-ro, Gangnam-gu, Seoul 06236
(Yeoksam-dong, Gangnam Finance Center 27th Floor)
Republic of Korea

Tel +82 (2) 2112 0100
Fax +82 (2) 2112 0101
www.kr.kpmg.com

Independent Auditors' Report on Internal Control over Financial Reporting

Based on a report originally issued in Korean

To the Shareholders and Board of Directors of
Hyundai Heavy Industries Holdings Co., Ltd.

Opinion on Internal Control over Financial Reporting

We have audited Hyundai Heavy Industries Holdings Co., Ltd.'s (the Company) internal control over financial reporting ("ICFR") as of December 31, 2020 based on the criteria established in the Conceptual Framework for Designing and Operating ICFR ("ICFR Design and Operation Framework") issued by the Operating Committee of ICFR in the Republic of Korea (the "ICFR Committee").

In our opinion, the Company maintained, in all material respects, effective ICFR as of December 31, 2020, based on ICFR Design and Operation Framework.

We also have audited, in accordance with Korean Standards on Auditing (KSAs), the separate financial statements of the Company, which comprise the separate statements of financial position as of December 31, 2020 and 2019, the separate statements of comprehensive income, changes in equity and cash flows for the years then ended, and notes, comprising significant accounting policies and other explanatory information, and our report dated March 17, 2021 expressed an unmodified opinion on those separate financial statements.

Basis for Opinion

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

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

The Company's management is responsible for designing, operating and maintaining effective ICFR and for its assessment of the effectiveness of ICFR, included in the accompanying Report on Internal Control Over Financial Reporting.

Those charged with governance are responsible for overseeing the Company's ICFR.

Auditors' Responsibilities for the Audit of the Internal Control over Financial Reporting

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

Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk.

Definition and Limitations of Internal Control over Financial Reporting

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

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

The engagement partner on the audit resulting in this independent auditors' report is Won-Pyo Jeon.

KPMG Samjong Accounting Corp.

Seoul, Korea
March 17, 2021

This report is effective as of March 17, 2021, 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 internal control over financial reporting. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

Report on the Operations of Internal Control Over Financial Reporting

Based on a report originally Issued in Korean

To the Board of Directors and Audit Committee of
Hyundai Heavy Industries Holdings Co., Ltd.:

We, as the Chief Executive Officer and the Internal Accounting Manager of Hyundai Heavy Industries Holdings Co., Ltd. ("the Company"), assessed operating status of the Company's Internal Control over Financial Reporting ("ICFR") for the year ended December 31, 2020.

Design and operation of ICFR is the responsibility of the Company's management, including the Chief Executive Officer and the Internal Accounting Manager.

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

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

Based on our assessment, we concluded that the Company's ICFR is designed and operated effectively as of December 31, 2020, in all material respects, in accordance with the 'Conceptual Framework for Designing and Operating Internal Control over Financial Reporting.

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

Kim, Jeong Hyeok
Internal Accounting Control Officer

Kwon, Oh Gab
Chief Executive Officer

February 4, 2021