S-1 Corporation and its subsidiaries

Consolidated financial statements
for the years ended December 31, 2020 and 2019
with the independent auditor's report

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Independent auditor's report

The Shareholders and Board of Directors
S-1 Corporation

Opinion

We have audited the consolidated financial statements of S-1 Corporation (the "Company") and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as of December 31, 2020 and 2019, and the consolidated statements of profit or loss, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

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

Basis for opinion

We conducted our audits in accordance with Korean Auditing Standards ("KGAAS"). Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report. We are independent of the Group in accordance with the ethical requirements that are relevant to our audits of the consolidated 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.

Key audit matters

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

(1) Goodwill impairment testing of Building Management Division

➢ Rationale for the selection of key audit matter

As described in Note 14 to the consolidated financial statements, goodwill of the cash-generating unit of the Building Management Division is ₩328,093 million as of December 31, 2020. We determined the goodwill impairment testing as a key audit matter because of the significance of the amount of goodwill and involvement of management's significant judgment and estimation on goodwill impairment testing.

➢ Audit procedures performed to address the key audit matter

- ✓ Assessed the competence and independence of the external valuer involved by management through checking its work experience, qualification and interest.
- ✓ Evaluated the rationality of assumptions applied to goodwill impairment testing through communication with the relevant personnel of the Group and external valuer.
- ✓ Involved our internal valuation specialists to assist us in reviewing the methodology for measuring recoverable amount used in external valuation report and the variables applied to the valuation model
- ✓ Compared the result of our independent calculation of the discount rate using the observable information to the discount rate applied by management.
- ✓ Recalculated the impairment losses to verify the accuracy of the calculation presented in the valuation report on goodwill impairment.
- ✓ Assessed the design and effectiveness of the internal controls relating to goodwill impairment testing.

Responsibilities of management and those charged with governance for the consolidated financial statements

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

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

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

Auditor's responsibilities for the audit of the consolidated financial statements

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

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

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

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

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

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

The engagement partner on the audit resulting in this independent auditor's report is *Jaeyoung Oh.*

Ernst & Young Han Young

March 10, 2021

This audit report is effective as of March 10, 2021, the independent auditor's report date. Accordingly, certain material subsequent events or circumstances may have occurred during the period from the independent auditor's report date to the time this report is used. Such events and circumstances could significantly affect the accompanying consolidated financial statements and may result in modifications to this report.

S-1 Corporation and its subsidiaries

Consolidated financial statements
for the years ended December 31, 2020 and 2019

"The accompanying consolidated financial statements, including all footnotes and disclosures, have been prepared by, and are the responsibility of, the Group."

Heechan Roh
Chief Executive Officer
S-1 Corporation

S-1 Corporation and its subsidiaries
Consolidated statements of financial position
as of December 31, 2020 and 2019
(Korean won in thousands)

	Notes		2020		2019
Assets					
Current assets:					
Cash and cash equivalents	6,7	₩	213,172,898	₩	200,582,006
Short-term financial assets	2,6,7		299,802,544		226,751,126
Trade and other receivables, net	2,6,9,20		136,697,278		143,839,685
Contract assets, net	2,9,20		30,927,714		50,023,552
Accrued income	2,6		963,122		1,553,808
Inventories, net	10		43,992,867		41,408,118
Advanced payments			4,467,949		7,790,689
Prepaid expenses			63,276,634		59,130,874
Prepaid value added tax			4,443,549		1,823,647
Other current assets			-		280,281
Total current assets			797,744,555		733,183,786
Non-current assets:					
Long-term contract assets, net	2,9,20		3,621,661		3,210,559
Long-term financial assets	2,6,7		6,000		6,000
Financial assets at fair value through OCI	2,5,6,8		21,277,112		10,270,706
Financial assets at fair value through profit or loss	2,5,6,8		6,546,721		2,555,935
Loans and receivables	2,6		49,849,801		48,346,937
Investment in a joint venture	11		2,525,716		2,561,156
Property and equipment, net	12		469,575,845		470,234,332
Intangible assets, net	14		432,564,691		439,926,290
Right-of-use assets, net	13		54,779,639		26,734,155
Long-term prepaid expenses	2		56,728,318		54,096,478
Net defined benefit assets	16		9,114,990		784,390
Deferred tax assets	2,27		2,354,644		3,048,995
Total non-current assets			1,108,945,138		1,061,775,933
Total assets		**₩**	**1,906,689,693**	**₩**	**1,794,959,719**

(Continued)

S-1 Corporation and its subsidiaries
Consolidated statements of financial position
as of December 31, 2020 and 2019 (cont'd)
(Korean won in thousands)

	Notes		2020		2019
Liabilities					
Current liabilities:					
Trade and other payables	4,6,15	₩	217,494,472	₩	217,488,064
Lease liabilities	4,6,13		18,356,585		11,754,871
Value added tax withheld			29,238,831		24,684,833
Income tax payables			21,341,474		24,000,654
Advances received	21		69,401,769		48,108,857
Unearned revenue	21		15,618,213		15,930,319
Withholdings			7,386,940		7,134,477
Current portion of deposits withheld	4,6		34,107,513		34,979,136
Total current liabilities			412,945,797		384,081,211
Non-current liabilities:					
Long-term trade and other payables	4,6,15		7,119,069		5,467,817
Long-term lease liabilities	4,6,13,14		37,258,854		15,097,078
Net defined benefit liabilities	16		996,777		3,883,712
Deferred tax liabilities	27		2,870,905		2,630,947
Deposits withheld	4,6		4,898,397		5,955,007
Provisions	17		1,428,703		2,482,570
Long-term unearned revenue	2,21		14,220,035		15,167,176
Other non-current liabilities			40,766,504		32,587,723
Total non-current liabilities			109,559,244		83,272,030
Total liabilities		**₩**	**522,505,041**	**₩**	**467,353,241**
Equity					
Issued capital	1,18	₩	18,999,589	₩	18,999,589
Capital surplus	18		192,913,601		192,913,601
Retained earnings	19		1,324,033,323		1,267,598,907
Other components of equity	20		(151,787,177)		(151,931,592)
Equity attributable to the owners of the parent			**1,384,159,336**		**1,327,580,505**
Non-controlling interests	32		**25,316**		**25,972**
Total equity			**1,384,184,652**		**1,327,606,477**
Total liabilities and equity		**₩**	**1,906,689,693**	**₩**	**1,794,959,718**

The notes are an integral part of the consolidated financial statements.

S-1 Corporation and its subsidiaries
Consolidated statements of profit or loss
for the years ended December 31, 2020 and 2019
(Korean won in thousands except earnings per share)

	Notes		2020		2019
Sales	2,21,22,31	₩	**2,223,340,509**	₩	**2,151,521,516**
Cost of sales	21		1,672,120,747		1,607,782,233
Gross profit			**551,219,762**		**543,739,283**
Selling and administrative expenses	6,23,24		346,757,074		346,917,277
Operating profit			**204,462,688**		**196,822,006**
Other non-operating income	6,25		7,719,609		9,805,451
Other non-operating expenses	6,25		27,613,075		19,596,961
Finance income	6,26		4,165,189		6,282,757
Finance costs	6,26		1,357,040		859,244
Profit before income tax expenses			**187,377,371**		**192,454,009**
Income tax expenses	27		45,287,786		45,812,728
Profit for the year		₩	**142,089,585**	₩	**146,641,281**
Profit attributable to:					
Owners of the parent		₩	142,090,242	₩	146,642,457
Non-controlling interests	32	₩	(657)	₩	(1,176)
Earnings per share attributable to the owners of the parent	28				
Basic earnings per share (Korean won)		₩	4,203	₩	4,337
Diluted earnings per share (Korean won)		₩	4,203	₩	4,337

The notes are an integral part of the consolidated financial statements.

S-1 Corporation and its subsidiaries
Consolidated statements of comprehensive income
for the years ended December 31, 2020 and 2019
(Korean won in thousands)

	Notes	2020	2019
Profit for the year		**₩ 142,089,585**	**₩ 146,641,281**
Other comprehensive income (loss):			
Other comprehensive income (loss) not to be reclassified to profit or loss in subsequent periods (net of tax):			
Re-measurement gain (loss) on defined benefit plans		(1,130,228)	2,480,892
Gain on valuation of financial assets at fair value through OCI		383,855	560,769
Other comprehensive income (loss) to be reclassified to profit or loss in subsequent periods (net of tax):			
Exchange differences on translation of foreign operations		(239,440)	121,416
Other comprehensive income (loss) for the year, net of tax		**(985,813)**	**3,163,077**
Total comprehensive income for the year, net of tax		**₩ 141,103,772**	**₩ 149,804,358**
Total comprehensive income for the year attributable to:			
Owners of the parent		₩ 141,104,429	₩ 149,805,534
Non-controlling interests		(657)	(1,176)

The notes are an integral part of the consolidated financial statements.

S-1 Corporation and its subsidiaries
Consolidated statements of changes in equity
for the years ended December 31, 2020 and 2019
(Korean won in thousands)

	Attributable to the owners of the parent						
	Issued capital	Capital surplus	Retained earnings	Other components of equity	Sub-total	Non-controlling interests	Total equity
As of January 1, 2019	₩ **18,999,589**	₩ **192,913,601**	₩ **1,203,001,156**	₩ **(152,613,778)**	₩ **1,262,300,568**	₩ **17,148**	₩ **1,262,317,716**
Profit (loss) for the year	-	-	146,642,457	-	146,642,457	(1,176)	146,641,281
Net gain on valuation of fair value through OCI	-	-	-	560,769	560,769	-	560,769
Re-measurement gain on defined benefit plans	-	-	2,480,892	-	2,480,892	-	2,480,892
Exchange differences on translation of foreign operations	-	-	-	121,417	121,417	-	121,417
Total comprehensive income (loss) for the year	**-**	**-**	**149,123,349**	**682,186**	**149,805,535**	**(1,176)**	**149,804,359**
Dividends	-	-	(84,525,598)	-	(84,525,598)	-	(84,525,598)
Acquisition of investments in subsidiaries	-	-	-	-	-	10,000	10,000
Total transactions with owners of the parent	**-**	**-**	**(84,525,598)**	**-**	**(84,525,598)**	**10,000**	**(84,515,598)**
As of December 31, 2019	₩ **18,999,589**	₩ **192,913,601**	₩ **1,267,598,907**	₩ **(151,931,592)**	₩ **1,327,580,505**	₩ **25,972**	₩ **1,327,606,477**
As of January 1, 2020	₩ **18,999,589**	₩ **192,913,601**	₩ **1,267,598,907**	₩ **(151,931,592)**	₩ **1,327,580,505**	₩ **25,972**	₩ **1,327,606,477**
Profit (loss) for the year	-	-	142,090,242	-	142,090,242	(657)	142,089,585
Net gain on valuation of fair value through OCI	-	-	-	383,855	383,855	-	383,855
Re-measurement loss on defined benefit plans	-	-	(1,130,228)	-	(1,130,228)	-	(1,130,228)
Exchange differences on translation of foreign operations	-	-	-	(239,439)	(239,439)	-	(239,439)
Total comprehensive income (loss) for the year	**-**	**-**	**140,960,014**	**144,416**	**141,104,430**	**(657)**	**141,103,773**
Dividends	-	-	(84,525,598)	-	(84,525,598)	-	(84,525,598)
Total transactions with owners of the parent	**-**	**-**	**(84,525,598)**	**-**	**(84,525,598)**	**-**	**(84,525,598)**
As of December 31, 2020	₩ **18,999,589**	₩ **192,913,601**	₩ **1,324,033,323**	₩ **(151,787,176)**	₩ **1,384,159,337**	₩ **25,315**	₩ **1,384,184,652**

The notes are an integral part of the consolidated financial statements.

S-1 Corporation and its subsidiaries
Consolidated statements of cash flows
for the years ended December 31, 2020 and 2019
(Korean won in thousands)

	Notes	2020	2019
Operating activities			
Profit for the year		₩ 142,089,585	₩ 146,641,282
Adjustments to reconcile profit for the year to net cash flows provided by operating activities:	29	266,892,822	251,792,834
Working capital adjustments	29	(20,140,291)	(84,299,769)
Interest received		4,454,243	6,976,521
Interest paid		(1,058,520)	(694,358)
Dividend received		513,737	502,500
Income tax paid		(46,332,543)	(41,087,508)
Net cash flows provided by operating activities		**346,419,033**	**279,831,502**
Investing activities			
Net decrease (increase) in financial instruments		(73,051,418)	26,085,010
Acquisition of financial assets of fair value through OCI		(10,500,000)	(147,477)
Acquisition of financial assets of fair value through profit or loss		(4,000,000)	(1,050,309)
Acquisition of property and equipment		(140,534,142)	(152,771,780)
Proceeds from disposal of property and equipment		113,097	67,699
Acquisition of intangible assets		(462,402)	(515,476)
Proceeds from disposal of intangible assets		63,362	669,160
Net decrease (increase) in loans and receivables		(1,504,552)	4,071,528
Net cash flows used in investing activities		**(229,876,055)**	**(123,591,645)**
Financing activities			
Dividends paid		(84,525,598)	(84,525,598)
Payment of lease liabilities		(19,242,271)	(18,635,772)
Acquisition of investment in subsidiaries		-	10,000
Net cash flows used in financing activities		**(103,767,869)**	**(103,151,370)**
Net foreign exchange difference		**(184,217)**	**60,149**
Net increase in cash and cash equivalents		**12,590,892**	**53,148,636**
Cash and cash equivalents as of January 1		**200,582,006**	**147,433,369**
Cash and cash equivalents as of December 31		**₩ 213,172,898**	**₩ 200,582,005**

The notes are an integral part of the consolidated financial statements.

1. General information

The accompanying consolidated financial statements have been prepared for S-1 Corporation, (the "Company") and its seven subsidiaries (collectively referred to as the "Group"), in accordance with Korean International Financial Reporting Standards ("KIFRS") 1110 *Consolidated Financial Statements.*

The Company was established on November 28, 1977, under the Commercial Code of the Republic of Korea. The Company is mainly engaged in fire, crime and disaster prevention services, security services and building management services. On January 30, 1996, the Company listed its common shares on the Korea Exchange.

As of December 31, 2020, the Company's issued capital amounts to ₩19,000 million, and the major shareholders are Secom Co., Ltd. of Japan (25.65%) and affiliates of the Samsung Group (20.57%).

1.1 Consolidated subsidiaries

Details of the Company's subsidiaries as of December 31, 2020 and 2019 are as follows:

		2020		2019			
Subsidiaries	Location	Controlling interest	Non-controlling interest	Controlling interest	Non-controlling interest	Closing month	Main business
HTSS (Human Total Security Systems Corp.)	Korea	100.00%	-	100.00%	-	December	Security system service
S1CRM	Korea	100.00%	-	100.00%	-	December	Call center and telemarketing
SBSS (Samsung Beijing Security System)	China	100.00%	-	100.00%	-	December	Security system service
SOCM LLC. (*1)	Mongolia	100.00%	-	100.00%	-	December	Security system service
S-1 Corporation Vietnam Co., Ltd.	Vietnam	100.00%	-	100.00%	-	December	Security system service
SVIC35	Korea	99.00%	1.00%	99.00%	1.00%	December	New technology investment association
S-1CORPORATION HUNGARY LLC	Hungary	100.00%	-	100.00%	-	December	Security system service

(*1) The Company decided to liquidate SOCM LLC, the subsidiary, in accordance with the resolution of the Board of Directors on January 31, 2020, and the liquidation process is currently underway.

A summarized financial information of the consolidated subsidiaries as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020		2019	
	Total assets	Total liabilities	Total assets	Total liabilities
HTSS	₩ 38,447,666	₩ 27,886,385	₩ 29,367,763	₩ 26,221,471
S1CRM	4,359,359	3,009,094	3,990,889	2,830,661
SBSS	10,864,585	1,542,138	14,240,431	7,031,768
SOCM LLC.	86,463	2,111	104,347	2,326
S-1 Vietnam	4,598,624	1,101,498	4,216,421	980,947
SVIC35	2,547,717	16,167	2,613,054	15,817
S-1 Hungary	6,439,221	6,078,144	2,189,760	2,282,739

1.1 Consolidated subsidiaries (cont'd)

A summarized financial information of the consolidated subsidiaries for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020			2019		
	Sales	Profit (loss) for the year	Total comprehensive income (loss)	Sales	Profit (loss) for the year	Total comprehensive income (loss)
HTSS	₩ 170,415,287	₩ 5,850,458	₩ 7,414,989	₩ 146,112,646	₩ 2,264,625	₩ (715,779)
S1CRM	13,417,567	325,746	190,037	13,177,649	250,173	(122,342)
SBSS	20,579,914	2,108,857	2,108,857	31,819,845	2,763,618	2,763,618
SOCM LLC.	-	(8,789)	(8,789)	-	(4,200)	(4,200)
S-1 Vietnam	5,291,006	484,606	484,606	5,468,256	756,866	756,866
SVIC35	3,105	(65,687)	(65,687)	59,787	(117,553)	(117,553)
S-1 Hungary	11,270,115	466,588	466,588	5,320,054	(110,946)	(110,946)

2. Significant accounting policies

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

2.1 Basis of consolidated financial statements preparation

The Group maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language in accordance with KIFRS. The accompanying consolidated financial statements have been condensed, restructured and translated into English from the Korean language financial statements.

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

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

The preparation of the consolidated financial statements requires the use of certain critical accounting estimates. It also requires management to exercise judgment in the process of applying the Group's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in Note 3.

2.2 Changes in accounting policies and disclosures

2.2.1 New and amended standards and interpretations

The Group applied for the first-time certain standards and amendments, which are effective for annual periods beginning on or after January 1, 2020. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

Amendments to KIFRS 1103: Definition of a Business
The amendment to KIFRS 1103 *Business Combinations* clarifies that to be considered a business, an integrated set of activities and assets must include, at a minimum, an input and a substantive process that, together, significantly contribute to the ability to create output. Furthermore, it clarifies that a business can exist without including all of the inputs and processes needed to create outputs. These amendments had no impact on the consolidated financial statements of the Group but may impact future periods should the Group enter into any business combinations.

Amendments to KIFRS 1107, KIFRS 1109 and KIFRS 1039: Interest Rate Benchmark Reform
The amendments to KIFRS 1109 and KIFRS 1039 provide a number of reliefs, which apply to all hedging relationships that are directly affected by interest rate benchmark reform. A hedging relationship is affected if the reform gives rise to uncertainty about the timing and/or amount of benchmark-based cash flows of the hedged item or the hedging instrument. These amendments have no impact on the consolidated financial statements of the Group as it does not have any interest rate hedge relationships.

Amendments to KIFRS 1001 and KIFRS 1008: Definition of Material
The amendments provide a new definition of material that states, “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.” The amendments clarify that materiality will depend on the nature or magnitude of information, either individually or in combination with other information, in the context of the financial statements. A misstatement of information is material if it could reasonably be expected to influence decisions made by the primary users. These amendments had no impact on the consolidated financial statements of, nor is there expected to be any future impact to the Group.

Conceptual Framework for Financial Reporting issued on March 29, 2018
The Conceptual Framework is not a standard, and none of the concepts contained therein override the concepts or requirements in any standard. The purpose of the Conceptual Framework is to assist the KASB in developing standards, to help preparers develop consistent accounting policies where there is no applicable standard in place and to assist all parties to understand and interpret the standards. This will affect those entities which developed their accounting policies based on the Conceptual Framework. The revised Conceptual Framework includes some new concepts, updated definitions and recognition criteria for assets and liabilities and clarifies some important concepts. These amendments had no impact on the consolidated financial statements of the Group.

2.3.1 Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Group’s financial statements are disclosed below. The Group intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

Amendments to KIFRS 1001: Classification of Liabilities as Current or Non-current
The amendments to paragraphs 69 to 76 of KIFRS 1001 specify the requirements for classifying liabilities as current or non-current. The amendments clarify:

- What is meant by a right to defer settlement
- That a right to defer must exist at the end of the reporting period
- That classification is unaffected by the likelihood that an entity will exercise its deferral right
- That only if an embedded derivative in a convertible liability is itself an equity instrument would the terms of a liability not impact its classification

2.3.1 Standards issued but not yet effective (cont'd)

The amendments are effective for annual reporting periods beginning on or after January 1, 2023 and must be applied retrospectively. The Group is currently assessing the impact the amendments will have on current practice and whether existing loan agreements may require renegotiation.

Reference to the Conceptual Framework – Amendments to KIFRS 1103
The amendments are intended to replace a reference to the Framework for the Preparation and Presentation of Financial Statements, issued in 1989, with a reference to the Conceptual Framework for Financial Reporting issued in March 2018 without significantly changing its requirements.

The Board also added an exception to the recognition principle of KIFRS 1103 to avoid the issue of potential 'day 2' gains or losses arising for liabilities and contingent liabilities that would be within the scope of KIFRS 1037 or KIFRS 2121 *Levies,* if incurred separately. At the same time, the Board decided to clarify existing guidance in KIFRS 1103 for contingent assets that would not be affected by replacing the reference to the Framework for the Preparation and Presentation of Financial Statements. The amendments are effective for annual reporting periods beginning on or after January 1, 2022 and apply prospectively.

Property and equipment: Proceeds before Intended Use – Amendments to KIFRS 1016
The amendments prohibit entities deducting from the cost of an item of property and equipment, any proceeds from selling items produced while bringing that asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Instead, an entity recognizes the proceeds from selling such items, and the costs of producing those items, in profit or loss.

The amendment is effective for annual reporting periods beginning on or after January 1, 2022 and must be applied retrospectively to items of property and equipment made available for use on or after the beginning of the earliest period presented when the entity first applies the amendment. The amendments are not expected to have a material impact on the Group.

Onerous Contracts – Costs of Fulfilling a Contract – Amendments to KIFRS 1037
The amendments specify which costs an entity needs to include when assessing whether a contract is onerous or loss-making. The amendments apply a "directly related cost approach". The costs that relate directly to a contract to provide goods or services include both incremental costs and an allocation of costs directly related to contract activities. General and administrative costs do not relate directly to a contract and are excluded unless they are explicitly chargeable to the counterparty under the contract. The amendments are effective for annual reporting periods beginning on or after January 1, 2022. The Group will apply these amendments to contracts for which it has not yet fulfilled all its obligations at the beginning of the annual reporting period in which it first applies the amendments.

Amendments to KIFRS 1116 Covid-19 Related Rent Concessions
The amendments provide relief to lessees from applying KIFRS 1116 guidance on lease modification accounting for rent concessions arising as a direct consequence of the Covid-19 pandemic. As a practical expedient, a lessee may elect not to assess whether a Covid-19 related rent concession from a lessor is a lease modification. A lessee that makes this election accounts for any change in lease payments resulting from the Covid-19 related rent concession the same way it would account for the change under KIFRS 1116 if the change was not a lease modification.

The amendment applies to annual reporting periods beginning on or after June 1, 2022. Earlier application is permitted. This amendment had no impact on the consolidated financial statements of the Group.

2.3.2 Annual Improvements 2018-2020 Cycle

KIFRS 1101 *First-time Adoption of International Financial Reporting Standards* – Subsidiary as a first-time adopter
The amendment permits a subsidiary that elects to apply paragraph D16(1) of KIFRS 1101 to measure cumulative translation differences using the amounts reported by the parent, based on the parent's date of transition to KIFRS. This amendment is also applied to an associate or joint venture that elects to apply paragraph D16(1) of KIFRS 1101. The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted.

KIFRS 1109 *Financial Instruments* – Fees in the '10 per cent' test for derecognition of financial liabilities
The amendment clarifies the fees that an entity includes when assessing whether the terms of a new or modified financial liability are substantially different from the terms of the original financial liability. These fees include only those paid or received between the borrower and the lender, including fees paid or received by either the borrower or lender on the other's behalf. An entity applies the amendment to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment.

The amendment is effective for annual reporting periods beginning on or after January 1, 2022 with earlier adoption permitted. The Group will apply the amendments to financial liabilities that are modified or exchanged on or after the beginning of the annual reporting period in which the entity first applies the amendment. The amendments are not expected to have a material impact on the Group.

KIFRS 1041 *Agriculture* – Taxation in fair value measurements
The amendment removes the requirement in paragraph 22 of KIFRS 1041 that entities exclude cash flows for taxation when measuring the fair value of assets within the scope of KIFRS 1041. An entity applies the amendment prospectively to fair value measurements on or after the beginning of the first annual reporting period beginning on or after January 1, 2022 with earlier adoption permitted. The amendments are not expected to have a material impact on the Group.

2.4 Consolidation

2.4.1 Subsidiaries

Subsidiaries are all entities (including special purpose entities) over which the Group has control. The Group controls the corresponding investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Consolidation of a subsidiary begins from the date the Group obtains control of a subsidiary and ceases when the Group loses control of the subsidiary.

2.4.2 Business combinations and goodwill

The Group applies the acquisition method to account for business combinations. The consideration transferred is measured at the fair values of the assets transferred, and identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are initially measured at their fair values at the acquisition date. The Group recognizes any non-controlling interest in the acquiree on an acquisition-by-acquisition basis in the event of liquidation, either at fair value or at the non-controlling interest's proportionate share of the recognized amounts of acquiree's identifiable net assets. All other non-controlling interests are measured at their acquisition-date fair values, unless another measurement basis is required by KIFRS. Acquisition-related costs are expensed as incurred.

2.4 Consolidation (cont'd)

Goodwill is recognized as the excess of the aggregate of the consideration transferred, the amount of any non-controlling interest in the acquiree, and the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree over the identifiable net assets acquired. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized in profit or loss.

Balances of receivables and payables, income and expenses and unrealized gains on transactions between the Group subsidiaries are eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

If the Group loses control of a subsidiary, any investment retained in the subsidiary is re-measured at its fair value at the date when control is lost and any resulting difference is recognized in profit or loss.

2.5 Segment reporting

Information of each operating segment is reported in a manner consistent with the business segment reporting provided to the chief operating decision-maker. The chief operating decision maker is responsible for allocating resources and assessing performance of the operating segments.

2.6 Foreign currency translation

2.6.1 Functional and presentation currency

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

2.6.2 Transactions and balances

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

Exchange differences arising on non-monetary financial assets and liabilities such as equity instruments at fair value through profit or loss and fair value through OCI are recognized in profit or loss and included in other comprehensive income, respectively, as part of the fair value gain or loss.

In determining the spot exchange rate to use on initial recognition of the related asset, expense or income (or part of it) on the derecognition of a non-monetary asset or non-monetary liability relating to advance consideration, the date of the transaction is the date on which the Group initially recognizes the non-monetary asset or non-monetary liability arising from the advance consideration. If there are multiple payments or receipts in advance, the Group determines the transaction date for each payment or receipt of advance consideration.

2.7 Inventories

Inventories are stated at the lower of cost and net realizable value. Cost is determined using the moving-weighted average method.

2.8 Property and equipment

Property and equipment is stated at its cost less accumulated depreciation and accumulated impairment losses. Historical cost includes expenditures that is directly attributable to the acquisition of the items.

Land is not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate the difference between their cost and their residual values over their estimated useful life, as follows:

Accounts	Estimated useful life	Accounts	Estimated useful life
Buildings	10 - 50 years	Security equipment	5 years
Structures	5 - 25 years	Security control equipment	5 years
Vehicles	5 years	Furniture and fixtures	5 years
Others	5 years		

The depreciation method, residual values and useful life of property and equipment are reviewed at the end of each reporting period and, if appropriate, accounted for as changes in accounting estimates.

2.9 Government grants

Government grants are recognized at their fair values when there is reasonable assurance that the grant will be received and the Group will comply with the conditions attaching to it. Government grants related to assets are presented by deducting the grants in arriving at the carrying amount of the assets, and grants related to income are deferred and presented by deducting the related expenses for the purpose of the government grants.

2.10 Leases

The Group assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Lessee accounting

The Group applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. The Group recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

(1) Right-of-use assets

The Group recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets

If ownership of the leased asset transfers to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset. The right-of-use assets are also subject to impairment, refer Note 2.11 Impairment of non-financial assets.

2.10 Leases (cont'd)

(2) Lease liabilities

At the commencement date of the lease, the Group recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including in-substance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognized as expenses (unless they are incurred to produce inventories) in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Group uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset. The Group classifies lease liabilities as interest-bearing debt.

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

The Group applies the short-term lease recognition exemption to its short-term leases of vehicles and computerized equipment (i.e., those leases that have a lease term of 12 months or less from the commencement date and do not contain a purchase option). The Group also applies the lease of low-value assets recognition exemption to leases of office equipment that are considered to be low value. Lease payments on short-term leases and leases of low-value assets are recognized as expense on a straight-line basis over the lease term

Lessor accounting

Leases in which the Group does not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income arising is accounted for on a straight-line basis over the lease terms and is included in revenue in the consolidated statement of profit or loss due to its operating nature. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as rental income. Contingent rents are recognized as revenue in the period in which they are earned.

2.11 Intangible assets

2.11.1 Research and development

Research costs are expensed as incurred. Development expenditures on an individual project are recognized as an intangible asset when the Group can demonstrate:

- The technical feasibility of completing the intangible asset so that the asset will be available for use or sale
- Its intention to complete and its ability to use or sell the asset
- How the asset will generate future economic benefits
- The availability of resources to complete the asset
- The ability to measure reliably the expenditure during development

Other development expenditures that do not meet these criteria are recognized as an expense as incurred. Development costs previously recognized as an expense are not recognized as an asset in a subsequent period. Capitalized development costs are recognized as intangible assets and the assets are amortized over their estimated useful life.

2.11 Intangible assets (cont'd)

2.11.2 Membership rights

Membership rights are regarded as intangible assets with indefinite useful life and not amortized because there is no foreseeable limit to the period over which the asset is expected to be utilized.

2.11.3 Other intangible assets

Patents, trademarks and software for internal use are recognized at acquisition cost. Amortization is calculated using the straight-line method to allocate the cost over their estimated useful life of five to ten years. Where an indication of impairment exists, the carrying amounts of other intangible assets are assessed and if the carrying amount exceeds its recoverable amount, it is written down to its recoverable amount.

2.11.4 Contractual customer relationships and contractual value

The contractual customer relationships and contractual value acquired in a business combination are recognized at fair value on the acquisition date. The customer relationships and contractual value have a definite useful life and are recorded at cost less any accumulated amortization. Such customer relationships and contractual value are amortized on a straight-line basis over the estimated period of ten to fifteen years.

2.11.5 Goodwill

Goodwill is measured as the excess of the aggregate of the consideration transferred, the amount of any non-controlling interest in the acquiree, and the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. Goodwill arising from the acquisition of subsidiaries and business is included in intangible assets. Goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gain (loss) on disposal of entities includes carrying amount of disposed entity's goodwill.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the acquirer's cash-generating units, or groups of cash-generating units, that is expected to benefit from the synergies of the combination, and the allocation is determined based on the operating segments.

Goodwill is tested for impairment annually or more frequently if there is any indication that it may be impaired. Goodwill is tested for impairment by comparing the carrying amount of the cash generating units or groups of cash-generating units with the recoverable amount, which is the higher of its fair value less costs to sell and its value in use. An impairment loss is immediately recognized and is not subsequently reversed.

2.12 Impairment of non-financial assets

Goodwill or intangible assets with an indefinite useful life are not subject to amortization and are tested annually for impairment. Assets that are subject to amortization are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. Non-financial assets, other than goodwill, that suffered.

2.13 Financial instruments: Initial recognition and subsequent measurement

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

2.13 Financial instruments: Initial recognition and subsequent measurement (cont'd)

2.13.1 Financial assets

Initial recognition and measurement
Financial assets are classified, at initial recognition, as subsequently measured at amortized cost, fair value through other comprehensive income (OCI), and fair value through profit or loss.

The classification of financial assets at initial recognition depends on the financial asset's contractual cash flow characteristics and the Group's business model for managing them. With the exception of trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient, the Group initially measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs. Trade receivables that do not contain a significant financing component or for which the Group has applied the practical expedient are measured at the transaction price determined under KIFRS 1115.

In order for a financial asset to be classified and measured at amortized cost or fair value through OCI, it needs to give rise to cash flows that are 'solely payments of principal and interest (SPPI)' on the principal amount outstanding. This assessment is referred to as the SPPI test and is performed at an instrument level.

The Group's business model for managing financial assets refers to how it manages its financial assets in order to generate cash flows. The business model determines whether cash flows will result from collecting contractual cash flows, selling the financial assets, or both.

Purchases or sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the market place (regular way trades) are recognized on the trade date, i.e., the date that the Group commits to purchase or sell the asset.

Subsequent measurement
For purposes of subsequent measurement, financial assets are classified in four categories:
- Financial assets at amortized cost (debt instruments)
- Financial assets at fair value through OCI with recycling of cumulative gains and losses (debt instruments)
- Financial assets designated at fair value through OCI with no recycling of cumulative gains and losses upon derecognition (equity instruments)
- Financial assets at fair value through profit or loss

Financial assets at amortized cost (debt instruments)
This category is the most relevant to the Group. The Group measures financial assets at amortized cost if both of the following conditions are met:
- The financial asset is held within a business model with the objective to hold financial assets in order to collect contractual cash flows, and
- The contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding

Financial assets at amortized cost are subsequently measured using the effective interest rate (EIR) method and are subject to impairment. Gains and losses are recognized in profit or loss when the asset is derecognized, modified or impaired.

2.13 Financial instruments: Initial recognition and subsequent measurement (cont'd)

Financial assets designated at fair value through OCI (equity instruments)

Upon initial recognition, the Group can elect to classify irrevocably its equity investments as equity instruments designated at fair value through OCI when they meet the definition of equity under KIFRS 1032 *Financial Instruments: Presentation and are not held for trading*. The classification is determined on an instrument-by-instrument basis.

Gains and losses on these financial assets are never recycled to profit or loss. Dividends are recognized as other non-operating income in the consolidated statement of profit or loss when the right of payment has been established, except when the Group benefits from such proceeds as a recovery of part of the cost of the financial asset, in which case, such gains are recorded in OCI. Equity instruments designated at fair value through OCI are not subject to impairment assessment.

The Group may elect to classify irrevocably its non-listed equity investments under this category.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss include financial assets held for trading and financial assets designated upon initial recognition at fair value through profit or loss. Financial assets are classified as held for trading if they are acquired for the purpose of selling or repurchasing in the near term. Derivatives, including separated embedded derivatives, are also classified as held for trading unless they are designated as effective hedging instruments. Financial assets with cash flows that are not solely payments of principal and interest are classified and measured at fair value through profit or loss, irrespective of the business model. Notwithstanding the criteria for debt instruments to be classified at amortized cost or at fair value through OCI, as described above, debt instruments may be designated at fair value through profit or loss on initial recognition if doing so eliminates, or significantly reduces, an accounting mismatch.

Financial assets at fair value through profit or loss are carried in the consolidated statement of financial position at fair value with net changes in fair value recognized in the consolidated statement of profit or loss.

A derivative embedded in a hybrid contract, with a financial liability or non-financial host, is separated from the host and accounted for as a separate derivative if: the economic characteristics and risks are not closely related to the host; a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and the hybrid contract is not measured at fair value through profit or loss. Embedded derivatives are measured at fair value with changes in fair value recognized in profit or loss. Reassessment only occurs if there is either a change in the terms of the contract that significantly modifies the cash flows that would otherwise be required or a reclassification of a financial asset out of the fair value through profit or loss category.

A derivative embedded within a hybrid contract containing a financial asset host is not accounted for separately. The financial asset host together with the embedded derivative is required to be classified in its entirety as a financial asset at fair value through profit or loss.

2.13 Financial instruments: Initial recognition and subsequent measurement (cont'd)

Derecognition

A financial asset (or, where applicable a part of a financial asset or part of a group of similar financial assets) is derecognized when:

- The rights to receive cash flows from the asset have expired.
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass-through' arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

When the Group has transferred its rights to receive cash flows from an asset or has entered into a pass-through arrangement, it evaluates if, and to what extent, it has retained the risks and rewards of ownership. When it has neither transferred nor retained substantially all of the risks and rewards of the asset, nor transferred control of the asset, the Group continues to recognize the transferred asset to the extent of the Group's continuing involvement. In that case, the Group also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Group has retained.

Continuing involvement that takes the form of a guarantee over the transferred asset is measured at the lower of the original carrying amount of the asset and the maximum amount of consideration that the Group could be required to repay.

Impairment of financial assets

Further disclosures relating to impairment of financial assets are also provided in the following notes:

- Disclosures for significant assumptions
- Debt instruments at fair value through OCI
- Trade receivables, including contract assets

The Group recognizes an allowance for expected credit losses (ECLs) for all debt instruments not held at fair value through profit or loss. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate. The expected cash flows will include cash flows from the sale of collateral held or other credit enhancements that are integral to the contractual terms.

ECLs are recognized in two stages. For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure, irrespective of the timing of the default (a lifetime ECL).

2.13 Financial instruments: Initial recognition and subsequent measurement (cont'd)

For trade receivables and contract assets, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognizes a loss allowance based on lifetime ECLs at each reporting date. The Group has established a provision matrix that is based on its historical credit loss experience, adjusted for forward-looking factors specific to the debtors and the economic environment.

2.13.2 Financial liabilities

Initial recognition and measurement
Financial liabilities are classified, at initial recognition, as financial liabilities at fair value through profit or loss, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate.

All financial liabilities are recognized initially at fair value and in the case of loans and borrowings and payable, net of directly attributable transaction costs.

The Group's financial liabilities include trade and other payables.

Subsequent measurement
The measurement of financial liabilities depends on their classification.

Financial liabilities at fair value through profit or loss
Financial liabilities at fair value through profit or loss includes financial liabilities held for trading and financial liabilities designated upon initial recognition as of fair value through profit or loss.

Financial liabilities are classified as held for trading if they are acquired for the purpose of selling in the near term. This category includes derivative financial instruments entered into by the Group that are not designated as hedging instruments in hedge relationships as defined by KIFRS 1109. Separated embedded derivatives are also classified as held for trading unless they are designated as effective hedging instruments. Gains or losses on liabilities held for trading are recognized in the consolidated statement of profit or loss.

Financial liabilities designated upon initial recognition at fair value through profit or loss are designated at the initial date of recognition, and only if the criteria in KIFRS 1109 are satisfied. The Group has not designated any financial liability as of fair value through profit or loss.

Loans and borrowings
After initial recognition, interest bearing loans and borrowings are subsequently measured at amortized cost using the effective interest rate method. Gains and losses are recognized in the consolidated statement of profit or loss when the liabilities are derecognized as well as through the effective interest rate (EIR) method amortization process.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fee or costs that are an integral part of the EIR. The EIR amortization is included as finance costs in the consolidated statement of profit or loss.

Derecognition
A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as a derecognition of the original liability and the recognition of a new liability, and the difference in the respective carrying amounts is recognized in the consolidated statements of profit or loss.

2.13.3 Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount reported in the consolidated statement of financial position if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

2.14 Provisions

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation and the increase in the provision due to passage of time is recognized as interest expense.

2.15 Current and deferred tax

The tax expense for the period consists of current and deferred tax. Tax is recognized on the profit for the period in the statement of income, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively. The tax expense is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period.

Management periodically evaluates tax policies that are applied in tax returns in which applicable tax regulation is subject to interpretation. The Group recognizes current income tax on the basis of the amount expected to be paid to the tax authorities.

Deferred tax is recognized for temporary differences arising between the tax bases of assets and liabilities and their carrying amounts as expected tax consequences at the recovery or settlement of the carrying amounts of the assets and liabilities. However, deferred tax assets and liabilities are not recognized if they arise from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss.

Deferred tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the deductible temporary differences can be utilized.

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

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred taxes assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

2.16 Employee benefits

The Group has both defined contribution and defined benefit plans.

A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The contributions are recognized as employee benefit expense when an employee has rendered service.

A defined benefit plan is a pension plan that is not a defined contribution plan. Typically, defined benefit plans define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation. The liability recognized in the statement of financial position in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds and that have terms to maturity approximating to the terms of the related pension obligation. The remeasurements of the net defined benefit liability are recognized in other comprehensive income.

2.16 Employee benefits (cont'd)

If any plan amendments, curtailments, or settlements occur, past service costs or any gains or losses on settlement are recognized as profit or loss for the year.

The Group provides long-term employee benefits to long-term employees. Other long-term employee benefits are accounted for in the same way as the defined benefit plans. The Group recognizes service costs, net interest expense and remeasurements of other long-term employee benefits liabilities in the consolidated statement of profit or loss. Such liabilities are evaluated annually by an independent actuary.

2.17 Revenue from contracts with customers

The Group is mainly engaged in fire, crime and disaster prevention services. Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Group expects to be entitled in exchange for those goods or services. The Group has generally concluded that it is the principal in its revenue arrangements, except for the agency services below, because it typically controls the goods or services before transferring them to the customer.

The disclosures of significant accounting judgments, estimates and assumptions relating to revenue from contracts with customers are provided in Note 3.

Sale of goods
Revenue from sale of goods is recognized at the point in time when control of the asset is transferred to the customer, generally on delivery of the goods. The normal credit term is 30 to 90 days upon delivery.
The Group considers whether there are other promises in the contract that are separate performance obligations to which a portion of the transaction price needs to be allocated (e.g., warranties, customer loyalty points). In determining the transaction price for the sale of goods, the Group considers the effects of variable consideration, the existence of significant financing components, noncash consideration, and consideration payable to the customer (if any).

Rendering of services
The Group mainly renders security services. This service is rendered on a fixed contract, and revenue is recognized according to the time passed. For certain services that are rendered, revenue is recognized according to the percentage of completion. The percentage of completion is measured as the costs to date over the total estimated costs.

Contract balances

(1) Contract assets
A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognized for the earned consideration that is conditional.

(2) Trade receivables
A receivable represents the Group's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due). Refer to accounting policies of financial assets in the Note 2.13.

(3) Contract liabilities
A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognized when the payment is

made or the payment is due (whichever is earlier). Contract liabilities are recognized as revenue when the Group performs under the contract.

2.18 Earnings per share

Basic earnings per share is calculated by dividing the profit attributable to equity holders of the Group by the weighted average number of ordinary shares in issue during the year, excluding ordinary shares purchased by the Group and held as treasury shares. Diluted earnings per share is calculated by adjusting the weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares. The dilutive potential ordinary shares are applied when dilutive effects are recognized.

2.19 Approval of the consolidated financial statements

The issuance of the Group's consolidated financial statements as of December 31, 2020 and for the year then ended were approved by the Board of Directors on January 27, 2021, which are subject to change upon approval of the annual shareholders' meeting.

3. Critical accounting estimates and judgments

The Group makes estimates and assumptions concerning the future. The estimates and assumptions are continuously evaluated with consideration to factors such as events reasonably predictable in the foreseeable future within the present circumstance according to historical experience. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

3.1 Revenue recognition

Revenue from the rendering of services is recognized under the percentage-of-completion, under which revenue is generally recognized based on the costs incurred to date as a percentage of the total estimated costs to be incurred. The current revenue will be impacted in the period by factors such as variability of beginning projects, scope, costs and customer's plan.

3.2 Useful life of property and equipment

The Group determines estimated useful life of property and equipment and recognizes the amount of depreciation. These estimates are based on life cycle of products and can be affected according to competitors that correspond to change of technology and industry-life cycle. In case that newly estimated useful life decrease, management will increase the amount of depreciation. Also, the assets that are abandoned, set for held for sale and impaired in techniques can be removed or the value of assets will be reduced.

3.3 Estimated impairment of goodwill

The Group tests annually whether goodwill has suffered any impairment. The recoverable amounts of cash-generating units have been determined based on value-in-use calculations. These calculations require the use of estimates (Note 14).

3.4 Expected credit losses allowance for trade receivables and contract assets.

The Group uses a provision set-up table to calculate the expected credit losses (ECLs) for its trade receivables and contract assets. The provisioning rate is based on the number of deadlines in bundles by various customer segments (e.g., regional location, product type, customer type and credit rating, collateral or transaction credit insurance) with similar loss patterns.

The provision matrix is based on the default rate observed in our past. The Group adjusts the setting rate table by reflecting the forward-looking information in the past credit loss experience. Adjust the default rate for each settlement date and analyze the changes in future expectations.

3. Critical accounting estimates and judgments (cont'd)

An assessment of the correlation between past default rates and future economic conditions and expected credit losses (ECLs) is a significant estimate. The magnitude of expected credit losses is sensitive to changes in the situation and the future economic environment. The Group's past credit loss experience and expectations of the economic environment do not represent future real-life defaults for customers. Information on sales receivables and expected credit losses for contract assets of the Group is disclosed in (Note 9).

3.5 Fair value of financial instruments

In principle, the fair value of financial instruments that are not traded in an active market is determined using valuation techniques. At the end of the reporting period, the Group makes a judgement on the choice and assumptions of various evaluation techniques based on important market conditions

3.6 Defined benefit liability

The present value of defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions including the discount rate (Note 15)

3.7 Income taxes

The Group is operating in numerous countries and the income generated from these operations is subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain (Note 27).

Surtax on undistributed corporate earnings
The Group shall pay an additional surtax where the use of corporate earnings on qualifying investments, wage increase and supplier partnership fall below a certain portion of its taxable income for 3 years from 2018. As the Group considers the surtax on its undistributed earnings when computing its corporate income tax, the Group's income tax may change arising from changes arising from changes in investment, wage growth, or supplier partnership.

4. Financial risk management

The Group's activities are expose to a variety of financial risks: market risk (including price risk), credit risk and liquidity risk. The Group's overall risk management program focuses on the unpredictability of financial markets and seeks to minimize potential adverse effects on the Group's financial performance.

4.1 Market risk

4.1.1 Price risk

The Group is exposed to equity securities price risk due to equity securities held by the Group, which are classified as financial assets at fair value through OCI on the consolidated statement of financial position.

The table below summarizes the impact of increases (decreases) of the equity securities on the Group's comprehensive income for the year. The analysis is based on the assumption that the equity securities had increased (decreased) by 30% with all other variables held constant (Korean won in thousands):

	Impact on comprehensive income	
	2020	2019
Equity securities (listed)	₩ 2,202,041	₩ 1,453,890

4.1.2 Credit risk

Credit risk is managed on a Group basis. Credit risk arises from cash and cash equivalents, derivative financial instruments and deposits with banks and financial institutions, as well as credit exposures to customers, including outstanding receivables and committed transactions. For banks and financial institutions, only independently rated parties with a minimum rating of 'A' are accepted. If customers are independently rated, these ratings are used. If there is no independent rating, the credit quality of the customer is evaluated taking into account its financial position, past experience and other factors. Individual risk limits are set based on internal or external ratings in accordance with limits set by the board. The utilization of credit limits is regularly monitored. Sales to retail customers are settled in cash or using major credit cards.

The Group's maximum exposures of financial assets to credit risk correspond with amount of financial assets excluding equity securities. Details of impaired receivables are described in Note 9.

4.1.3 Liquidity risk

The Group's finance team monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times so that the Group does not breach borrowing limits or covenants (where applicable) on any of its borrowing facilities. Such forecasting takes into consideration the Group's debt financing plans, covenant compliance, compliance with internal statement of financial position ratio targets and, if applicable external regulatory or legal requirements – for example, currency restrictions.

The Group's finance team invests surplus funds in interest-bearing current accounts, time deposits, money market deposits and marketable securities, instruments with appropriate maturities to provide sufficient liquidity in accordance with decisions made through the aforementioned forecasts.

The followings are the contractual maturities of financial liabilities as of December 31, 2020 and 2019 (Korean won in thousands):

	2020			
	Less than 1 year	Between 1 and 3 years	Between 3 and 5 years	Over 5 years
Trade and other payables	₩ 217,494,472	₩ -	₩ -	₩ -
Lease liabilities	18,356,585	-	-	-
Long-term trade and other payables	-	7,119,069	-	-
Long-term lease liabilities	-	26,109,964	11,148,891	-
Deposits withheld	34,107,513	4,898,397	-	-

	2019			
	Less than 1 year	Between 1 and 3 years	Between 3 and 5 years	Over 5 years
Trade and other payables	₩ 217,488,064	₩ -	₩ -	₩ -
Lease liabilities	11,754,871	-	-	-
Long-term trade and other payables	-	5,467,817	-	-
Long-term lease liabilities	-	8,174,226	5,417,823	1,505,030
Deposits withheld	34,979,136	5,955,007	-	-

4.1.4 Capital management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. This ratio is calculated as total liabilities divided by total capital. The gearing ratios as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Total liabilities (A)	₩ 522,505,041	₩ 467,353,241
Total equity (B)	1,384,184,652	1,327,606,477
Debt ratio (A/B)	37.75%	35.20%

5. Fair value

There is no significant change in the business and economic environments that affects the fair value of financial assets and liabilities of the Group during 2020.

5.1 Fair value of financial instruments by category

The carrying amounts and fair values of financial instruments by category as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020		2019	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial instruments (*1):				
Financial assets at fair value through OCI	₩ 21,277,111	₩ 21,277,111	₩ 10,270,706	₩ 10,270,706
Financial assets at fair value through profit or loss	6,546,721	6,546,721	2,555,935	2,555,935
Lease liabilities (*2)	18,356,585	(*2)	11,754,871	(*2)
Long-term lease liabilities (*2)	37,258,854	(*2)	15,097,078	(*2)

(*1) Short-term trade receivables and payables whose carrying amount is a reasonable approximation of fair value are excluded from the fair value disclosures.
(*2) It was excluded from the fair value disclosure in accordance with KIFRS 1107 *Financial Instruments: Disclosures.*

5.2 Fair value hierarchy

Assets measured at fair value or for which the fair value is disclosed are categorized within the fair value hierarchy, and the defined levels are as follows (Korean won in thousands):

Level 1 - The quoted prices in active markets for identical assets or liabilities
Level 2 - The inputs that are observable for the asset or liability, either directly or indirectly
Level 3 - The inputs for the asset or liability that are not based on observable market data

5. Fair value (cont'd)

	2020			
	Level 1	Level 2	Level 3	Total
Recurring fair value measurements:				
Fair value through OCI	₩ 9,683,557	₩ -	₩ 11,593,554	₩ 21,277,111
Fair value through profit or loss	-	-	6,546,721	6,546,721

	2019			
	Level 1	Level 2	Level 3	Total
Recurring fair value measurements:				
Fair value through OCI	₩ 6,393,537	₩ -	₩ 3,877,169	₩ 10,270,706
Fair value through profit or loss	-	-	2,555,935	2,555,935

6. Category of financial instruments

Details of financial assets and liabilities by categories as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020			
Financial asset	Amortized cost	Fair value through OCI	Fair value through profit or loss	Total
Cash and cash equivalents	₩ 213,172,898	₩ -	₩ -	₩ 213,172,898
Short-term financial assets	299,802,544	-	-	299,802,544
Trade and other receivables	136,697,278	-	-	136,697,278
Accrued income	963,122	-	-	963,122
Long-term financial assets	6,000	-	-	6,000
Financial assets at fair value through OCI	-	21,277,111	-	21,277,111
Financial assets at fair value through profit or loss	-	-	6,546,721	6,546,721
Loans and receivables, non-current	49,849,801	-	-	49,849,801
	₩ 700,491,643	₩ 21,277,111	₩ 6,546,721	₩ 728,315,475

	2019			
Financial asset	Amortized cost	Fair value through OCI	Fair value through profit or loss	Total
Cash and cash equivalents	₩ 200,582,006	₩ -	₩ -	₩ 200,582,006
Short-term financial assets	226,751,126	-	-	226,751,126
Trade and other receivables	143,839,685	-	-	143,839,685
Accrued income	1,553,808	-	-	1,553,808
Long-term financial assets	6,000	-	-	6,000
Financial assets at fair value through OCI	-	10,270,706	-	10,270,706
Financial assets at fair value through profit or loss	-	-	2,555,935	2,555,935
Loans and receivables, non-current	48,346,937	-	-	48,346,937
	₩ 621,079,562	₩ 10,270,706	₩ 2,555,935	₩ 633,906,203

6. Category of financial instruments (cont'd)

Financial liabilities- amortized cost		2020		2019
Trade and other payables	₩	217,494,472	₩	217,488,064
Lease liabilities		18,356,585		11,754,871
Long-term trade and other payables		7,119,069		5,467,817
Long-term lease liabilities		37,258,854		15,097,078
Current portion of deposits withheld		34,107,513		34,979,136
Deposits withheld		4,898,397		5,955,007
	₩	319,234,890	₩	290,741,973

Details of gains or losses on financial instruments by category for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

		2020		2019
Financial assets at fair value through OCI:				
Gain on valuation (other comprehensive income) (*)	₩	506,405	₩	739,800
Dividend income		326,748		209,435
Fair value through profit or loss:				
Dividend income		11,474		31,565
Financial assets at amortized costs:				
Interest income		3,863,557		6,170,796
Impairment (allowance for doubtful accounts)		(3,444,651)		(2,488,403)
Gain/loss on foreign currency transactions		(1,542,507)		(999,736)
Financial liabilities at amortized costs:				
Interest expenses		1,058,520		694,358

(*) The amount does not include tax effect

7. Cash and cash equivalents

The book values of cash and cash equivalents as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Cash in bank and on hand	₩ 31,078,346	₩ 23,298,964
Short-term bank deposits (*)	182,094,552	177,283,042
	₩ 213,172,898	₩ 200,582,006

(*) Short-term bank deposits include ordinary deposits and time deposits maturing within three months from the acquisition date.

Restricted financial instruments

As of December 31, 2020, long-term and short-term financial instruments such as benefit sharing funds and deposits for checking accounts, which amount to ₩5,873 million, are restricted for use.

8. Fair value of financial instruments

Details of financial assets at fair value through OCI as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Equity instruments	₩ 21,277,111	₩ 10,270,706

Details of financial assets at fair value through profit or loss as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Equity instruments	₩ 2,054,650	₩ 2,063,863
Debt instruments	4,492,071	492,071
	₩ 6,546,721	₩ 2,555,935

Changes in financial instruments measured at fair value for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Beginning balance	₩ 12,826,641	₩ 13,589,055
Acquisition	14,500,000	1,147,477
Reclassification	-	(2,700,000)
Valuation	497,192	790,109
Ending balance	₩ 27,823,833	₩ 12,826,641

9. Trade and other receivables and contract assets

Trade and other receivables as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Trade receivables	₩ 143,779,068	₩ 151,468,656
Allowance for doubtful accounts of trade receivables	(10,452,876)	(10,682,241)
Other receivables	3,698,327	3,175,116
Allowance for doubtful accounts of other receivables	(327,240)	(121,846)
	₩ 136,697,279	₩ 143,839,685

The carrying amount of the Group's contract assets as of December 31, 2020 is ₩34,549 million, which is the net of allowance for doubtful account of ₩898 million

Changes in the carrying amount of allowance for doubtful account of trade and other receivables for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Beginning balance	₩ 11,818,889	₩ 11,828,231
Bad debt expenses	3,657,718	2,957,782
Written off and others	(3,798,689)	(2,967,124)
Ending balance	₩ 11,677,918	₩ 11,818,889

Information on credit risk exposure of trade and other receivables as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020		
	Expected credit loss rate	Book value	Expected credit loss
Contract assets	2.5%	₩ 35,447,177	₩ 897,803
Trade and other receivables:			
Not overdue	-	134,519,959	-
Less than 1 year	38.1%	3,064,221	1,168,039
1 year ~ 2 years	81.0%	1,477,021	1,195,884
More than 2 years	100.0%	8,416,193	8,416,193
Total	6.4%	₩ 182,924,571	₩ 11,677,919

	2019		
	Expected credit loss rate	Book value	Expected credit loss
Contract assets	1.9%	₩ 54,248,914	₩ 1,014,802
Trade and other receivables:			
Not overdue	-	141,271,544	-
Less than 1 year	46.1%	3,872,043	1,785,393
1 year ~ 2 years	73.7%	1,833,341	1,351,850
More than 2 years	100.0%	7,666,844	7,666,844
Total	5.7%	₩ 208,892,686	₩ 11,818,889

10. Inventories

Inventories as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

		2020		2019
Supplies and merchandise	₩	26,306,815	₩	24,006,850
Security contracts-in-process		17,437,876		17,159,103
Goods in transit		248,177		242,164
	₩	43,992,868	₩	41,408,117

The cost of inventories recognized as expense and included in 'cost of sales' amounts to ₩157,091 million (2019: ₩171,944million).

11. Investment in a joint venture

Details of investment in a joint venture as of December 31, 2020 are as follows (Korean won in thousands):

	2020						
	Ownership percentage		Acquisition cost		Net asset value		Book Value
Koramco Investment Private REITs No.78 (*)	4.11%	₩	2,700,000	₩	2,765,262	₩	2,525,717

(*) The Group classified the equity securities as investment in a joint venture because all investors' consent is required in determining the financial and operating policies based on the investor agreement.

Changes in investment in a joint venture for the year ended December 31, 2020 are as follows (Korean won in thousands):

		2020
Opening balance	₩	2,561,156
Acquisition		-
Share of profit of a joint venture		140,075
Dividend		(175,514)
Closing balance	₩	2,525,717

A summarized financial information of the joint venture as of and for the year ended December 31, 2020 is as follows (Korean won in thousands):

		2020
Total assets	₩	157,647,383
Total liabilities		90,366,060
Revenue		9,489,047
Profit for the year		3,408,145
Total comprehensive income		3,408,145

Details of adjustments of net assets of a joint venture to the carrying amount of the Group's share in the joint venture for the year ended December 31, 2020 are as follows (Korean won in thousands):

		2020
Net assets	₩	67,281,323
Ownership percentage		4.11%
The Group's share of net assets		2,765,262
Others		(239,546)
Book value	₩	2,525,716

12. Property and equipment

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

2020	Land	Buildings	Structures	Security equipment	Security control equipment	Vehicles	Furniture and fixtures	Construction in progress	Total
Beginning acquisition cost	₩ 52,017,102	₩ 84,702,359	₩ 10,015,272	₩ 910,327,592	₩ 27,030,682	₩ 1,347,434	₩ 73,362,413	₩ 1,624,110	₩ 1,160,426,964
Beginning accumulated depreciation	-	(30,223,919)	(7,144,642)	(563,567,281)	(25,699,656)	(1,113,512)	(62,443,621)	-	(690,192,632)
Beginning net book value	52,017,102	54,478,440	2,870,630	346,760,311	1,331,026	233,922	10,918,792	1,624,110	470,234,332
Acquisitions	-	-	-	131,051,744	522,390	-	1,205,619	6,863,826	139,643,579
Disposals	-	-	-	(2,161,988)	-	-	(96,705)	-	(2,258,693)
Depreciation	-	(1,763,237)	(399,318)	(123,741,515)	(662,855)	(69,461)	(3,958,497)	-	(130,594,884)
Transfer	-	-	-	-	-	-	764,448	(8,222,948)	(7,458,500)
Exchange differences	-	-	-	-	12,924	(2,552)	(360)	-	10,011
Ending acquisition cost	52,017,102	84,702,359	10,015,272	942,811,820	27,573,499	1,343,685	74,417,020	264,988	1,193,145,745
Ending accumulated depreciation	-	(31,987,156)	(7,543,960)	(590,903,270)	(26,370,014)	(1,181,777)	(65,583,723)	-	(723,569,901)
Ending net book value	₩ 52,017,102	₩ 52,715,203	₩ 2,471,312	₩ 351,908,550	₩ 1,203,485	₩ 161,908	₩ 8,833,297	₩ 264,988	₩ 469,575,844

2019	Land	Buildings	Structures	Security equipment	Security control equipment	Vehicles	Furniture and fixtures	Construction in progress	Total
Beginning acquisition cost	₩ 52,017,102	₩ 84,702,359	₩ 9,865,822	₩ 860,211,649	₩ 26,534,421	₩ 1,373,975	₩ 71,271,497	₩ 2,313,910	₩ 1,108,290,735
Beginning accumulated depreciation	-	(28,460,657)	(6,746,043)	(527,092,472)	(24,866,910)	(1,071,580)	(60,824,522)	-	(649,062,186)
Beginning net book value	52,017,102	56,241,702	3,119,779	333,119,177	1,667,511	302,395	10,446,975	2,313,910	459,228,549
Acquisitions	-	-	-	137,480,368	432,082	-	2,807,146	12,461,649	153,181,246
Disposals	-	-	-	(2,195,222)	-	(1)	(5,840)	-	(2,201,064)
Depreciation	-	(1,763,262)	(398,599)	(121,644,011)	(805,118)	(91,529)	(4,143,857)	-	(128,846,375)
Transfer	-	-	149,450	-	-	20,916	1,812,723	(13,151,449)	(11,168,360)
Exchange differences	-	-	-	-	36,551	2,140	1,645	-	40,336
Ending acquisition cost	52,017,102	84,702,359	10,015,272	910,327,592	27,030,682	1,347,434	73,362,413	1,624,110	1,160,426,964
Ending accumulated depreciation	-	(30,223,919)	(7,144,642)	(563,567,281)	(25,699,656)	(1,113,513)	(62,443,621)	-	(690,192,632)
Ending net book value	₩ 52,017,102	₩ 54,478,440	₩ 2,870,630	₩ 346,760,311	₩ 1,331,026	₩ 233,921	₩ 10,918,792	₩ 1,624,110	₩ 470,234,332

Depreciation expense of ₩127,605 million (2019: ₩125,731 million) has been charged to 'cost of sales' and ₩2,990 million (2019: ₩3,115 million) to selling and administrative expenses.

13. Leases

The Group has lease contracts for various items of buildings, vehicles and computerized equipment used in its operations. The lease term for the Group's right-of-use assets is generally 1 to 5 years. The Group's obligations under the lease agreement are guaranteed by the lessor's rights to the leased asset. In general, the Group is restricted from distributing the lease assets and sub-leasing.

The Group also has certain leases of vehicles and computerized equipment with lease terms of 12 months or less and leases of office equipment with low value. The Group applies the 'short-term lease' and 'lease of low-value assets' recognition exemptions for these leases.

Details of right-of-use assets as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020		
	Acquisition cost	Accumulated depreciation	Book value
Buildings	₩ 54,017,186	₩ (17,102,991)	₩ 36,914,195
Vehicles	30,065,880	(14,144,568)	15,921,311
Computerized equipment	2,624,406	(680,274)	1,944,132
	₩ 86,707,472	₩ (31,927,833)	₩ 54,779,638

	2019		
	Acquisition cost	Accumulated depreciation	Book value
Buildings	₩ 14,882,877	₩ (8,273,980)	₩ 6,608,897
Vehicles	26,356,999	(8,658,592)	17,698,407
Computerized equipment	3,073,110	(646,260)	2,426,850
	₩ 44,312,986	₩ (17,578,832)	₩ 26,734,154

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

	2020			
	Building	Vehicles	Computerized equipment	Total
Beginning balance	₩ 6,608,897	₩ 17,698,407	₩ 2,426,850	₩ 26,734,154
Increase	41,108,664	7,961,654	-	49,070,318
Decrease (Termination of contract)	(211,094)	(731,915)	(44,194)	(987,203)
Depreciation	(10,592,272)	(9,006,834)	(438,524)	(20,037,630)
Ending Balance	₩ 36,914,195	₩ 15,921,312	₩ 1,944,132	₩ 54,779,639

	2019			
	Building	Vehicles	Computerized equipment	Total
Beginning balance	₩ -	₩ -	₩ -	₩ -
Adoption of KIFRS 1116	12,518,089	19,354,160	1,353,509	33,225,758
Increase	3,981,495	8,777,458	1,719,601	14,478,554
Decrease (Termination of contract)	(1,339,057)	(875,029)	-	(2,214,085)
Depreciation	(8,551,630)	(9,558,183)	(646,260)	(18,756,072)
Ending Balance	₩ 6,608,897	₩ 17,698,406	₩ 2,426,850	₩ 26,734,155

13. Leases (cont'd)

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

	2020	2019
Beginning balance	₩ 26,851,949	₩ -
Adoption of KIFRS 1116	-	33,225,758
Increase	49,070,318	14,478,554
Decrease (Termination of contract)	(1,058,034)	(2,217,006)
Interest expense	1,058,519	694,358
Payment of lease liabilities.	(20,300,790)	(19,330,130)
Foreign currency translation.	(6,523)	415
Ending balance	₩ 55,615,439	₩ 26,851,949

Maturity profiles of lease liabilities recognized by the Group as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Within one year	₩ 18,356,585	₩ 11,754,871
After one year but not more than five years	37,258,854	13,592,048
More than five years	-	1,505,030
	₩ 55,615,439	₩ 26,851,949

Gains or losses recognized from lease contracts for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Expense relating to short-term leases	₩ 6,838,292	₩ 8,965,502
Expense relating to leases of low-value assets	2,818,528	3,380,615
Depreciation expense of right-of-use assets	20,037,630	18,756,072
Interest expense on lease liabilities	1,058,519	694,358

14. Intangible assets

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

	2020				
	Goodwill	Industrial property	Development costs	Others	Total
Beginning balance	₩ 328,092,729	₩ 338,342	₩ 18	₩ 111,495,201	₩ 439,926,290
Increase (*)	-	81,079	-	7,879,843	7,960,922
Disposal	-	-	-	(69,340)	(69,340)
Amortization	-	(64,051)	-	(15,183,954)	(15,248,006)
Exchange differences	-	-	-	(5,174)	(5,174)
Ending balance	₩ 328,092,729	₩ 355,369	₩ 18	₩ 104,116,576	₩ 432,564,692

(*) Includes amounts reclassified from construction-in-progress.

14. Intangible assets (cont'd)

	2019				
	Goodwill	Industrial property	Development costs	Others	Total
Beginning balance	₩ 328,092,729	₩ 351,724	₩ 18	₩ 114,817,263	₩ 443,261,734
Increase (*)	-	45,842	-	11,690,122	11,735,965
Disposal	-	-	-	(669,160)	(669,160)
Amortization	-	(59,224)	-	(14,347,149)	(14,406,374)
Exchange differences	-	-	-	4,125	4,125
Ending balance	₩ 328,092,729	₩ 338,342	₩ 18	₩ 111,495,201	₩ 439,926,290

(*) Includes amounts reclassified from construction-in-progress.

Amortization of ₩490 million (2019: ₩322 million) is included in the 'cost of sales' and ₩14,758 million (2019: ₩14,084 million) in the 'selling and administrative expenses'.

Total research and development costs that the Group recognized as expenses are ₩12,118 million (2019: ₩12,522 million).

Impairment tests for goodwill

As of December 31, 2020, the Group has goodwill which arose from the acquisition of a business in 2014. Details of goodwill allocated to groups of cash generating units under the management's control are as follows (Korean won in thousands):

	2020
Building management	₩ 328,092,729

The Group tests annually for impairment. The recoverable amount of the groups of cash generating units is estimated using the calculation of value in use. The calculation of value in use, based on a five-year financial budget approved by management, used pre-tax cash flow estimation. Cash flows beyond the five-year period are extrapolated using the estimated growth rates stated below. The growth rate does not exceed the long-term average growth rate for the business in which the cash generating units operate. In addition, a constant growth rate assumption is used for the perpetual cash flow calculation. The key assumptions used for value-in-use calculations in 2020 are as follows:

	2020
Operating profit rate of cash sales to total sales	8.6 ~ 9.3%
Revenue growth rate (*1)	1.6 ~ 7.4%
Perpetual growth rate	1.00%
Discount rate before tax (*2)	10.3%

(*1) The estimate of cash flows for the next five years is calculated using the revenue growth rate that is based on historical growth rate.
(*2) Pre-tax discount rate applied to the cash flow projections

The Group determined budgeted sales growth rate based on past performances and its expectations of the market development.

The impairment test suggests that the carrying value of cash generating units does not exceed the recoverable amount.

15. Trade and other payables

Trade and other payables as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020		2019	
	Current	Non-current	Current	Non-current
Trade payables	₩ 106,051,559	₩ -	₩ 114,123,242	₩ -
Other payables	62,273,594	-	55,243,483	-
Accrued expenses	49,169,317	7,119,068	48,121,339	5,467,817
	₩ 217,494,470	₩ 7,119,068	₩ 217,488,064	₩ 5,467,817

16. Net defined benefit liabilities (assets)

Defined benefit plans that the Group operates are pension plans based on the final salary of employees and provide a guaranteed amount of pensions to employees. The level of benefits provided depends on the length of service and the final salary of employees. The benefit payments are from separately administered funds.

Net defined benefit liabilities (assets) recognized in the consolidated statements of financial position as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Present value of defined benefit obligations	₩ 342,307,413	₩ 322,460,913
Fair value of plan assets (*)	(350,425,625)	(319,361,592)
Subtotal	(8,118,212)	3,099,321
Net defined benefit assets	(9,114,989)	(784,390)
Net defined benefit liabilities	996,777	3,883,712
Liabilities (assets) recognized in the consolidated statements of financial position	₩ (8,118,212)	₩ 3,099,322

(*) Contribution to the National Pension Fund of ₩341 million (2019: ₩346 million), is included in the fair value of plan assets.

Changes in the present value of defined benefit obligations for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Beginning balance	₩ 322,460,913	₩ 303,092,941
Current service cost	36,437,668	36,167,979
Interest expense	6,239,407	6,748,921
Remeasurements:		
Actuarial loss (gain) arising from changes in demographic assumptions	(812,161)	1,024,103
Actuarial gain arising from changes in financial assumptions	(225,496)	(12,462,527)
Actuarial loss arising from experience adjustments	2,308,624	7,197,533
Payments from plans: Benefits paid	(25,540,179)	(19,308,036)
Transfer of affiliates	1,438,638	-
Ending balance	₩ 342,307,414	₩ 322,460,914

16. Net defined benefit liabilities (assets) (cont'd)

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

	2020	2019
Beginning balance	₩ 319,361,592	₩ 289,794,836
Interest income	5,645,033	5,924,339
Remeasurements:		
Return on plan assets (excluding amounts included in interest income)	(273,266)	(843,185)
Contributions: Employers	47,334,725	44,399,395
Payments from plans: Benefits paid	(21,642,457)	(19,913,794)
Ending balance	₩ 350,425,627	₩ 319,361,591

Plan assets as of December 31, 2020 and 2019 consist of the following (Korean won in thousands):

2020	Quoted price	Unquoted price	Total	Composition
Cash and cash equivalents	₩ 350,084,289	₩ -	₩ .350,084,289	99.90%
Others	-	341,336	341,336	0.10%
	₩ 350,084,289	₩ 341,336	₩ 350,425,625	100.00%

2019	Quoted price	Unquoted price	Total	Composition
Cash and cash equivalents	₩ 319,015,908	₩ -	₩ 319,015,908	99.89%
Others	-	345,684	345,684	0.11%
	₩ 319,015,908	₩ 345,684	₩ 319,361,592	100.00%

The principal actuarial assumptions as of December 31, 2020 and 2019 are as follows:

	2020	2019
Discount rate	2.00%	2.00%
Salary growth rate	3.36% ~ 5.00%	3.36% ~ 5.00%

The sensitivity of the defined benefit obligations as of December 31, 2020, to changes in the weighted principal assumptions is as follows (in percentage, %):

	Effect on defined benefit obligation		
	Changes in principal assumption	Increase in principal assumption	Decrease in principal assumption
Discount rate	1.00%	9% decrease	10% increase
Salary growth rate	1.00%	10% increase	9% decrease

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. The sensitivity of the defined benefit obligation to changes in principal actuarial assumptions is calculated using the projected unit credit method, the same method applied when calculating the defined benefit obligations recognized on the statement of financial position.

The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous period.

16. Net defined benefit liabilities (assets) (cont'd)

Expected contributions to post-employment benefit plans for the year ended December 31, 2021 are ₩37,756 million.

Expected maturity analysis of undiscounted pension benefits as of December 31, 2020, is as follows (Korean won in thousands):

	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Between 5 and 10 years	Total
Pension benefits	₩ 23,131,224	₩ 26,590,099	₩ 82,367,800	₩ 160,226,819	₩ 292,315,942

The weighted average duration of the defined benefit obligations is 9.47 years.

Recognized expense related to the defined contribution plan for the year ended December 31, 2020 is ₩11,556 million (2019: ₩9,490 million).

17. Commitments and contingencies

(a) As of December 31, 2020, seventeen civil suits with claims totaling ₩88,993 million are filed against the Group relating to the compensation for damages from security services and unjust enrichment. Regarding certain suits, provisions are included in the consolidated financial statements. The Group reversed its provisions for ₩1,270 million based on the suit, and recognized them as other income in the income statement. The management believes the outcome of civil suits will not impact the financial position of the Group.

In the case of a lawsuit against Samsung SDS Co., Ltd., all claims against the defendants (including the Group, etc.) have been dismissed after the reporting period. The Group will respond to the plaintiff's appeal in the future.

(b) The Group has a technical assistance agreement with Secom Co., Ltd. for licensing and technical assistance on the security business. Under the agreement, the Group pays royalties to Secom Co., Ltd. amounting to 0.65% of a portion of sales from system security services.

(c) As of December 31, 2020, the Group has a purchasing loan agreement with the maximum limit of ₩72 billion with Hana Bank and B2B plus agreement with the maximum limit of ₩8 billion with Woori Bank

(d) The Group is provided with performance guarantees and construction warranty guarantees amounting to ₩159.4 billion by Seoul Guarantee Insurance and others as of December 31, 2020.

18. Issued capital and capital surplus

The number of authorized shares in accordance with the Group's article of incorporation is 80 million shares, and the par value per share is ₩500. As of December 31, 2020, the total number of common shares issued is 37,999,178 shares.

Details of issued capital and capital surplus as of December 31, 2020 are as follows (Korean won in thousands, except for number of shares):

Number of common shares outstanding (*1)	Issued capital	Capital surplus	Total
33,810,239	₩ 18,999,589	₩ 192,913,601	₩ 211,913,190

(*1) The difference between the number of common shares outstanding and the number of common shares issued is due to 4,188,939 shares of treasury stock.

19. Retained earnings

Retained earnings as of December 31, 2020 and 2019 consist of the followings (Korean won in thousands):

	2020	2019
Legal reserves (*1)	₩ 9,799,800	₩ 9,799,800
Discretionary reserves	1,118,954,332	1,048,954,333
Unappropriated retained earnings	195,279,190	208,844,774
	₩ 1,324,033,322	₩ 1,267,598,907

(*1) In accordance with the Korean Commercial Code, an amount equal to at least 10% of cash dividends is required to be appropriated as a legal reserve until the reserve equals 50% of issued capital. The legal reserve may not be utilized for cash dividends but may only be used to offset a deficit, if any, or be transferred to capital.

20. Other components of equity

Other components of equity as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Accumulated other comprehensive income:		
Net gain on valuation of financial assets at fair value through OCI	₩ 4,769,651	₩ 4,385,796
Exchange differences on translation of foreign operations	(513,572)	(274,133)
Other:		
Treasury share	(155,751,107)	(155,751,107)
Others	(292,148)	(292,148)
	₩ (151,787,176)	₩ (151,931,592)

21. Revenue from contracts with customers

Details of revenue from contracts with customers for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

2020	Security system service	Building management service	Call center & telemarketing	Consolidation adjustments	Total
Time of transfer of goods or services					
Goods or services transferred at a point in time	₩ 6,334,575	₩ -	₩ -	₩ -	₩ 6,334,575
Goods or services transferred over time	1,792,205,383	596,651,090	13,417,566	(186,712,942)	2,215,561,097
Total revenue from contracts with customers	1,798,539,958	596,651,090	13,417,566	(186,712,942)	2,221,895,672
Revenue from other sources	1,444,836	-	-	-	1,444,836
Total	₩ 1,799,984,794	₩ 596,651,090	₩ 13,417,566	₩ (186,712,942)	₩ 2,223,340,508

21. Revenue from contracts with customers (cont'd)

2019	Security system service	Building management service	Call center & telemarketing	Consolidation adjustments	Total
Time of transfer of goods or services					
Goods or services transferred at a point in time	₩ 5,426,454	₩ -	₩ -	₩ -	₩ 5,426,454
Goods or services transferred over time	1,740,663,828	560,943,157	13,177,649	(170,765,420)	2,144,019,214
Total revenue from contracts with customers	1,746,090,282	560,943,157	13,177,649	(170,765,420)	2,149,445,668
Revenue from other sources	2,075,849	-	-	-	2,075,849
Total	₩ 1,748,166,131	₩ 560,943,157	₩ 13,177,649	₩ (170,765,420)	₩ 2,151,521,517

Details of the Group's contract balance as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Trade receivables	₩ 133,326,191	₩ 140,786,415
Contract assets	34,549,374	53,234,112
Advances received	69,401,768	48,108,857
Unearned revenue	29,838,248	31,097,494

Trade receivables are non-interest-free and the usual payment date is 30 to 90 days. Based on expected credit losses, the provision was recognized at ₩10,453 million as of the end of the current period.

Service contract assets are recognized for the first time when consideration is received on the condition that installation is complete in respect of revenue from security services. ₩898 million was recognized for expected credit loss provision relating to contract assets.

Contract liabilities include advanced receipts and income received in advance relating to revenue from customized security facilities and security services. Contract liabilities are recognized as revenue in accordance with each contract, depending on the time-period or progress rate.

Details of the Group's contract liabilities and related revenue as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Amounts included in contract liabilities at the beginning of the year	₩ 31,097,494	₩ 31,915,784
Performance obligations satisfied in previous years	24,818,720	27,107,789

22. Contracts with customers recognized using the input method

As of December 31, 2020, there is no contract among which applied the percentage-of-completion method where the contract revenue accounts for more than 5% of the total sales for the year ended December 31, 2019.

Changes in contract revenues and costs due to changes in accounting estimates in relation to the contracts that recognize revenue over time based on the percentage-of-completion method, for the year ended December 31, 2020 are as follows (Korean won in thousands):

	Changes in total contract revenues	Changes in total contract costs	Effect on profit or loss
Security system service	₩ 4,581,391	₩ 11,470,636	₩ (6,889,244)

23. Expenses by nature

Expenses by nature for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Purchase of merchandise	₩ 157,091,339	₩ 171,944,135
Labor expenses	743,941,818	721,001,124
Depreciation and amortization	165,880,522	162,008,821
Outsourcing expenses	609,518,339	547,436,904
Commission expenses and royalties	48,733,467	41,204,628
Advertising expenses and sales commission expenses	25,706,790	28,155,273
Communication expenses	28,004,806	32,375,025
Transportation expenses	10,358,850	10,563,415
Others	229,641,890	240,010,185
	₩ 2,018,877,821	₩ 1,954,699,510

24. Selling and administrative expenses

Selling and administrative expenses for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Labor expenses	₩ 196,797,509	₩ 194,453,380
Development costs (*)	12,118,031	12,522,876
Depreciation and amortization	25,282,312	24,806,586
Commission expenses and royalties	24,023,041	21,239,264
Advertising expenses and sales commission expenses	22,529,742	24,516,734
Communication expenses	3,334,580	2,757,265
Insurance premium	5,737,386	6,074,880
Transportation expenses	7,128,075	8,797,852
Rental expenses	2,686,295	4,845,505
Bad debt expenses	3,657,718	2,957,782
Others	43,462,384	43,945,153
	₩ 346,757,073	₩ 346,917,277

(*) Depreciation and amortization costs of ₩435 million (2019: ₩468 million) are included in development costs.

25. Other non-operating income and expenses

Details of other non-operating income and other non-operating expenses for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

		2020		2019
Other non-operating income:				
Dividend income	₩	338,222	₩	241,000
Gain on disposal of property and equipment		61,162		68,324
Gain on foreign currency transactions		3,330,903		2,215,670
Gain on foreign currency translation		616,586		21,123
Miscellaneous gain		3,145,973		7,100,290
Gain on termination of lease contract		86,688		34,398
Share of profit of a joint venture		140,074		124,646
	₩	7,719,608	₩	9,805,451
Other non-operating expenses:				
Donations	₩	1,695,858	₩	1,668,080
Loss on obsolescence of inventories		17,876,226		11,467,909
Loss on disposal of property and equipment		2,206,758		2,201,689
Loss on disposal of intangible assets		5,978		-
Loss on foreign currency transactions		4,877,076		3,170,908
Loss on foreign currency translation		616,032		12,646
Miscellaneous loss		319,289		1,044,253
Loss on termination of lease contract		15,857		31,476
	₩	27,613,074	₩	19,596,961

26. Finance income and costs

Finance income and costs for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

		2020		2019
Finance income:				
Interest income	₩	3,863,557	₩	6,170,796
Gain on foreign currency translation		6,582		51
Gain on foreign currency transactions		295,051		111,910
	₩	4,165,190	₩	6,282,757
Finance costs:				
Interest expenses	₩	1,058,520	₩	694,358
Loss on foreign currency translation		58		467
Loss on foreign currency transactions		298,461		164,419
	₩	1,357,039	₩	859,244

27. Income tax

Income tax expenses for the years ended December 31, 2020 and 2019 consists of the following (Korean won in thousands):

		2020		2019
Current income tax:				
Current tax on profits for the year	₩	42,832,374	₩	44,035,138
Adjustments in respect of prior years		1,229,649		346,352
Total current tax		44,062,023		44,381,490
Deferred tax due to temporary differences		934,309		2,527,084
Deferred tax charged to equity		291,454		(1,095,846)
Income tax expenses	₩	45,287,786	₩	45,812,728

The reconciliation between income tax expenses at the effective tax rate and profit before income tax expenses at the Korea statutory rate for the years ended December 31, 2020 and 2019 is as follows (Korean won in thousands):

		2020		2019
Profit before income tax expenses	₩	187,377,371	₩	192,454,010
Tax calculated at statutory tax rates		44,640,765		45,708,950
Tax effects of:				
Non-taxable income		(13,333)		(12,337)
Non-deductible expenses		658,611		788,641
Tax credit		(1,237,522)		(1,288,610)
Adjustment in respect of prior years		1,239,265		616,085
Income tax expenses	₩	45,287,786	₩	45,812,728
Effective tax rate (*)		24.17%		23.80%

(*) Income tax expenses divided by profit before income tax expenses.

27. Income tax (cont'd)

Changes in temporary differences and related deferred tax assets and liabilities are as follows (Korean won in thousands):

	2020				
	Temporary differences			Deferred tax assets (liabilities)	
	Beginning	Increase (decrease)	Ending	Beginning	Ending
Allowance for doubtful accounts	₩ 7,192,921	₩ 1,212,256	₩ 8,405,178	₩ 1,740,687	₩ 2,034,053
Accrued income	(1,553,808)	590,686	(963,122)	(375,874)	(232,981)
Accrued expenses	35,039,138	84,960	35,124,098	8,353,846	8,379,264
Defined benefit obligations	307,470,834	22,308,472	329,779,306	73,503,630	78,845,620
Plan assets	(303,587,123)	(27,379,938)	(330,967,061)	(72,649,214)	(79,106,926)
Depreciation	(121,399)	121,379	(20)	(4)	(4)
Impairment of financial assets at fair value through OCI	2,526,720	-	2,526,720	611,466	611,466
Gain on valuation of financial assets at fair value through OCI	(5,786,011)	(506,405)	(6,292,416)	(1,400,215)	(1,522,765)
Payables for donations	380,000	-	380,000	91,960	91,960
Other non-current liabilities	32,753,288	8,233,138	40,986,424	7,837,291	9,778,093
Provisions	2,480,000	(1,270,000)	1,210,000	600,160	292,820
Penalty	10,487,280	(9,406)	10,477,874	2,537,922	2,535,645
Loss on obsolescence of intangible assets	33,982	(33,982)	-	8,224	-
Repair costs	619,372	(501,427)	117,945	149,888	28,543
Long-term unearned revenue (Construction revenue)	21,576,379	8,261,869	29,838,248	5,221,484	7,220,856
Long-term prepaid expenses	(101,384,733)	(13,619,000)	(115,003,733)	(24,535,105)	(27,830,903)
Long-term trade receivables (Unbilled Subsidy)	(3,756,793)	(2,396,092)	(6,152,885)	(909,144)	(1,488,998)
Tax and utility (acquisition tax)	25,965	14,432	40,397	6,189	9,681
Right-of-use assets	117,794	718,006	835,800	28,250	202,058
Construction loss allowance	2,570	216,133	218,703	622	52,926
Others	(1,528,990)	(228,222)	(1,757,212)	(404,015)	(416,669)
Total	₩ 2,987,386	₩ (4,183,141)	₩ (1,195,756)	₩ 418,048	₩ (516,261)

27. Income tax (cont'd)

	2019				
	Temporary differences			Deferred tax assets (liabilities)	
	Beginning	Increase (decrease)	Ending	Beginning	Ending
Allowance for doubtful accounts	₩ 8,624,418	₩ (1,431,497)	₩ 7,192,921	₩ 2,087,109	₩ 1,740,687
Accrued income	(2,359,531)	805,725	(1,553,808)	(570,770)	(375,874)
Accrued expenses	32,973,043	2,066,095	35,039,138	7,882,131	8,353,846
Defined benefit obligations	288,102,862	19,367,972	307,470,834	68,971,134	73,503,630
Plan assets	(283,038,711)	(20,548,412)	(303,587,123)	(67,857,020)	(72,649,214)
Depreciation	(123,436)	2,037	(121,399)	(453)	(4)
Impairment of financial assets at fair value through OCI	2,526,720	-	2,526,720	611,466	611,466
Gain on valuation of financial assets at fair value through OCI	(5,046,210)	(739,800)	(5,786,010)	(1,221,183)	(1,400,215)
Payables for donations	380,000	-	380,000	91,960	91,960
Other non-current liabilities	27,831,908	4,921,379	32,753,287	6,676,523	7,837,291
Provisions	5,820,000	(3,340,000)	2,480,000	1,408,440	600,160
Penalty	10,516,102	(28,822)	10,487,280	2,544,897	2,537,922
Loss on obsolescence of intangible assets	478,572	(444,590)	33,982	115,815	8,224
Repair costs	1,414,802	(795,430)	619,372	342,382	149,888
Long-term unearned revenue (construction revenue)	31,915,784	(10,339,404)	21,576,379	7,723,620	5,221,484
Long-term prepaid expenses	(101,384,733)	-	(101,384,733)	(24,535,105)	(24,535,105)
Long-term trade receivables (unbilled subsidy)	(3,756,793)	-	(3,756,793)	(909,144)	(909,144)
Tax and utility (acquisition tax)	-	25,965	25,965	-	6,189
Right-of-use assets	-	117,794	117,794	-	28,250
Construction loss allowance	-	2,570	2,570	-	622
Tax loss carry forward	-	210,246	210,246	-	46,254
Others	(1,600,394)	(138,844)	(1,739,238)	(416,669)	(450,269)
Total	₩ 13,274,403	₩ (10,287,016)	₩ 2,987,384	₩ 2,945,133	₩ 418,048

The Group has not recognized deferred tax assets arising from investments in subsidiaries as the related temporary difference will not reverse due to the low possibilities of dividend payouts and disposal of investments in the foreseeable future. As of December 31, 2020, the total temporary difference which is not recognized as deferred tax liabilities is ₩19,400 million.

27. Income tax (cont'd)

The analysis of deferred tax assets and deferred tax liabilities as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

		2020		2019
Deferred tax assets:				
Deferred tax asset to be recovered after more than 12 months	₩	74,433,414	₩	89,157,785
Deferred tax asset to be recovered within 12 months		12,127,444		11,840,337
	₩	86,560,858	₩	100,998,122
Deferred tax liabilities:				
Deferred tax liability to be recovered after more than 12 months	₩	(86,841,839)	₩	(100,204,581)
Deferred tax liability to be recovered within 12 months		(235,280)		(375,494)
		(87,077,119)		(100,580,075)
Deferred tax assets, net	₩	(516,261)	₩	418,048

Details of deferred tax charged directly to equity for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

		2020		2019
Gain on valuation of financial assets at fair value through OCI	₩	(122,550)	₩	(179,032)
Re-measurement gain (loss) on defined benefit plans		414,004		(916,814)
	₩	291,454	₩	(1,095,846)

28. Earnings per share

Basic earnings per ordinary share for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

		2020		2019
Profit attributable to owners of the parent	₩	142,090,241	₩	146,642,457
Weighted average number of ordinary shares outstanding (*1)		33,810,239		33,810,239
Basic earnings per share (Korean won)	₩	4,203	₩	4,337

(*1) Weighted average number of ordinary shares outstanding = Total issued shares – weighted average number of treasury shares

	2020	2019
Issued shares	37,999,178	37,999,178
Treasury shares	4,188,939	4,188,939
Weighted average number of ordinary shares outstanding	33,810,239	33,810,239

Because there is no diluted potential common stock, diluted earnings per share are the same as basic earnings per share.

29. Cash generated from operations

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

	2020	2019
Adjustments for:		
Depreciation and amortization	₩ 165,880,522	₩ 162,008,821
Loss on obsolescence of inventories	17,305,318	10,990,732
Retirement benefits	37,032,041	36,992,561
Loss on foreign currency translation	616,090	13,113
Gain on foreign currency translation	(623,167)	(21,175)
Loss on disposal of property and equipment	2,206,757	2,201,689
Gain on disposal of property and equipment	(61,161)	(68,323)
Loss on disposal of intangible assets	5,978	-
Bad debt expenses	3,657,718	2,957,782
Interest expenses	1,058,519	694,358
Interest income	(3,863,556)	(6,170,796)
Dividend	(338,222)	(153,010)
Income taxes	45,287,786	45,812,728
Miscellaneous gain	(1,270,000)	(3,340,000)
Loss on termination of lease contract	15,857	31,476
Gain on termination of lease contract	(86,687)	(34,398)
Provision of construction loss allowance	216,132	2,570
Share of profit of a joint venture	(140,074)	(124,646)
Others	(7,030)	(648)
	₩ 266,892,821	₩ 251,792,834

	2020	2019
Changes in operating assets and liabilities:		
Trade receivables	₩ 4,266,863	₩ (23,829,864)
Contract assets	19,301,615	(17,191,334)
Other receivables	(608,901)	753,587
Advanced payments	3,333,038	(6,278,982)
Prepaid expenses	(334,213)	(5,281,560)
Value added tax prepaid	(2,577,412)	(1,619,140)
Long-term contract assets	(829,945)	(1,588,088)
Long-term prepaid expenses	(6,447,540)	-
Inventories	(19,828,549)	(9,413,618)
Other non-current assets	-	(1,821,918)
Trade payables	(8,173,907)	14,943,241
Other payables	9,100,982	2,040,478
Advances received	21,273,942	6,333,375
Unearned revenue	-	695,447
Value added tax withheld	4,392,054	2,767,680
Withholdings	274,446	587,907
Net defined benefit liabilities	(49,793,808)	(43,793,638)
Deposits withheld	(1,928,233)	(1,591,211)
Long-term unearned revenue	(1,259,246)	(1,513,736)
Long-term other payables	9,698,521	1,501,604
	₩ (20,140,293)	₩ (84,299,770)

29. Cash generated from operations (cont'd)

Significant non-cash transactions for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020	2019
Reclassification of construction-in-progress to intangible assets	₩ 7,458,500	₩ 11,168,360
Increase in other payables related to acquisition of property and equipment	345,200	1,235,763
Acquisition of right-of-use assets	49,070,318	46,854,142

30. Related party transaction

The related parties of the Group as of December 31, 2020 and 2019 are as follows:

	2020	2019
Entity with significant influence over the Group	Secom Co., Ltd.	Secom Co., Ltd.
Joint venture	Koramco Investment Private REITs No.78	Koramco Investment Private REITs No.78
Others	Affiliates of the Samsung group	Affiliates of the Samsung group

Sales and purchases with subsidiaries and others for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

2020	Sales	Purchases	Other income	Other expense
Entity with significant influence over the Group:				
Secom Co., Ltd.	₩ -	₩ -	₩ -	₩ 4,632,516
Joint venture				
Koramco Investment Private REITs No.78	-	-	175,514	-
Others:				
Samsung Electronics Co., Ltd.	412,167,600	10,949,909	-	-
Samsung Life Insurance Co., Ltd.	64,891,910	10,118,375	6,723,911	1,536,206
Samsung Display Co., Ltd.	53,237,478	23,136	-	-
Other affiliates	245,426,943	54,432,589	54,885	10,481,706
	₩ 775,723,931	₩ 75,524,009	₩ 6,954,310	₩ 16,650,428

2019	Sales	Purchases	Other income	Other expense
Entity with significant influence over the Group:				
Secom Co., Ltd.	₩ -	₩ -	₩ -	₩ 4,651,629
Joint venture				
Koramco Investment Private REITs No.78	-	-	175,500	-
Others:				
Samsung Electronics Co., Ltd.	363,134,156	10,129,633	-	-
Samsung Life Insurance Co., Ltd.	68,032,950	9,372,086	6,331,884	1,428,153
Samsung Display Co., Ltd.	53,622,824	29,567	-	-
Other affiliates	247,211,357	65,197,836	22,431	11,008,806
	₩ 732,001,287	₩ 84,729,122	₩ 6,529,815	₩ 17,088,588

30. Related party transaction (cont'd)

Outstanding balances with related parties as of December 31, 2020 and 2019 are as follows (Korean won in thousands):

2020	Trade receivables	Other receivables (*)	Trade payables	Other payables
Entity with significant influence over the Group:				
Secom Co., Ltd.	₩ -	₩ -	₩ -	₩ 2,317,290
Others:				
Samsung Electronics Co., Ltd.	32,310,383	83,756	1,463,141	157,641
Samsung Life Insurance Co., Ltd.	224,560	366,854,986	-	305,290
Samsung Display Co., Ltd.	8,618,082	-	3,890	58,464
Other affiliates	30,782,269	8,037,250	16,246,920	1,242,857
	₩ 71,935,294	₩ 374,975,992	₩ 17,713,951	₩ 4,081,542

(*) Other receivables from other affiliates comprise plan assets of ₩350,084 million in Samsung Life Insurance Co., Ltd. and leasehold deposits of ₩16,771 million.

2019	Trade receivables	Other receivables (*)	Trade payables	Other payables
Entity with significant influence over the Group:				
Secom Co., Ltd.	₩ –	₩ –	₩ –	₩ 2,332,643
Others:				
Samsung Electronics Co., Ltd.	42,354,812	87,792	555,346	230,476
Samsung Life Insurance Co., Ltd.	144,531	333,711,508	-	265,110
Samsung Display Co., Ltd.	5,416,441	-	3,670	78,846
Other affiliates	27,144,254	7,953,475	22,063,911	1,244,952
	₩ 75,060,038	₩ 341,752,775	₩ 22,622,927	₩ 4,152,027

(*) Other receivables from other affiliates comprise plan assets of ₩318,232 million in Samsung Life Insurance Co., Ltd. and leasehold deposits of ₩15,480 million.

Dividends paid to Secom Co., Ltd., a related party of the Group, amounts to ₩24,368 million for the year ended December 31, 2020 (2019: ₩24,368 million). Dividends paid to other related parties amount to ₩19,539 million (2019: ₩19,539 million). In addition, there were no financial transactions with related parties for the years ended December 31, 2020 and 2019

The Group entered into a technical assistance agreement with Secom Co., Ltd., which has significant influence over the Group.

	Related product	Provided by	Fee
Technical assistance	Security system	Secom Co., Ltd.	0.65% of a portion of sales

As of December 31, 2020, there are no payment guarantees and collaterals provided by the Group to the related parties.

30. Related party transaction (cont'd)

Key management consists of registered executive officers who have authority and responsibility in the planning, operations and control of the business of the Group. The compensation paid or payable to key management for employee services for the years ended December 31, 2020 and 2019 consists of (Korean won in millions):

	2020	2019
Salaries and other short-term employee benefits	₩ 3,952	₩ 3,824
Retirement benefits	883	367
Other long-term benefits	1,966	878
	₩ 6,801	₩ 5,069

31. Segment information

According to management of the Group who oversees the strategic decision-making process and determines the operating segment, the Group has three operating segments.

The following table presents the revenue by segment from external customers for the years ended December 31, 2020 and 2019 (Korean won in thousands):

	2020				
	Security system service	Building management service	Call center & telemarketing	Consolidation adjustments	Total
Revenues	₩ 1,799,984,794	₩ 596,651,091	₩ 13,417,567	₩ (186,712,942)	₩ 2,223,340,510
Internal	173,295,376	-	13,417,567	(186,712,942)	1
External	1,626,689,418	596,651,091	-	-	2,223,340,509
Operating profit	157,733,776	46,350,028	378,884	-	204,462,688
Total assets	1,318,727,001	593,742,914	4,359,359	(10,139,582)	1,906,689,692
Non-current assets					
Property and equipment, intangible assets and others	543,386,100	413,075,979	458,096	-	956,920,175
Increase and decrease in property and equipment, intangible assets and others	19,645,365	339,415	40,618	-	20,025,398
Depreciation and amortization	150,869,173	14,929,388	81,961	-	165,880,522

	2019				
	Security system service	Building management service	Call center & telemarketing	Consolidation adjustments	Total
Revenues	₩ 1,748,166,132	₩ 560,943,157	₩ 13,177,649	₩ (170,765,420)	₩ 2,151,521,517
Internal	157,587,772	-	13,177,649	(170,765,420)	1
External	1,590,578,360	560,943,157	-	-	2,151,521,517
Operating profit	152,450,625	44,085,190	286,192	-	196,822,007
Total assets	1,264,683,282	539,665,473	3,990,889	(13,379,925)	1,794,959,719
Non-current assets					
Property and equipment, intangible assets and others	523,740,735	412,736,564	417,478	-	936,894,777
Increase and decrease in property and equipment, intangible assets and others	41,443,189	(7,238,328)	199,632	-	34,404,493
Depreciation and amortization	148,468,824	13,459,978	80,019	-	162,008,821

31. Segment information (cont'd)

Revenues from major customers accounting for more than 10% of the Group's revenue amount to ₩412,168 million and ₩363,134 million for the years ended December 31, 2020 and 2019, respectively.

32. Information about non-controlling interests

The profit or loss allocated to non-controlling interests and accumulated non-controlling interests of subsidiaries that are material to the Group for the years ended December 31, 2020 and 2019 are as follows (Korean won in thousands):

	2020				
	Accumulated non-controlling interests at the beginning of the year	Profit or loss allocated to non-controlling interests	Dividends paid to non-controlling interests	Others	Accumulated non-controlling interests at the end of the year
SVIC35	₩ 25,972	₩ (656)	₩ -	₩ -	₩ 25,316

	2019				
	Accumulated non-controlling interests at the beginning of the year	Profit or loss allocated to non-controlling interests	Dividends paid to non-controlling interests	Others	Accumulated non-controlling interests at the end of the year
SVIC35	₩ 17,148	₩ (1,176)	₩ -	₩ 10,000	₩ 25,972

33. Uncertainty of the impact of Covid-19

In order to prevent the spread of Covid-19, a various prevention and control measures, including restrictions on travelling are being implemented worldwide, and as a result, the global economy has been extensively affected. In addition, governments are implementing various support measures to address Covid-19. The line items affected by Covid-19 are mainly the collectability of trade receivables (Note 9) and impairment of intangible assets (Note 14). The Group has prepared the consolidated financial statements by reasonably estimating the impact of Covid-19 on the Group. However, there are significant uncertainties in estimating the timing for endpoint of Covid-19 and the impact of Covid-19 on the Group.