



SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

**CONSOLIDATED FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED
DECEMBER 31, 2021 AND 2020**

ATTACHMENT: INDEPENDENT AUDITORS' REPORT

SAMSUNG SDS CO., LTD.

CONTENTS

	Page
INDEPENDENT AUDITORS' REPORT	1
STATEMENTS OF FINANCIAL POSITION	5
STATEMENTS OF COMPREHENSIVE INCOME	7
STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY	9
STATEMENTS OF CASH FLOWS	10
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS	11

INDEPENDENT AUDITORS' REPORT

English Translation of Independent Auditors' Report Originally Issued In Korean on March 4, 2022.

To the Shareholders and the Board of Directors of
Samsung SDS CO., Ltd.:

AUDIT OPINION

We have audited the accompanying consolidated financial statements of Samsung SDS Co., Ltd. (the "Company") and its subsidiaries (the "Group"), which comprise the consolidated statements of financial position as of December 31, 2021 and 2020, and the related consolidated statements of comprehensive income, consolidated statements of changes in shareholders' 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, 2021 and 2020, and its financial performance and its cash flows for the years then ended in accordance with Korean International Financial Reporting Standards ("K-IFRS").

BASIS FOR AUDIT OPINION

We conducted our audits in accordance with the Korean Standards on Auditing ("KSAs"). Our responsibilities under those standards are further described in the *Auditors' Responsibilities for the Audits 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 audit opinion.

KEY AUDIT MATTERS

The key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the 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.

- Recognition of the gain or loss in accordance with the modification of project

1) Reasons why the matter was determined to be a key audit matter

The Group's provision of custom-built software, provision of commercial software installation services, custom-built systems ("SI sales") are recognized over period (see Note 2.(7)). For SI sales, changes in scope, period and contract amount may occur upon request from the customer to change the project. The Group's management maintains that in the event of a modification in the project, estimated costs involved are properly changed and gain or loss are properly recognized. Considering the nature of SI sales, it is probable that a project modification may occur, and the amount of SI sales in which the project modification occurred is material to the consolidated financial statements. For these reasons, we determined recognition of the gain or loss in accordance with the modification of project as a key audit matter.

2) How we addressed the key audit matter in our audit procedures

Our audit procedures performed on recognition of the gain or loss in accordance with the modification of project are as follows:

- When changing the terms of the contract, including the amount of the contract. Understand and evaluate the internal control design associated with the recognition of the revenue, and question and inspection for which the process is reviewed by the rightful approver.
- Review redetermined contract amount with the supporting documentation, when the modification of project occurred.
- Questions for changes of contract amount and analytical procedures.
- Inspection for supporting documents related with re-estimated costs.
- A retrospective review of contracts with the estimated total contract cost and significant changes related to the modified project at the end of the period and after.

RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

Management is responsible for the preparation of the accompanying consolidated financial statements in accordance with K-IFRSs, and for such internal control as they determine 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 of the Group 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.

AUDITORS' RESPONSIBILITIES FOR THE AUDITS 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 KSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

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

- Identify and assess the risks of material misstatement of the 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 in the preparation of the consolidated financial statements and the reasonableness of accounting estimates and related disclosures made by management.

Deloitte.

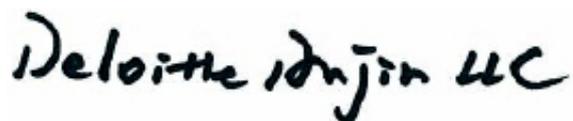
- Conclude on the appropriateness of management’s use of the going-concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group’s ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors’ 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 auditors’ 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 will communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

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

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

The engagement partner on the audit resulting in this independent auditors’ report is Jo, Jihun



March 4, 2022

Notice to Readers

This report is effective as of March 4, 2022, the audit report date. Certain subsequent events or circumstances may have occurred between the auditors’ report date and the time the auditors’ report is read. Such events or circumstances could significantly affect the consolidated financial statements and may result in modifications to the auditors’ report.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES (the “Group”)

CONSOLIDATED FINANCIAL STATEMENTS
AS OF AND FOR THE YEARS ENDED
DECEMBER 31, 2021 AND 2020

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

Hwang, Sung-Woo
Chief Executive Officer
SAMSUNG SDS CO., LTD.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION

As of December 31, 2021 and 2020

(In Korean won)

	<u>Notes</u>	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Assets			
Current Assets:			
Cash and cash equivalents	5,7 ₩	1,080,888,303,254	1,199,285,828,821
Short-term financial instruments	6,7	3,510,296,210,127	2,995,006,424,561
Trade receivables	7,9	1,918,856,084,913	1,500,925,778,294
Other receivables	7,9,18,26	689,924,842,050	624,546,285,548
Prepayments		68,339,934,105	24,067,732,793
Prepaid expenses		119,917,881,360	92,965,934,727
Inventories	10	44,302,331,418	25,746,661,465
Other current assets	7,9	143,442,749,776	118,608,482,808
		<u>7,575,968,337,003</u>	<u>6,581,153,129,017</u>
Non-Current Assets:			
Fair value through other comprehensive income ("FVOCI")	7,8,11,33	55,198,118,721	16,655,585,372
Fair value through profit or loss ("FVPL")	7,8,11,33	16,617,484,741	12,176,365,205
Investments in associates	13	110,236,423,388	93,938,343,878
Property and equipment	4,14	1,178,634,318,859	1,116,313,315,255
Right-of-use assets	16	439,897,752,714	346,470,911,263
Intangible assets	4,15	715,361,900,049	736,725,070,761
Deposits	7	81,984,599,435	58,705,699,165
Long-term prepaid expenses		5,508,212,184	867,767,984
Deferred tax assets	31	44,462,488,843	30,598,814,874
Net defined benefit assets	21	203,102,019,979	75,012,428,836
Other non-current assets	6,7,9,18	90,460,519,331	86,301,623,928
		<u>2,941,463,838,244</u>	<u>2,573,765,926,521</u>
Total Assets		₩ 10,517,432,175,247	9,154,919,055,538

See accompanying notes to the consolidated financial statements.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION, CONTINUED

As of December 31, 2021 and 2020

(In Korean won)

	<u>Notes</u>	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Liabilities and Shareholders' Equity			
Current Liabilities:			
Trade payables	7,33	₩ 821,773,048,473	574,353,683,222
Other payables	7,33	70,253,640,225	58,234,683,987
Short-term borrowings	7,19,33	464,000,000	899,728,640
Advances received	26	286,229,775,145	221,229,387,136
Withholdings		16,881,624,919	13,829,684,496
Accrued expenses	7,33	815,329,323,073	541,235,843,541
Income tax payable		43,527,469,531	64,027,253,069
Current portion of corporate bond	7,19,33	-	10,000,000
Current portion of provisions	20,37	16,114,592,800	18,939,616,747
Current portion of lease liabilities	7,17,33	149,014,065,000	125,977,965,503
Other current liabilities	7,33	150,702,078,789	102,018,979,887
		<u>2,370,289,617,955</u>	<u>1,720,756,826,228</u>
Non-current Liabilities:			
Net defined benefit liabilities	21	5,739,191,224	9,192,456,129
Deferred tax liabilities	31	274,204,454,379	239,267,099,284
Long-term accrued expenses	7,33	86,583,248,601	67,187,669,507
Provisions	20	19,902,320,387	16,201,928,111
Lease liabilities	7,17,33	312,583,282,490	238,795,877,623
Other non-current liabilities	21	4,429,428,140	4,409,034,423
		<u>703,441,925,221</u>	<u>575,054,065,077</u>
Total Liabilities		<u>3,073,731,543,176</u>	<u>2,295,810,891,305</u>
Equity:			
Equity attributable to owners of the Company			
Common stock	23	38,688,900,000	38,688,900,000
Premium on common stock		1,297,466,852,618	1,297,466,852,618
Retained earnings	24	6,086,848,943,364	5,661,318,543,041
Other components of equity	25	(194,284,062,194)	(328,446,911,515)
Subtotal		<u>7,228,720,633,788</u>	<u>6,669,027,384,144</u>
Non-controlling interests		<u>214,979,998,283</u>	<u>190,080,780,089</u>
Total Equity		<u>7,443,700,632,071</u>	<u>6,859,108,164,233</u>
Total Liabilities and Equity		<u>₩ 10,517,432,175,247</u>	<u>9,154,919,055,538</u>

See accompanying notes to the consolidated financial statements.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

For the years ended December 31, 2021 and 2020

(In Korean won)

	<u>Notes</u>	<u>2021</u>	<u>2020</u>
Revenue	4,26,34 ₩	13,630,002,438,924	11,017,431,525,517
Cost of Sales	27,34	<u>11,946,838,969,703</u>	<u>9,327,683,136,712</u>
Gross profit		1,683,163,469,221	1,689,748,388,805
Selling and administrative expenses		<u>875,065,697,614</u>	<u>818,130,312,595</u>
Operating profit		808,097,771,607	871,618,076,210
Non-operating items:			
Other non-operating income	29,34	23,509,983,905	15,870,252,153
Other non-operating expenses	29,34	31,314,741,426	45,226,771,829
Finance income	30	130,898,062,964	153,592,632,438
Finance expenses	30	80,122,936,409	112,711,846,336
Gain on valuation/disposal of investments in associates, net	13	<u>6,473,620,706</u>	<u>2,975,711,299</u>
Profit before income tax expense		857,541,761,347	886,118,053,935
Income tax expense	31	<u>224,160,328,235</u>	<u>433,209,102,610</u>
Net Income		<u>633,381,433,112</u>	<u>452,908,951,325</u>
Other comprehensive income (loss):			
Items not subsequently reclassified to net income:			
Remeasurement of the net defined benefit liabilities	21	(45,580,065,578)	(45,102,239,442)
Valuation gain (loss) on FVOCI	11	<u>31,133,238,242</u>	<u>10,659,486,931</u>
		<u>(14,446,827,336)</u>	<u>(34,442,752,511)</u>
Items subsequently reclassified to net income:			
Capital change in equity method	13	10,103,458,804	(6,777,456,290)
Cumulative effect of foreign currency translation		<u>144,251,235,168</u>	<u>(89,493,682,191)</u>
		<u>154,354,693,972</u>	<u>(96,271,138,481)</u>
Total comprehensive income	₩	<u>773,289,299,748</u>	<u>322,195,060,333</u>

See accompanying notes to the consolidated financial statements.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME, CONTINUED

For the years ended December 31, 2021 and 2020

(In Korean won)

	<u>Notes</u>	<u>2021</u>	<u>2020</u>
Net Income Attributable to:			
Owners of the Group	₩	611,170,846,723	443,454,581,091
Non-controlling interests		22,210,586,389	9,454,370,234
Comprehensive Income Attributable to:			
Owners of the Group		745,333,696,044	308,785,784,520
Non-controlling interests		27,955,603,704	13,409,275,813
Earnings per share:			
Basic earnings per share	35 ₩	7,901	5,733
Diluted earnings per share	35	7,901	5,733

See accompanying notes to the consolidated financial statements.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

For the years ended December 31, 2021 and 2020

(In Korean won)

	Common stock	Share premium	Retained earnings	Other components of equity	Sub-total	Non-controlling interests	Total
Balance, as of January 1, 2020	₩ 38,688,900,000	1,297,466,852,618	5,403,504,408,350	(193,864,857,726)	6,545,795,303,242	179,361,785,258	6,725,157,088,500
Comprehensive income	-	-	443,454,581,091	(134,668,796,571)	308,785,784,520	13,409,275,813	322,195,060,333
Net income	-	-	443,454,581,091	-	443,454,581,091	9,454,370,234	452,908,951,325
Valuation gain (loss) on FVOCI	-	-	-	10,766,798,370	10,766,798,370	(107,311,439)	10,659,486,931
Capital change in equity method	-	-	-	(6,777,456,290)	(6,777,456,290)	-	(6,777,456,290)
Remeasurement of the net defined benefit liabilities	-	-	-	(45,486,961,798)	(45,486,961,798)	384,722,356	(45,102,239,442)
Cumulative effect of foreign currency translation	-	-	-	(93,171,176,853)	(93,171,176,853)	3,677,494,662	(89,493,682,191)
Transactions with shareholders	-	-	(185,640,446,400)	86,742,782	(185,553,703,618)	(2,690,280,982)	(188,243,984,600)
Dividends	-	-	(185,640,446,400)	-	(185,640,446,400)	(2,626,067,400)	(188,266,513,800)
Changes in ownership interests in subsidiaries	-	-	-	86,742,782	86,742,782	(64,213,582)	22,529,200
Balance, as of December 31, 2020	₩ 38,688,900,000	1,297,466,852,618	5,661,318,543,041	(328,446,911,515)	6,669,027,384,144	190,080,780,089	6,859,108,164,233
Balance, as of January 1, 2021	₩ 38,688,900,000	1,297,466,852,618	5,661,318,543,041	(328,446,911,515)	6,669,027,384,144	190,080,780,089	6,859,108,164,233
Comprehensive income	-	-	611,170,846,723	134,162,849,321	745,333,696,044	27,955,603,704	773,289,299,748
Net income	-	-	611,170,846,723	-	611,170,846,723	22,210,586,389	633,381,433,112
Valuation gain (loss) on FVOCI	-	-	-	30,508,278,828	30,508,278,828	624,959,414	31,133,238,242
Capital change in equity method	-	-	-	10,103,458,804	10,103,458,804	-	10,103,458,804
Remeasurement of the net defined benefit liabilities	-	-	-	(44,992,741,280)	(44,992,741,280)	(587,324,298)	(45,580,065,578)
Cumulative effect of foreign currency translation	-	-	-	138,543,852,969	138,543,852,969	5,707,382,199	144,251,235,168
Transactions with shareholders	-	-	(185,640,446,400)	-	(185,640,446,400)	(3,056,385,510)	(188,696,831,910)
Dividends	-	-	(185,640,446,400)	-	(185,640,446,400)	(2,313,320,500)	(187,953,766,900)
Changes in ownership interests in subsidiaries	-	-	-	-	-	(743,065,010)	(743,065,010)
Balance, as of December 31, 2021	₩ 38,688,900,000	1,297,466,852,618	6,086,848,943,364	(194,284,062,194)	7,228,720,633,788	214,979,998,283	7,443,700,632,071

See accompanying notes to the consolidated financial statements.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

For the years ended December 31, 2021 and 2020

(In Korean won)

	<u>Note</u>	<u>2021</u>	<u>2020</u>
Cash flows from operating activities:			
Cash generated from operating activities:	32 ₩	1,124,866,393,254	1,117,344,491,990
Interest received		56,957,636,467	75,386,948,400
Interest paid		(13,091,761,384)	(74,491,020)
Dividends received		22,023,318	17,250,000
Income tax paid		(188,515,417,025)	(213,271,347,481)
		<u>980,238,874,630</u>	<u>979,402,851,889</u>
Cash flows from investing activities:			
Net increase in short-term financial instruments		(515,289,785,566)	(312,312,507,309)
Increase in other current asset		(88,083,250)	(24,186,979,897)
Net increase in long-term financial instruments		1,520,622,359	(18,908,864,888)
Disposal of property and equipment		299,904,969	1,007,424,734
Disposal of intangible assets		306,228,378	172,715,149
Decrease in deposits		8,134,221,175	5,110,598,795
Disposal of FVOCI		8,875,056,005	16,801,659,711
Disposal of FVPL		-	1,791,146,600
Disposal of assets classified as held for sale		-	61,548,000,000
Acquisition of property and equipment		(286,572,609,573)	(235,469,100,397)
Acquisition of intangible assets		(33,167,727,079)	(34,352,587,772)
Increase in deposits		(21,617,713,384)	(11,272,423,092)
Acquisition of FVOCI		(4,167,799,988)	-
Acquisition of FVPL		(2,218,800,000)	(4,515,316,666)
Decrease in other non-current assets		17,351,427,829	9,398,950,735
		<u>(826,635,058,125)</u>	<u>(545,187,284,297)</u>
Cash flows from financing activities:			
Proceeds from short-term borrowings		-	170,576,640
Repayment of short-term borrowings		(435,728,640)	-
Repayment of corporate bond		(10,000,000)	-
Repayment of lease liabilities		(134,632,667,724)	(162,342,971,624)
Decrease in deposits received		(429,493,971)	-
Dividends		(187,953,766,900)	(188,266,513,800)
Payment of non-controlling interests		68,846,755	53,860,000
Decrease in non-controlling interests		(5,104,154)	(654,800,000)
		<u>(323,397,914,634)</u>	<u>(351,039,848,784)</u>
Net Increase (decrease) in cash and cash equivalents			
Cash and cash equivalents at beginning of the year		1,199,285,828,821	1,148,183,598,879
Effects of exchange rate changes on cash and cash equivalents		51,396,572,562	(32,073,488,866)
		<u>(169,794,098,129)</u>	<u>83,175,718,808</u>
Cash and cash equivalents at end of the year	₩	<u>1,080,888,303,254</u>	<u>1,199,285,828,821</u>

See accompanying notes to the consolidated financial statements.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

1. GENERAL:

Samsung SDS Co., Ltd. (the “Company”) and its subsidiaries (collectively, the “Group”) have prepared the consolidated financial statements in accordance with Korean International Financial Reporting Standards (“K-IFRS”) 1110, *Consolidated Financial Statements*. The Company was incorporated in 1985 to engage in the information processing system implementation, software development and professional service related to information processing technology. The Company has provided Information Technology (“IT”) services, including cloud and IT Outsourcing (“ITO”) with a majority of companies and Samsung Group. In addition, the Company offers global logistics based on business solutions and Supply Chain Management (“SCM”) consulting.

The Company is located at 125 Olympic-ro 35-gil, Songpa-gu, Seoul, Republic of Korea. The Company's common shares were listed on the Stock Market of Korea Exchange in 2014. As of December 31, 2021, the capital stock of the Company is ₩ 38,689 million, and the shareholders are as follows:

	<u>Number of shares</u>	<u>Ownership (%)</u>
Samsung Electronics Co., Ltd.	17,472,110	22.6%
Samsung C&T Corporation	13,215,822	17.1%
Lee, Jae-yong	7,118,713	9.2%
Lee, Bu-jin	3,021,014	3.9%
Lee, Suh-hyeon	3,021,014	3.9%
Others	33,529,127	43.3%
Total	<u><u>77,377,800</u></u>	<u><u>100.0%</u></u>

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

(1) Basis of consolidated financial statements preparation

The Group has prepared the consolidated financial statements in accordance with the Korean International Financial Reporting Standards (“K-IFRSs”). The principal accounting policies are set out below. Except for the effect of the amendments to K-IFRS and new interpretations set out below, the principal accounting policies used to prepare the consolidated financial statements as of and for the year ended December 31, 2021, are consistent with the accounting policies used to prepare the consolidated financial statements as of and for the year ended December 31, 2020.

The accompanying consolidated financial statements have been prepared on a historical cost basis, except for certain non-current assets and financial instruments that are measured at fair values, as explained in the accounting policies below. Historical cost is based on the fair values of the consideration given.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of K-IFRS 1102, *Share-Based Payment*, leasing transactions that are within the scope of K-IFRS 1116 *Leases*, and measurements that have some similarities to fair value but are not fair value, such as net realizable value in K-IFRS 1002, *Inventories*, or value in use in K-IFRS 1036, *Impairment of Assets*.

The management has, at the time of approving the financial statements, a reasonable expectation that the Group have adequate resources to continue in operational existence for the foreseeable future. Thus, they continue to adopt the going-concern basis of accounting in preparing the financial statements.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(1) Basis of consolidated financial statements preparation, Continued

New and Amended to K-IFRS and new interpretations that are mandatorily effective for the current year

In the current year, the Group has applied a number of new and amended to K-IFRS and new interpretations issued that are mandatorily effective for accounting periods beginning on or after January 1, 2021.

- K-IFRS 1116 *Leases* – Impact of the initial application of *Covid-19-Related Rent Concessions (Amendment)* beyond June 30, 2021

The practical expedient permits a lessee to elect not to assess whether a COVID-19-related rent concession is a lease modification. A lessee that makes this election shall account for any change in lease payments resulting from the COVID-19-related rent concession the same way it would account for the change applying K-IFRS 1116 if the change was not a lease modification.

The practical expedient applies only to rent concessions occurring as a direct consequence of COVID-19 and only if all of the following conditions are met:

- The change in lease payments results in revised consideration for the lease that is substantially the same as, or less than, the consideration for the lease immediately preceding the change;
- Any reduction in lease payments affects only payments originally due on or before June 30, 2022 (a rent concession meets this condition if it results in reduced lease payments on or before June 30, 2022, and increased lease payments that extend beyond June 30, 2022); and
- There is no substantive change to other terms and conditions of the lease.

The Group elected the practical expedient for all rent concessions that meet the above criteria. The Group recognized in profit or loss regarding changes in lease payments resulting from the rent concessions. (See Note 16)

- Impact of the initial application of Interest Rate Benchmark Reform

In the current year, the Group adopted the Phase 2 amendments Interest Rate Benchmark Reform—Amendments to K-IFRS 1109, K-IFRS 1039, K-IFRS 1107, K-IFRS 1104 and K-IFRS 1116. Adopting these amendments enables the Group to reflect the effects of transitioning from interbank offered rates (IBOR) to alternative benchmark interest rates (also referred to as ‘risk free rates’ or RFRs) without giving rise to accounting impacts that would not provide useful information to users of financial statements.

Both the Phase 1 and Phase 2 amendments are not relevant to the Group because it applies hedge accounting to its interest rate benchmark exposures, and in the current period modifications in response to the reform have not been made to some (but not all) of the Group’s derivative and non-derivative financial instruments that mature post 2021 (the date by which the reform is expected to be implemented).

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

(2) New and revised K-IFRSs in issue, but not yet effective

At the date of authorization of these consolidated financial statements, the Group has not applied the following new and revised K-IFRS standards that have been issued, but are not yet effective:

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(2) New and revised K-IFRSs in issue, but not yet effective, Continued

- K-IFRS 1117 *Insurance Contracts*

K-IFRS 1117 establishes the principles for the recognition, measurement, presentation and disclosure of insurance contracts and supersedes IFRS 4 *Insurance Contracts*.

K-IFRS 1117 outlines a general model, which is modified for insurance contracts with direct participation features, described as the variable fee approach. The general model is simplified if certain criteria are met by measuring the liability for remaining coverage using the premium allocation approach.

The general model uses current assumptions to estimate the amount, timing and uncertainty of future cash flows and it explicitly measures the cost of that uncertainty. It takes into account market interest rates and the impact of policyholders' options and guarantees.

K-IFRS 1117 must be applied retrospectively unless impracticable, in which case the modified retrospective approach or the fair value approach is applied.

For the purpose of the transition requirements, the date of initial application is the start of the annual reporting period in which the entity first applies the standard, and the transition date is the beginning of the period immediately preceding the date of initial application.

- K-IFRS 1001 *Presentation of Financial Statements* - Classification of Liabilities as Current or Non-Current (Amendment)

The amendments to K-IFRS 1001 affect only the presentation of liabilities as current or non-current in the consolidated statements of financial position and not the amount or timing of recognition of any asset, liability, income or expenses, or the information disclosed about those items.

The amendments clarify that the classification of liabilities as current or non-current is based on rights that are in existence at the end of the reporting period; specify that classification is unaffected by expectations about whether an entity will exercise its right to defer settlement of a liability; explain that rights are in existence if covenants are complied with at the end of the reporting period; and introduce a definition of 'settlement' to make clear that settlement refers to the transfer to the counterparty of cash, equity instruments, other assets or services.

The amendments are applied retrospectively for annual periods beginning on or after January 1, 2023, with early application permitted.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(2) New and revised K-IFRSs in issue, but not yet effective, Continued

- K-IFRS 1103 *Business Combinations* - Reference to the Conceptual Framework (Amendment)

The amendments update K-IFRS 1103 so that it refers to the Conceptual Framework (2018) instead of the Framework (2007). They also add to K-IFRS 1103 a requirement that, for obligations within the scope of K-IFRS 1037, an acquirer applies K-IFRS 1037 to determine whether at the acquisition date a present obligation exists as a result of past events. For a levy that would be within the scope of K-IFRS 2121 Levies, the acquirer applies K-IFRS 2121 to determine whether the obligating event that gives rise to a liability to pay the levy has occurred by the acquisition date.

Finally, the amendments add an explicit statement that an acquirer does not recognize contingent assets acquired in a business combination.

The amendments are effective for business combinations for which the date of acquisition is on or after the beginning of the first annual period beginning on or after January 1, 2022. Early application is permitted if an entity also applies all other updated references (published together with the updated Conceptual Framework) at the same time or earlier.

- K-IFRS 1016 *Property, Plant and Equipment* - Proceeds before Intended Use (Amendment)

The amendments prohibit deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced before that asset is available for use, i.e., proceeds while bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Consequently, an entity recognizes such sales proceeds and related costs in profit or loss. The entity measures the cost of those items in accordance with K-IFRS 1002 *Inventories*.

If not presented separately in the consolidated statements of comprehensive income, the financial statements shall disclose the amounts of proceeds and cost included in profit or loss that relate to items produced that are not an output of the entity's ordinary activities, and which line item(s) in the consolidated statement of comprehensive income include(s) such proceeds and cost.

The amendments are applied retrospectively, but only to items of property, plant and equipment that are brought to the location and condition necessary for them to be capable of operating in the manner intended by management on or after the beginning of the earliest period presented in the financial statements in which the entity first applies the amendments.

The Group shall recognize the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings (or other component of equity, as appropriate) at the beginning of that earliest period presented. The amendments are effective for annual periods beginning on or after January 1, 2022, with early application permitted.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(2) New and revised K-IFRSs in issue, but not yet effective, Continued

- K-IFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets* - Onerous Contracts - Cost of Fulfilling a Contract (Amendment)

The amendments specify that the 'cost of fulfilling' a contract comprises the 'costs that relate directly to the contract.' Costs that relate directly to a contract consist of both the incremental costs of fulfilling that contract (examples would be direct labor or materials) and an allocation of other costs that relate directly to fulfilling contracts (an example would be the allocation of the depreciation charge for an item of property, plant and equipment used in fulfilling the contract).

The amendments apply to contracts for which the entity has not yet fulfilled all its obligations at the beginning of the annual reporting period in which the entity first applies the amendments. Comparatives are not restated. Instead, the entity shall recognize the cumulative effect of initially applying the amendments as an adjustment to the opening balance of retained earnings or other component of equity, as appropriate, at the date of initial application.

The amendments are effective for annual periods beginning on or after January 1, 2022, with early application permitted.

- Annual Improvements to K-IFRSs 2018–2020

The annual improvements include amendments to four standards, such as K-IFRS 1101, *First-time Adoption of K-IFRS*; K-IFRS 1109, *Financial Instruments*; K-IFRS 1116, *Leases*; and K-IFRS 1041, *Agriculture*.

① K-IFRS 1101 – *First-Time Adoption of K-IFRS*

The amendment provides additional relief to a subsidiary, which becomes a first-time adopter later than its parent in respect of accounting for cumulative translation differences. As a result of the amendment, a subsidiary that uses the exemption in K-IFRS 1101 paragraph D16(1) can now also elect to measure cumulative translation differences for all foreign operations at the carrying amount that would be included in the parent's consolidated financial statements, based on the parent's date of transition to K-IFRSs, if no adjustments were made for consolidation procedures and for the effects of the business combination in which the parent acquired the subsidiary. A similar election is available to an associate or joint venture that uses the exemption in K-IFRS 1101 paragraph D16(1).

The amendment is effective for annual periods beginning on or after January 1, 2022, with early application permitted.

② K-IFRS 1109 – *Financial Instruments*

The amendment clarifies that in applying the '10%' test to assess whether to derecognize a financial liability, an entity includes only fees paid or received between the entity (the borrower) and the lender, including fees paid or received by either the entity or the lender on the other's behalf.

The amendment is applied prospectively to modifications and exchanges that occur on or after the date the entity first applies the amendment.

The amendment is effective for annual periods beginning on or after January 1, 2022, with early application permitted.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(2) New and revised K-IFRSs in issue, but not yet effective, Continued

③ K-IFRS 1116 – *Leases*

The amendment removes the illustration of the reimbursement of leasehold improvements.

As the amendment to K-IFRS 1116 only regards an illustrative example, no effective date is stated.

④ K-IFRS 1041 – *Agriculture*

The amendment removes the requirement in K-IFRS 1041 for entities to exclude cash flows for taxation when measuring fair value. This aligns the fair value measurement in K-IFRS 1041 with the requirements of K-IFRS 1113, *Fair Value Measurement*, to use internally consistent cash flows and discount rates, and enables preparers to determine whether to use pretax or posttax cash flows and discount rates for the most appropriate fair value measurement.

The amendment is applied prospectively, i.e., for fair value measurements on or after the date an entity initially applies the amendment.

The amendment is effective for annual periods beginning on or after January 1, 2022, with early application permitted.

- K-IFRS 1001 *Presentation of Financial Statements* and IFRS Practice Statement 2 *Making Materiality Judgements* - Disclosure of Accounting Policies (Amendment)

The amendments change the requirements in K-IFRS 1001 with regard to disclosure of accounting policies. The amendments replace all instances of the term 'significant accounting policies' with 'material accounting policy information.' Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements.

The supporting paragraphs in K-IFRS 1001 are also amended to clarify that accounting policy information that relates to immaterial transactions, other events or conditions is immaterial and need not be disclosed. Accounting policy information may be material because of the nature of the related transactions, other events or conditions, even if the amounts are immaterial. However, not all accounting policy information relating to material transactions, other events or conditions is itself material.

The board has also developed guidance and examples to explain and demonstrate the application of the 'four-step materiality process' described in IFRS Practice Statement 2.

The amendments to K-IFRS 1001 are effective for annual periods beginning on or after January 1, 2023, with earlier application permitted and are applied prospectively. The amendments to IFRS Practice Statement 2 do not contain an effective date or transition requirements.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(2) New and revised K-IFRSs in issue, but not yet effective, Continued

- K-IFRS 1008 *Accounting Polices, Changes in Accounting Estimates and Errors* - Definition of Accounting Estimates (Amendment)

The amendments replace the definition of a change in accounting estimates with a definition of accounting estimates. Under the new definition, accounting estimates are “monetary amounts in financial statements that are subject to measurement uncertainty.”

The amendments are effective for annual periods beginning on or after January 1, 2023, to changes in accounting policies and changes in accounting estimates that occur on or after the beginning of that period with earlier application permitted.

- K-IFRS 1012 *Income Taxes* - Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendment)

The amendments introduce a further exception from the initial recognition exemption. Under the amendments, an entity does not apply the initial recognition exemption for transactions that give rise to equal taxable and deductible temporary differences.

Depending on the applicable tax law, equal taxable and deductible temporary differences may arise on initial recognition of an asset and liability in a transaction that is not a business combination and affects neither accounting nor taxable profit. For example, this may arise upon recognition of a lease liability and the corresponding right-of-use asset applying K-IFRS 1116 at the commencement date of a lease.

Following the amendments to K-IFRS 1012, an entity is required to recognize the related deferred tax asset and liability, with the recognition of any deferred tax asset being subject to the recoverability criteria in K-IFRS 1012.

The amendments are effective for annual reporting periods beginning on or after January 1, 2023, with earlier application permitted.

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

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(3) Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and its entities (including structured entities) controlled by the Company (and its subsidiaries). Control is achieved where the Company: 1) has the power over the investee; 2) is exposed, or has rights, to variable returns from its involvement with the investee; and 3) has the ability to use its power to affect its returns. The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of controls listed above.

When the Group has less than a majority of the voting rights of an investee, it has power over the investee when the voting rights are sufficient to give it the practical ability to direct the activities of the investee unilaterally. The Group considers all relevant facts and circumstances in assessing whether or not its voting rights in an investee are sufficient to give it the power, including:

- the size of the Group's holding of voting rights relative to the size and dispersion of holdings of other vote holders;
- potential voting rights held by the Group, other vote holders or other parties;
- rights arising from other contractual arrangements; and
- any additional facts and circumstances that indicate that the Group has, or does not have, the current ability to direct the relevant activities at the time that decisions need to be made, including voting patterns at previous shareholders' meetings.

Consolidation of a subsidiary begins when the Company obtains control over the subsidiary and ceases when the Company loses control of the subsidiary. Specifically, the results of subsidiaries acquired or disposed of during the year are included in profit or loss from the date the Company gains control until the date when the Company ceases to control the subsidiary. Profit or loss and each component of other comprehensive income ("OCI") are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of the subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(3) Basis of consolidation, Continued

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with the Group's accounting policies.

All intragroup transactions and related assets, liabilities, income and expenses are eliminated in full on consolidation.

Non-controlling interests in subsidiaries are identified separately from the Group's equity therein. Those interests of non-controlling shareholders that are present ownership interests entitling their holders to a proportionate share of net assets upon liquidation may initially be measured at 1) fair value or 2) at the non-controlling interests' proportionate share of the fair value of the acquiree's identifiable net assets. The choice of measurement is made on an acquisition-by-acquisition basis. Other non-controlling interests are initially measured at fair value. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition, plus the non-controlling interests' share of subsequent changes in equity. Total comprehensive income is attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted, and the fair value of the consideration paid or received is recognized directly in equity and attributed to the owners of the Company.

When the Group loses control over a subsidiary, a gain or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill) and liabilities of the subsidiary and any non-controlling interests. When assets of the subsidiary are carried at revalued amounts or fair values and the related cumulative gain or loss has been recognized in OCI and accumulated in equity, the amounts previously recognized in OCI and accumulated in equity are accounted for as if the Group had directly disposed of the relevant assets (i.e., reclassified to profit or loss or transferred directly to retained earnings). The fair value of any investment retained in the former subsidiary at the date when control is lost is recognized as the fair value on initial recognition for subsequent accounting under K-IFRS 1109, *Financial Instruments*, or, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

(4) Business combination

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs are recognized in profit or loss as incurred.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(4) Business combination, Continued

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognized at their fair value at the acquisition date, except that:

- deferred tax assets or liabilities and liabilities or assets related to employee benefit arrangements are recognized and measured in accordance with K-IFRS 1012, *Income Taxes*, and K-IFRS 1019, *Employee Benefits*, respectively;
- liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with K-IFRS 1102, *Share-Based Payment*, at the acquisition date; and
- assets (or disposal groups) that are classified as held for sale in accordance with K-IFRS 1105, *Non-Current Assets Held for Sale and Discontinued Operations*, are measured in accordance with that standard.

Goodwill is measured as the excess of the sum of a) the consideration transferred, b) the amount of any non-controlling interests in the acquiree and c) the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of a) the consideration transferred, b) the amount of any non-controlling interests in the acquiree and c) the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognized immediately in profit or loss as a bargain purchase gain.

When the consideration transferred by the Group in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement-period adjustments are adjusted retrospectively, with corresponding adjustments against goodwill. Measurement-period adjustments are adjustments that arise from additional information obtained during the 'measurement period' (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement-period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Other contingent consideration is remeasured to fair value at subsequent reporting dates with changes in fair value recognized in profit or loss.

When a business combination is achieved in stages, the Group's previously held interests (including joint operations) in the acquired entity are remeasured to its acquisition-date fair value and the resulting gain or loss, if any, is recognized in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognized in OCI are reclassified to profit or loss, where such treatment would be appropriate if that interest were disposed of.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period, or additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(5) Investments in associates and joint ventures

An associate is an entity over which the Group has significant influence and that is neither a subsidiary nor an interest in a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

A joint venture is a joint arrangement, whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The results of operations and assets and liabilities of associates or joint ventures are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment is classified as held for sale, in which case, it is accounted for in accordance with K-IFRS 1105, *Non-Current Assets Held for Sale and Discontinued Operations*. Under the equity method, an investment in an associate or a joint venture is initially recognized in the consolidated statements of financial position at cost and adjusted thereafter to recognize the Group's share of the profit or loss and OCI of the associate or joint venture. When the Group's share of losses of an associate or a joint venture exceeds its interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), it discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

An investment in an associate or a joint venture is accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. On acquisition of the investment in an associate or a joint venture, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognized immediately in profit or loss in the period in which the investment is acquired.

The requirements of K-IFRS 1028 are applied to determine whether it is necessary to recognize any impairment loss with respect to the Group's investment in an associate or a joint venture. When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with K-IFRS 1036 as a single asset by comparing its recoverable amount (higher of value in use and fair value, less costs of disposal) with its carrying amount. Any impairment loss recognized is not allocated to any asset, including goodwill that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with K-IFRS 1036 to the extent that the recoverable amount of the investment subsequently increases.

The Group discontinues the use of the equity method from the date when the investment ceases to be an associate or a joint venture. When the Group retains an interest in the former associate or a joint venture and the retained interest is a financial asset, the Group measures the retained interest at fair value at that date and the fair value is regarded as its fair value on initial recognition in accordance with K-IFRS 1109. The difference between the carrying amount of the associate or a joint venture at the date the equity method was discontinued, and the fair value of any retained interest and any proceeds from disposing of a part interest in the associate or a joint venture is included in the determination of the gain or loss on disposal of the associate or joint venture. In addition, the Group accounts for all amounts previously recognized in OCI in relation to that associate on the same basis as would be required if that associate had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognized in OCI by that associate or joint venture would be reclassified to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) when the associate or joint venture is disposed of.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(5) Investments in associates and joint ventures, Continued

When the Group reduces its ownership interest in an associate or a joint venture but continues to use the equity method, it reclassifies to profit or loss the proportion of the gain or loss that had previously been recognized in OCI relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

When the Group's entity transacts with an associate or a joint venture of the Group, profits and losses resulting from the transactions with the associate or joint venture are recognized in the Group's consolidated financial statements only to the extent of interests in the associate or joint venture that are not related to the Group.

The Group applies K-IFRS 1109, including the impairment requirements, to long-term interests in an associate or joint venture to which the equity method is not applied and which form part of the net investment in the investee. Furthermore, in applying K-IFRS 1109 to long-term interests, the Group does not take into account adjustments to their carrying amount required by K-IFRS 1028 (i.e., adjustments to the carrying amount of long-term interests arising from the allocation of losses of the investee or assessment of impairment in accordance with K-IFRS 1028).

(6) Goodwill

Goodwill resulting from an acquisition of a business is carried at cost as established at the date of acquisition of the business, less accumulated impairment losses, if any.

For the purpose of impairment testing, goodwill is allocated to each of the Group's cash-generating units ("CGUs") (or groups of CGUs) that are expected to benefit from the synergies of the combination.

A CGU to which goodwill has been allocated is tested for impairment annually, or more frequently when there is indication that the unit may be impaired. If the recoverable amount of the CGU is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit on a pro rata basis based on the carrying amount of each asset in the unit. Any impairment loss for goodwill is recognized directly in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods.

On disposal of the relevant CGU, the attributable amount of goodwill is included in the determination of the profit or loss on disposal.

(7) Revenue recognition

The Group recognizes revenue from the following major sources:

- IT service
- Logistics service

Revenue is measured based on the consideration to which the Group expects to be entitled in a contract with a customer and excludes amounts collected on behalf of third parties. The Group recognizes revenue when it transfers control of a product or service to a customer.

1) IT service

The IT service is divided into order-based consulting/system integration ("SI"), maintenance, outsourcing and telecommunication infrastructure services.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(7) Revenue recognition, Continued

1) IT service, Continued

① Consulting/SI service

The Group recognizes revenues under Application of K-IFRS 1115 (1) provision of hardware, software and professional services (custom-built systems); (2) provision of commercial software installation services; (3) provision of software and professional services (provision of custom-built software); and (4) provision of hardware and software.

The Group recognizes revenues by cost-to-cost method for basis of percentage of total costs incurred when constructing custom-built systems, providing commercial software installation services and supplying custom-built software.

According to K-IFRS 1115, the Group's custom-built systems, provision of commercial software installation services and provision of custom-built software are performance improvements, which create or enhance an asset that the customer controls as the asset is created or enhanced; therefore, the control over assets and service is transferred over period to customer. As the Group satisfies the performance obligation over period, revenue is recognized over period and it is recognized before being billed to the customer is included in contract assets in accordance with K-IFRS 1115.

Provisions for project losses were adjusted from unbilled or over claimed construction, as K-IFRS 1011 requires recognized losses to be added or subtracted on unbilled or over claimed construction. In contrast, K-IFRS 1115 does not require the adjustment for contract assets or contract liabilities; instead, losses are shown as the separate account, as a provision, in accordance with K-IFRS 1037.

The Group provides servers, storages, network equipment, PCs of hardware and SAP, ORACLE of software, recognizing revenue when it transfers control of the asset to customer, and the group recognizes receivables when the asset is delivered and inspected; customer takes risk of obsolescence of the good or service.

② Maintenance services

The Group provides customers with maintenance services after consulting/SI service provision. Revenue related to maintenance services is recognized over period, and it is recognized by straight-line method over the service period.

③ Outsourcing Service

The Group provides customers with IT outsourcing services, which are divided into computerized agency service, cloud, server rental service and business travel service.

The Group provides computerized service for a certain period of time after signing a service contract and performing obligations, the customer receives direct benefits. Accordingly, revenue related to agency services is recognized over period, and it is recognized by straight-line method over the service period.

The Group also provides customers with cloud and server rental service, and the usage of services is directly equivalent to the Group's value, so the Group recognizes revenue by applying a usage-based calculation method.

In the case of business travel services, the Group provides services according to the customer's request, and the cost incurred for the completion of the service directly corresponds to the value, so it recognizes revenue by applying the calculation method based on the cost incurred in fulfilling the obligation.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(7) Revenue recognition, Continued

1) IT service, Continued

④ Telecommunications infrastructure services

The Group provides telecommunication infrastructure services, such as Internet-only and telephone lines that customers receive and consume, and their line usage directly corresponds to the value the Group gives to the customers, so the Group recognizes revenues by applying the method for basis of the line usage.

2) Logistics service

The Group is engaged in a logistics service business that provides SCM consulting services to the customers through its own logistics execution solution.

Applying K-IFRS 1115 identifies separate performance obligations, such as transportation and warehouse operations. Revenue from transportation service is recognized on a straight-line basis over the period of service.

(8) Lease

1) The Group as lessee

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

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

The incremental borrowing rate depends on the term, currency and start date of the lease and is determined based on a series of inputs including: the risk-free rate based on government bond rates; a country-specific risk adjustment; a credit risk adjustment based on bond yields; and an entity-specific adjustment when the risk profile of the entity that enters into the lease is different to that of the Group and the lease does not benefit from a guarantee from the Group.

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

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

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

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(8) Lease, Continued

1) The Group as lessee, Continued

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

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

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

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

Whenever the Group incurs an obligation for costs to dismantle and remove a leased asset, restore the site on which it is located or restore the underlying asset to the condition required by the terms and conditions of the lease, a provision is recognized and measured under K-IFRS 1037. To the extent that the costs relate to a right-of-use asset, the costs are included in the related right-of-use asset, unless those costs are incurred to produce inventories.

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

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

The Group applies K-IFRS 1036 to determine whether a right-of-use asset is impaired and accounts for any identified impairment loss as described in the 'Property and Equipment' policy (Note 2.(15)).

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

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

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(8) Lease, Continued

2) The Group as lessor

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

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

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

Amounts due from lessees under finance leases are recognized as receivables at the amount of the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Group's net investment outstanding in respect of the leases.

Subsequent to initial recognition, the Group regularly reviews the estimated unguaranteed residual value and applies the impairment requirements of K-IFRS 1109, recognizing an allowance for expected credit losses ("ECLs") on the lease receivables.

Finance lease income is calculated with reference to the gross carrying amount of the lease receivables, except for credit-impaired financial assets for which interest income is calculated with reference to their amortized cost (i.e., after a deduction of the loss allowance).

When a contract includes both lease and non-lease components, the Group applies K-IFRS 1115 to allocate the consideration under the contract to each component.

(9) Foreign currencies

The individual financial statements of each Group entity are presented in the currency of the primary economic environment in which the entity operates (its functional currency). For the purpose of the consolidated financial statements, the results of operations and financial position of each Group entity are expressed in Korean won, which is the functional currency of the entity and the presentation currency for the consolidated financial statements.

In preparing the consolidated financial statements of the individual Group entities, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(9) Foreign currencies, Continued

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

- exchange differences on foreign currency borrowings related to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;
- exchange differences on transactions entered into in order to hedge certain foreign currency risks; and
- exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognized initially in OCI and reclassified from equity to profit or loss on disposal or partial disposal of the net investment.

For the purpose of presenting consolidated financial statements, the assets and liabilities of the Group's foreign operations are expressed in Korean won using exchange rates prevailing at the end of the reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuated significantly during that period; in which case, the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in OCI and accumulated in a foreign exchange translation reserve (attributed to non-controlling interests as appropriate).

On the disposal of a foreign operation (i.e., a disposal of the Group's entire interest in a foreign operation, a disposal involving loss of control over a subsidiary that includes a foreign operation or a partial disposal of an interest in a joint arrangement or an associate that includes a foreign operation whose retained interest becomes a financial asset), all of the accumulated exchange differences in respect of that operation attributable to the owners of the Group are reclassified to profit or loss.

In case of a partial disposal (i.e., no loss of control) of a subsidiary that includes a foreign operation, the proportionate share of accumulated exchange differences is reattributed to non-controlling interests in equity and is not recognized in profit or loss. For all other partial disposals (i.e., partial disposals of associates or joint arrangements that do not result in the Group losing significant influence or joint control), the proportionate share of the accumulated exchange differences is reclassified to profit or loss.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate. Exchange differences arising are recognized in equity.

(10) Government grants

Government grants are not recognized until there is a reasonable assurance that the Group will comply with the conditions attached to them and that the grants will be received.

The benefit of a government loan at a below-market rate of interest is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

Government grants related to assets are presented in the consolidated statements of financial position by deducting the grant from the carrying amount of the asset (including property and equipment). The related grant is recognized in profit or loss over the life of a depreciable asset as a reduced depreciation expense.

Government grants related to income are recognized in profit or loss on a systematic basis over the periods in which the Group recognizes as expenses the related costs for which the grants are intended to compensate.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(10) Government grants, Continued

Government grants that are receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognized in profit or loss in the period in which they become receivable.

Government grants towards staff retraining costs are recognized as income over the periods necessary to match them with the related costs and are deducted in reporting the related expense.

(11) Retirement benefit costs

The Group concurrently operates defined contribution retirement benefit plans and defined benefit retirement benefit plans.

Contributions to defined contribution retirement benefit plans are recognized as an expense when employees have rendered service entitling them to the contributions.

For defined benefit retirement benefit plans, the cost of providing benefits is determined using the projected unit credit method, with actuarial valuations being carried out at the end of each annual reporting period. Remeasurements, comprising actuarial gains and losses, the effect of the asset ceiling (if applicable) and the return on plan assets (excluding interest), are recognized immediately in the consolidated statements of financial position with a charge or credit to the consolidated statements of comprehensive income in the period in which they occur.

Remeasurements recognized in the consolidated statements of comprehensive income are not reclassified. Past service cost is recognized in profit or loss in the period of a plan amendment. Net interest is calculated by applying a discount rate to the net defined benefit liability or asset at the beginning of the period. Defined benefit costs are composed of service cost (including current service cost and past service cost, as well as gains and losses on curtailments and settlements), net interest expense (income) and remeasurement.

The Group recognizes the service cost and net interest expense (income) components in profit or loss and the remeasurement component in OCI. Curtailment gains and losses are accounted for as past service costs.

The retirement benefit obligation recognized in the consolidated statements of financial position represents the actual deficit or surplus in the Group's defined benefit plans. Any surplus resulting from this calculation is limited to the present value of any economic benefits available in the form of refunds from the plans or reductions in future contributions to the plans. Discretionary contributions made by employees or third parties reduce service cost upon payment of these contributions to the plan. When the formal terms of the plans specify that there will be contributions from employees or third parties, the accounting depends on whether the contributions are linked to service as follows:

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(11) Retirement benefit costs, Continued

Discretionary contributions made by employees or third parties reduce service cost upon payment of these contributions to the plan. When the formal terms of the plans specify that there will be contributions from employees or third parties, the accounting depends on whether the contributions are linked to service as follows:

- If the contributions are not linked to services (e.g., contributions are required to reduce a deficit arising from losses on plan assets or from actuarial losses), they are reflected in the remeasurement of the net defined benefit liability (asset).
- If contributions are linked to services, they reduce service costs. For the amount of contribution that is dependent on the number of years of service, the entity reduces service cost by attributing the contributions to periods of service using the attribution method required by K-IFRS 1019 paragraph 70 for the gross benefits. For the amount of contribution that is independent of the number of years of service, the entity reduces service cost in the period in which the related service is rendered.

(12) Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

1) Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the consolidated statements of comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

A provision is recognized for those matters for which the tax determination is uncertain, but it is considered probable that there will be future outflow of funds to a tax authority. The provisions are measured at the best estimate of the amount expected to become payable. The assessment is based on the judgement of tax professionals within the Company supported by previous experience in respect of such activities and in certain cases based on specialist independent tax advice.

2) Deferred tax

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

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognized to the extent it is probable that there will be sufficient taxable profits against which the benefits of the temporary differences can be utilized, and they are expected to reverse in the foreseeable future.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(12) Taxation, Continued

2) Deferred tax, Continued

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent it is no longer probable that sufficient taxable profits will be available to allow all or part of the assets to be recovered. Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset is realized based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amounts of its assets and liabilities.

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

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

3) Current and deferred taxes for the year

Current and deferred taxes are recognized in profit or loss, except when they relate to items that are recognized in OCI or directly in equity; in which case, the current and deferred taxes are also recognized in OCI or directly in equity. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

4) Uncertainty over income tax treatments

The Group filed a lawsuit against Seoul High Court for the income tax disposition Jamsil Tax Office imposed in 2016 in accordance with the tax investigation by National Tax Service regarding the merger gain recognized for the year ended on December 31, 2010. The lawsuit is currently in progress.

Uncertain tax items are related to the interpretation of the tax legislation regarding the arrangements the Group has entered into. Given the final result of tax litigation is uncertain, it is possible that the future conclusion can be changed significantly due to open tax matters.

(13) Property and equipment

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

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(13) Property and equipment, Continued

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

The Group does not depreciate land. Depreciation expense is computed using the straight-line method based on the estimated useful lives of the assets as follows:

	<u>Useful lives (years)</u>
Buildings	20–40
Machinery and equipment	4–6
Others	4

If each part of an item of property and equipment has a cost that is significant in relation to the total cost of the item, it is depreciated separately.

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

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

(14) Intangible assets

Goodwill, memberships and emission rights are not amortized, and development costs and other intangible assets are amortized according to the estimated useful life. Intangible assets, except for aforementioned assets, are amortized by the straight-line method over the following estimated useful lives for each individual asset:

	<u>Estimated useful life (years)</u>
Software	4–6

1) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost, less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are carried at cost, less accumulated impairment losses.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(14) Intangible assets, Continued

2) Internally generated intangible assets - research and development expenditure

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following conditions have been demonstrated:

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

The amount initially recognized for internally generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria. Where no internally generated intangible asset can be recognized, development expenditure is recognized in profit or loss in the period in which it is incurred. Subsequent to initial recognition, internally generated intangible assets are reported at cost, less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

3) Intangible assets acquired in a business combination

Intangible assets that are acquired in a business combination are recognized separately from goodwill and are initially recognized at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost, less accumulated amortization and accumulated impairment losses, on the same basis as intangible assets that are acquired separately.

4) Derecognition of intangible assets

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

5) Patents and trademarks

Patents and trademarks are measured initially at purchase cost and are amortized on a straight-line basis over their estimated useful lives.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(15) Impairment of property and equipment and intangible assets other than goodwill

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

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

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

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

(16) Inventories

Inventories are stated at the lower of cost or net realizable value. Costs of inventories, except for those in transit using actual cost method, are measured using the average method and consist of the purchase price, cost of conversion and other costs incurred in bringing the inventories to their present location and condition. Net realizable value represents the estimated selling price for inventories, less all estimated costs of completion and costs necessary to make the sale.

When inventories are sold, the carrying amount of those inventories is recognized as an expense (cost of sales) in the period in which the related revenue is recognized. The amount of any write-down of inventories to net realizable value and all losses of inventories are recognized as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realizable value, is recognized as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs.

(17) Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

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

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(17) Provisions, Continued

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

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

1) Onerous contracts

Present obligations arising under onerous contracts are recognized and measured as provisions. An onerous contract is considered to exist where the Group has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract.

2) Warranties

Provisions for the expected cost of warranty obligations under sale of goods are recognized at the date of sale of the relevant products. The amounts are recognized based on the best estimate of amounts necessary to settle the present and future warranty obligations.

3) Restoration provisions

Provisions for the costs to restore leased assets to their original condition, as required by the terms and conditions of the lease, are recognized when the obligation is incurred either at the commencement date or as a consequence of having used the underlying asset during a particular period of the lease. The amounts are recognized based on the best estimate of amounts necessary to restore the assets. Estimates are regularly reviewed and adjusted as appropriate for new circumstances.

(18) Financial instruments

Financial assets and financial liabilities are recognized in the Group's consolidated statements of financial position when the Group becomes a party to the contractual provisions of the instrument. Financial assets and financial liabilities are initially measured at fair value, except for trade receivables that do not have a significant financing component which are measured at transaction price. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at FVPL) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVPL are recognized immediately in profit or loss.

(19) Financial assets

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

All recognized financial assets are measured subsequently in their entirety at either amortized cost or fair value depending on the classification of the financial assets.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(19) Financial assets, Continued

1) Classification of financial assets

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

- The financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows.
- 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 ("SPPI").

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

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

By default, all other financial assets are measured subsequently at FVPL.

Despite the foregoing, the Group may make the following irrevocable election/designation at initial recognition of a financial asset:

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

1-1) Amortized cost and effective interest method

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

The amortized cost of a financial asset is the amount at which the financial asset is measured at initial recognition, minus the principal repayments, plus the cumulative amortization using the effective interest method of any difference between that initial amount and the maturity amount, adjusted for any loss allowance. The gross carrying amount of a financial asset is the amortized cost of the financial asset before adjusting for any loss allowance. Interest income is recognized using the effective interest method for debt instruments measured subsequently at amortized cost and at FVOCI. For financial assets other than purchased or originated credit-impaired financial assets, interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit impaired (see below). For financial assets that have subsequently become credit impaired, interest income is recognized by applying the effective interest rate to the amortized cost of the financial asset. If, in subsequent reporting periods, the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit impaired, interest income is recognized by applying the effective interest rate to the gross carrying amount of the financial asset.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(19) Financial assets, Continued

1) Classification of financial assets, Continued

1-1) Amortized cost and effective interest method, Continued

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

Interest income is recognized in profit or loss and is included in the "finance income - interest income" line item (see Note 30).

1-2) Debt instruments classified as at FVOCI

Fair value is determined in the manner described in Note 8. The corporate bonds are initially measured at fair value, plus transaction costs. Subsequently, changes in the carrying amount of these corporate bonds as a result of foreign exchange gains and losses, impairment gains or losses, and interest income, calculated using the effective interest method, are recognized in profit or loss. The amounts that are recognized in profit or loss are the same as the amounts that would have been recognized in profit or loss if these corporate bonds had been measured at amortized cost. All other changes in the carrying amount of these corporate bonds are recognized in OCI and accumulated under the heading of investments revaluation reserve. When these corporate bonds are derecognized, the cumulative gains or losses previously recognized in OCI are reclassified to profit or loss.

1-3) Equity instruments designated as at FVOCI

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

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

Dividends on these investments in equity instruments are recognized in profit or loss in accordance with K-IFRS 1109, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the 'other non-operating income and expenses' line item in profit or loss (see Note 29).

The Group designated all investments in equity instruments that are not held for trading as at FVOCI on initial recognition (see Note 11).

A financial asset is held for trading if:

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

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(19) Financial assets, Continued

1) Classification of financial assets, Continued

1-4) Financial assets at FVPL

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

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

Financial assets at FVPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognized in profit or loss to the extent they are not part of a designated hedging relationship (see hedge accounting policy). The net gain or loss recognized in profit or loss includes any dividend or interest earned on the financial asset and is included in the 'other non-operating income and expenses' line item (see Note 29). Fair value is determined in the manner described in Note 8.

2) Foreign exchange gains and losses

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

- For financial assets measured at amortized cost that are not part of a designated hedging relationship, exchange differences are recognized in profit or loss in the 'Finance income and expenses' line item (see Note 30).
- For debt instruments measured at FVOCI that are not part of a designated hedging relationship, exchange differences on the amortized cost of the debt instrument are recognized in profit or loss in the 'Finance income and expenses' line item (see Note 30). As the foreign currency element recognized in profit or loss is the same as if it was measured at amortized cost, the residual foreign currency element based on the translation of the carrying amount (at fair value) is recognized in OCI in the investments revaluation reserve.
- For financial assets measured at FVPL that are not part of a designated hedging relationship, exchange differences are recognized in profit or loss in the 'Finance income and expenses' line item as part of the fair value gain or loss (see Note 30).
- For equity instruments measured at FVOCI, exchange differences are recognized in OCI in the investments revaluation reserve.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(19) Financial assets, Continued

3) Impairment of financial assets

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

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

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

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

3-1) Significant increase in credit risk

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

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

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

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(19) Financial assets, Continued

3) Impairment of financial assets, Continued

3-1) Significant increase in credit risk, Continued

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

Despite the foregoing, the Group assumes that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial instrument is determined to have low credit risk at the reporting date. A financial instrument is determined to have low credit risk if:

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

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

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

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

3-2) Definition of default

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

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

Irrespective of the above analysis, the Group considers that default has occurred when a financial asset is more than 12 months past due, unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(19) Financial assets, Continued

3) Impairment of financial assets, Continued

3-3) Credit-impaired financial assets

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

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

3-4) Write-off policy

The Group writes off a financial asset when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, and the debtor has been placed under liquidation or has entered into bankruptcy proceedings. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate.

3-5) Measurement and recognition of ECL

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

For financial assets, the ECL is estimated as the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive, discounted at the original effective interest rate. For a lease receivable, the cash flows used for determining the ECL are consistent with the cash flows used in measuring the lease receivable in accordance with K-IFRS 1116 *Leases*.

For a financial guarantee contract, as the Group is required to make payments only in the event of a default by the debtor in accordance with the terms of the instrument that is guaranteed, the expected loss allowance is the expected payment to reimburse the holder for a credit loss that it incurs, less any amounts that the Group expects to receive from the holder, the debtor or any other party.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(19) Financial assets, Continued

3) Impairment of financial assets, Continued

3-5) Measurement and recognition of ECL, Continued

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

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

4) Derecognition of financial assets

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

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

(20) Financial liabilities and equity instruments

1) Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or equity in accordance with the substance of the contractual arrangement and the definitions of a financial liability and an equity instrument. Furthermore, the Group does not reassess such classification subsequent to the initial recognition, unless the terms of the instrument change.

2) Equity instruments

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

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(20) Financial liabilities and equity instruments, Continued

2) Equity instruments, Continued

Repurchase of the Group's own equity instruments is recognized and deducted directly in equity. No gain or loss is recognized in profit or loss on the purchase, sale, issue or cancelation of the Group's own equity instruments.

3) Financial liabilities

All financial liabilities are measured subsequently at amortized cost using the effective interest method or at FVPL. However, financial liabilities that arise when a transfer of a financial asset does not qualify for derecognition or when the continuing involvement approach applies, and financial guarantee contracts are issued by the Group, are measured in accordance with the specific accounting policies set out below.

4) Financial liabilities at FVPL

Financial liabilities are classified as at FVPL when a financial liability is (i) contingent consideration of an acquirer in a business combination, (ii) held for trading or (iii) designated as at FVPL.

A financial liability is classified as held for trading if:

- it has been acquired principally for the purpose of repurchasing in the near term;
- on initial recognition, it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit taking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading or contingent consideration of an acquirer in a business combination may be designated as at FVPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise;
- the financial liability forms part of a group of financial assets or financial liabilities, or both, which is managed, and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and K-IFRS 1109 permits the entire combined contract to be designated as at FVPL.

Financial liabilities at FVPL are measured at fair value, with any gains or losses arising on changes in fair value recognized in profit or loss to the extent that they are not part of a designated hedging relationship (see hedge accounting policy). The net gain or loss recognized in profit or loss incorporates any interest paid on the financial liability and is included in the 'other operating income and expenses' line item (see Note 29) in profit or loss.

However, for financial liabilities that are designated as at FVPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability is recognized in OCI, unless the recognition of the effects of changes in the liability's credit risk in OCI would create or enlarge an accounting mismatch in profit or loss. The remaining amount of change in the fair value of liability is recognized in profit or loss. Changes in fair value attributable to a financial liability's credit risk that are recognized in OCI are not subsequently reclassified to profit or loss; instead, they are transferred to retained earnings upon derecognition of the financial liability.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(20) Financial liabilities and equity instruments, Continued

4) Financial liabilities at FVPL, Continued

Gains or losses on financial guarantee contracts issued by the Group that are designated by the Group as at FVPL are recognized in profit or loss.

Fair value is determined in the manner described in Note 8.

5) Financial liabilities measured subsequently at amortized cost

Financial liabilities that are not (i) contingent consideration of an acquirer in a business combination, (ii) held for trading or (iii) designated as at FVPL are measured subsequently at amortized cost using the effective interest method.

The effective interest method is a method of calculating the amortized cost of a financial liability and allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial liability, or (where appropriate) a shorter period, to the amortized cost of the financial liability.

6) Financial guarantee contracts

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

Financial guarantee contract liabilities are measured initially at their fair values and, if not designated as at FVPL and do not arise from a transfer of an asset, are measured subsequently at the higher of:

- the amount of the loss allowance determined in accordance with K-IFRS 1109 (see financial assets above) or
- the amount recognized initially, less, where appropriate, cumulative amortization recognized in accordance with the revenue recognition policies set out above.

7) Foreign exchange gains and losses

For financial liabilities that are denominated in a foreign currency and are measured at amortized cost at the end of each reporting period, the foreign exchange gains and losses are determined based on the amortized cost of the instruments. These foreign exchange gains and losses are recognized in the 'Finance income and expenses' line item in profit or loss (see Note 30) for financial liabilities that are not part of a designated hedging relationship. For those which are designated as a hedging instrument for a hedge of foreign currency risk, foreign exchange gains and losses are recognized in OCI and accumulated in a separate component of equity.

The fair value of financial liabilities denominated in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of the reporting period. For financial liabilities that are measured as at FVPL, the foreign exchange component forms part of the fair value gains or losses and is recognized in profit or loss for financial liabilities that are not part of a designated hedging relationship.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES, Continued

(20) Financial liabilities and equity instruments, Continued

8) Derecognition of financial liabilities

The Group derecognizes financial liabilities when, and only when, its obligations are discharged, canceled or have expired. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in profit or loss.

When the Group exchanges with the existing lender one debt instrument for another one with substantially different terms, such exchange is accounted for as an extinguishment of the original financial liability and the recognition of a new financial liability. Similarly, the Group accounts for substantial modification of terms of an existing liability or part of it as an extinguishment of the original financial liability and the recognition of a new liability. It is assumed that the terms are substantially different if the discounted present value of the cash flows under the new terms, including any fees paid net of any fees received and discounted using the original effective rate, is at least 10% different from the discounted present value of the remaining cash flows of the original financial liability. If the modification is not substantial, the difference between (1) the carrying amount of the liability before the modification and (2) the present value of the cash flows after modification should be recognized in profit or loss as the modification gain or loss within other operating income and expenses.

(21) Accounting treatment related to the emission rights cap and trade scheme

The Group classifies the emission rights as intangible assets. Emission rights allowances that the government allocated free of charge are measured at ₩0, and emission rights allowances purchased are measured at cost, which the Group paid to purchase the allowances. If emission rights allowances that the government allocated free of charge are sufficient to settle the emission rights allowances allotted for the vintage year, the emission liabilities are measured at ₩0. However, for the emission liabilities that exceed the allowances allocated free of charge, the shortfall is measured at the best estimate at the end of the reporting period.

3. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY:

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

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

(1) Critical judgments in applying accounting policies

The following are the critical judgments, apart from those involving estimations (see Note 3(2)), that the management has made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial statements:

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

3. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY, Continued

(1) Critical judgments in applying accounting policies, Continued

1) Revenue recognition

Revenue from project services is recognized using the percentage-of-completion method, which is recognized based on the costs incurred to date as a percentage to the total estimated costs to be incurred. In determining this revenue recognition, management considered whether the specific criteria for revenue recognition set out in K-IFRS 1115, particularly project service revenue, met the percentage-of-completion criteria requirements in paragraph 35. Considering these requirements, management determined that it is appropriate to recognize revenue on the percentage-of-completion method for project service revenue.

2) Business model assessment

Classification and measurement of financial assets depends on the results of the SPPI and the business model test (please see financial assets section of Note 2). The Group determines the business model at a level that reflects how groups of financial assets are managed together to achieve a particular business objective. This assessment includes judgement reflecting all relevant evidence, including how the performance of the assets is evaluated and measured, the risks that affect the performance of the assets and how these are managed, and how the managers of the assets are compensated. The Group monitors financial assets measured at amortized cost or FVOCI that are derecognized prior to their maturity to understand the reason for their disposal and whether the reasons are consistent with the objective of the business for which the asset was held. Monitoring is part of the Group's continuous assessment of whether the business model for which the remaining financial assets are held continues to be appropriate and, if it is not appropriate, whether there has been a change in business model and so a prospective change to the classification of those assets. No such changes were required during the periods presented.

3) Significant increase in credit risk

As explained in Note 2, ECLs are measured as an allowance equal to 12-month ECL for stage 1 assets or lifetime ECL for stage 2 or stage 3 assets. An asset moves to stage 2 when its credit risk has increased significantly since initial recognition. K-IFRS 1109 does not define what constitutes a significant increase in credit risk. In assessing whether the credit risk of an asset has significantly increased, the Group takes into account qualitative and quantitative reasonable and supportable forward-looking information.

(2) Key sources of estimation uncertainty

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

1) Uncertainty on the estimation of the total contract revenue

Total contract revenue is measured based on the initial amount of revenue agreed in the contract, but the measurement of contract revenue is affected by the various uncertainties that depend on the outcome of future events, as total contract revenue may increase or decrease as the terms of the contract change. The Group includes the contract revenue if the customer is likely to approve changes in the amount of revenue due to changes in the terms of the contract or if the Group is likely to meet the performance criteria and the amount can be measured reliably.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

3. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY, Continued

(2) Key sources of estimation uncertainty, Continued

2) Uncertainty on the estimation of the total contract cost

The contract revenue amount is affected by the percentage of completion, which is estimated by reference to the total cost incurred, and the estimated total contract cost is estimated by reference to the expected future figures, such as the material costs, the labor costs and the contract period. The Group periodically reviews the significant changes in estimated total contract costs and reflects the changes in the current progress calculation at the end of the reporting period.

3) Impairment test - Goodwill

The recoverable amounts of CGUs (groups) to review the impairment of goodwill have been determined based on value in use. The recoverable amount of the allocated goodwill will be most sensitively affected by the achievement of the next year's business plan. The business plan that has been considered and approved by the board of directors comprises forecasts of revenue, wages and salaries, and overheads based on current and anticipated market conditions.

4) Defined benefit plan

The Group's defined benefit obligation is determined based on the actuarial valuation carried out at the end of each annual reporting period. Actuarial assumptions are the Group's best estimates of the variables in determining the cost of providing postretirement benefits, such as discount rates, rates of expected future salary increases and mortality rates. Significant estimation uncertainty is likely to persist in making such assumptions due to the long-term nature of postretirement benefit plan. At the end of this year, defined benefit liability of the plan is ₩1,524,093 million (December 31, 2020: ₩1,368,221 million), as detailed in Note 21.

5) Valuation of financial instruments

As described in Note 8, the Group uses valuation techniques that include inputs that are not based on observable market data to estimate the fair value of certain type of financial instruments. Note 8 provides detailed information about key assumptions used in the determination of the fair value of financial instruments as well as the detailed sensitivity analysis for these assumptions. The management believes that the chosen valuation techniques and assumptions used are appropriate in determining the fair value of financial instruments.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

4. SEGMENT REPORTING:

(1) Basis for segmentation

The Group is composed of an IT service division and logistics service division, which are its strategic business units. These divisions offer different goods and services and are managed separately because each division requires different technologies and marketing strategies.

The following summary describes the operations of each operating segment:

	Main Business
IT service	Reportable segment for IT consulting, IT system design and development, SI, clients' information system operation and maintenance, data centers and network service outsourcing
Logistics service	Reportable segment for global logistics services, such as supply chain and logistics consulting and solutions

(2) Financial information for each segment

Financial information for each segment for the years ended December 31, 2021 and 2020, is as follows. Significant accounting policies applied to each reportable segment are the same as the significant accounting policies described in Note 2. Management determines resources to be allocated to each division and reviews based on operating income of each division in order to evaluate performance.

The Group reports segment assets based on property and equipment and intangible assets. Segment liabilities are not reported to the Group's CEO and, therefore, are not disclosed.

1) Segment information

(In thousands of Korean won)

	2021				
	Logistics service	IT service	Total	Adjustments	Adjusted amounts
Revenue	₩ 8,285,607,140	6,702,499,276	14,988,106,416	(1,358,103,977)	13,630,002,439
Internal revenue	(292,801,845)	(1,065,302,132)	(1,358,103,977)	1,358,103,977	-
External revenue	7,992,805,295	5,637,197,144	13,630,002,439	-	13,630,002,439
Depreciation	6,667,911	236,614,630	243,282,541	(6,828,706)	236,453,835
Amortization	309,930	53,913,622	54,223,552	926,988	55,150,540
Operating profit	144,085,024	661,018,790	805,103,814	2,993,958	808,097,772
Non-current assets	53,402,149	1,840,594,070	1,893,996,219	-	1,893,996,219
Acquisition of non-current assets	27,915,125	301,911,411	329,826,536	(6,863,021)	322,963,515

(In thousands of Korean won)

	2020				
	Logistics service	IT service	Total	Adjustments	Adjusted amounts
Revenue	₩ 6,001,541,973	6,362,547,816	12,364,089,789	(1,346,658,263)	11,017,431,526
Internal revenue	(298,560,365)	(1,048,097,898)	(1,346,658,263)	1,346,658,263	-
External revenue	5,702,981,608	5,314,449,918	11,017,431,526	-	11,017,431,526
Depreciation	7,228,059	222,011,027	229,239,086	(5,834,055)	223,405,031
Amortization	635,832	63,624,606	64,260,438	1,211,298	65,471,736
Operating profit	92,796,224	772,949,597	865,745,821	5,872,255	871,618,076
Non-current assets	29,429,023	1,823,609,363	1,853,038,386	-	1,853,038,386
Acquisition of non-current assets	12,556,363	268,324,697	280,881,060	(7,140,107)	273,740,953

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

4. SEGMENT REPORTING, Continued

2) Information on geographical areas

The Group's revenues (based on location) by region for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

		<u>2021</u>	<u>2020</u>
External revenues:			
Domestic	₩	4,852,038,241	4,354,706,215
America		2,947,599,376	2,300,873,610
Europe		1,591,486,755	1,169,343,957
Asia and Africa (*1)		2,962,726,711	2,151,277,847
China		1,276,151,356	1,041,229,897
Total	₩	<u>13,630,002,439</u>	<u>11,017,431,526</u>

(*1) Korea and China are excluded.

(In thousands of Korean won)

		<u>2021</u>	<u>2020</u>
Non-current asset (*1):			
Domestic	₩	1,793,374,715	1,771,128,048
America		31,590,359	26,998,527
Europe		29,002,701	16,995,905
Asia and Africa (*2)		29,089,592	27,010,432
China		10,938,852	10,905,474
Total	₩	<u>1,893,996,219</u>	<u>1,853,038,386</u>

(*1) Financial instruments, investments in associates, deferred tax assets and long-term prepaid expenses are excluded.

(*2) Korea and China are excluded.

(3) Revenues generated from external customer of Samsung Electronics Co., Ltd. and its subsidiaries account for more than 10% of the Group's consolidated revenue amounting to ₩9,625,164 million and ₩7,700,340 million for the years ended December 31, 2021 and 2020, respectively.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

5. CASH AND CASH EQUIVALENTS:

Cash and cash equivalents as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

		<u>December 31, 2021</u>	<u>December 31, 2020</u>
Cash on hand	₩	7,583	7,669
Demand deposits		1,080,880,720	1,199,278,160
Total	₩	<u>1,080,888,303</u>	<u>1,199,285,829</u>

6. FINANCIAL INSTRUMENTS RESTRICTED OR PLEDGED AS COLLATERAL:

Details of restricted financial instruments or those pledged as collateral as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

		<u>December 31, 2021</u>	<u>December 31, 2020</u>
Short-term financial instruments:			
Deposit related to national project	₩	770,393	375,371
Long-term financial instruments:			
Deposits for checking account		17,000	17,000
Deposits for contract (*1)		10,000,000	10,000,000
Deposits for subcontractors (*2)		48,200,000	48,200,000
Others (*3)		15,000	15,000
Total	₩	<u>59,002,393</u>	<u>58,607,371</u>

(*1) As a time deposit related to the service contract signed with the Korea Development Bank, pledge and right to collateral security are established and provided as collateral to the Korea Development Bank (see Note 22 (3).5).

(*2) Deposits restricted in use for financially supporting the Group's subcontractors in agreement with Industrial Bank of Korea.

(*3) Others are subject to withdrawal restrictions in relation to guarantees provided by Seoul Guarantee Insurance Company.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

7. CATEGORIES OF FINANCIAL INSTRUMENTS:

(1) Details of categories of financial instruments as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021				
	Amortized cost	FVOCI	FVPL	Total	Fair value
Financial assets:					
Cash and cash equivalents	₩ 1,080,888,303	-	-	1,080,888,303	1,080,888,303
Short-term financial instruments	3,510,296,210	-	-	3,510,296,210	3,510,296,210
FVOCI	-	55,198,119	-	55,198,119	55,198,119
FVPL	-	-	16,617,485	16,617,485	16,617,485
Trade receivables, other receivables and other assets (*1)	1,964,779,550	-	-	1,964,779,550	1,964,779,550
Others (*2)	187,950,519	-	-	187,950,519	187,950,519
Total	₩ 6,743,914,582	55,198,119	16,617,485	6,815,730,186	6,815,730,186

(*1) Other assets, such as short-term loans and long-term loans, are included.

(*2) Others, such as accrued income, deposits provided for guarantees, long-term financial instruments and deposits provided, are included.

(In thousands of Korean won)

	December 31, 2021	
	Amortized cost	Fair value
Financial liabilities:		
Trade and other payables	₩ 892,026,689	892,026,689
Accrued expense (*1)	540,551,816	540,551,816
Lease liabilities	461,597,347	461,597,347
Borrowings and corporate bonds	464,000	464,000
Others (*2)	9,214,838	9,214,838
Total	₩ 1,903,854,690	1,903,854,690

(*1) The amount excludes ₩361,361 million related to employee benefits expense.

(*2) Others, such as dividends payable, deposits received and long-term deposits received, are included.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

7. CATEGORIES OF FINANCIAL INSTRUMENTS, Continued

(1) Details of categories of financial instruments as of December 31, 2021 and 2020, are as follows, Continued

(In thousands of Korean won)

	December 31, 2020				
	Amortized cost	FVOCI	FVPL	Total	Fair value
Financial assets:					
Cash and cash equivalents	₩ 1,199,285,829	-	-	1,199,285,829	1,199,285,829
Short-term financial instruments	2,995,006,425	-	-	2,995,006,425	2,995,006,425
FVOCI	-	16,655,585	-	16,655,585	16,655,585
FVPL	-	-	12,176,365	12,176,365	12,176,365
Trade receivables, other receivables and other assets (*1)	1,539,246,832	-	-	1,539,246,832	1,539,246,832
Others (*2)	165,373,873	-	-	165,373,873	165,373,873
Total	₩ 5,898,912,959	16,655,585	12,176,365	5,927,744,909	5,927,744,909

(*1) Other assets, such as short-term loans receivable, long-term trade receivable and long-term loans receivable, are included.

(*2) Others, such as accrued income, deposits provided for guarantees, long-term financial instruments and deposits provided, are included.

(In thousands of Korean won)

	December 31, 2020	
	Amortized cost	Fair value
Financial liabilities:		
Trade and other payables	₩ 632,588,367	632,588,367
Accrued expense (*1)	352,568,848	352,568,848
Lease liabilities	364,773,843	364,773,843
Borrowings and corporate bonds	909,729	909,729
Others (*2)	5,975,081	5,975,081
Total	₩ 1,356,815,868	1,356,815,868

(*1) The amount excludes ₩275,250 million related to employee benefits expense.

(*2) Others, such as dividends payable, deposits received and long-term deposits received, are included.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

7. CATEGORIES OF FINANCIAL INSTRUMENTS, Continued

(2) Net gains or losses on financial instruments by category for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021	2020
Financial assets measured at amortized cost:		
Interest income (*1)	₩ 60,808,535	65,534,664
Reversal of bad debt expense (bad debt expenses)	686,096	(12,277,205)
Financial assets measured at fair value:		
Valuation gain on FVOCI	43,249,789	14,426,115
Dividend income	16,350	17,283
Valuation gain on FVPL	2,222,319	493,565
Disposal gain on FVPL	-	100,000
Financial liabilities measured at amortized cost:		
Interest expenses	(17,648,968)	(16,359,876)
Net gain (loss) on foreign currency transaction	4,625,129	(1,995,469)
Net foreign exchange gain (loss)	2,990,430	(6,298,533)

(*1) Interest income includes interest income generated by cash and cash equivalents.

8. FAIR VALUE OF FINANCIAL INSTRUMENTS:

There are no significant changes in the business and economic environment that would affect the fair value of financial assets and liabilities for the year ended December 31, 2021.

(1) Fair value hierarchy

The Group classifies the financial instruments measured at fair value in the consolidated statements of financial position into the following three levels (fair value hierarchy) based on the inputs to valuation techniques used to measure fair value:

- Level 1: Inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Group can access at the measurement date.
- Level 2: Inputs other than quoted prices included within Level 1, that are observable for the asset or liability, either directly (for example, price) or indirectly (for example, derived from price).
- Level 3: Inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Fair value hierarchy of financial instruments subsequently measured at fair value as of December 31, 2021 and 2020, is as follows:

(In thousands of Korean won)

	December 31, 2021			
	Level 1	Level 2	Level 3	Total
FVOCI	₩ 46,487,021	-	8,711,098	55,198,119
FVPL	-	4,524,048	12,093,436	16,617,484
Total	₩ 46,487,021	4,524,048	20,804,534	71,815,603

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

8. FAIR VALUE OF FINANCIAL INSTRUMENTS, Continued

(1) Fair value hierarchy, Continued

Fair value hierarchy of financial instruments subsequently measured at fair value as of December 31, 2021 and 2020, is as follows, Continued

(In thousands of Korean won)

		December 31, 2020			
		Level 1	Level 2	Level 3	Total
FVOCI	₩	-	11,990,358	4,665,228	16,655,586
FVPL		-	3,858,748	8,317,617	12,176,365
Total	₩	-	15,849,106	12,982,845	28,831,951

The above fair values are measured on a recurring basis. The fair value of financial instruments that are not traded in an active market is determined using valuation methods. These valuation techniques maximize the use of observable market data where they are available and rely as little as possible on entity-specific estimates.

If all significant inputs required to measure the fair value of an instrument are observable, the instrument is included in Level 2.

If one or more significant inputs are not based on observable market data, the financial instruments are included in Level 3. The fair value of the financial instruments in Level 3 was estimated using the discounted cash flow model.

The Group recognized transfers between levels of the fair value hierarchy depending on whether an active market exists and input variables are observable for the year ended December 31, 2021. Unlisted securities, which were classified as Level 2, were listed and transferred to Level 1, and they transferred to Level 3 once all significant input variables were not observable. Also, financial assets, which were classified as Level 3, transferred to Level 2, as the price can be measured due to capital increase by new issuance.

(2) Changes in financial instruments in Level 3 for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

		2021	2020
Beginning balance	₩	12,982,845	5,725,588
Acquisition		6,386,600	4,015,336
Disposal		-	(3,470,114)
Change		1,435,089	6,712,035
Ending balance	₩	20,804,534	12,982,845

(3) The valuation process of fair value measurements for major financial instruments categorized as Level 3

The fair value of CVnet Co., Ltd., FVOCI categorized within Level 3 of the fair value hierarchy, was appropriately estimated based on the professional judgment of independent appraisers' reasonable valuation method.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

8. FAIR VALUE OF FINANCIAL INSTRUMENTS, Continued

(4) Valuation methods and inputs

Valuation methods and inputs used in the recurring fair value measurements categorized within Level 3 of the fair value hierarchy as of December 31, 2021, are as follows:

	Fair value	Level	Valuation method	Inputs	Range of inputs (weighted average)
FVOCI CVnet Co., Ltd	₩ 1,357,800	3	Discounted cash flow	Sales growth rate Pretax discount rate	5.2%–7.1%(5.9%) 16.40%

(5) Sensitivity analysis for recurring fair value measurements categorized within Level 3

Sensitivity analysis of financial instruments is performed to measure favorable and unfavorable changes in the fair value of financial instruments, which are affected by the unobservable input parameters, using statistical techniques. Financial instruments categorized in Level 3 and subject to sensitivity analysis are equity securities whose fair value changes are recognized in OCI.

The sensitivity analysis of OCI in accordance with the variation of the input parameters for the equity securities is as follows:

(In thousands of Korean won)

		Favorable change	Unfavorable change
FVOCI (*1)	₩	39,000	(34,200)

(*1) Changes in fair value are calculated as favorable changes and unfavorable changes based on the changes in discount rate, which are significant unobservable inputs. Favorable changes are the changes decreasing in discount rate by 1% point. Unfavorable changes are the changes increasing in discount rate by 1% point.

9. TRADE RECEIVABLES, OTHER RECEIVABLES AND OTHERS:

(1) Details of trade receivables, other receivables and others as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021			December 31, 2020		
	Trade receivables	Other receivables (*)	Others	Trade receivables	Other receivables (*)	Others
Receivables, gross	₩ 1,935,668,732	46,876,022	3,257,552	1,519,260,746	36,311,894	3,541,752
Allowances for bad debts	(16,812,647)	(1,535,820)	-	(18,334,968)	(1,532,593)	-
Receivables, net	₩ 1,918,856,085	45,340,202	3,257,552	1,500,925,778	34,779,301	3,541,752

(*) The service receivables in contract asset amounting to ₩667,590,168 thousand and ₩592,378,499 thousand as of December 31, 2021 and 2020, respectively, are excluded (see Note 26).

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

9. TRADE RECEIVABLES, OTHER RECEIVABLES AND OTHERS, Continued

(2) Changes in the allowance for doubtful accounts of trade receivables, other receivables and others for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021			2020		
	Trade receivables	Other receivables	Others	Trade receivables	Other receivables	Others
Beginning balance	₩ 18,334,968	1,532,593	-	16,259,856	1,535,111	-
(Reversal of) provision for bad debt expense	(690,294)	4,198	-	12,278,338	(1,134)	-
Receivables written off	(596,120)	-	-	(8,046,671)	(1,406)	-
Collection of receivables written off	239,445	-	-	2,685	1,673	-
Others	(475,352)	(971)	-	(2,159,240)	(1,651)	-
Ending balance	₩ 16,812,647	1,535,820	-	18,334,968	1,532,593	-

The recognition of allowance for doubtful accounts has been included in selling and administrative expenses and other income and expenses in the consolidated statements of comprehensive income (see Notes 28 and 29).

(3) The aging analysis of trade receivables, other receivables and others overdue, but not individually impaired, as of December 31, 2021 and 2020, is as follows:

(In thousands of Korean won)

	December 31, 2021		December 31, 2020	
Within 1 month	₩	310,429,893		335,438,726
1 month to 6 months		36,422,325		63,412,304
7 to 12 months		11,115,115		14,685,993
More than 12 months		5,033,645		5,896,194
Total	₩	363,000,978		419,433,217

(4) Details of the Group's individually impaired receivables as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021		December 31, 2020	
Individually impaired receivables	₩	18,002,764		19,364,427

The individually impaired receivables are generally aged more than one year, and the debtors are experiencing significant financial difficulty. The Group recorded an additional allowance of ₩345 million and ₩503 million as of December 31, 2021 and 2020, respectively, using historical experience rates based on aging analysis of receivables.

(5) The maximum exposure to credit risk as of December 31, 2021, is the carrying value of each class of receivables.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

10. INVENTORIES:

(1) Details of inventories as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

		<u>December 31, 2021</u>	<u>December 31, 2020</u>
Raw materials	₩	12,301,435	4,621,470
Merchandise		29,760,978	19,224,283
Goods in transit		444,665	128,654
Supplies		1,795,253	1,772,254
Total	₩	<u>44,302,331</u>	<u>25,746,661</u>

(2) The amount of inventories recognized as expenses (cost of sales) and valuation losses on inventories reflected in cost of sales for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

		<u>2021</u>	<u>2020</u>
Inventories recognized as expenses (cost of sales)	₩	612,824,766	571,931,116
Inventories written down		3,271,046	1,432,924
Reversals of inventories written down		(1,019,341)	(700,595)

11. FINANCIAL ASSETS MEASURED AT FAIR VALUE:

(1) Changes in financial assets measured at fair value (excluding investments in associates) for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

		<u>2021</u>			<u>2020</u>		
		FVOCI	FVPL	Total	FVOCI	FVPL	Total
Beginning balance	₩	16,655,586	12,176,365	28,831,951	24,599,578	7,715,028	32,314,606
Increase		4,167,800	2,218,800	6,386,600	-	4,515,317	4,515,317
Decrease		(8,875,056)	-	(8,875,056)	(22,370,107)	(547,545)	(22,917,652)
Valuation		43,249,789	2,222,319	45,472,108	14,426,115	493,565	14,919,680
Ending balance	₩	<u>55,198,119</u>	<u>16,617,484</u>	<u>71,815,603</u>	<u>16,655,586</u>	<u>12,176,365</u>	<u>28,831,951</u>

(2) Details of FVOCI as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

		<u>December 31, 2021</u>	<u>December 31, 2020</u>
Listed securities (*)	₩	46,487,021	-
Unlisted securities (*)		8,711,098	16,655,586
Total	₩	<u>55,198,119</u>	<u>16,655,586</u>

(*) The Group makes an irrevocable selection to present in OCI subsequent changes in the fair value of an investment in an equity instrument that is not held for trading at the date of initial application.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

11. FINANCIAL ASSETS MEASURED AT FAIR VALUE, Continued

(2) Details of FVOCI as of December 31, 2021 and 2020, are as follows, Continued

1) Listed securities (excluding investments in associates)

Details of listed securities (excluding investments in associates) as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021		December 31, 2020	
	Number of shares owned	Percentage of ownership (%)	Book value	Book value
SentinelOne, Inc. (*1)	776,649	0.30	₩ 46,487,021	-

(*1) SentinelOne, Inc. was an unlisted security at the time of initial investment, and the Group made an irrevocable election to account for the equity investment at FVOCI. As the unlisted security was listed on the New York Stock Exchange for the year ended December 31, 2021, it has been changed to a listed security as of December 31, 2021. The carrying amount of the unlisted security as of December 31, 2020, was ₩11,990,358 thousand.

2) Unlisted securities (excluding investments in associates)

Details of unlisted securities (excluding investments in associates) as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021		December 31, 2020	
	Number of shares owned	Percentage of ownership (%)	Book value	Book value
CVnet Co., Ltd. (*1)	600,000	9.38	₩ 1,357,800	1,707,000
Others			7,353,298	14,948,586
Total			₩ 8,711,098	16,655,586

(*1) The fair value of CVnet Co., Ltd. was appropriately estimated based on the professional judgment of independent appraisers' reasonable valuation method. The fair value was estimated using the discounted cash flow method by the independent appraisers. In estimating the future cash flows, economic indicators and conditions were taken into consideration and it was presumed that there were no significant changes in the business structure of the investee.

(3) Details of FVPL as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021	December 31, 2020
Capital investment of partnership	₩ 3,924,816	3,843,950
Unlisted securities	12,692,668	8,332,415
Total	₩ 16,617,484	12,176,365

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

11. FINANCIAL ASSETS MEASURED AT FAIR VALUE, Continued

(4) Changes in valuation gain (loss) in the above FVOCI in accordance with fair value assessment for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

		2021	2020
Beginning balance	₩	27,546,530	13,264,393
Measurement of fair value		43,249,789	14,282,137
Included in profit or loss		-	-
Ending balance before tax		70,796,319	27,546,530
Income tax effect		(19,893,583)	(7,152,073)
Ending balance after tax	₩	50,902,736	20,394,457

12. SUBSIDIARIES:

(1) Subsidiaries as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

December 31, 2021

Region	Name of subsidiaries	Type of business	Number of shares owned by			Ownership (%)	Country	Shares held by subsidiaries (%)
			Controlling company	Subsidiary	Total			
Korea	SECUI Corp.	System software development and supply	6,500,000	-	6,500,000	56.52	Korea	-
	Multicampus Co., Ltd. (*1)	Providing remote education system and contents	2,800,000	-	2,800,000	47.24	Korea	-
	SVIC #39 Investment Partnership	New technology development, Venture capital	49	-	49	99.00	Korea	-
	SVIC #50 Investment Partnership	New technology development, Venture capital	78	-	78	99.00	Korea	-
	S-Core Co, Ltd.	Operating system software development	21,347,538	140,912	21,488,450	82.22	Korea	0.54
	Open Hands Co., Ltd.	Software development	20,000	-	20,000	100.00	Korea	-
	Miracom, Inc.	SI service	5,010,297	-	5,010,297	83.62	Korea	-

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

12. SUBSIDIARIES, Continued

(1) Subsidiaries as of December 31, 2021 and 2020, are as follows, Continued

(In thousands of Korean won)

December 31, 2021

Region	Name of subsidiaries	Type of business	Number of shares owned by			Ownership (%)	Country	Shares held by subsidiaries (%)
			Controlling company	Subsidiary	Total			
America	LANGUAGE TESTING INTERNATIONAL, INC. (*1)	Oral proficiency interview computer Assessment service	-	115,980	115,980	38.91	America	82.36
	Samsung SDS America, Inc.	SI service, Logistics	5,500,000	-	5,500,000	100.00	America	-
	SAMSUNG SDS GSCL Canada., Ltd.	Logistics	10,000	-	10,000	100.00	Canada	-
	Neo Express Transportation (NEXT) Inc.	Logistics	449,339	-	449,339	51.00	America	-
	Samsung SDS Mexico, S.A. de C.V.	SI service, Logistics	-	99	99	99.00	Mexico	99.00
	Samsung SDS Global SCL Panama S.A.	Logistics	-	9,999	9,999	99.99	Panama	99.99
	Samsung SDS Global SCL Chile Limitada	Logistics	-	274,972,500	274,972,500	99.99	Chile	99.99
	Samsung SDS Global SCL Peru S.A.C	Logistics	-	9,999	9,999	99.99	Peru	99.99
	Samsung SDS Global SCL Colombia S.A.S	Logistics	-	-	-	100.00	Colombia	100.00
	Samsung SDS Latin America Solucoes Em Tecnologia Ltda.	SI service, Logistics	31,250,723,153	84,690,306	31,335,413,459	100.00	Brazil	0.27
	INTE-SDS Logistics S.A. de C.V.	Logistics	4,313,534	-	4,313,534	51.00	Mexico	-
Europe	Samsung SDS Europe, Ltd.	SI service, Logistics	1,000,002	-	1,000,002	100.00	England	-
	Samsung SDS Global SCL Hungary, Kft.	Logistics	-	-	-	100.00	Hungary	-
	Samsung SDS Global SCL Slovakia, S.R.O.	Logistics	-	-	-	100.00	Slovakia	-
	Samsung SDS Global SCL Poland Sp. Z.o.o.	Logistics	9,999	1	10,000	100.00	Poland	0.01
	Samsung GSCL Sweden AB	Logistics	5,800,000	-	5,800,000	100.00	Sweden	-
	Samsung SDS Global SCL France SAS	Logistics	150,000	-	150,000	100.00	France	-
	Samsung SDS Global SCL Greece Societe Anonyme	Logistics	19,998	2	20,000	100.00	Greece	0.01
	Samsung SDS Global SCL Italy S.R.L. A Socio Unico	Logistics	100,000	-	100,000	100.00	Italy	-
	Samsung SDS Global Supply Chain Logistics Spain S.L.U	Logistics	56,000	-	56,000	100.00	Spain	-
	Samsung SDS Global SCL Netherlands Cooperatief U.A.	Logistics	-	-	-	100.00	Netherland	0.01
	Samsung SDS Global SCL Germany GmbH	SI service, Logistics	-	-	-	100.00	Germany	-
	Samsung SDS Global SCL Romania S.R.L	Logistics	9,999	1	10,000	100.00	Romania	0.01
	Samsung SDS Rus Limited Liability Company	SI service, Logistics	-	-	-	100.00	Russia	0.01

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

12. SUBSIDIARIES, Continued

(1) Subsidiaries as of December 31, 2021 and 2020, are as follows, Continued

(In thousands of Korean won)

December 31, 2021

Region	Name of subsidiaries	Type of business	Number of shares owned by			Ownership (%)	Country	Shares held by subsidiaries (%)	
			Controlling company	Subsidiary	Total				
Asia	Samsung SDS Asia Pacific Pte, Ltd.	SI service, Logistics	31,000,000	-	31,000,000	100.00	Singapore	-	
	Samsung Data Systems India Private Limited	SI service, Logistics	6,329,999	-	6,329,999	99.99	India	-	
	Samsung SDS Vietnam Co., Ltd.	SI service, Logistics	-	-	-	100.00	Vietnam	-	
	PT. Samsung SDS Global SCL Indonesia (*2)	Logistics	245	-	245	49.00	Indonesia	-	
	Samsung SDS Global SCL Philippines Co., Ltd. Inc.	Logistics	20,999,995	-	20,999,995	99.99	Philippines	-	
	Samsung SDS Global SCL Thailand Co., Ltd	Logistics	879,988	-	879,988	99.99	Thailand	-	
	Samsung SDS Global SCL Malaysia SDN.BHD.	SI service, Logistics	2,099,998	-	2,099,998	99.99	Malaysia	-	
	SAMSUNG SDS Global SCL Australia Pty., Ltd.	Logistics	1,000	-	1,000	100.00	Australia	-	
	SDS-ACUTECH CO., Ltd. (*1)	Logistics	109,999	-	109,999	49.99	Thailand	-	
	ALS SDS Joint Stock Company	Logistics	739,500	-	739,500	51.00	Vietnam	-	
	SDS-MP Logistics Joint Stock Company	Logistics	816,000	-	816,000	51.00	Vietnam	-	
	Samsung SDS China Co., Ltd.	SI service	-	-	-	100.00	China	-	
	Samsung SDS Global Development Center Xi'an	SI service	-	-	-	100.00	China	100	
	Samsung SDS Global SCL Beijing Co., Ltd.	Logistics	-	-	-	100.00	China	100	
	Samsung SDS Global SCL Hong Kong Co., Ltd.	Logistics	11,691,380	-	11,691,380	100.00	Hong Kong	-	
	Miracom, Inc. Asia Pacific Ltd.	SI service	-	5,864,162	5,864,162	83.62	Hong Kong	100	
	Africa	Samsung SDS Global SCL Egypt	Logistics	9,999	-	9,999	99.99	Egypt	-
		Samsung SDS Global SCL South Africa (PTY) Ltd.	Logistics	100	-	100	100.00	South Africa	-
	Middle East	Samsung SDS Global SCL Nakliyat ve Lojistik Anonim Sirketi	Logistics	1,000	-	1,000	100.00	Turkey	-
		Samsung SDS Global Supply Chain Logistics Middle East DWC-LLC	Logistics	2,930,000	-	2,930,000	100.00	United Arab Emirates	-

(*1) Although the Group holds less than a majority of the voting rights, it maintains control through a contractual agreement among the shareholders.

(*2) The Group maintains control because all of the non-controlling interests are composed of preferred shares without voting rights.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

12. SUBSIDIARIES, Continued

(1) Subsidiaries as of December 31, 2021 and 2020, are as follows, Continued

(In thousands of Korean won)

December 31, 2020

Region	Name of subsidiaries	Type of business	Number of shares owned by			Ownership (%)	Country	Shares held by subsidiaries(%)
			Controlling company	Subsidiary	Total			
Korea	S-Core Co., Ltd.	Operating system Software development	21,347,538	140,912	21,488,450	82.22	Korea	0.54
	Open Hands Co., Ltd.	Software development	20,000	-	20,000	100.00	Korea	-
	Miracom Inc.	SI service	5,010,297	-	5,010,297	83.62	Korea	-
	MultiCampus Co., Ltd. (*1)	Providing remote education system and contents	2,800,000	-	2,800,000	47.24	Korea	-
	SVIC #31 Investment Partnership	New technology development, Venture capital	-	-	-	99.00	Korea	-
	SVIC #39 Investment Partnership	New technology development, Venture capital	-	-	-	99.00	Korea	-
	SECUi Corp.	System software development and supply	6,500,000	-	6,500,000	56.52	Korea	-
America	Samsung SDS Global SCL America, Inc.	Logistics	5,500,000	-	5,500,000	100.00	America	-
	Samsung SDS Latin America Solucoes Em Tecnologia Ltda.	SI service	224,218,200	607,637	224,825,837	100.00	Brazil	0.27
	Samsung SDS Mexico, S.A. de C.V.	SI service, Logistics	-	99	99	99.00	Mexico	99.00
	Language Testing International, Inc. (*1)	Oral proficiency interview computer assessment service	-	115,980	115,980	38.91	America	82.36
	Samsung SDS Global SCL Panama S.A.	Logistics	-	9,999	9,999	99.99	Panama	99.99
	Samsung SDS Global SCL Chile Limitada	Logistics	-	-	-	99.99	Chile	99.99
	Samsung SDS Global SCL Colombia S.A.S	Logistics	-	10,000	10,000	100.00	Colombia	100.00
	Samsung SDS Global SCL Peru S.A.C	Logistics	-	9,999	9,999	99.99	Peru	99.99
	Samsung SDS GSCL Canada., Ltd.	Logistics	10,000	-	10,000	100.00	Canada	-
	Samsung SDS Global SCL Latin America Logistica Ltda	Logistics	5,887,266,647	15,954,652	5,903,221,299	100.00	Brazil	0.27
	Samsung SDS America, Inc. Neo EXpress Transportation (NEXT) Inc.	SI service	8,100,000	-	8,100,000	100.00	America	-
	INTE-SDS Logistics S.A. de C.V.	Logistics	449,339	-	449,339	51.00	America	-
		Logistics	4,313,534	-	4,313,534	51.00	Mexico	-

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

12. SUBSIDIARIES, Continued

(1) Subsidiaries as of December 31, 2021 and 2020, are as follows, Continued

(In thousands of Korean won)

December 31, 2020

Region	Name of subsidiaries	Type of business	Number of shares owned by			Ownership (%)	Country	Shares held by subsidiaries(%)
			Controlling company	Subsidiary	Total			
Europe	Samsung SDS Europe, Ltd.	SI service, Logistics	1,000,002	-	1,000,002	100.00	England	-
	Samsung SDS Global SCL Netherlands						Netherlands	
	Cooperatief U.A.	Logistics	-	-	-	100.00		0.01
	Samsung SDS Global SCL Rus Limited Liability Company	Logistics	-	-	-	100.00	Russia	0.01
	Samsung SDS Global SCL Hungary, Kft.	Logistics	-	-	-	100.00	Hungary	-
	Samsung SDS Global SCL Slovakia, S.R.O.	Logistics	-	-	-	100.00	Slovakia	-
	Samsung SDS Global SCL Poland Sp. Z.o.o.	Logistics	9,999	1	10,000	100.00	Poland	0.01
	Samsung GSCL Sweden AB	Logistics	5,800,000	-	5,800,000	100.00	Sweden	-
	Samsung SDS Global SCL France SAS	Logistics	150,000	-	150,000	100.00	France	-
	Samsung SDS Global SCL Baltics, SIA	Logistics	16,000	-	16,000	100.00	Latvia	-
	Samsung SDS Global SCL Italy S.R.L. A Socio Unico	Logistics	100,000	-	100,000	100.00	Italy	-
	Samsung SDS Global Supply Chain Logistics Spain S.L.U.	Logistics	56,000	-	56,000	100.00	Spain	-
	Samsung SDS Global SCL Greece Societe Anonyme	Logistics	19,998	2	20,000	100.00	Greece	0.01
	Samsung SDS Global SCL Germany GmbH	Logistics	-	-	-	100.00	Germany	-
	Samsung SDS Global SCL Austria GmbH	Logistics	-	-	-	100.00	Austria	-
	Samsung SDS Global SCL Romania S.R.L.	Logistics	9,999	1	10,000	100.00	Romania	0.01

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

12. SUBSIDIARIES, Continued

(1) Subsidiaries as of December 31, 2021 and 2020, are as follows, Continued

(In thousands of Korean won)

December 31, 2020

Region	Name of subsidiaries	Type of business	Number of shares owned by			Ownership (%)	Country	Shares held by subsidiaries(%)	
			Controlling company	Subsidiary	Total				
Asia	Samsung SDS China Co., Ltd.	SI service	-	-	-	100.00	China	-	
	Samsung IT Services (Beijing) Co., Ltd.	SI service	-	-	-	100.00	China	-	
	Samsung SDS Asia Pacific Pte, Ltd.	SI service, Logistics	31,000,000	-	31,000,000	100.00	Singapore	-	
	Samsung SDS Vietnam Co., Ltd.	SI service, Logistics	-	-	-	100.00	Vietnam	-	
	ALS SDS Joint Stock Company	Logistics	739,500	-	739,500	51.00	Vietnam	-	
	Samsung SDS Global SCL Philippines Co., Ltd. Inc.	Logistics	20,999,995	-	20,999,995	99.99	Philippines	-	
	Samsung SDS Global SCL Thailand Co., Ltd.	Logistics	879,988	-	879,988	99.99	Thailand	-	
	SDS - Acutech Co., Ltd. (*1)	Logistics	109,999	-	109,999	49.99	Thailand	-	
	Samsung SDS Global SCL Malaysia SDN. BHD	Logistics	2,099,998	-	2,099,998	99.99	Malaysia	-	
	PT. Samsung SDS Global SCL Indonesia (*2)	Logistics	245	-	245	49.00	Indonesia	-	
	Samsung SDS Global SCL Hong Kong Co., Ltd.	Logistics	11,691,380	-	11,691,380	100.00	Hongkong	-	
	Samsung Data Systems India Private Limited	Logistics	2,999,999	-	2,999,999	99.99	India	-	
	Samsung SDS India Private Limited	SI service	2,999,999	-	2,999,999	99.99	India	-	
	Samsung SDS Global SCL Beijing Co., Ltd.	Logistics	-	-	-	100.00	China	100.00	
	Miracom, Inc. Asia Pacific Ltd.	SI service	-	5,864,162	5,864,162	83.62	Hongkong	100.00	
	Samsung SDS Global Development Center Xi'an	SI service	-	-	-	100.00	China	100.00	
	Samsung SDS Global SCL Australia Pty., Ltd.	Logistics	1,000	-	1,000	100.00	Australia	-	
	VASCO Supply Chain Solutions Private Limited	Logistics	-	-	-	50.99	India	-	
	SDS-MP Logistics Joint Stock Company	Logistics	816,000	-	816,000	51.00	Vietnam	-	
	Africa	Samsung SDS Global SCL Egypt	Logistics	9,999	-	9,999	99.99	Egypt	-
		Samsung SDS Global SCL South Africa (PTY) Ltd.	Logistics	100	-	100	100.00	South Africa	-
	Middle East	Samsung SDS Global SCL Nakliyat ve Lojistik Anonim Sirketi	Logistics	1,000	-	1,000	100.00	Turkey	-
		Samsung SDS Global Supply Chain Logistics Middle East DWC-LLC	Logistics	2,930,000	-	2,930,000	100.00	United Arab Emirates	-

(*1) Although the Group holds less than a majority of the voting rights, it maintains control through a contractual agreement among the shareholders.

(*2) The Group maintains control because all of the non-controlling interests are composed of preferred shares without voting rights.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

12. SUBSIDIARIES, Continued

(2) The financial status of subsidiaries as of and for the years ended December 31, 2021 and 2020, is as follows:

(In thousands of Korean won)

	2021				
	Total assets	Total liabilities	Total equity	Revenue	Net income (loss)
MultiCampus Co., Ltd.	₩ 244,329,814	114,676,806	129,653,009	295,822,269	19,555,966
Miracom Inc.	133,247,778	53,421,441	79,826,338	309,587,256	6,176,215
Samsung SDS America, Inc. (Formerly, Samsung SDS Global SCL America, Inc.)	630,068,672	251,134,476	378,934,196	1,842,412,492	23,559,579
Samsung SDS Europe, Ltd.	239,719,887	72,200,665	167,519,222	292,498,234	17,169,964
Samsung SDS Global SCL Hungary, Kft.	130,003,491	107,422,035	22,581,456	361,650,185	11,245,511
Samsung SDS Global SCL Slovakia, S.R.O.	86,338,146	55,230,543	31,107,603	195,349,322	2,948,502
Samsung SDS Global SCL Poland Sp. Z.o.o.	55,931,124	42,295,699	13,635,424	204,555,785	5,402,937
Samsung SDS Global SCL Netherlands Cooperatief U.A.	105,236,552	102,055,908	3,180,643	197,263,453	(516,083)
Samsung SDS Asia Pacific Pte, Ltd.	164,159,223	55,975,433	108,183,791	166,561,328	9,409,486
Samsung Data Systems India Private Limited	186,353,557	114,425,340	71,928,217	290,396,662	12,585,182
Samsung SDS Vietnam Co., Ltd.	639,296,290	190,643,863	448,652,427	1,314,426,229	54,498,142
Samsung SDS Global SCL Thailand Co.,Ltd	88,597,918	41,601,518	46,996,400	517,380,186	(1,122,018)
Samsung SDS Global SCL Malaysia SDN.BHD.	45,851,952	30,281,405	15,570,547	188,841,242	3,535,686
Samsung SDS Global SCL Beijing Co., Ltd.	416,083,629	184,128,366	231,955,264	983,716,086	33,978,668
Samsung SDS Global SCL Hong Kong Co., Ltd.	39,585,729	24,871,753	14,713,976	164,968,959	(112,141)
Samsung SDS Mexico, S.A. de C.V.	139,538,996	120,325,993	19,213,003	506,772,298	4,929,363
Samsung SDS Latin America Solucoes Em Tecnologia Ltda. (Formerly, Samsung SDS Global SCL Latin America Logistica Ltda.)	160,076,101	58,576,333	101,499,767	178,389,919	16,487,094

(In thousands of Korean won)

	2020				
	Total assets	Total liabilities	Total equity	Revenue	Net income (loss)
Miracom Inc.	116,384,935	42,713,091	73,671,844	304,630,207	8,968,194
MultiCampus Co., Ltd.	183,523,357	71,035,240	112,488,117	250,840,574	10,599,484
SECUI Corp.	149,968,788	29,922,264	120,046,524	107,723,940	5,680,628
S-Core Co., Ltd.	47,613,185	22,414,568	25,198,617	67,992,619	(455,843)
Samsung SDS Global SCL America, Inc.	288,776,664	94,632,365	194,144,299	1,234,556,887	13,893,241
Samsung SDS Mexico, S.A. de C.V.	76,324,246	62,962,962	13,361,284	356,176,421	4,279,737
Samsung SDS Global SCL Latin America Logistica Ltda	61,915,289	30,133,263	31,782,026	98,678,875	4,069,218
Samsung SDS America, Inc.	210,367,057	88,275,244	122,091,813	428,945,354	20,971,683
Samsung SDS Europe, Ltd.	264,744,548	95,907,514	168,837,034	376,890,512	18,131,824
Samsung SDS Global SCL Netherlands Cooperatief U.A.	99,536,957	94,832,392	4,704,565	165,484,463	(725,953)
Samsung SDS Global SCL Slovakia, S.R.O.	87,159,499	59,063,700	28,095,799	166,938,600	465,701
Samsung SDS Global SCL Poland Sp. Z.o.o.	34,013,980	25,706,403	8,307,577	137,781,395	2,897,099
Samsung SDS China Co., Ltd.	104,209,885	3,145,995	101,063,890	2,697,143	421,549
Samsung IT Services (Beijing) Co., Ltd.	172,809,571	89,388,871	83,420,700	246,069,962	21,498,470
Samsung SDS Asia Pacific Pte, Ltd.	134,162,946	41,839,090	92,323,856	139,112,713	3,953,454
Samsung SDS Vietnam Co., Ltd.	472,067,788	117,915,645	354,152,143	990,617,216	40,255,783
Samsung SDS Global SCL Thailand Co., Ltd.	90,684,080	41,531,247	49,152,833	293,898,295	5,380,493
Samsung Data Systems India Private Limited	54,627,046	39,295,052	15,331,994	155,546,671	4,433,478
Samsung SDS India Private Limited	98,163,812	62,466,178	35,697,634	112,337,329	5,171,830
Samsung SDS Global SCL Beijing Co., Ltd.	291,580,505	115,634,636	175,945,869	748,564,782	14,845,244
Samsung SDS Global SCL Malaysia SDN. BHD	37,353,819	26,021,414	11,332,405	110,063,107	1,677,304
Samsung SDS Global SCL Hungary, Kft.	55,448,063	43,615,709	11,832,354	180,056,045	3,135,817

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

12. SUBSIDIARIES, Continued

(3) The status of subsidiaries newly excluded in the preparation of the consolidated financial statements for the year ended December 31, 2021, is as follows:

Location	Name of subsidiaries	Reason
America	Samsung SDS America, Inc. (*1)	Merged
America	Samsung SDS Latin America Solucoes Em Tecnologia Ltda. (*2)	Merged
Europe	Samsung SDS Global SCL Baltics, SIA	Liquidated
Europe	Samsung SDS Global SCL Austria GmbH	Liquidated
Asia	Samsung SDS India Private Limited (*3)	Merged
Asia	VASCO Supply Chain Solutions Private Limited	Liquidated
Asia	Samsung IT Services (Beijing) Co., Ltd. (*4)	Merged

(*1) The subsidiary Samsung SDS Global SCL America, Inc. merged with Samsung SDS America, Inc. and changed its name to Samsung SDS America, Inc. for the year ended December 31, 2021.

(*2) The subsidiary Samsung SDS Global SCL Latin America Logistica Ltda merged with Samsung SDS Latin America Solucoes Em Tecnologia Ltda. and changed its name to Samsung SDS Latin America Solucoes Em Tecnologia Ltda. during the year ended December 31, 2021.

(*3) The subsidiary Samsung SDS India Private Limited merged with Samsung Data Systems India Pvt. Ltd. during the year ended December 31, 2021.

(*4) The subsidiary Samsung IT Services (Beijing) Co., Ltd. merged with Samsung SDS China Co., Ltd. during the year ended December 31, 2021.

13. INVESTMENTS IN ASSOCIATES:

(1) Details of the investments in associates as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	Location	Main Business	December 31, 2021			December 31, 2020	
			Ownership (%)	Acquisition cost	Book value	Ownership (%)	Book value
KOREA INFORMATION CERTIFICATE AUTHORITY, INC. (*1) (*3)	Korea	Certification services based for e-commerce	4.79	₩ 1,128,139	8,218,335	6.42	5,649,651
Donga.com Inc. (*2)	Korea	Internet media business	18.97	1,306,377	4,333,399	18.97	3,980,697
Dunet, Inc. (*1)	Korea	Providing remote education system and content	18.01	971,068	-	18.01	-
SERI Technologies, Inc.	Korea	Financial information system integration	29.00	4,190,500	5,105,566	29.00	4,641,957
iMarket Asia Co., Ltd.	China	Global industrial goods e-commerce	40.56	18,799,534	36,057,011	40.56	32,230,992
CMC Corporation	Vietnam	IT service	30.00	54,554,914	56,522,112	30.00	47,435,047
	Total			₩ 80,950,532	110,236,423		93,938,344

(*1) Although each ownership of KOREA INFORMATION CERTIFICATE AUTHORITY, INC. and Dunet, Inc. of the Group is less than 20%, these investments are classified as investments in associates because the Group can participate in decision-making on the financial and operating policies of the investees.

(*2) Due to treasury stock, the effective ratio of shareholding is 20.20%.

(*3) The proportion of ownership interest has been decreased due to KOREA INFORMATION CERTIFICATE AUTHORITY, INC.'s issuance of new shares for the years ended December 31, 2021.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

13. INVESTMENTS IN ASSOCIATES, Continued

(2) Market price information of the marketable investment in associates owned by the Company as of December 31, 2021, is as follows:

(In thousands of Korean won, except for market value per share)

	Number of shares	Market value per share	Market price	Book value
KOREA INFORMATION				
CERTIFICATE AUTHORITY, INC.	2,000,000 Shares ₩	6,760	13,520,000	8,218,335
CMC Corporation	29,999,959 Shares	2,868	86,036,780	56,522,112

(3) Details of changes in investments in associates accounted for using the equity method for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

2021						
	Beginning balance	Disposal	Share of profit of associates	Change in associates' equity	Others (*1)	Ending balance
KOREA INFORMATION						
CERTIFICATE						
AUTHORITY, INC. ₩	5,649,651	1,954,889	808,361	5,434	(200,000)	8,218,335
Donga.com Inc.	3,980,697	-	431,702	-	(79,000)	4,333,399
Dunet, Inc.	-	-	-	-	-	-
SERI Technologies, Inc.	4,641,957	-	463,609	-	-	5,105,566
iMarket Asia Co., Ltd.	32,230,992	-	490,700	3,335,319	-	36,057,011
CMC Corporation	47,435,047	-	2,324,359	6,762,706	-	56,522,112
₩	93,938,344	1,954,889	4,518,731	10,103,459	(279,000)	110,236,423

(*1) The amount changes of investments in associates, due to the change in the dividend

(In thousands of Korean won)

2020					
	Beginning balance	Share of profit of associates	Change in associates' equity	Others (*1)	Ending balance
KOREA INFORMATION					
CERTIFICATE					
AUTHORITY, INC. ₩	5,276,621	568,226	4,804	(200,000)	5,649,651
Donga.com Inc.	3,645,227	414,444	26	(79,000)	3,980,697
Dunet, Inc.	109,635	(109,635)	-	-	-
SERI Technologies, Inc.	4,548,138	93,819	-	-	4,641,957
iMarket Asia Co., Ltd.	33,029,262	211,372	(1,009,642)	-	32,230,992
CMC Corporation	52,823,204	1,797,485	(5,772,644)	(1,412,998)	47,435,047
₩	99,432,087	2,975,711	(6,777,456)	(1,691,998)	93,938,344

(*1) The amount changes of investments in associates, due to the change in the dividend

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

13. INVESTMENTS IN ASSOCIATES, Continued

(4) Summary of financial information of associates as of and for the years ended December 31, 2021 and 2020, is as follows:

(In thousands of Korean won)

		2021				
		Total assets	Total liabilities	Total equity	Revenue	Net income
KOREA INFORMATION						
CERTIFICATE AUTHORITY, INC.	₩	260,499,729	53,932,221	206,567,508	50,062,459	12,629,480
Donga.com Inc.		26,199,952	3,353,617	22,846,335	21,656,195	2,480,949
Dunet, Inc.		4,474,630	8,346,597	(3,871,967)	12,148,128	1,438,709
SERI Technologies, Inc.		11,590,770	4,540,242	7,050,528	23,416,468	1,582,212
iMarket Asia Co., Ltd.		168,087,647	95,367,122	72,720,525	495,678,864	1,644,084
CMC Corporation		289,575,456	159,120,814	130,454,642	303,500,400	15,371,202

(In thousands of Korean won)

		2020				
		Total assets	Total liabilities	Total equity	Revenue	Net income
KOREA INFORMATION						
CERTIFICATE AUTHORITY, INC.	₩	114,598,268	26,562,578	88,035,690	33,893,881	6,849,646
Donga.com Inc.		24,188,627	3,201,790	20,986,837	21,331,886	2,166,696
Dunet, Inc.		4,597,216	9,903,501	(5,306,285)	12,055,662	350,506
SERI Technologies, Inc.		9,959,876	4,508,000	5,451,876	15,190,292	231,014
iMarket Asia Co., Ltd.		136,488,262	72,412,033	64,076,229	438,359,276	675,960
CMC Corporation		238,009,205	131,327,436	106,681,769	258,749,948	12,350,493

(5) Reconciliation of the above summarized financial information to the carrying amount of the interest in the associates recognized in the consolidated financial statements for the years ended 2021 and 2020, is as follows:

(In thousands of Korean won)

		2021					
		KOREA INFORMATION		Donga.com		SERI Technologies,	
		CERTIFICATE AUTHORITY, INC.	INC.	Dunet, Inc.	INC.	iMarket Asia Co., Ltd.	CMC Corporation
Net assets of associate	₩	206,567,508	22,846,335	(3,871,968)	7,050,528	72,720,526	130,454,642
Proportion of the Group's ownership interest in the associate (%)		4.79	18.97	18.01	29.00	40.56	30.00
Amount of the Group's ownership interest in the associate		8,218,335	4,333,399	(697,341)	2,044,653	25,066,784	33,373,473
Goodwill		-	-	-	3,060,913	10,990,227	23,148,639
Carrying amount of the Group's interest in the associate	₩	8,218,335	4,333,399	-	5,105,566	36,057,011	56,522,112

(In thousands of Korean won)

		2020					
		KOREA INFORMATION		Donga.com		SERI Technologies,	
		CERTIFICATE AUTHORITY, INC.	INC.	Dunet, Inc.	INC.	iMarket Asia Co., Ltd.	CMC Corporation
Net assets of associate	₩	88,035,690	20,986,837	(5,306,285)	5,451,876	64,076,229	106,681,769
Proportion of the Group's ownership interest in the associate (%)		6.42	18.97	18.01	29.00	40.56	30.00
Amount of the Group's ownership interest in the associate		5,649,651	3,980,697	(955,662)	1,581,044	22,144,643	25,881,920
Goodwill		-	-	-	3,060,913	10,086,349	21,553,127
Carrying amount of the Group's interest in the associate	₩	5,649,651	3,980,697	-	4,641,957	32,230,992	47,435,047

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

13. INVESTMENTS IN ASSOCIATES, Continued

(6) The details of cumulative unrecognized share of profit since the Group discontinued the application of equity method for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021	2020
Dunet, Inc.'s unrecognized share of profit (loss)	₩ (258,321)	955,662

(In thousands of Korean won)

	2021	2020
Dunet, Inc.'s cumulative unrecognized share of profit	₩ 697,341	955,662

14. PROPERTY AND EQUIPMENT:

(1) Details of the carrying amounts of property and equipment as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021					
	Land	Buildings	Machinery and equipment	Others	Construction in progress	Total
Acquisition costs	₩ 116,588,319	666,398,899	1,668,263,746	161,515,587	18,125,240	2,630,891,791
Accumulated depreciation	-	(125,628,788)	(1,199,625,811)	(120,794,275)	-	(1,446,048,874)
Accumulated impairment	-	-	(6,208,598)	-	-	(6,208,598)
Book value	₩ 116,588,319	540,770,111	462,429,337	40,721,312	18,125,240	1,178,634,319

(In thousands of Korean won)

	December 31, 2020					
	Land	Buildings	Machinery and equipment	Others	Construction in progress	Total
Acquisition costs	₩ 116,588,319	665,154,804	1,586,628,521	170,853,184	2,705,277	2,541,930,105
Accumulated depreciation	-	(108,303,198)	(1,181,328,507)	(130,478,287)	-	(1,420,109,992)
Accumulated impairment	-	-	(5,506,798)	-	-	(5,506,798)
Book value	₩ 116,588,319	556,851,606	399,793,216	40,374,897	2,705,277	1,116,313,315

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

14. PROPERTY AND EQUIPMENT, Continued

(2) Changes in property and equipment for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021					Total
	Land	Buildings	Machinery and equipment	Others	Construction in progress	
Beginning balance	₩ 116,588,319	556,851,606	399,793,216	40,374,897	2,705,277	1,116,313,315
Acquisition	-	6,103	260,094,861	14,230,270	17,972,614	292,303,848
Transfer	-	1,237,670	1,227,723	570,800	(2,552,651)	483,542
Transfer to other account	-	-	(4,350)	(18,038)	-	(22,388)
Disposal	-	-	(199,472)	(39,500)	-	(238,972)
Depreciation	-	(17,325,546)	(202,233,555)	(16,894,441)	-	(236,453,542)
Impairment	-	-	(701,800)	-	-	(701,800)
Others	-	278	4,452,714	2,497,324	-	6,950,316
Ending balance	₩ 116,588,319	540,770,111	462,429,337	40,721,312	18,125,240	1,178,634,319

(In thousands of Korean won)

	2020					Total
	Land	Buildings	Machinery and equipment	Others	Construction in progress	
Beginning balance	₩ 116,226,492	574,340,906	362,074,057	54,458,870	903,316	1,108,003,641
Acquisition	-	482,593	227,907,069	5,929,073	2,986,461	237,305,196
Transfer	-	1,184,500	(566,203)	913,521	(1,184,500)	347,318
Transfer to other account	-	-	-	(216,456)	-	(216,456)
Disposal	-	-	(363,903)	(476,071)	-	(839,974)
Depreciation	-	(17,277,449)	(184,730,238)	(21,180,888)	-	(223,188,575)
Impairment	-	-	(272,232)	-	-	(272,232)
Others	361,827	(1,878,944)	(4,255,334)	946,848	-	(4,825,603)
Ending balance	₩ 116,588,319	556,851,606	399,793,216	40,374,897	2,705,277	1,116,313,315

(3) Details of comprehensive property insurance for the damage of buildings, machinery and equipment and vehicles as of December 31, 2021, are as follows:

(In millions of won, SGD, INR, EUR, USD, CNY, HKD, VND)

	Amount	
Samsung Fire & Marine Insurance Co., Ltd.	KRW	2,077,323
Qbe Insurance (International) Limited	SGD	10,700,000
Iffco Tokio General Insurance Group Limited	INR	447,770,589
Generali a.s.	EUR	1,000,000
Lockton Philippines Insurance and Oriental Assurance Corporation	USD	13,438,025
Samsung Liability Insurance Co., Ltd. Beijing branch	CNY	88,372,196
Wilson Risk Solutions Co. Ltd	HKD	3,150,000
Samsung Vina Insurance Co. Ltd	VND	367,291,826

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

15. INTANGIBLE ASSETS:

(1) Details of carrying amounts of intangible assets as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021				
	Goodwill	Development costs	Others (*1)	Software	Total
Acquisition cost	₩ 624,579,192	141,397,673	381,662,521	308,284,507	1,455,923,893
Accumulated amortization	-	(107,619,172)	(311,160,628)	(264,348,634)	(683,128,434)
Accumulated impairment	(54,829,261)	-	(1,424,590)	(1,179,709)	(57,433,560)
Book value	₩ 569,749,931	33,778,501	69,077,303	42,756,164	715,361,899

(*1) Others are composed of identifiable intangible assets, such as customer relationships, customer value and technology value acquired from business combination, memberships and industrial property rights.

(In thousands of Korean won)

	December 31, 2020				
	Goodwill	Development costs	Others (*1)	Software	Total
Acquisition cost	₩ 624,227,886	250,842,234	381,868,195	374,355,969	1,631,294,284
Accumulated amortization	-	(208,221,211)	(296,515,904)	(329,284,202)	(834,021,317)
Accumulated impairment	(54,829,261)	-	(4,538,926)	(1,179,709)	(60,547,896)
Book value	₩ 569,398,625	42,621,023	80,813,365	43,892,058	736,725,071

(*1) Others are composed of identifiable intangible assets, such as customer relationships, customer value and technology value acquired from business combination, memberships and industrial property rights.

(2) Changes in intangible assets for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021				
	Goodwill	Development costs	Others	Software	Total
Beginning balance	₩ 569,398,625	42,621,023	80,813,365	43,892,058	736,725,071
Acquisition	-	8,548,099	1,013,347	21,098,220	30,659,666
Transfer	-	-	1,323	-	1,323
Transfer to other account	-	4,350	-	-	4,350
Disposal	-	-	(257,974)	(339,403)	(597,377)
Amortization	-	(17,398,453)	(15,248,491)	(22,503,596)	(55,150,540)
Impairment loss	-	-	(214)	-	(214)
Reversal of Impairment loss	-	-	3,114,550	-	3,114,550
Others	351,306	3,482	(358,603)	608,885	605,070
Ending balance	₩ 569,749,931	33,778,501	69,077,303	42,756,164	715,361,899

(In thousands of Korean won)

	2020				
	Goodwill	Development costs	Others	Software	Total
Beginning balance	₩ 590,105,046	57,191,303	97,619,303	44,801,501	789,717,153
Acquisition	-	10,080,537	1,658,467	24,696,753	36,435,757
Transfer	-	-	(75,415)	64,693	(10,722)
Disposal	-	-	(40,880)	(72,621)	(113,501)
Amortization	-	(24,651,440)	(16,797,414)	(24,014,133)	(65,462,987)
Impairment loss	(20,442,685)	-	(859,016)	-	(21,301,701)
Others	(263,736)	623	(691,680)	(1,584,135)	(2,538,928)
Ending balance	₩ 569,398,625	42,621,023	80,813,365	43,892,058	736,725,071

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

15. INTANGIBLE ASSETS, Continued

(3) Amortization of intangible assets for the years ended December 31, 2021 and 2020, is presented in the following accounts:

(In thousands of Korean won)

		2021	2020
Cost of sales	₩	29,492,371	37,638,747
Selling and administrative expenses (*1)		25,658,169	27,824,240
Total	₩	55,150,540	65,462,987

(*1) Research and development expenses of ₩177 million and ₩213 million are included in selling and administrative expenses for the years ended December 31, 2021 and 2020, respectively.

(4) The Group recognized research and development expenses, amounting to ₩150,156 million and ₩121,386 million for the years ended December 31, 2021 and 2020, respectively.

(5) Goodwill

1) Goodwill was allocated to the Group's CGUs (groups) as of December 31, 2021 and 2020, as follows:

(In thousands of Korean won)

Segment	CGU		December 31, 2021	December 31, 2020
IT service	Samsung Networks, Inc. (*1)	₩	417,495,744	417,495,744
	MultiCampus Co., Ltd.		42,558,636	42,558,636
	Samsung SNS Co., Ltd.		37,428,837	37,428,837
	S-CORE CO., Ltd.		19,967,668	19,967,668
	Miracom Inc.		8,125,514	8,125,514
	SERICEO		6,458,968	6,458,968
	Language Testing International, Inc.		4,271,527	3,920,221
	SECUi Corp.		23,759,221	23,759,221
	Others		2,400,000	2,400,000
	Subtotal		562,466,115	562,114,809
Logistics service	EXE C&T Co., Ltd.		7,283,816	7,283,816
	Total	₩	569,749,931	569,398,625

(*1) Goodwill allocated to major CGU

Goodwill allocated to CGU of Samsung Networks, Inc. accounts for most of total carrying amount of goodwill. It was recognized in merger with Samsung Networks, Inc. in 2010 and the CGU of Samsung Network, Inc. has been stable with consistent growth considering past experiences regarding strategic decisions for CGU and sales and market trend.

The CGU of Samsung Networks, Inc. is in IT service segment and it provides Network Service (VPN, Wireless LAN u-Ready, etc.), Telephony Service (Wyz070, telephone, etc.), NI service (Network Consulting, Telecommunications infrastructure services, provision of telecommunication equipment, etc.) and Telecommunications Application Service (Contact center, IDC, etc.)

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

15. INTANGIBLE ASSETS, Continued

2) Key assumptions used for value-in-use estimation as of December 31, 2021, are as follows:

The Group performed an impairment test on goodwill as of December 31, 2021, considering the changes in CGUs for the year ended December 31, 2021. The recoverable amounts of CGUs (groups) have been determined based on fair value, less costs to sell as of impairment test date and value in use. The recoverable amount of the MultiCampus Co., Ltd. was determined based on the calculation of fair value, less costs to sell and it is calculated by deducting the disposal cost from stock price as of impairment test date. The impairment test of CGUs (groups) except for MultiCampus Co., Ltd. is performed based on value in use and it is calculated using cash flow projections based on financial budgets approved by management covering a one-year period. The forecasts used are consistent with those contained in the industry report.

	<u>Samsung Networks, Inc.</u>	<u>Samsung SNS Co., Ltd.</u>	<u>EXE C&T Co., Ltd.</u>	<u>SECUi Corp.</u>
Sales growth rate (*1)	0.8%-3.7%	5.6%-10.2%	4.5%-25.3%	3.7%-10.6%
Permanent growth rate (*2)	0.00%	0.00%	0.00%	0.00%
Discount rate (*3)	7.83%	11.59%	18.00%	15.20%

(*1) This is the sales growth rate to estimate the cash flow projections over the next five years. The Group has determined the sales growth rate of CGU based on historical performance and its expectations of market development.

(*2) The Group applied 0% as a steady growth rate for subsequent years, according to paragraphs 33(3) in K-IFRS 1036, Impairment of Assets.

(*3) Weighted-average cost of capital applied to cash flow projections is the rate that reflects intrinsic risk of CGUs (groups) as of the impairment test date.

3) Impairment of goodwill

As a result of the impairment test, the Group did not recognize any impairment loss on goodwill because the recoverable amount exceeds the carrying amount.

(6) No impairment loss on development costs is recognized as costs for the year ended December 31, 2021.

(7) Details of major development costs as of December 31, 2021 and 2020, are as follows:

(In thousands of won)

		<u>December 31, 2021</u>	<u>December 31, 2020</u>	<u>Residual amortization period</u>
Project A	₩	12,084,328	6,006,027	-
Project B		5,667,137	15,382,229	Less than 1 year
Project C		100,278	701,948	Less than 1 year
Others		15,926,758	20,530,819	1 year-6 years
Total	₩	<u>33,778,501</u>	<u>42,621,023</u>	

Project A is in the current development stage, and it is expected to be completed within a year. Changes in the carrying amount of the project except for Project A are amortized on development cost.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

16. LEASE:

(1) Details of the carrying amounts of right-of-use assets as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021				
	Buildings	Machinery and equipment	Vehicles	Others	Total
Acquisition costs	₩ 712,052,800	40,671,556	8,293,984	576,673	761,595,013
Accumulated depreciation	(280,960,713)	(36,171,352)	(4,205,246)	(359,949)	(321,697,260)
Net book value	₩ 431,092,087	4,500,204	4,088,738	216,724	439,897,753

(In thousands of Korean won)

	December 31, 2020				
	Buildings	Machinery and equipment	Vehicles	Others	Total
Acquisition costs	₩ 562,158,358	33,219,255	17,907,309	645,013	613,929,935
Accumulated depreciation	(236,237,316)	(22,287,443)	(8,614,723)	(319,542)	(267,459,024)
Net book value	₩ 325,921,042	10,931,812	9,292,586	325,471	346,470,911

(2) Changes in the carrying amounts of right-of-use assets for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021				
	Buildings	Machinery and equipment	Vehicles	Others	Total
Beginning balance	₩ 325,921,042	10,931,812	9,292,586	325,471	346,470,911
Acquisition	503,478,181	44,911,901	9,109,900	3,000,851	560,500,833
Depreciation	(134,372,797)	(13,259,944)	(2,882,197)	(228,918)	(150,743,856)
Others (*1)	(263,934,339)	(38,083,565)	(11,431,551)	(2,880,680)	(316,330,135)
Ending balance	₩ 431,092,087	4,500,204	4,088,738	216,724	439,897,753

(*1) Others include the increase or decrease due to the exchange rate fluctuation or the replacement of the sublease receivables.

(In thousands of Korean won)

	2020				
	Buildings	Machinery and equipment	Vehicles	Others	Total
Beginning balance	₩ 384,757,243	33,112,726	6,283,681	7,079,072	431,232,722
Acquisition	82,959,188	103,395	6,985,806	1,797,263	91,845,652
Depreciation	(130,293,726)	(26,020,498)	(6,140,833)	(184,980)	(162,640,037)
Others (*1)	(11,501,663)	3,736,189	2,163,932	(8,365,884)	(13,967,426)
Ending balance	₩ 325,921,042	10,931,812	9,292,586	325,471	346,470,911

(*1) Others include the increase or decrease due to the exchange rate fluctuation or the replacement of the sublease receivables.

The Group leases several assets, including buildings, machinery and vehicles. The average lease term is 5.55 years (December 31, 2020: 4.45 years). Legal ownership of leased assets is held by the lessor as collateral for the lease liabilities. The carrying amount of right-of-use assets has increased by ₩229,964 million due to the renewal of the lease and the contract for the new lease for the year ended December 31, 2021. See Note 17 for an analysis of the maturity of lease liabilities.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

16. LEASE, Continued

(3) The amounts of lease recognized in profit or loss for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Depreciation of right-of-use assets	₩ 150,743,856	162,640,037
Interest expense on lease liabilities	15,097,984	14,724,277
Expense relating to short-term leases or to lease of low-value assets	21,128,480	44,110,272
Income from subleasing right-of-use assets	(318,239)	(429,743)

The total cash outflow for leases amounts to ₩182,706 million and ₩177,067 million for the years ended December 31, 2021 and 2020, respectively.

17. LEASE LIABILITIES:

The Group leases buildings and vehicles. The lessor owns legal ownership of the leased assets with the carrying amount of ₩439,898 million (December 31, 2020 : ₩346,471 million) as collateral for lease liability.

(1) Details of the lease liabilities as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Current liabilities	₩ 149,014,065	125,977,965
Non-current liabilities	312,583,282	238,795,878
Total	<u>₩ 461,597,347</u>	<u>364,773,843</u>

(2) Maturity analysis of the lease liabilities as of December 31, 2021 and 2020, is as follows:

(In thousands of Korean won)

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Within 1 year	₩ 157,629,932	135,737,306
1 year to 2 years	130,688,838	109,596,006
2 to 3 years	65,549,489	90,531,102
3 to 4 years	37,984,422	36,610,172
4 to 5 years	26,451,612	10,068,722
More than 5 years	90,424,697	21,582,893
Subtotal	<u>508,728,990</u>	<u>404,126,201</u>
Less adjustment for present value	(47,131,643)	(39,352,358)
Present value of lease liability	<u>₩ 461,597,347</u>	<u>364,773,843</u>

The Group is not exposed to a significant liquidity risk with regard to its lease liabilities. Lease liabilities are monitored within the Group's treasury division. All lease obligations are presented in Korean won.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

18. FINANCE LEASE RECEIVABLES:

(1) Details of finance lease receivables as of December 31, 2021 and 2020, are as follows:

	December 31, 2021		December 31, 2020	
	Undiscounted Lease Receivable	Net investment in the lease	Undiscounted Lease Receivable	Net investment in the lease
Current assets	₩ 5,165,189	5,102,335	5,138,639	3,149,976
Non-current assets	6,493,480	6,253,214	11,851,727	12,146,064
Total	₩ 11,658,669	11,355,549	16,990,366	15,296,040

The average commitment terms of financial lease is 5.24 years as of December 31, 2021. Generally, lease commitments do not include an extension option or a termination option.

(2) Details of the finance lease receivables as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021	December 31, 2020
Within 1 year	₩ 5,165,189	5,138,639
1 year to 2 years	5,191,906	5,216,348
2 to 3 years	1,301,574	5,295,243
3 to 4 years	-	1,340,136
Total lease payments	11,658,669	16,990,366
Addition: unguaranteed residual values	-	-
Subtotal	11,658,669	16,990,366
Less unearned finance income	(303,120)	(1,694,326)
Present value of lease receivable	11,355,549	15,296,040
Less impairment loss allowance	-	-
Net investment in the lease	₩ 11,355,549	15,296,040

(3) The amounts recognized in profit or loss of net investment in the lease from finance lease receivables for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021	2020
Finance income on the net investment in finance leases	₩ 318,239	429,743

The Group's finance lease arrangements do not include variable receivables. The average effective interest rate contracted approximates 2.29% per annum.

(4) Impairment of finance lease receivables

The management of the Group estimates the loss allowance on finance lease receivables at the end of the reporting period as the end of the reporting period. None of the finance lease receivables as an amount equal to lifetime ECL is past due at the end of the reporting period, and taking into account the historical default experience and the future prospects of the industries in which the lessees operate, together with the value of collateral held over these finance lease receivables, the management of the Group considers that no finance lease receivable are impaired.

There has been no change in the estimation techniques or significant assumptions made during the current reporting period in assessing the loss allowance for finance lease receivables.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

19. BORROWINGS AND CORPORATE BOND:

Details of borrowings and corporate bond as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	Financial institutions	Annual interest rate (%)	December 31, 2021	December 31, 2020
Short-term borrowings	CITIBANK	5.95	₩ 464,000	899,729
Private placed corporate bond	MG Community Credit Cooperatives	2.60	-	10,000
Total			₩ 464,000	909,729

20. PROVISIONS:

(1) Details of provisions as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021		
	Current	Non-Current	Total
Provision for repairs	₩ 172,841	24,170	197,011
Provision for project losses	1,711,816	416,085	2,127,901
Provision for warranties	2,903,229	-	2,903,229
Asset retirement obligation	195,540	18,515,160	18,710,700
Emission liability	101,941	-	101,941
Others	11,029,226	946,905	11,976,131
Total	₩ 16,114,593	19,902,320	36,016,913

(In thousands of Korean won)

	December 31, 2020		
	Current	Non-Current	Total
Provision for repairs	₩ 82,086	32,588	114,674
Provision for project losses	688,810	188,659	877,469
Provision for warranties	1,645,216	-	1,645,216
Asset retirement obligation	1,820,367	15,980,681	17,801,048
Others	14,703,138	-	14,703,138
Total	₩ 18,939,617	16,201,928	35,141,545

(2) Changes in provisions for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021				
	Beginning Balance	Increase	Utilization	Reversal	Ending Balance
Provision for repairs (*1)	₩ 114,674	140,007	-	(57,670)	197,011
Provision for project losses	877,469	1,862,080	(607,849)	(3,799)	2,127,901
Provision for warranties (*2)	1,645,216	1,482,916	-	(224,903)	2,903,229
Asset retirement obligation (*3)	17,801,048	1,750,502	(710,086)	(130,764)	18,710,700
Emission liability	-	101,941	-	-	101,941
Others	14,703,138	3,339,340	(6,066,347)	-	11,976,131
Total	₩ 35,141,545	8,676,786	(7,384,282)	(417,136)	36,016,913

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

20. PROVISIONS, Continued

(2) Changes in provisions for the years ended December 31, 2021 and 2020, are as follows, Continued

(In thousands of Korean won)

	2020				Ending Balance
	Beginning Balance	Increase	Utilization	Reversal	
Provision for repairs (*1)	₩ 60,679	74,981	-	(20,986)	114,674
Provision for project losses	850,440	431,130	(322,807)	(81,294)	877,469
Provision for warranties (*2)	1,768,731	101,067	(15,457)	(209,125)	1,645,216
Asset retirement obligation (*3)	16,978,368	1,256,093	(433,413)	-	17,801,048
Others	14,704,687	233,210	(171,479)	(63,280)	14,703,138
Total	₩ 34,362,905	2,096,481	(943,156)	(374,685)	35,141,545

(*1) The Group makes provisions for estimated costs of project repairs based on historical experience and terms of guarantees.

(*2) The Group makes provisions for estimated costs of future services arising from warranties, exchanges and refunds and repairs based on warranty period (one year) and historical rate.

(*3) The Group makes provisions for expected expense to be paid for restoration of leasehold assets to their original condition in the future.

21. RETIREMENT BENEFIT PLANS:

The Group concurrently operates defined contribution retirement benefit plans and defined benefit retirement benefit plans.

(1) Defined contribution retirement benefit plans

Defined contribution retirement benefit plans of ₩9,904 million and ₩8,994 million were recognized as expense in the consolidated statements of comprehensive income for the years ended December 31, 2021 and 2020, respectively. The Group has unpaid contributions of ₩244 million and ₩976 million as of December 31, 2021 and 2020, respectively.

(2) Defined benefit retirement benefit plans

1) Net defined benefit liabilities (assets) recognized in the consolidated statements of financial position as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021	December 31, 2020
Present value of funded defined benefit obligation	₩ 1,494,551,766	1,344,298,280
Present value of unfunded defined benefit obligation	29,540,787	23,922,353
Subtotal	1,524,092,553	1,368,220,633
Less fair value of plan assets	(1,721,455,382)	(1,434,040,606)
Total	₩ (197,362,829)	(65,819,973)

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

21. RETIREMENT BENEFIT PLANS, Continued

2) Changes in net defined benefit liabilities (assets) for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021		
	Defined benefit obligation	Fair value of plan assets	Net defined benefit liabilities (assets)
Beginning balance	₩ 1,368,220,633	(1,434,040,606)	(65,819,973)
Included in profit or loss:			
Current service cost	119,102,978	-	119,102,978
Past service cost	-	-	-
Interest cost (income)	40,842,062	(42,030,366)	(1,188,304)
Others	-	-	-
Subtotal	<u>159,945,040</u>	<u>(42,030,366)</u>	<u>117,914,674</u>
Included in OCI:			
Remeasurement elements:			
Actuarial loss (gain) arising from:			
Effect of change in discount rate	(56,434,835)	-	(56,434,835)
Financial assumptions	56,542,809	-	56,542,809
Demographical assumptions	41,604	-	41,604
Experience adjustment	48,438,429	-	48,438,429
Return on plan assets	-	12,049,160	12,049,160
Subtotal	<u>48,588,007</u>	<u>12,049,160</u>	<u>60,637,167</u>
Others:			
Contributions paid by the employer	-	(306,614,404)	(306,614,404)
Benefits paid	(47,864,876)	47,236,359	(628,517)
Transfer from affiliates	3,736	236,252	239,988
Others	(4,799,987)	1,708,223	(3,091,764)
Subtotal	<u>(52,661,127)</u>	<u>(257,433,570)</u>	<u>(310,094,697)</u>
Ending balance	₩ <u>1,524,092,553</u>	<u>(1,721,455,382)</u>	<u>(197,362,829)</u>

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

21. RETIREMENT BENEFIT PLANS, Continued

2) Changes in net defined benefit liabilities (assets) for the years ended December 31, 2021 and 2020, are as follows, Continued

(In thousands of Korean won)

	2020		
	Defined benefit obligation	Fair value of plan assets	Net defined benefit liabilities (assets)
Beginning balance	₩ 1,211,493,253	(1,152,366,303)	59,126,950
Included in profit or loss:			
Current service cost	112,764,966	-	112,764,966
Past service cost	-	-	-
Interest cost (income)	28,628,882	(26,467,579)	2,161,303
Others	(51,813)	-	(51,813)
Subtotal	141,342,035	(26,467,579)	114,874,456
Included in OCI:			
Remeasurement elements:			
Actuarial loss (gain) arising from:			
Effect of change in discount rate	(76,855,637)	-	(76,855,637)
Financial assumptions	84,216,945	-	84,216,945
Demographical assumptions	33,087,343	-	33,087,343
Experience adjustment	22,105,698	-	22,105,698
Return on plan assets	-	232,302	232,302
Subtotal	62,554,349	232,302	62,786,651
Others:			
Contributions paid by the employer	-	(295,135,241)	(295,135,241)
Benefits paid	(50,911,851)	39,529,258	(11,382,593)
Transfer from affiliates	3,597,548	-	3,597,548
Others	145,299	166,957	312,256
Subtotal	(47,169,004)	(255,439,026)	(302,608,030)
Ending balance	₩ 1,368,220,633	(1,434,040,606)	(65,819,973)

3) The principal actuarial assumptions used as of December 31, 2021 and 2020, are as follows:

	December 31, 2021	December 31, 2020
Discount rate	2.4% - 3.8%	1.8% - 3.4%
Expected rate of salary increase (including inflation rate)	4.5% - 6.1%	4.8% - 6.1%

Assumptions regarding the future mortality rate are based on average life expectancy and published statistics.

4) Details of fair value of plan assets as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021		December 31, 2020	
	Carrying amounts	Composition (%)	Carrying amounts	Composition (%)
Cash and cash equivalents	₩ 1,720,967,863	99.90	1,431,139,357	99.80
Others	487,519	0.10	2,901,249	0.20
Total	₩ 1,721,455,382	100.00	1,434,040,606	100.00

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

21. RETIREMENT BENEFIT PLANS, Continued

- 5) The sensitivity analysis of the overall defined benefit liability in accordance with changes to the principal assumptions as of December 31, 2021 and 2020, is as follows:

(In thousands of Korean won)

	December 31, 2021		
	Changes in principal assumption	Effect due to increase in principal assumption	Effect due to decrease in principal assumption
Discount rate	1.00% point	₩ (108,219,623)	123,556,045
Salary growth rate	1.00% point	123,927,591	(110,515,725)

(In thousands of Korean won)

	December 31, 2020		
	Changes in principal assumption	Effect due to increase in principal assumption	Effect due to decrease in principal assumption
Discount rate	1.00% point	₩ (102,616,281)	117,724,742
Salary growth rate	1.00% point	117,421,189	(104,278,529)

- 6) Expected contributions to defined benefit plans for the year ended December 31, 2022, amounted to ₩154,775 million.
- 7) The weighted-average duration of the defined benefit liabilities as of December 31, 2021, is 4.47 - 8.35 years.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

22. COMMITMENTS AND CONTINGENCIES:

(1) Guarantees

Details of guarantees provided for employees by the Group as of December 31, 2021, are as follows:

(In thousands of Korean won)

	Detail	Financial institutions		Amounts
Employees	Debt guarantee	Woori Bank (*1)	₩	10,000,000

(*1) Guarantees are provided for the employee's housing loan owed to the financial institutions.

(2) Guarantees provided and major commitments

Details of guarantees provided to the Group and major commitments with financial institutions as of December 31, 2021, are as follows:

(In thousands of Korean won, USD, KWD, SAR, CNY, SGD, VND, EUR, INR, AUD, MYR, EGP, PEN, TRY, AED, SEK)

Financial institutions	Detail		Executed amounts		Limits
KEB Hana Bank	Payment guarantee		-	USD	15,000,000
		CNY	3,899,517	CNY	50,000,000
Shinhan Bank	Import letter of credit		-	USD	27,000,000
	Bills bought		-	USD	5,000,000
	Payment guarantee		-	USD	34,299,000
	Payment guarantee	VND	78,688,109,102	USD	6,000,000
	Payment guarantee	VND	41,701,100,000	VND	52,278,500,000
	Payment guarantee	SGD	35,112	SGD	35,112
Woori Bank	Payment guarantee	USD	360,000	USD	24,000,000
	Payment guarantee	CNY	2,000,000	CNY	2,000,000
Kookmin Bank	Payment guarantee		-		
	Import letter of credit	USD	1,369,831	USD	20,000,000
	Local letter of credit		-	KRW	5,000,000
HSBC	Payment guarantee		-	USD	10,000,000
	Overseas financing guarantee		-	USD	3,100,000
			-	INR	360,000,000
		AUD	654,890	AUD	654,890
Bank of China	Payment guarantee		-	USD	18,000,000
Citi Bank	Payment guarantee	KWD	97,719	KWD	97,719
		AED	183,640		
		EUR	1,631,595		
	Overseas financing guarantee	MYR	190,000		
		EGP	30,000		
		USD	856,554		
		PEN	50,000		
		TRY	500,000		
		SEK	8,706,800	USD	53,500,000
China Merchants Bank	Payment guarantee	CNY	955,391	CNY	955,391
Commerzbank AG	Payment guarantee	EUR	3,057,218	EUR	3,300,000
BOA(Bank of America)	Payment guarantee	USD	6,327,439	USD	6,327,439
Emirates NBD	Payment guarantee	AED	3,626	AED	3,626
SABB (Saudi British Bank)	Payment guarantee	SAR	1,567,261	SAR	1,567,261

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

22. COMMITMENTS AND CONTINGENCIES, Continued

(3) Other commitments

- 1) The Company entered into general term loan agreements with an aggregate credit limit of ₩20,000 million with Shinhan Bank as of December 31, 2021. In addition, a domestic subsidiary, S-Core Co., Ltd., entered into a general term loan agreement with an aggregate credit limit of ₩3,000 million with Shinhan Bank as of December 31, 2021.
- 2) The Company has bank overdraft facilities with Woori Bank and three other banks amounting to ₩70,500 million in aggregate, and a domestic subsidiary, Miracom Inc., has bank overdraft facilities with Woori Bank and one other bank amounting to ₩4,800 million in aggregate as of December 31, 2021.
- 3) The Company has a contractual agreement of business-to-business electronic payment system with KEB Hana Bank and three other banks amounting to ₩65,193 million, with a credit limit of ₩340,000 million as of December 31, 2021.
- 4) The Company has a comprehensive credit limit with KEB Hana Bank to ₩19,300 million as of December 31, 2021.
- 5) The Company has been provided a payment guarantee amounting to ₩638,295 million by Korea Software Financial Cooperative and Seoul Guarantee Insurance Company, and in relation to the guarantee, an equity investment of ₩2,719 million is provided to Korea Software Financial Cooperative as collateral as of December 31, 2021. The Company has provided a time deposit of ₩10,000 million as collateral in relation to the outsourcing service contract for information system operation business concluded with Korea Development Bank. Miracom Inc. and MultiCampus Co., Ltd., which are domestic subsidiaries of the Company, are provided with payment guarantees by Korea Software Financial Cooperative amounting to ₩27,625 million and ₩5,361 million, respectively, and each of these subsidiaries has provided equity investment of ₩411 million and ₩219 million, respectively, to Korea Software Financial Cooperative as collateral. In addition, Miracom Inc.; MultiCampus Co., Ltd.; SECUi. Corp.; and S-Core Co., Ltd. are provided with payment guarantees by Seoul Guarantee Insurance Company amounting to ₩2,462 million, ₩707 million, ₩2,686 million and ₩698 million as of December 31, 2021, respectively.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

23. SHARE CAPITAL AND PREMIUM:

Under its articles of incorporation, the Group is authorized to issue 200,000,000 common shares with a par value of ₩500 per share, and 50,000,000 shares of participating preferred share, which are non-voting and are entitled to receive a minimum cash dividend of more than 1% of par value by resolution of the board of directors. In addition, the Group is authorized to issue to investors, other than current shareholders, convertible debentures and debentures with warrants with face values of up to ₩67,000 million, where ₩50,000 million of such debentures is for common shares and the remaining ₩17,000 million is for preferred shares. As of December 31, 2021, 77,377,800 shares are issued and share capital amounts to ₩38,689 million. As of December 31, 2021, there are no issued convertible debentures, debentures with warrants and participating preferred share, which are non-voting.

24. RETAINED EARNINGS:

(1) Retained earnings as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Legal reserve		
Earned surplus reserve (*1)	₩ 19,344,450	19,344,450
Reserve for business development (*2)	21,000,000	21,000,000
Subtotal	<u>40,344,450</u>	<u>40,344,450</u>
Discretionary reserve		
Reserve for business rationalization (*3)	10,098,807	10,098,807
Subtotal	<u>10,098,807</u>	<u>10,098,807</u>
Unappropriated retained earnings	6,036,405,686	5,610,875,286
Total	<u>₩ 6,086,848,943</u>	<u>5,661,318,543</u>

(*1) The Commercial Code of the Republic of Korea requires the Group to appropriate, as a legal reserve, an amount equal to a minimum of 10% of cash dividends paid, until such reserve equals 50% of its issued capital stock. This reserve is not available for the payment of cash dividends, but may be transferred to capital stock or used to reduce accumulated deficit, if any, with the ratification of the Group's majority shareholders.

(*2) In accordance with the former corporate income tax law, the Group has accumulated reserves for business development by the amount of retained earnings in excess of accumulated earnings. This amount may be transferred to capital stock or used to reduce accumulated deficit, if any, with the ratification of the Group's majority shareholders.

(*3) Pursuant to the Special Tax Treatment Control Law, the Group is required to appropriate, as a reserve for business rationalization, a portion of retained earnings equal to tax reductions arising from investment and other tax credits. Due to revision made to Korean tax laws during 2002, such reserves are no longer required.

(2) Changes in retained earnings for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>2021</u>	<u>2020</u>
Beginning balance	₩ 5,661,318,543	5,403,504,408
Net income attributable to the owners of the Group	611,170,846	443,454,581
Dividends	(185,640,446)	(185,640,446)
Ending balance	<u>₩ 6,086,848,943</u>	<u>5,661,318,543</u>

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

24. RETAINED EARNINGS, Continued

(3) Details of dividends declared and dividends' payout ratio for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

		<u>2021</u>	<u>2020</u>
Number of common shares outstanding	common shares	77,350,186 shares	77,350,186 shares
Dividend ratio	common shares	480%	480%
Dividends	common shares ₩	185,640,446	185,640,446

25. OTHER COMPONENTS OF EQUITY:

(1) Details of other components of equity as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

		<u>December 31, 2021</u>	<u>December 31, 2020</u>
Valuation gain on FVOCI	₩	50,902,736	20,394,457
Changes in associates' accumulated OCI		10,827,380	723,921
Changes in associates' accumulated other comprehensive losses		(9,554,504)	(9,554,504)
Foreign currency translation differences		(18,368,445)	(156,912,298)
Treasury stock		(1,592,531)	(1,592,531)
Other capital adjustment		80,353,908	80,353,908
Remeasurement of defined benefit liability		(306,852,606)	(261,859,864)
Total	₩	<u>(194,284,062)</u>	<u>(328,446,911)</u>

(2) Changes in treasury stock for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>2021</u>		<u>2020</u>	
	Number of shares	Book value	Number of shares	Book value
Beginning	27,614 shares	₩ 1,592,531	27,614 shares	₩ 1,592,531
Acquisition	-	-	-	-
Ending	<u>27,614 shares</u>	<u>₩ 1,592,531</u>	<u>27,614 shares</u>	<u>₩ 1,592,531</u>

The Group acquired 13,515 shares (at ₩56,406 per share) of treasury stocks from shareholders who exercised the appraisal right against the merger of Samsung Networks Co., Ltd., in accordance with the Commercial Code of the Republic of Korea. The Group holds 9,005 common shares due to transfer of treasury shares owned by Samsung Networks Co., Ltd. and 4,197 common shares due to acquisition of fractional shares.

In addition, the Group holds 346 common shares due to transfer of treasury shares owned by Samsung SNS Co., Ltd. and 551 common shares due to acquisition of fractional shares for the year ended December 31, 2013.

The Group intends to dispose of its treasury shares depending on the market conditions.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

26. REVENUE

(1) Details of revenue for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>2021</u>	<u>2020</u>
Sales of goods	₩ 309,635,813	284,697,095
IT service (*1)	5,327,561,331	5,029,752,824
Logistics service	7,992,805,295	5,702,981,607
Total	<u>₩ 13,630,002,439</u>	<u>11,017,431,526</u>

(*1) Revenue from fixed-price contracts is included.

(2) Details of contract assets as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Installation of software services, etc.	₩ 656,725,165	592,378,499
Less allowance for doubtful accounts	-	-
Total	<u>656,725,165</u>	<u>592,378,499</u>
Current	656,725,165	592,378,499
Total	<u>₩ 656,725,165</u>	<u>592,378,499</u>

(3) None of the contract assets are impaired as of December 31, 2021, and considering past default experience and prospects for the industry to which the customer belongs, management determines that none the contract assets are impaired.

(4) Details of contract liabilities as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Installation of software services, etc. (*1)	₩ 238,379,382	192,666,481
Total	<u>238,379,382</u>	<u>192,666,481</u>
Current	238,379,382	192,666,481
Total	<u>₩ 238,379,382</u>	<u>192,666,481</u>

(*1) Contract liabilities relating to software installation services are balances due to customers under contracts. These arise if a particular milestone payment exceeds the revenue recognized to date under the cost-to-cost method.

(5) No revenue was recognized for the years ended December 31, 2021 and 2020, in relation to performance obligations fulfilled in the accounting periods beginning on or before January 1, 2020. The amount of revenue recognized for the years ended December 31, 2021 and 2020, arising from contract liabilities carried forward from prior year is as follows:

(In thousands of Korean won)

	<u>2021</u>	<u>2020</u>
Installation of software services, etc.	₩ 184,810,611	80,135,276

(6) There are no contract assets or trade receivables in relation to the major contract more than 5% of the Group's revenue in the prior period that is recognized in the current period by the cost-to-cost method for basis of the percentage of total costs incurred to date for the year ended December 31, 2021.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

26. REVENUE, Continued

(7) Changes in estimated total contract costs

Applying the cost-to-cost method, which is a basis of the total contract amount and total contract cost associated with a contract that recognize revenue over time, the effects of changes in estimates and changes in those for current and future periods on gains and losses, contract assets and contract liabilities changes are as follows:

(In thousands of Korean won)

		<u>Change in contract amount</u>	<u>Change in estimated total contract cost</u>	<u>Effect on net income</u>	<u>Effect on future income</u>	<u>Change in contract assets</u>
Installation of Software services, etc.	₩	45,477,644	30,818,899	7,888,380	6,770,365	7,888,380

The impact on current and future periods is calculated based on total estimated contract costs considering events that occurred until December 31, 2021, after the commencement of the contract and the current estimate of total contract revenue as of December 31, 2021. Estimates of total contract revenue and total contract costs may change in future periods.

27. EXPENSES BY NATURE:

Details of expenses by nature for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

		<u>2021</u>	<u>2020</u>
Changes in inventories and purchase of inventories	₩	611,770,390	571,237,842
Wages and salaries		2,245,855,709	1,937,120,590
Employee welfare		413,122,974	398,737,517
Depreciation		236,453,542	223,188,575
Depreciation of right-of-use assets		150,743,856	162,640,038
Amortization		55,150,540	65,462,987
Advertising		5,191,212	4,579,307
Transportation		1,811,579	2,868,545
Travel		29,461,694	23,264,460
Training		77,411,789	73,012,817
Commission and service charges		194,347,028	154,436,195
Rent		53,450,499	50,045,321
Outsourcing		1,090,070,578	948,995,258
Communication		169,449,798	178,623,899
Taxes and dues		32,827,172	34,427,829
Logistics		7,281,093,766	5,149,205,277
Others		173,692,541	167,966,992
Total	₩	<u>12,821,904,667</u>	<u>10,145,813,449</u>

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

28. SELLING AND ADMINISTRATIVE EXPENSES:

Details of selling and administrative expenses for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>2021</u>	<u>2020</u>
Wages and salaries	₩ 444,374,975	405,647,288
Provision for severance indemnities	36,674,217	29,772,358
Employee welfare	91,009,323	90,752,836
Repairs and maintenance	3,344,212	3,261,025
Supplies	2,008,236	2,186,258
Utility	1,513,100	1,175,393
Outsourcing	44,034,764	31,798,824
Travel	6,011,861	4,606,433
Communication	1,231,478	1,221,022
Insurance premium	3,000,953	2,829,999
Commission and service charges	38,606,524	39,048,979
Advertising	5,125,808	4,579,307
Depreciation	14,589,800	14,544,745
Depreciation of right-of-use assets	39,546,189	38,486,396
Amortization	25,481,350	27,611,213
Rent	21,414,020	20,700,368
Publication	449,253	638,007
Entertainment	4,736,342	3,791,667
Conference	1,888,241	1,323,499
Training	5,918,518	6,188,058
Recreation	1,167,220	1,077,511
Broadcasting	48,336	14,123
Bad debt	(679,960)	12,300,875
Service charge	2,432,365	449,619
Research and development	69,500,594	62,871,711
Others	11,637,979	11,252,799
Total	<u>₩ 875,065,698</u>	<u>818,130,313</u>

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

29. OTHER OPERATING INCOME AND EXPENSES:

(1) Details of other operating income for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>2021</u>	<u>2020</u>
Commission income	₩ 1,450,463	1,170,514
Dividend income	16,350	17,283
Gains on disposal of FVPL	-	100,000
Valuation gain on FVPL	2,753,739	1,637,167
Gain on disposal of property and equipment	655,899	672,990
Gains on disposal of intangible assets	(25)	59,314
Reversal of impairment losses on intangible assets	3,114,550	-
Reversal of allowance for doubtful accounts	10,333	27,680
Others	15,508,675	12,185,304
Total	<u>₩ 23,509,984</u>	<u>15,870,252</u>

(2) Details of other operating expenses for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>2021</u>	<u>2020</u>
Valuation loss on FVPL	₩ 531,419	1,143,603
Loss on disposal of property and equipment	117,022	505,539
Impairment loss on property and equipment	701,800	272,232
Impairment loss on assets classified as held for sale	-	-
Loss on disposal of intangible assets	291,124	101
Impairment loss on intangible assets	214	21,301,700
Other bad debt expense	4,198	4,009
Donations	2,701,116	5,159,811
Others	26,967,848	16,839,777
Total	<u>₩ 31,314,741</u>	<u>45,226,772</u>

30. FINANCE INCOME AND EXPENSES:

(1) Details of finance income and expenses for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>2021</u>	<u>2020</u>
Finance income		
Interest income		
Financial asset measured at amortized cost	₩ 60,808,535	65,534,664
Gain on foreign currency transaction	54,617,874	70,832,283
Foreign exchange gain	15,471,654	17,225,685
Total	<u>₩ 130,898,063</u>	<u>153,592,632</u>
Finance expenses		
Interest expense		
Financial asset measured at amortized cost	17,648,968	16,359,876
Loss on foreign currency transaction	49,992,745	72,827,752
Foreign exchange loss	12,481,224	23,524,218
Total	<u>₩ 80,122,936</u>	<u>112,711,846</u>

(2) The Group recognizes the gain and loss from foreign exchange differences as finance income and expenses.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

31. INCOME TAX EXPENSE

(1) The components of income tax expense for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>2021</u>	<u>2020</u>
Current income taxes	₩ 193,264,492	183,859,865
Additional income taxes for prior years and other	1,216,539	5,575,735
Adjustment amount recognized in the current period (*1)	-	163,936,582
Deferred income tax arising from temporary differences and other differences	29,679,297	79,836,921
Income tax expense	<u>₩ 224,160,328</u>	<u>433,209,103</u>

(*1) The Group appealed to the Seoul Administrative court against the income tax disposition. However, The Group's appeal was dismissed by the court in 2020. Accordingly, the Group reflected it to the Income tax expense (see Note 2).

(2) The actual income tax expense on the Group's profit before tax differs from the amount that is computed using the tax calculated at the weighted-average rate applied to profits for the years ended December 31, 2021 and 2020, is as follows:

(In thousands of Korean won)

	<u>2021</u>	<u>2020</u>
Profit before income tax expenses	₩ 857,541,761	886,118,054
Income tax based on statutory tax rate	202,112,783	219,147,228
Weighted-average tax rate (*1)	23.57%	24.73%
Adjustment amount recognized in the current period for prior-period current tax (*1)	-	163,936,582
Adjustments		
Permanent differences	13,500,207	9,802,788
Tax credit	(11,652,661)	(10,508,217)
Tax credit for which no deferred tax asset was recognized	-	88,956
Adjustment related to investments in subsidiaries	(708,194)	30,312,185
Others (*2)	20,908,193	20,429,581
Income tax expense	<u>₩ 224,160,328</u>	<u>433,209,103</u>
Effective tax rate	26.14%	48.89%

(*1) The Group's statutory tax rate is applied differently according to the tax authorities as of December 31, 2021 and 2020.

(*2) Other adjustments consist of additional income taxes for prior years and tax effect from tax rate change, etc.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

31. INCOME TAX EXPENSE, Continued

(3) Changes in deferred income tax assets and liabilities resulting from the tax effect of cumulative temporary differences and others for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021					
	Cumulative temporary differences			Deferred tax assets (liabilities)		
	Beginning	Changes	End	Beginning	Changes	End
Deferred income tax arising from temporary differences:						
Net defined benefit liabilities	₩ (128,564,394)	(105,746,081)	(234,310,475)	(126,441,957)	(45,700,375)	(172,142,332)
Investment in associates	16,834,637	4,974,187	21,808,824	(6,809,193)	(47,573)	(6,856,766)
Property and equipment	23,935,006	4,660,110	28,595,116	(4,018,302)	3,239,939	(778,363)
Employee welfare fund	(5,115,608)	(207,577)	(5,323,185)	(1,406,792)	(57,084)	(1,463,876)
Prepaid rent expenses	(3,685,580)	(133,402)	(3,818,982)	(1,013,535)	(36,685)	(1,050,220)
Investment in subsidiaries	(882,033,267)	402,902	(881,630,365)	(242,559,148)	110,798	(242,448,350)
Right-of-use assets	(148,552,690)	(40,225,406)	(188,778,096)	(40,851,990)	(11,061,986)	(51,913,976)
Accrued expenses	99,341,278	17,035,731	116,377,009	27,318,852	4,684,825	32,003,677
Long-term accrued expense	33,905,525	5,973,479	39,879,004	9,324,019	1,642,707	10,966,726
Provision	15,354,583	1,647,424	17,002,007	4,222,510	453,042	4,675,552
Deposit	4,110,497	70,005	4,180,502	1,130,387	19,251	1,149,638
Foreign exchange gains and losses	3,681,325	(8,034,481)	(4,353,156)	1,012,364	(2,209,482)	(1,197,118)
Taxes and dues	742,349	(27,388)	714,961	204,146	(7,532)	196,614
Lease liabilities	156,414,727	42,787,380	199,202,107	43,014,050	11,766,529	54,780,579
Others	(281,557,943)	(10,944,936)	(292,502,879)	2,654,043	(6,372,571)	(3,718,528)
Subtotal	(1,095,189,555)	(87,768,053)	(1,182,957,608)	(334,220,546)	(43,576,197)	(377,796,743)
Deferred tax charged directly to shareholders' equity:						
Valuation of FVOCI and others	431,035,570	49,704,307	480,739,877	125,552,262	22,502,515	148,054,777
				Deferred tax assets		44,462,489
				Deferred tax liabilities		(274,204,454)
				Net deferred tax liabilities	₩	<u>(229,741,965)</u>

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

31. INCOME TAX EXPENSE, Continued

(3) Changes in deferred income tax assets and liabilities resulting from the tax effect of cumulative temporary differences and others for the years ended December 31, 2021 and 2020, are as follows, Continued

(In thousands of Korean won)

	2020					
	Cumulative temporary differences			Deferred tax assets (liabilities)		
	Beginning	Changes	End	Beginning	Changes	End
Deferred income tax arising from temporary differences:						
Net defined benefit liabilities	₩ (238,476,869)	109,912,475	(128,564,394)	(65,581,139)	(60,860,818)	(126,441,957)
Investment in associates	(41,521,139)	58,355,776	16,834,637	(11,418,313)	4,609,120	(6,809,193)
Property and equipment	(47,359,753)	71,294,759	23,935,006	(8,439,347)	4,421,045	(4,018,302)
Employee welfare fund	(4,956,885)	(158,723)	(5,115,608)	(1,363,143)	(43,649)	(1,406,792)
Prepaid rent expenses	(5,616,353)	1,930,773	(3,685,580)	(1,544,497)	530,962	(1,013,535)
Investment in subsidiaries	(661,430,158)	(220,603,109)	(882,033,267)	(181,893,293)	(60,665,855)	(242,559,148)
Right-of-use assets	-	(148,552,690)	(148,552,690)	-	(40,851,990)	(40,851,990)
Accrued expenses	71,221,439	28,119,839	99,341,278	19,585,896	7,732,956	27,318,852
Long-term accrued expense	40,064,198	(6,158,673)	33,905,525	11,017,654	(1,693,635)	9,324,019
Provision	16,366,589	(1,012,006)	15,354,583	4,500,812	(278,302)	4,222,510
Deposit	6,087,166	(1,976,669)	4,110,497	1,673,971	(543,584)	1,130,387
Foreign exchange gains and losses	138,582	3,542,743	3,681,325	38,110	974,254	1,012,364
Taxes and dues	383,244	359,105	742,349	105,392	98,754	204,146
Lease liabilities	-	156,414,727	156,414,727	-	43,014,050	43,014,050
Others	(279,262,138)	(2,295,805)	(281,557,943)	18,774,747	(16,120,704)	2,654,043
Subtotal	(1,144,362,077)	49,172,522	(1,095,189,555)	(214,543,150)	(119,677,396)	(334,220,546)
Deferred tax charged directly to shareholders' equity:						
Valuation of FVOCI and others	377,278,480	53,757,090	431,035,570	101,935,231	23,617,031	125,552,262
				Deferred tax assets		30,598,815
				Deferred tax liabilities		(239,267,099)
				Net deferred tax liabilities	₩	(208,668,284)

Realization of the future tax benefits related to the deferred tax assets is dependent on many factors, including the Group's ability to generate sufficient taxable income within the period during which the temporary differences reverse, the outlook of the global economic environment and the overall future industry outlook. The Group's management periodically considers these factors in reaching its conclusion.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

31. INCOME TAX EXPENSE, Continued

- (4) Deferred income tax assets and liabilities credited (charged) directly to equity as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Temporary differences:		
Valuation gain on FVOCI	₩ 444,332	128,838
Other capital adjustment	21,953,355	33,688,029
Remeasurement of the net defined benefit liabilities	458,342,190	397,218,703
Subtotal	<u>480,739,877</u>	<u>431,035,570</u>
Deferred tax assets	₩ <u>148,054,777</u>	<u>125,552,262</u>

- (5) Details temporary differences to be added and unused tax loss carryforwards not recognized as deferred tax liabilities (assets) in the consolidated statements of financial position as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Temporary differences to be added	₩ 424,597,242	422,978,618
Unused tax loss carryforwards	-	(1,402,170)
Total	<u>₩ 424,597,242</u>	<u>421,576,448</u>

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

32. CASH FLOWS FROM OPERATING ACTIVITIES:

(1) Adjustment items to net income for cash flows from operating activities and changes in operating assets and liabilities for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>2021</u>	<u>2020</u>
Net income	₩ 633,381,433	452,908,951
Adjustment items:		
Foreign exchange losses	12,481,224	23,524,218
Depreciation	236,453,542	223,188,575
Depreciation of right-of-use assets	150,743,856	162,640,037
Amortization	55,150,540	65,462,987
Provision for severance indemnities	117,914,674	114,874,456
Foreign exchange gains	(15,471,654)	(17,225,685)
Reversal of provision for project loss	(3,799)	(81,295)
Impairment loss on property and equipment	701,800	272,232
Impairment loss on goodwill	-	20,442,684
Impairment loss on intangible assets	214	859,016
Income tax expense	224,160,328	433,209,103
Others	(24,674,590)	(13,886,037)
Subtotal	<u>757,456,135</u>	<u>1,013,280,291</u>
Changes in operating assets and liabilities:		
Increase in trade receivables	(400,642,363)	(106,258,733)
Decrease in other receivables	23,886,277	62,309,122
Increase in prepaid expenses	(65,775,078)	(58,504,837)
Increase in trade payables	224,359,594	74,241,719
Increase (decrease) in other payables	16,262,321	(19,206,383)
Increase (decrease) in accrued expenses	223,861,557	(54,262,027)
Changes in net defined benefit liabilities	(307,981,584)	(302,437,448)
Increase in advances received	57,657,830	84,604,766
Increase in withholdings	3,304,951	17,590,311
Others	(40,904,680)	(46,921,240)
Subtotal	<u>(265,971,175)</u>	<u>(348,844,750)</u>
Cash flows from operating activities	<u>₩ 1,124,866,393</u>	<u>1,117,344,492</u>

(2) Significant transactions not affecting cash flows for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	<u>2021</u>	<u>2020</u>
Write-off of accounts receivable and long-term and short-term other receivables by offset of allowance for doubtful accounts	₩ 596,120	8,048,077
Transfer of construction in progress	2,552,651	1,185
Changes in other payables in connection with the acquisition of property and equipment	5,731,238	1,836,096
Changes in other payables in connection with the acquisition of intangible assets	(2,508,060)	2,083,170
Right-of-use assets transfer of lease liabilities	133,438,660	13,784,325
Finance lease receivables transfer of right-of-use assets	2,942,061	3,801,625

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

32. CASH FLOWS FROM OPERATING ACTIVITIES, Continued

(3) Adjustments of liabilities from financing activities for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021			
	Beginning Balance	Other (*1)	Cash flows	Ending Balance
Short-term borrowings	₩ 899,729	-	(435,729)	464,000
Current portion of lease liabilities	125,977,966	157,668,767	(134,632,668)	149,014,065
Current portion of corporate bond	10,000	-	(10,000)	-
Lease liabilities	238,795,878	73,787,404	-	312,583,282
Deposits received (*2)	1,141,657	(34,458)	(320,529)	786,670
Long-term deposits received (*2)	4,403,628	34,458	(108,965)	4,329,121
Total	₩ 371,228,858	231,456,171	(135,507,891)	467,177,138

(*1) Impact of liquidity classification and interest on lease liabilities are included.

(*2) This only includes deposits for finance lease borrowed in exchange for the use of finance lease assets.

(In thousands of Korean won)

	December 31, 2020			
	Beginning Balance	Other (*1)	Cash flows	Ending Balance
Short-term borrowings	₩ 797,510	(68,358)	170,577	899,729
Current portion of lease liabilities	149,950,106	138,370,832	(162,342,972)	125,977,966
Lease liabilities	295,725,470	(56,929,592)	-	238,795,878
corporate bond	10,000	-	-	10,000
Total	₩ 446,483,086	81,372,882	(162,172,395)	365,683,573

(*1) Impact of liquidity classification and interest on lease liabilities are included.

33. FINANCIAL RISK MANAGEMENT:

The Group is exposed to credit risk, liquidity risk and market risk. Market risk arises from currency risk, interest rate risk and fair value risk associated with investments. The Group has a risk management program in place to monitor and actively manage such risks.

The Group's finance management team is responsible for financial risk management. Also, the financial risk management officers develop, evaluate and estimate the financial risk, and hedge the risk exposures in cooperation with the business units of the Group and domestic and overseas subsidiaries.

The Group's financial assets that are under financial risk management are composed of cash and cash equivalents, short-term financial instruments, financial assets measured at fair value, trade and other receivables and other financial assets. The Group's financial liabilities under financial risk management are composed of trade and other payables and others.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

33. FINANCIAL RISK MANAGEMENT, Continued

(1) Market risk

1) Foreign exchange risk

The Group is exposed to foreign exchange risk due to revenues and expenses arising from foreign currency transactions through global business activities. These transactions are mainly conducted in USD, EUR, GBP and other foreign currencies.

To minimize foreign exchange risk arising from operating activities, the Group's foreign exchange management policy requires all normal business transactions, such as import-export, to be in functional currency or cash inflows in foreign currencies to match up with cash outflows in foreign currencies. Foreign exchange risk for inevitably occurring foreign exchange positions is managed in accordance with the procedures and regulations prescribed in advance.

The Group's foreign currency risk management policy also defines foreign exchange risk, measurement period, controlling responsibilities and management procedures. The Group restricts all speculative foreign exchange transactions and operates a system to manage receivables and payables denominated in foreign currency. The Group's global foreign currency management system monitors, evaluates, manages and reports its foreign exchange risk (Net assets in foreign currencies = Assets in foreign currencies – Liability in foreign currencies).

The carrying amounts of financial assets and liabilities denominated in foreign currency held by the Group as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	Assets		Liabilities	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
USD ₩	551,941,992	128,466,809	307,953,465	44,420,285
EUR	237,445,856	152,906,631	199,895,217	101,000,508
GBP	140,388,637	108,208,405	36,851,424	28,365,178

In addition to the major currencies, the Group has other financial assets denominated in foreign currency amounting to ₩583,526 million and ₩36,531 million as of December 31, 2021 and 2020, respectively, and other financial liabilities denominated in foreign currency amounting to ₩149,949 million and ₩23,154 million as of December 31, 2021 and 2020, respectively.

Foreign currency exposure to financial assets and liabilities of a 5% currency rate change against the Korean won as of December 31, 2021 and 2020, is presented below. The 5% represents reasonably possible changes in exchange rates by applying sensitivity when foreign exchange rate risk is internally reported to key management personnel. Sensitivity analysis includes only monetary items to be paid denominated in foreign currencies. Foreign currency translations are adjusted by assuming a 5% change in foreign exchange rates at the end of the reporting period. The effect of foreign currency changes to the Company's equity is calculated by the sum of net effect of exchange rate fluctuations in the Korean won against foreign currencies.

(In thousands of won)

	USD Effect		EUR Effect		GBP Effect	
	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020	December 31, 2021	December 31, 2020
Net income for the year ₩	12,199,426	4,202,326	1,877,532	2,595,306	5,176,861	3,992,161
Net assets	12,199,426	4,202,326	1,877,532	2,595,306	5,176,861	3,992,161

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

33. FINANCIAL RISK MANAGEMENT, Continued

(1) Market risk, Continued

2) Stock price risk

The Group's investment portfolio consists of investments in listed and unlisted securities using direct and indirect investment vehicles for strategic purposes (see Note 11). The Group has no listed securities except for investments in subsidiaries and investments in associates as of December 31, 2021 and 2020.

3) Interest rate risk

The Group is exposed to fair value risk of consolidated statements of financial position items due to changes in market price rates, and is exposed to interest rate risk, such as changes in cash flows of interest income and expense arising from investing and financing activities, including investment risk. The Group's position with regard to interest rate risk exposure is mainly driven by interest-bearing deposits and variable-rate borrowings. The Group establishes the policy to manage the uncertainty related to interest rate fluctuations and minimize interest expenses.

In order to avoid interest rate risk, the Group maintains minimum external borrowings by facilitating cash pooling systems on regional and global bases. The Group manages exposed interest rate risk via periodic monitoring and planning.

The Group does not have variable rate borrowings as of December 31, 2021 and 2020.

(2) Credit risk

Credit risk arises during the normal course of transactions and investing activities, where clients or other party fails to discharge an obligation. The Group monitors and sets the customer's and counterparty's credit limit on a periodic basis based on the counterparty's financial conditions, default history and other important factors.

Credit risk also arises from cash and cash equivalents, savings and derivative instrument transactions with financial institutions. To minimize such risk, the Group transacts only with banks that have strong international credit rating, and all new transactions with financial institutions with no prior transaction history are approved, managed and monitored by the Group's finance team.

Book value of financial assets represents the maximum exposure to credit risk. The Group's maximum exposure to credit risk as of December 31, 2021 and 2020, is as follows:

(In thousands of Korean won)

	<u>December 31, 2021</u>	<u>December 31, 2020</u>
Financial guarantee agreement (*1)	₩ 10,000,000	10,000,000

(*1) The Group's maximum exposure in relation to financial guarantee contracts is the maximum amount to be paid by the Group if warranties are claimed.

Financial assets exposed to credit risk, excluding financial guarantee contracts, are excluded from disclosure because the carrying amounts best represent maximum exposure to credit risk.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

33. FINANCIAL RISK MANAGEMENT, Continued

(3) Liquidity risk

It is important for the Group to maintain adequate level of liquidity considering the Group's large-scale investments. The Group manages its liquidity risk to maintain adequate liquidity by constantly managing periodic projected cash flows through estimated required cash levels and cash flow management.

Accordingly, the Group estimates and manages required working capital, including required cash and cash equivalents. Funding is deposited and procured in banks at an amount greater than a predetermined level.

Meanwhile, the Group mitigates liquidity risk by contracting with financial institutions with respect to bank overdrafts or banking facility agreement.

Also, in the event of large investments in facilities, the Group manages liquidity risk using available cash reserves or long-term borrowings.

The following table shows in detail the contractual maturities of non-derivative financial liabilities. This table was prepared on the basis of earliest maturity date based on undiscounted cash flows of financial liabilities and includes all cash flows of principal and interest. Contractual maturity is based on the earliest date the Group could be required to make payment.

(In thousands of Korean won)

	December 31, 2021		December 31, 2020	
	Less than 1 year	1 year to 5 years	Less than 1 year	1 year to 5 years
Financial liabilities:				
Trade and other payables	₩ 892,026,689	-	632,588,367	-
Accrued expenses	540,551,816	-	352,568,848	-
Borrowings and corporate bond	464,000	-	909,729	-
Lease liabilities	149,014,065	312,583,282	125,977,965	238,795,878
Other financial liabilities	4,885,717	4,329,121	1,571,453	4,403,628
Subtotal	1,586,942,287	316,912,403	1,113,616,362	243,199,506
Financial guarantee agreement	10,000,000	-	10,000,000	-
Total	₩ 1,596,942,287	316,912,403	1,123,616,362	243,199,506

(4) Capital risk management

The Group's capital management objective is to maintain a sound capital structure. The Group uses the debt-to-equity ratio as an indicator to manage capital. This ratio is calculated by dividing total liabilities with total equity.

There was no change in the Group's capital risk management policy in comparison with the year ended December 31, 2020.

Debt-to-equity ratio of the Group as of December 31, 2021 and 2020, is as follows:

(In thousands of Korean won)

	December 31, 2021	December 31, 2020
Total debt	₩ 3,073,731,543	2,295,810,891
Total equity	7,443,700,632	6,859,108,164
Debt-to-equity ratio	41.30%	33.50%

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

34. RELATED-PARTY TRANSACTIONS:

(1) The Group's related parties as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	Ownership (%)	
	December 31, 2021	December 31, 2020
Entity with significant influence over the Group:		
Samsung Electronics Co., Ltd. and its subsidiaries	-	-
Associates:		
DongA.com Co., Ltd.	18.97	18.97
Dunet, Inc.	18.01	18.01
Korea Information Certificate Authority, Inc.	4.79	6.42
SERI Technologies, Inc.	29.00	29.00
iMarket Asia Co., Ltd.	40.56	40.56
CMC Corporation	30.00	30.00
Other related parties (*1):		
Samsung SDI Co., Ltd. and etc.	-	-

(*1) A large-scale business group affiliation (other related parties) does not correspond to the related parties defined in paragraph 9 of K-IFRS 1024. However, a large-scale business group affiliation designated by the Fair Trade Commission is a group classified as related party and in accordance with the resolution of the Securities and Futures Commission, is classified as a related party in accordance with the substantive relationship stipulated in paragraph 10 of K-IFRS 1024.

(2) Revenue and purchase transactions to related parties for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021	
	Revenue	Purchase (*1)
Entities with significant influence over the Group:		
Samsung Electronics Co., Ltd.	₩ 2,187,324,915	99,264,150
Samsung Display Co., Ltd.	178,780,550	7,168
Samsung Electronics Service Co., Ltd.	21,659,275	26,015
Samsung Electronics Sales Co., Ltd.	10,188,174	20,688
Samsung Electronics Logitech Corp.	121,987,485	-
Samsung Medison Co., Ltd.	1,615,660	67,468
Samsung Electronics America, Inc.	775,494,961	20,412,626
Samsung International, Inc.	282,906,235	209,846
Samsung Austin Semiconductor LLC.	148,951,414	-
Samsung Electronic Digital appliance S.A. de C.V	365,951,569	57,317
Samsung Electronics Ltd. (UK)	128,413,734	2,043,037
Samsung Electronics Hungarian Private Co. Ltd.	233,471,708	123,358
Samsung Electronics Europe Logistics	312,096,180	1,483,697
Samsung Electronics Slovakia s.r.o	57,028,252	22,836
Samsung India Electronics Private Ltd.	247,079,613	11,932
Thai Samsung Electronics Co., Ltd.	526,845,323	282,707
Samsung Display Vietnam Co., Ltd.	91,122,518	5,243
Samsung Electronics Vietnam	405,227,540	595,844
Samsung Electronics Vietnam THANGUYEN Co., Ltd.	455,270,459	464,638
Samsung Electronics HCMC CE Complex Co., Ltd.	248,460,878	480,505
Samsung (China) Semiconductor Co. Ltd.	342,128,051	71
Samsung Electronics da Amazonia Ltda	426,767,044	50,186,762
Others (*2)	2,056,392,334	78,972,419

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

34. RELATED-PARTY TRANSACTIONS, Continued

(2) Revenue and purchase transactions to related parties for the years ended December 31, 2021 and 2020, are as follows, Continued

(In thousands of Korean won)

	2021	
	Revenue	Purchase (*1)
Associates:		
iMarket Asia Co., Ltd.	₩ 1,072,649	138,703
DongA.com Co., Ltd.	222,478	-
Korea Information Certificate Authority, Inc.	200,000	189,430
SERI Technologies, Inc.	388,611	2,213,578
Total	₩ 9,627,047,610	257,280,038

(*1) The Group purchased machinery and other equipment of ₩13,955 million from Samsung Electronics Co., Ltd. for the year ended December 31, 2021.

(*2) Others consist of the subsidiaries of Samsung Electronics Co., Ltd.

(In thousands of Korean won)

	2020	
	Revenue	Purchase (*1)
Entities with significant influence over The Group:		
Samsung Electronics Co., Ltd.	₩ 2,181,488,462	65,008,153
Samsung Display Co., Ltd.	169,782,851	251,487
Samsung Electronics Service Co., Ltd.	23,897,154	10,401
Samsung Electronics Sales Co., Ltd.	7,333,610	64,757
Samsung Electronics Logitech Corp.	93,156,344	542,084
Samsung Medison Co., Ltd.	2,308,135	1,193,112
Samsung Electronics America, Inc.	640,257,852	33,750,106
Samsung International, Inc.	244,113,185	742,579
Samsung Austin Semiconductor LLC.	124,211,709	-
Samsung Electronic Digital appliance S.A. de C.V	248,413,488	53,377
Samsung Electronics Ltd. (UK)	94,114,137	326,031
Samsung Electronics Hungarian Private Co. Ltd.	133,102,806	226,310
Samsung Electronics Europe Logistics	287,377,933	2,826,148
Samsung Electronics Slovakia s.r.o	43,096,353	141,225
Samsung India Electronics Private Ltd.	195,431,736	57,721
Thai Samsung Electronics Co., Ltd.	300,724,295	132,221
Samsung Display Vietnam Co., Ltd.	88,027,637	-
Samsung Electronics Vietnam	261,387,488	735,582
Samsung Electronics Vietnam THAINGUYEN Co., Ltd.	326,826,303	1,859,540
Samsung Electronics HCMC CE Complex Co., Ltd	163,179,563	949,434
Samsung(China) Semiconductor Co. Ltd.	228,608,155	39,264
Samsung Electronics da Amazonia Ltda	408,542,428	5,338,035
Others (*2)	1,434,958,074	64,041,931
Associates:		
iMarket Asia Co., Ltd.	235,268	41,930
DongA.com Co., Ltd.	131,964	-
Korea Information Certificate Authority, Inc.	200,000	248,613
SERI Technologies, Inc.	27,451	2,014,958
Total	₩ 7,700,934,381	180,594,999

(*1) The Group purchased machinery and other equipment of ₩2,279 million from Samsung Electronics Co., Ltd. for the year ended December 31, 2020.

(*2) Others consist of the subsidiaries of Samsung Electronics Co., Ltd.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

34. RELATED-PARTY TRANSACTIONS, Continued

(2) Revenue and purchase transactions to related parties for the years ended December 31, 2021 and 2020, are as follows, Continued

Revenue and purchase transactions with other related parties for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021	
	Revenue	Purchase
Other related parties:		
Samsung SDI Co., Ltd.	₩ 160,063,004	55,677
Samsung Fire & Marine Insurance Co., Ltd.	162,100,304	14,996,025
Samsung Life Insurance Co., Ltd.	157,956,468	31,865,712
Samsung C&T Corporation	130,696,327	914,465
Others	1,012,707,132	71,113,040
Total	₩ 1,623,523,235	118,944,919

(In thousands of Korean won)

	2020	
	Revenue	Purchase
Other related parties:		
Samsung SDI Co., Ltd.	₩ 130,419,476	47,302
Samsung Fire & Marine Insurance Co., Ltd.	146,622,684	14,882,510
Samsung Life Insurance Co., Ltd.	153,972,598	31,132,468
Samsung C&T Corporation	103,188,068	8,340,155
Others	793,142,417	80,374,170
Total	₩ 1,327,345,243	134,776,605

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

34. RELATED-PARTY TRANSACTIONS, Continued

(3) Receivables from and payables to related parties as of December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021	
	Receivables	Payables (*2)
Entities with significant influence over The Group:		
Samsung Electronics Co., Ltd.	₩ 677,074,537	162,523,961
Samsung Display Co., Ltd.	35,845,324	4,281,592
Samsung Electronics Service Co., Ltd.	2,513,015	63,356
Samsung Electronics Sales Co., Ltd.	1,778,732	34,025
Samsung Electronics Logitech Corp.	14,586,878	68,314
Samsung Medison Co., Ltd.	30,322	10,760
Samsung Electronics America, Inc.	63,516,771	3,049,189
Samsung International, Inc.	35,090,443	13,939
Samsung Austin Semiconductor LLC.	24,037,674	674,863
Samsung Electronic Digital appliance S.A. de C.V	79,649,938	1,182,959
Samsung Electronics Ltd. (UK)	30,700,250	2,180,648
Samsung Electronics Hungarian Private Co. Ltd.	70,615,979	10,703
Samsung Electronics Europe Logistics	40,440,189	10,336
Samsung Electronics Slovakia s.r.o	13,526,141	48,069
Samsung India Electronics Private Ltd.	55,450,294	1,003,427
Thai Samsung Electronics Co., Ltd.	36,991,411	4,297,960
Samsung Display Vietnam Co., Ltd.	20,880,750	744,187
Samsung Electronics Vietnam	39,038,200	1,114,676
Samsung Electronics Vietnam THAINGUYEN Co., Ltd.	49,488,659	573,872
Samsung Electronics HCMC CE Complex Co., Ltd.	31,144,803	2,601,695
Samsung(China) Semiconductor Co. Ltd.	53,403,347	10,764,822
Samsung Electronics da Amazonia Ltda	50,725,520	7,530,327
Others (*1)	280,303,802	44,159,766
Associates:		
iMarket Asia Co., Ltd.	4,961	11,732
DongA.com Co., Ltd.	12,285	-
Korea Information Certificate Authority, Inc.	-	-
SERI Technologies, Inc.	53,020	-
Total	₩ 1,706,903,245	246,955,178

(*1) Others consist of the subsidiaries of Samsung Electronics Co., Ltd.

(*2) Lease liabilities of ₩33,981 million is included for the year ended December 31, 2021.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

34. RELATED-PARTY TRANSACTIONS, Continued

(3) Receivables from and payables to related parties as of December 31, 2021 and 2020, are as follows, Continued

(In thousands of Korean won)

	December 31, 2020	
	Receivables	Payables (*2)
Entities with significant influence over The Group:		
Samsung Electronics Co., Ltd.	₩ 651,270,208	85,296,046
Samsung Display Co., Ltd.	38,046,860	2,454,164
Samsung Electronics Service Co., Ltd.	4,998,556	63,546
Samsung Electronics Sales Co., Ltd.	406,833	46,638
Samsung Electronics Logitech Corp.	5,238,069	16,316
Samsung Medison Co., Ltd.	99,767	12,750
Samsung Electronics America, Inc.	20,156,421	215,278
Samsung International, Inc.	24,217,633	62,037
Samsung Austin Semiconductor LLC.	13,338,386	547,596
Samsung Electronic Digital appliance S.A. de C.V	13,144,358	66,961
Samsung Electronics Ltd. (UK)	21,776,513	3,470,831
Samsung Electronics Hungarian Private Co. Ltd.	35,780,721	23,639
Samsung Electronics Europe Logistics	42,749,447	27,464
Samsung Electronics Slovakia s.r.o	11,775,981	-
Samsung India Electronics Private Ltd.	50,334,828	723,051
Thai Samsung Electronics Co., Ltd.	31,642,434	3,353,457
Samsung Display Vietnam Co., Ltd.	13,957,392	341,215
Samsung Electronics Vietnam	28,648,841	1,230,989
Samsung Electronics Vietnam THAINGUYEN Co., Ltd.	26,970,331	940,340
Samsung Electronics HCMC CE Complex Co., Ltd.	19,875,645	1,002,767
Samsung(China) Semiconductor Co. Ltd.	30,386,063	2,900,187
Samsung Electronics da Amazonia Ltda	34,554,163	(514,075)
Others (*1)	187,088,004	36,588,789
Associates:		
iMarket Asia Co., Ltd.	7,202	4,872
DongA.com Co., Ltd.	7,128	64,908
Korea Information Certificate Authority, Inc.	-	261
SERI Technologies, Inc.	-	1,361
Total	₩ 1,306,471,784	138,941,388

(*1) Others consist of the subsidiaries of Samsung Electronics Co., Ltd.

(*2) Lease liabilities of ₩30,285 million are included for the year ended December 31, 2020.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

34. RELATED-PARTY TRANSACTIONS, Continued

(3) Receivables from and payables to related parties as of December 31, 2021 and 2020, are as follows, Continued
Receivables and payables to other related parties for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	December 31, 2021	
	Receivables (*1)	Payables (*2)
Other related parties:		
Samsung SDI Co., Ltd.	₩ 47,386,869	5,127,485
Samsung Fire & Marine Insurance Co., Ltd.	25,856,612	4,792,796
Samsung Life Insurance Co., Ltd.	9,389,652	2,357,431
Samsung C&T Corporation	59,703,968	7,030,757
Others	195,826,372	29,200,631
Total	₩ 338,163,473	48,509,100

(*1) Lease receivables of ₩11,173 million are included for the year ended December 31, 2021.

(*2) Lease liabilities of ₩1,396 million are included for the year ended December 31, 2021.

(In thousands of Korean won)

	December 31, 2020	
	Receivables (*1)	Payables (*2)
Other related parties:		
Samsung SDI Co., Ltd.	₩ 46,010,499	12,879,159
Samsung Fire & Marine Insurance Co., Ltd.	20,794,040	1,412,740
Samsung Life Insurance Co., Ltd.	10,373,368	1,651,104
Samsung C&T Corporation	76,319,752	5,849,996
Others	172,164,044	21,028,507
Total	₩ 325,661,703	42,821,506

(*1) Lease receivables of ₩16,212 million is included for the year ended December 31, 2020.

(*2) Lease liabilities of ₩573 million is included for the year ended December 31, 2020.

(4) Key management compensation

Key management compensations for the Group's registered executives for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021	2020
Short-term benefits	₩ 3,586,363	3,067,537
Other long-term benefits	2,893,265	1,822,384
Provision for severance indemnities	528,603	543,476
Total	₩ 7,008,231	5,433,397

Key management refers to the registered directors who have significant control and responsibilities over the Group's planning, operating and control activities.

(5) The Group recognized allowance for doubtful accounts of ₩268 thousand and ₩414,296 thousand with respect to receivables from related parties as of December 31, 2021 and 2020, respectively, and the Group recognized bad debt expense ₩414,028 thousand and ₩414,242 thousand for the years ended December 31, 2021 and 2020, respectively.

(6) For the years ended December 31, 2021 and 2020, the Group received dividends of ₩294 million and ₩1,707 million from related parties, respectively, and declared ₩74,250 million and ₩74,341 million of dividends to the related parties. As of December 31, 2021 and 2020, no dividends declared remains unpaid or received.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

35. EARNINGS PER SHARE:

(1) Basic earnings per share for the years ended December 31, 2021 and 2020, are as follows:

(In Korean won)

	<u>2021</u>	<u>2020</u>
Basic earnings per share	₩ 7,901	5,733

(2) Basic earnings per share

Net income and the weighted-average number of shares outstanding used in calculating basic earnings per share are as follows:

(In thousands of Korean won, except for share data)

	<u>2021</u>	<u>2020</u>
Net income	₩ 611,170,847	443,454,581
Weighted-average number of common shares outstanding (shares)	77,350,186	77,350,186

(3) Diluted earnings per share

Diluted earnings per share and basic earnings per share are identical as the Company did not issue potentially dilutive securities for the years ended December 31, 2021 and 2020.

36. APPROVAL OF CONSOLIDATED FINANCIAL STATEMENTS:

The consolidated financial statements of the Company as of and for the year ended December 31, 2021, approved for issue by the Board of Directors on January 27, 2022, are expected to be finally approved at the ordinary shareholders' meeting on March 16, 2022.

SAMSUNG SDS CO., LTD. AND ITS SUBSIDIARIES
 NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

As of and for the years ended December 31, 2021 and 2020

37. EMISSION RIGHTS AND LIABILITIES:

(1) The amount of free allocated gas emission (third planned period 2021-2025) as of December 31, 2021, is as follows:

(KAU)

Year of implementation	Quantity of emission rights allocated free of charge	
2021	KAU	93,044
2022		93,044
2023		93,044
2024		92,172
2025		92,172
Total	KAU	463,476

(2) The changes in the quantity of emission rights and the carrying value for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won, except for KAU)

	2021		2020	
	Quantity	Book value	Quantity	Book value
Beginning	KAU 25,590	₩ 359,915	KAU 21,485	₩ 359,915
Allocated free of charge	93,044	-	45,999	-
Disposal	(14,412)	(257,974)	-	-
Submit (*1)	(102,518)	-	(41,894)	-
Ending	KAU 1,704	₩ 101,941	KAU 25,590	₩ 359,915

(*1) The change in the quantity of emission rights for the current period is an estimate value, and the change in the quantity of emission rights for the previous period is the actual value.

No emission rights were provided as collateral by the Group as of December 31, 2021.

(3) Changes in emissions liabilities for the years ended December 31, 2021 and 2020, are as follows:

(In thousands of Korean won)

	2021	2020
Beginning	₩ -	-
Increase	101,941	-
Decrease	-	-
Ending (*1)	₩ 101,941	-

(*1) Emission liabilities are included current portion of provisions.