Daekyo Co., Ltd. and Subsidiaries

Consolidated Financial Statements December 31, 2021 and 2020

Daekyo Co., Ltd. and Subsidiaries Index December 31, 2021 and 2020

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Independent Auditor's Report

(English Translation of a Report Originally Issued in Korean)

To the Board of Directors and Shareholders of Daekyo Co., Ltd.

Opinion

We have audited the accompanying consolidated financial statements of Daekyo Co., Ltd. and its subsidiaries (collectively referred to as the "Group"), which comprise the consolidated statements of financial position as at December 31, 2021 and 2020, and the consolidated statements of profit or loss, consolidated statements of comprehensive income, consolidated statements of changes in equity and consolidated statements of cash flows for the years then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as at December 31, 2021 and 2020, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards as adopted by the Republic of Korea (Korean IFRS).

Basis for Opinion

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

Emphasis of Matter

Without modifying our opinion, we draw attention to Note 3 to the consolidated financial statements of the Group. Note 3 to the consolidated financial statements describes uncertainty relating to the impact of Coronavirus disease 2019 (COVID-19) on the educational service business, such as the learning center business and weekly home-school materials of the Group. These matters do not affect our opinion.

Key Audit Matters

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

(1) Impairment assessment of internally generated development costs

Why it is determined to be a key audit matter

As described in the Note 16 to the consolidated financial statements, the Group recognizes development costs which meet certain conditions defined in Korean IFRS 1038 *Intangible Assets*,

reviews to determine whether there is any indication of impairment in accordance with Korean IFRS 1036 *Impairment of Assets*, and performs an impairment test if there is an indication of impairment.

We focused on this area because estimates of recoverable amount of internally generated development costs involved with a significant level of judgments and estimations based on management's assumptions.

How our audit addressed the Key Audit Matter

We have performed the following audit procedures for the key audit matter:

- Obtained an understanding of the control related to the Group's development cost impairment assessment and tested design and operating effectiveness of controls.
- Evaluated the appropriateness of measurement method used for impairment tests
- Evaluated the reasonableness of key assumptions such as sales forecasts, operating income, discount rates and others
- Evaluated the reasonableness of key assumptions such as sales forecasts, operating income, discount rates and others used to estimate recoverable amount.
- Evaluated the competence and independence of the expert who involved in valuation of recoverable amount by management.

(2) Impairment assessment of goodwill related to subsidiary cash-generating unit ("CGU")

Why it is determined to be a key audit matter

As described in the Note 16 to the consolidated financial statements, goodwill in relation to the subsidiary CGU held by the Group as at December 31, 2021 amounts to $\mbox{$W$}$ 25,813 million, which is significant to the consolidated financial statements. The Group performs an impairment test for goodwill annually, and an impairment loss is recognized if the recoverable amount (the higher of the value in use or the fair value less costs for disposal) less than the carrying amount.

We determined the related goodwill impairment assessment as key audit matter because the size of goodwill amount (December 31, 2021: \(\psi \) 23,367 million) related to Eduvation Co., Ltd., Daekyo Educamp Co., Ltd. and KNOWRE AMERICAS, INC. is significant, and the future estimated cash flow requires the management's judgement on the future business estimation and discount rates and others for the valuation of recoverable amount.

How our audit addressed the Key Audit Matter

We have performed the following audit procedures for the key audit matter:

- Evaluated the competence and independence of the expert who involved in valuation of recoverable amount by management.
- Assessed the appropriateness of valuation models used by management to estimate the recoverable amounts.
- Compared the cash flow forecasts used in the impairment models to forecasts in the business plan approved by management.
- Assessed the reasonableness of the key assumptions used for the recoverable amounts estimation.
- Evaluated the results of a sensitivity analysis on the discount rates and others performed by

- management to assess the impact of changes in key assumptions on the impairment tests.
- Compared the discount rate computed independently using the observable information with the discount rate applied by management.

In addition, we included internal specialists with expertise in valuation model in the engagement team. The internal specialists evaluated the underlying data and assumptions used in cash flow estimates and reviewed reasonableness of assumptions and valuation methods used in fair value measurement.

Other Matter

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

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

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

In preparing the consolidated financial statements, management is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations.

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

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

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

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

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit
 procedures that are appropriate in the circumstances, but not for the purpose of expressing an
 opinion on the effectiveness of the entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

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

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

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

The engagement partner on the audit resulting in this independent auditor's report is Dongki Song, Certified Public Accountant.

Seoul, Korea March 17, 2022

This report is effective as of March 17, 2022, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

Daekyo Co., Ltd. and Subsidiaries Consolidated Statements of Financial Position December 31, 2021 and 2020

(in Korean won)	Notes	2021	2020
Assets			
Current assets			
Cash and cash equivalents	4,5,7,8	51,199,968,615	45,417,122,807
Financial deposits	4,5,7,8,30	11,950,166,863	21,669,801,390
Trade receivables	4,5,7,9,42	16,994,497,439	13,774,232,195
Other receivables	4,5,7,9,42	14,460,502,456	7,728,621,449
Contract assets	10	2,650,037,134	2,111,365,205
Financial assets at fair value through profit or loss	5,7,9	101,243,698,300	106,331,129,321
Inventories	11	18,258,073,822	15,632,831,769
Current tax assets		303,832,408	3,226,041,110
Other current assets	12	7,863,538,703	4,324,925,750
		224,924,315,740	220,216,070,996
Non-current assets			
Trade receivables	4,5,7,9,42	1,006,862,500	-
Other receivables	5,7,9,42	31,385,224,826	37,092,403,255
Contact assets	10	4,231,899,289	7,074,124,990
Financial assets at fair value through profit or loss	5,7,9	21,329,700,598	25,282,581,906
Financial assets at fair value through other comprehensive income	5,7,9	57,323,716,691	54,093,589,441
Investments in associates	13	15,074,274,984	11,387,347,336
Property, plant and equipment	14	138,075,286,981	143,373,017,966
Investment properties	15	143,425,157,707	146,929,413,402
Intangible assets	16	78,736,955,925	91,666,450,589
Right-of-use assets	17	70,475,451,023	77,425,184,666
Deferred tax assets	23	27,565,750,876	30,610,791,622
Other non-current assets	12	11,935,640	11,000,000
		588,642,217,040	624,945,905,173
Total assets		813,566,532,780	845,161,976,169

Daekyo Co., Ltd. and Subsidiaries Consolidated Statements of Financial Position December 31, 2021 and 2020

(in Korean won)	Notes	2021	2020
Liabilities			
Current liabilities			
Trade payables	4,5,7,42	5,772,839,522	4,162,313,454
Other payables	4,5,7,18,42	77,228,475,346	62,069,865,558
Contract liabilities	10	45,384,844,029	44,057,696,737
Borrowings	4,5,7,19,42	15,261,900,214	21,919,255,598
Lease liabilities	4,17	23,827,946,140	24,337,548,984
Income tax payable		164,758,050	253,789,695
Provisions	20	5,537,126,961	13,771,436,753
Other current liabilities	21	10,354,049,548	7,368,461,700
		183,531,939,810	177,940,368,479
Non-current liabilities			
Other payables	4,5,7,18,30	40,949,878,919	31,001,864,068
Contract liabilities	10	917,677,181	325,218,552
Borrowings	4,5,7,19,42	9,307,102,815	8,202,179
Lease liabilities	4,17	44,801,240,403	51,156,935,601
Net defined benefit liability	22	5,287,294,350	13,274,638,063
Provisions	20	7,734,038,370	5,101,892,373
Deferred tax liabilities	23	4,635,514,291	7,466,327,738
		113,632,746,329	108,335,078,574
Total liabilities		297,164,686,139	286,275,447,053
Equity			
Share capital	24	52,064,920,000	52,064,920,000
Reserves	25	74,606,093,338	74,571,683,663
Other components of equity	26,27,28	(145,214,840,437)	(136,182,223,264)
Accumulated other comprehensive income		26,310,977,251	20,393,900,757
Retained earnings	29	498,447,036,464	544,499,378,982
Equity attributable to owners of the Parent Company		506,214,186,616	555,347,660,138
Non-controlling interest			
Non-controlling interest		10,187,660,025	3,538,868,978
Total equity		516,401,846,641	558,886,529,116
Total liabilities and equity		813,566,532,780	845,161,976,169

Daekyo Co., Ltd. and Subsidiaries Consolidated Statements of Profit or Loss Years Ended December 31, 2021 and 2020

(in Korean won)	Notes	2021	2020
Sales	6,31,42	638,394,752,559	627,005,589,815
Cost of sales	33,42	545,820,729,436	542,718,015,868
Gross profit		92,574,023,123	84,287,573,947
Selling and administrative expenses Bad debt expense	32,33,42 4	119,522,152,455 1,364,262,689	111,706,299,841 608,207,468
Operating loss		(28,312,392,021)	(28,026,933,362)
Other income Other expenses Other bad debt expense Share of loss of associates Interest income Other finance income Finance costs Loss before income tax Income tax expense (benefit) Loss for the year	34,42 35,42 4 13 36 37	12,568,891,400 27,327,150,717 1,229,428 (1,126,724,003) 2,125,606,832 841,058,808 3,171,743,403 (44,403,682,532) (1,955,204,532) (42,448,478,000)	19,718,202,934 31,578,564,349 69,167,310 (88,333,755) 2,235,445,865 1,395,725,951 1,442,672,592 (37,856,296,618) (19,674,695,225) (18,181,601,393)
Profit (loss) for the year attributable to: Owners of the Parent Company Non-controlling interests		(43,634,321,834) 1,185,843,834	(17,563,751,822) (617,849,571)
Basic earnings (losses) per share attributable to the equity holders of the Parent Company:	39		
Basic losses per share for ordinary shares Basic earnings per share for preferred shares		(650) 90	(274) 106
Diluted earnings (losses) per share attributable to the equity holders of the Parent Company:	39		
Diluted losses per share for ordinary shares Diluted earnings per share for preferred shares		(650) 90	(274) 104

Daekyo Co., Ltd. and Subsidiaries Consolidated Statements of Comprehensive Income Years Ended December 31, 2021 and 2020

(in Korean won)	Notes	2021	2020
Loss for the year Other comprehensive income		(42,448,478,000)	(18,181,601,393)
Items that will not be reclassified to profit or loss Gain (loss) on valuation of debt instruments at fair value through other comprehensive income Remeasurements of the net defined benefit liability	22,23,29	6,546,753,872 1,543,990,059	(14,748,092,628) (80,211,311)
Items that may be subsequently reclassified to profit or loss Currency translation differences	,,	2,509,815,361	(1,684,446,276)
Other comprehensive income (loss) for the year, net of tax Total comprehensive loss for the year		10,600,559,292 (31,847,918,708)	(16,512,750,215) (34,694,351,608)
Total comprehensive income (loss) for the year is attributable to:			
Owners of the Parent Company Non-controlling interest		(33,345,542,344) 1,497,623,636	(33,923,111,861) (771,239,747)

(in Korean won)			Attributa	=				
	Notes	Share capital	Reserves	Other components of equity	Accumulated other comprehensive income	Retained earnings	Non-controlling interest	Total equity
Balance at January 1, 2020		52,064,920,000	73,605,009,933	(125,861,803,039)	36,696,357,046	572,478,813,984	4,243,250,476	613,226,548,400
Comprehensive income (loss)								
Loss for the year						(17,563,751,822)	(617,849,571)	(18,181,601,393)
Loss on valuation of equity instruments at fair value through		-	_	_	_	(17,000,701,022)	(017,043,071)	(10,101,001,000)
other comprehensive income					(14,748,092,628)			(14,748,092,628)
Currency translation differences					(1,554,363,661)		(130,082,615)	(1,684,446,276)
Remeasurement of net defined benefit liability		_	_		(1,001,000,001)	(56,903,750)	(23,307,561)	(80,211,311)
Transactions with owners		-	_	_	_	(50,505,750)	(20,007,001)	(00,211,011)
Dividends	29,40					(6,167,731,180)		(6,167,731,180)
Interim dividends	29,40					(4,191,048,250)		(4,191,048,250)
Changes in scope of consolidation	-, -	_	_			(1,101,010,200)	96.941.298	96.941.298
Increase in other components of equity		-	_	873,545,243	_	-	30,341,230	873.545.243
Dividends of subsidiaries		•		073,343,243	•		(301,305,193)	(301,305,193)
Issuance of shares of subsidiaries		•	-	-		-	271,222,144	271,222,144
Increase in other reserves			1,166,400,000			-	21 1,222,144	1,166,400,000
	28	•	1,100,400,000	(12,222,775,075)		-		(12,222,775,075)
Acquisition of treasury share Disposal of treasury share	28	•	(199,726,270)	1,372,209,342		-		1,172,483,072
· · · · · · · · · · · · · · · · · · ·	27		(199,720,270)	(343,399,735)		-	-	(343,399,735)
Stock options Balance at December 31, 2020	21	52.064.920.000	74,571,683,663	(136,182,223,264)	20.393.900.757	544,499,378,982	3.538.868.978	558,886,529,116
Balance at December 31, 2020		32,004,920,000	74,371,003,003	(130,102,223,204)	20,393,900,737	344,459,370,902	3,336,606,976	330,000,329,110
Balance at January 1, 2021		52,064,920,000	74,571,683,663	(136,182,223,264)	20,393,900,757	544,499,378,982	3,538,868,978	558,886,529,116
Comprehensive income (loss)								
Profit (loss) for the year		-	-	-	-	(43,634,321,834)	1,185,843,834	(42,448,478,000)
Gain on valuation of equity instruments at fair value through other								
comprehensive income		-	-	-	6,546,753,872	-	-	6,546,753,872
Disposal of equity instruments at fair value through								
other comprehensive income		-	-	-	-2,843,276,546	2,843,276,546	-	-
Currency translation differences		-	-	-	2,213,599,168	-	296,216,193	2,509,815,361
Remeasurement of net defined benefit liability		-	-	-	-	1,528,426,450	15,563,609	1,543,990,059
Transactions with owners								
Dividends	29,40	-	-	-	-	(4,293,192,440)	-	(4,293,192,440)
Interim dividends	29,40	-	-	-	-	(2,496,531,240)	-	(2,496,531,240)
Decrease in other components of equity		-	-	(9,260,957,915)	-	-	-	(9,260,957,915)
Dividends of subsidiaries		-	-	-	-	-	(168,540,358)	(168,540,358)
Acquisition of non-controlling interest		-	70,292,231	-	-	-	5,319,707,769	5,390,000,000
Decrease in other reserves		-	(2,125,200)	-	-	-	-	(2,125,200)
Acquisition of treasury share	28	-	-	(183,345,243)	-	-	-	(183,345,243)
Disposal of treasury share	28	-	(33,757,356)	699,095,586	-	-	-	665,338,230
Stock options	27			(287,409,601)				(287,409,601)
Balance at December 31, 2021		52,064,920,000	74,606,093,338	(145,214,840,437)	26,310,977,251	498,447,036,464	10,187,660,025	516,401,846,641

Daekyo Co., Ltd. and Subsidiaries Consolidated Statements of Cash Flows Years Ended December 31, 2021 and 2020

(in Korean won)	Notes	2021	2020
Cash flows from operating activities			
Cash generated from operations	41	42,306,027,477	32,760,047,741
Dividends received		3,895,053,394	6,041,756,613
Interest received		910,076,616	949,177,587
Interest paid		(2,367,341,890)	(3,115,696,644)
Income tax paid (refund)		1,678,601,936	(5,979,018,410)
Net cash inflow from operating activities		46,422,417,533	30,656,266,887
Cash flows from investing activities			
Decrease in financial deposits		19,587,642,654	19,140,059,634
Proceeds from disposal of financial assets at fair value		, , ,	,,,
through profit or loss		92,234,247,693	47,179,655,058
Proceeds from disposal of financial assets at fair value			
through other comprehensive income		5,406,289,079	-
Decrease in other receivables		16,636,823,801	21,545,029,702
Proceeds from disposal of investments in associates		79,498,235	11,459,033,814
Proceeds from disposal of property, plant and equipment		119,336,662	224,917,689
Proceeds from disposal of intangible assets		291,151,645	1,298,529,846
Government grants received		238,000,000	-
Acquisition of business		-	1,581,695,137
Increase in financial deposits		(9,796,641,312)	(13,119,241,014)
Acquisition of financial assets at fair value through			
profit or loss		(96,962,108,088)	(40,136,914,918)
Increase in other receivables		(11,785,118,590)	(17,187,847,562)
Acquisition of investments in associates		(5,151,527,000)	(2,303,047,535)
Acquisition of property, plant and equipment		(10,144,311,347)	(14,521,285,144)
Acquisition of intangible assets		(6,468,688,886)	(15,801,904,000)
Cash flow due to loss of control		(13,372,662)	(406,067,557)
Acquisition of business	•	(3,864,777,806)	(4.047.200.050)
Net cash outflow from investing activities	•	(9,593,555,922)	(1,047,386,850)
Cash flows from financing activities	40		
Issuance of shares of subsidiaries		-	271,222,144
Proceeds from borrowings		1,025,495,707	2,008,974,644
Acquisition of treasury shares		(183,345,243)	(12,222,775,075)
Dividends of subsidiaries		(168,540,358)	(301,305,193)
Acquisition of non-controlling interest		(605,992,401)	-
Dividends paid		(6,789,723,680)	(10,358,779,430)
Repayments of borrowings		(199,138,628)	(1,833,862,320)
Repayments of lease liabilities		(24,774,353,280)	(25,609,436,892)
Net cash outflow from financing activities		(31,695,597,883)	(48,045,962,122)
Net increase (decrease) in cash and cash equivalents		5,133,263,728	(18,437,082,085)
Cash and cash equivalents at the beginning of the year		45,417,122,807	64,028,732,954
Exchange gains (losses) on cash and cash equivalents		649,582,080	(174,528,062)
Cash and cash equivalents at the end of the year		51,199,968,615	45,417,122,807

1. General Information

Daekyo Co., Ltd. (the Company) and its subsidiaries (collectively referred to as the "Group") are engaged in educational and cultural work. The Company was incorporated in December 1986, to engage in the publication, manufacturing, and sales of home-school materials. The Company, as an education and culture company, provides various products and educational services such as the Noonnoppi education, pre-school education, publishing, educational institutions, home-based teaching, on-line education, and after-school teaching.

In February 2004, the Company listed its shares on the KRX KOSPI Market of the Korean Exchange. As at December 31, 2021, the majority shareholder, Daekyo Holdings Co., Ltd. owns 54.5% of the Company.

1.1 Consolidated Subsidiaries

		Percentage of ownership (%)							
			2021			2020			
			Interest			Interest			
			owned by	Non-		owned by	Non-		
		Controlling	subsidiary	controlling	•	subsidiary	controlling	Closing	Major
Subsidiaries	Location	interest (%)	(%)	interest (%)	interest (%)	(%)	interest (%)	Month	Business
Daekyo Edupia Co., Ltd. ¹	Korea	-	-	-	98.64	-	1.36	December	Education
Eduvation Inc.	Korea	100.00	-	-	100.00	-	-	December	Service for
									educational
Teuni Teuni Co., Ltd.	Korea	_						December	institutes Education
(formerly, TN Holdings Co.,	Noiea		-	-	100.00	-	-	December	Education
Ltd.) ⁵									
Teuni World Co., Ltd⁵	Korea	-	-	-	-	100.00	-	December	Education
Daekyo EduCamp Co., Ltd. ⁶	Korea	99.98	-	0.02	99.95	-	0.05	December	Education
DK ULSAN Co., Ltd.	Korea	-	100.00	-	_	100.00	-	December	Education
Daekyo CSA Co., Ltd.	Korea	70.00	-	30.00	70.00	-	30.00	December	Education
Daekyo America, Inc.	USA	50.06	-	49.94	50.06	-	49.94	December	Education
Daekyo Hong Kong Co., Ltd. ²	China	47.89	-	52.11	47.89	-	52.11	December	Education
Shen Zhen Daekyo	China	-	100.00	-	-	100.00	-	December	Education
Consulting Services									
Company Limited	Molovojo							December	Education
Daekyo Malaysia Sdn. Bhd.	Malaysia	100.00	-	-	100.00	-	-		
EYE LEVEL SDN.BHD	Malaysia	-	51.00	49.00	-	51.00	49.00		Education
Shanghai Daekyo Co., Ltd.	China	100.00	-	-	100.00	-	-	December	Education
P.T Daekyo Indonesia	Indonesia	69.83	-	30.17	69.83	-	30.17	December	Education
Daekyo Enopi Singapore PTE Ltd.	Singapore	70.00	-	30.00	70.00	-	30.00	December	Education
EYE LEVEL HUB LLC.	USA	50.06	_	49.94	50.06	_	49.94	December	Lease
Daekyo India Private Limited	India	100.00	_	-	100.00	_	_	March	Education
Daekyo UK Co.,Ltd. ³	UK	100.00	_	_	100.00	_	_	December	Education
Changchun Daekyo Consulting Co., Ltd. ⁴	China	-	-	-	100.00	-	-	December	Education

	Percentage of ownership (%)								
			2021			2020			
			Interest			Interest	_		
			owned by	Non-		owned by	Non-		
		Controlling	subsidiary	controlling	Controlling	subsidiary	controlling	Closing	Major
Subsidiaries	Location	interest (%)	(%)	interest (%)	interest (%)	(%)	interest (%)	Month	Business
Changchun Daekyo Consulting Co., Ltd	China	-	-	-	-	100.00	-	December	Education
KnowRe Americas, Inc. ⁶	USA	79.01	-	20.99	78.14	-	21.86	December	Development and supply of software
KnowRe Korea, Inc.	Korea	-	100.00	-	-	100.00	-	December	Development and supply of software
Truston Private Securities Investment Trust 4	Korea	100.00	-	-	100.00	-	-	December	Investment
DIFINITION, INC. ⁷	Korea	51.00	-	49.00	-	-	-	December	Development and supply of software
KIDS SCHOLE ⁷	Korea	100.00	-	-	-	-	-	December	Book Sales

¹ The Group lost its control over the entity as the entity was declared bankrupt during 2020, and it was liquidated during 2021.

² Although the Group has less than 50% of the voting power in the investee, it is included in subsidiary as the Group has a right to appoint its Board of Directors.

³ The Group resolved to liquidate the entities at the Board of Directors' meeting during 2020.

⁴ The entity was liquidated during 2021.

⁵ The entities were merged with Daekyo EduCamp Co., Ltd. during 2021.

⁶ The entities were additionally acquired during 2021.

⁷ The entities were newly acquired during 2021.

1.2 Summary of Financial Information of Consolidated Subsidiaries

Summarized statements of financial position and comprehensive income of consolidated subsidiaries as at and for the years ended December 31, 2021 and 2020, is as follows:

(in millions of Korean won)		2021		2020			
_	Assets	Liabilities	Equity	Assets	Liabilities	Equity	
Eduvation Inc.	5,819	1,277	4,542	5,689	931	4,758	
Teuni Teuni Co., Ltd. and its							
subsidiaries ¹	-	-	-	20,645	4,517	16,128	
Daekyo EduCamp Co., Ltd. and its							
subsidiaries	30,982	21,398	9,584	19,025	9,636	9,389	
Daekyo CSA Co., Ltd.	12	-	12	13	-	13	
Daekyo America, Inc.	5,142	4,292	850	4,487	5,220	(733)	
Daekyo Hong Kong Co., Ltd. and its							
subsidiaries	8,886	1,273	7,613	7,350	1,043	6,307	
Daekyo Malaysia Sdn. Bhd. and its							
subsidiaries	2,193	926	1,267	1,896	816	1,080	
Shanghai Daekyo Co., Ltd.	757	1,423	(666)	1,003	1,260	(257)	
P.T Daekyo Indonesia	487	3,356	(2,869)	599	3,128	(2,529)	
Daekyo Enopi Singapore PTE Ltd.	881	2,332	(1,451)	690	2,317	(1,627)	
EYE LEVEL HUB LLC	25,064	26,017	(953)	22,856	24,143	(1,287)	
Daekyo India Private Limited	454	460	(6)	788	459	329	
Daekyo UK Co., Ltd.	20	-	20	199	163	36	
Changchun Daekyo Consulting Co.,							
Ltd. and its subsidiaries	-	-	-	142	-	142	
KnowRe Americas, Inc. and its							
subsidiaries	2,718	2,589	129	3,485	2,996	489	
Truston Private Securities Investment							
Trust 4	5,675	118	5,557	5,109	41	5,068	
DIFINITION, INC. ²	11,992	1,455	10,537	-	-	-	
KIDS SCHOLE ²	15,182	8,326	6,856	-	-	-	

¹ The entities were merged with Daekyo EduCamp Co., Ltd during 2021.

² The entities were newly acquired during 2021.

(in millions of Korean won)		2021			2020	
·			Comprehensive			Comprehensive
<u>_</u>	Sales	Profit (loss)	income (loss)	Sales	Profit (loss)	income (loss)
Daekyo Edupia Co., Ltd. ¹	-	-	-	2,919	159	159
Eduvation Inc.	5,279	(218)	(216)	4,044	(499)	(507)
Teuni Teuni Co., Ltd. and its subsidiaries ²	1,879	(956)	(956)	7,045	(3,559)	(3,550)
Daekyo EduCamp Co., Ltd. and its subsidiaries	18,486	(18,112)	(18,256)	10,609	(6,254)	(6,262)
Daekyo CSA Co., Ltd.	-	-	-	-	-	-
Daekyo America, Inc.	6,344	1,591	1,582	6,463	202	281
Daekyo Hong Kong Co., Ltd.	5,577	1,069	1,628	3,860	(1,126)	(1,434)
Daekyo Malaysia Sdn. Bhd.						
and its subsidiaries	1,350	126	187	1,477	(50)	(100)
Shanghai Daekyo Co., Ltd.	698	(509)	(554)	734	(146)	(144)
P.T Daekyo Indonesia	436	(148)	(340)	372	(257)	(76)
Daekyo Enopi Singapore PTE						
Ltd.	1,595	276	176	1,174	(7)	65
EYE LEVEL HUB LLC.	3,833	434	334	3,990	(32)	51
Daekyo India Private Limited	123	(347)	(333)	143	(338)	(375)
Daekyo UK Co., Ltd. Changchun Daekyo Consulting Co., Ltd. and its	-	(19)	(16)	64	(176)	(178)
subsidiaries ³	-	(1)	(21)	24	(393)	(380)
KnowRe Americas, Inc. and						
its subsidiaries	8,487	(422)	(416)	9,002	561	440
Truston Private Securities						
Investment Trust 4	-	501	501	-	111	111
DIFINITION, INC.4	-	(463)	(463)	-	-	-
KIDS SCHOLE ⁴	3,053	85	12	-	-	-

¹ Financial performance before the loss of control during 2020.

1.3 Change in the Scope of Consolidation

Subsidiaries

Subsidiaries newly included in the consolidation for the year ended December 31, 2021:

Gabolalario	11000011
DIFINITION, INC.	Obtained a control by incorporation
KIDS SCHOLE	Obtained a control by acquisition of new shares

Reason

² The entities were merged with Daekyo EduCamp Co., Ltd during 2021. The information of profit or loss is financial performance before merger.

³ The entities were liquidated during 2021. The information of profit or loss is financial performance before liquidation.

⁴ The entities were newly acquired during 2021. The information of profit or loss is financial performance after acquisition.

Subsidiaries excluded from the consolidation for the year ended December 31, 2021:

Subsidiaries Reason

Changchun Daekyo Consulting Co., Ltd. Loss of control due to liquidation

2. Significant Accounting Policies

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

2.1 Basis of Preparation

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

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

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

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

- · Certain financial assets and liabilities (including derivative instruments)
- · assets held for sale measured at fair value less costs to sell, and
- · defined benefit pension plans plan assets measured at fair value

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

2.2 Changes in Accounting Policies and Disclosures

2.2.1 New and amended standards and interpretation adopted by the Group

The Group has applied the following standards and interpretation for the first time for their annual reporting period commencing January 1, 2021.

(a) Amendments to Korean IFRS 1109 Financial Instruments, Korean IFRS 1039 Financial Instruments: Recognition and Measurement, Korean IFRS 1107 Financial Instruments: Disclosure, Korean IFRS 1104 Insurance Contracts and Korean IFRS 1116 Lease – Interest Rate Benchmark Reform (Phase 2 amendments)

In relation to interest rate benchmark reform, the amendments provide exceptions including adjust effective interest rate instead of book amounts when interest rate benchmark of financial instruments at amortized costs is replaced, and apply hedge accounting without discontinuance although the interest rate benchmark is replaced in hedging relationship. The amendment does not have a significant impact on the financial statements.

(b) Amendment to Korean IFRS 1116 Lease - Covid-19 - Related Rent Concessions beyond June 30. 2021

The application of the practical expedient, a lessee may elect not to assess whether a rent concession occurring as a direct consequence of the COVID-19 pandemic is a lease modification, is extended to lease payments originally due on or before June 30, 2022. The amendment should be applied for annual periods beginning on or after April 1, 2021, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

2.2.2 New standards and interpretations not yet adopted by the Group

The following new accounting standards and interpretations have been published that are not mandatory for December 31, 2021 reporting periods and have not been early adopted by the Group.

(a) Amendments to Korean IFRS 1103 Business Combination – Reference to the Conceptual Framework

The amendments update a reference of definition of assets and liabilities qualify for recognition in revised Conceptual Framework for Financial Reporting. However, the amendments add an exception for the recognition of liabilities and contingent liabilities within the scope of Korea IFRS 1037 *Provisions, Contingent Liabilities and Contingent Assets*, and Korean IFRS 2121 *Levies*. The amendments also confirm that contingent assets should not be recognized at the acquisition date. The amendments should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

(b) Amendments to Korean IFRS 1016 Property, Plant and Equipment - Proceeds before intended use

The amendments prohibit an entity from deducting from the cost of an item of property, plant and equipment any proceeds from selling items produced while the entity is preparing the asset for its intended use. Instead, the entity will recognize the proceeds from selling such items, and the costs of producing those items, in profit or loss. The amendments should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The Group is in review for the impact of these amendments on the financial statements.

(c) Amendments to Korean IFRS 1037 Provisions, Contingent Liabilities and Contingent Assets - Onerous Contracts: Cost of Fulfilling a Contract

The amendments clarify that the direct costs of fulfilling a contract include both the incremental costs of fulfilling the contract and an allocation of other costs directly related to fulfilling contracts when assessing whether the contract is onerous. The amendments should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

(d) Amendments to Korean IFRS 1001 Presentation of Financial Statements - Classification of Liabilities as Current or Non-current

The amendments clarify that liabilities are classified as either current or non-current, depending on the substantive rights that exist at the end of the reporting period. Classification is unaffected by the likelihood that an entity will exercise right to defer settlement of the liability or the expectations of management. Also, the settlement of liability includes the transfer of the entity's own equity instruments, however, it would be excluded if an option to settle them by the entity's own equity instruments if compound financial instruments is met the definition of equity instruments and recognized separately from the liability. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group is in review for the impact of these amendments on the financial statements.

(e) New Standard: Korean IFRS 1117 Insurance Contract

Korean IFRS 1117 *Insurance Contracts* replaces Korean IFRS 1104 *Insurance Contracts*. This Standard estimates future cash flows of an insurance contract and measures insurance liabilities using discount rates applied with assumptions and risks at the measurement date. The entity recognizes insurance revenue on an accrual basis including services (insurance coverage) provided to the policyholder by each annual period. In addition, investment components (Refunds due to termination/maturity) repaid to a policyholder even if an insured event does not occur, are excluded from insurance revenue, and insurance financial income or expense and the investment income or expense are presented separately to enable users of the information to understand the sources of income or expenses. This Standard should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted for entities that applied Korean IFRS 1109 *Financial Instruments*. The Group does not expect that these amendments have a significant impact on the financial statements.

(f) Korean IFRS 1001 Presentation of Financial Statements - Disclosure of Accounting Policies

The amendments to Korean IFRS 1001 define and require entities to disclose their material accounting policies. The IASB amended IFRS Practice Statement 2 *Disclosure of Accounting Policies* to provide guidance on how to apply the concept of materiality to accounting policy disclosures.

The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group is in review for the impact of these amendments on the financial statements.

(g) Korean IFRS 1008 Accounting policies, changes in accounting estimates and errors - Definition of Accounting Estimates

The amendments define accounting estimates and clarify how to distinguish them from changes in accounting policies. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

(h) Korean IFRS 1012 Income Taxes - Deferred Tax related to Assets and Liabilities arising from a Single Transaction

The amendments include an additional condition to the exemption to initial recognition of an asset or liability that a transaction does not give rise to equal taxable and deductible temporary differences at the time of the transaction. The amendments should be applied for annual periods beginning on or after January 1, 2023, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

(i) Annual improvements to Korean IFRS 2018-2020

Annual improvements of Korean IFRS 2018-2020 Cycle should be applied for annual periods beginning on or after January 1, 2022, and earlier application is permitted. The Group does not expect that these amendments have a significant impact on the financial statements.

- Korean IFRS 1101 First time Adoption of Korean International Financial Reporting Standards – Subsidiaries that are first-time adopters
- Korean IFRS 1109 Financial Instruments Fees related to the 10% test for derecognition of financial liabilities
- · Korean IFRS 1116 Leases Lease incentives
- · Korean IFRS 1041 Agriculture Measuring fair value

2.3 Consolidation

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

(a) Subsidiaries

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

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

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

Intercompany transactions, balances and unrealized gains on transactions between group companies are eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

(b) Changes in ownership interests in subsidiaries without change of control

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

(c) Disposal of subsidiaries

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

recognized in profit or loss.

(d) Associates

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

2.4 Segment Reporting

The Group's operating segments are disclosed by entities reported to chief operating decision maker, the representative director, disclosures related to segment reporting are disclosed in 'Note 6' in accordance with Korean IFRS 1108 Segment Reporting.

2.5 Foreign Currency Translation

(a) Functional and presentation currency

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

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions or valuation where items are re-measured. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in profit or loss, except when deferred in other comprehensive income as qualifying cash flow hedges.

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

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

2.6 Financial Assets

(a) Classification

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

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

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

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

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

(b) Measurement

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

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

A. Debt instruments

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

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

B. Equity instruments

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

Changes in the fair value of financial assets at fair value through profit or loss are recognized in 'other income and expenses' in the statement of profit or loss as applicable. Impairment loss (reversal of impairment loss) on equity investments measured at fair value through other

comprehensive income are not reported separately from other changes in fair value.

(c) Impairment

The Group assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortized cost and fair value through other comprehensive income. The impairment methodology applied depends on whether there has been a significant increase in credit risk. For trade receivables, the Group applies the simplified approach, which requires expected lifetime credit losses to be recognized from initial recognition of the receivables (Note 4.1.2 provides more detail of how the Group determines there has been a significant increase in credit risk.)

(d) Recognition and derecognition

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

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

(e) Offsetting of financial instruments

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

2.7 Derivative Instruments

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

2.8 Trade Receivables

Trade receivables are recognized initially at the amount of consideration that is unconditional, unless they contain significant financing components when they are recognized at fair value. Trade receivables are subsequently measured at amortized cost using the effective interest method, less loss allowance. See Note 9 for further information about the Group's accounting for trade receivables and Note 4.1.2 for description of the Group's impairment policies.

2.9 Inventories

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

2.10 Non-current Assets (or disposal group) Held for Sale

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

2.11 Property, Plant and Equipment

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

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

	Estimated Useful lives
Buildings	40 - 60 years
Structures	3 - 40 years
Machinery	4 - 5 years
Vehicles	4 - 10 years
Tools	4 - 6 years
Supplies	3 - 17 years
Equipment	5 years

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

2.12 Borrowing Costs

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

2.13 Investment Property

Investment properties is property held to earn rentals or for capital appreciation or both. An investment properties is measured initially at its cost. An investment properties is measured after initial measurement at depreciated cost (less any accumulated impairment losses). After recognition as an asset, investment properties is carried at cost less accumulated depreciation and impairment losses. The Group depreciates investment properties, except for land, using the straight-line method over their useful lives of 40 to 60 years.

2.14 Intangible Assets

(a) Goodwill

Goodwill is tested annually for impairment and carried at cost less accumulated impairment losses. Impairment losses on goodwill are not reversed. Gains and losses on the disposal of an entity include the carrying amount of goodwill relating to the entity sold.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the CGUs, or group of CGUs, that is expected to benefit from the synergies of the combination.

Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. The carrying amount of goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs to sell. Any impairment is recognized immediately as an expense and is not subsequently reversed.

(b) Membership rights

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

(c) Development costs

Expenditure on research is recognized as an expense as incurred. Development costs which are individually identifiable and directly related to a new technology or to new products which carry probable future economic benefits are recognized as intangible assets when all the following

criteria are met:

- It is technically feasible to complete the intangible asset so that it will be available for use or sale:
- · Management intends to complete the intangible asset and use or sell it;
- · There is the ability to use or sell the intangible asset;
- It can be demonstrated how the intangible asset will generate probable future economic benefits;
- Adequate technical, financial and other resources to complete the development and to use or sell the intangible asset are available; and
- The expenditure attributable to the intangible asset during its development can be reliably measured.

Other development expenditures that do not meet these criteria are recognized as an expense as incurred. Development costs previously recognized as an expense are not recognized as an asset in a subsequent period. Capitalized development costs stated as intangible assets are amortized using the straight-line method over their estimated useful lives when the assets are available for using or selling and are tested for impairment.

	Estimated Useful Lives	Depreciation Method
Development Cost	2 - 5 years	Straight-line method

The Group generally recognizes expenditures incurred after the capitalization assessment phase as intangible assets, and expenditures incurred before the phase are recognized as expenses within research and development expenses.

(d) Other intangible assets

Other intangible assets such as industrial property rights and software which meet the definition of an intangible asset are amortized using the following depreciation method and estimated useful lives when the asset is available for use.

_	Estimated Useful Lives	Depreciation Method
Industrial property rights	5 - 10 years	Straight-line method
Software	4 - 5 years	Straight-line method
Other intangible assets	1 - 15 years	Straight-line method
Right to use donated assets	1 - 4 years	Straight-line method

(e) Technology

Technology is intangible asset acquired by business combination, which is measured at fair value as at acquisition date. The Group develops and holds technologies such as unit knowledge data analysis for customized learning program and algorithm for tailored content recommendation. It is amortized using the following estimated useful lives and depreciation method.

	Estimated Useful Lives	Depreciation Method
Technology	14 years	Straight-line method

(f) Customer value and brand value

Customer value and brand value are intangible assets acquired by business combination, which are measured at fair value as at acquisition date. The Group develops and operates a job portal that connects instructors and principal of private educational institutes and a management program for educational institutes. Those are amortized using the following estimated useful lives and depreciation method.

	Estimated Useful Lives	Depreciation Method
Customer value	8 - 11 years	Straight-line method
Brand value	7 - 11 years	Straight-line method

2.15 Government Grants

Government grants are recognized at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Government grants related to income are deferred and recognized in the statement of profit or loss over the period necessary to match them with the costs that they are intended to compensate.

Government grants related to assets are presented by deducting the grants in arriving at carrying amount of the assets and are credited to depreciation over the expected lives of the related assets.

2.16 Impairment of Non-financial Assets

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

2.17 Financial Liabilities

(a) Classification and measurement

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

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

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

(b) Derecognition

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

2.18 Trade and Other Payables

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

2.19 Borrowings

Borrowings are recognized initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortized cost; any difference between the proceeds (net of transaction costs) and the redemption value is recognized in the statement of income over the period of the borrowings using the effective interest method. The Group classifies the liability as current as long as it does not have an unconditional right to defer its settlement for at least 12 months after the reporting date.

2.20 Provisions

Provisions for make good obligation, legal claims and others are recognized when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period, and the increase in the provision due to the passage of time is recognized as interest expense.

2.21 Current and Deferred Tax

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

The current income tax expense is measured at the amount expected to be paid to the taxation authorities, using the tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation, and considers whether it is probable that a taxation authority will accept an uncertain tax treatment. The Group measures its tax balances either based on the most likely amount or the expected value, depending on which method provides a better prediction of the resolution of the uncertainty.

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

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

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

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable

right to offset and intends either to settle on a net basis, or to realize the assets and settle the liability simultaneously.

2.22 Employee Benefits

(a) Post-employment benefits

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

For defined contribution plans, the Group pays contribution to publicly or privately administered pension insurance plans on mandatory, contractual or voluntary basis. The Group has no further payment obligation once the contribution has been paid. The contribution is recognized as employee benefit expense when they are due.

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

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

(b) Share-based payments

The Group operates equity-settled, share-based compensation plans, under which the Group receives services from employees as consideration for equity instruments (options) of the Group. The fair value of the employee services received in exchange for the grant of the options is recognized as an expense. The total amount to be expensed is determined by reference to the fair value of the options granted. The Group makes payments with its treasury shares when the options are exercised.

(c) Other long-term employee benefits

Certain entities within the Group provide long-term employee benefits that are entitled to employees with service period. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology as used for defined benefit pension plans. The Group recognizes service cost, net interest on other long-term employee benefits and

remeasurements as profit or loss for the year. These liabilities are valued annually by an independent qualified actuary.

2.23 Share Capital

Ordinary shares and preferred shares that are not mandatorily redeemable are classified as equity.

Where the Group purchases its own equity share capital (treasury shares), the consideration paid, including any directly attributable incremental costs is deducted from equity attributable to the Company's equity holders until the shares are cancelled or reissued. Where such ordinary shares are subsequently reissued, any consideration received is included in equity attributable to the Company's equity holders.

2.24 Revenue Recognition

(a) Sales of goods

The Group sells weekly home-school materials, reference books, collections, publications and others. Sales of goods are recognized when products are delivered to the purchaser. Delivery does not occur until the products have been shipped to the specified location, the risks of obsolescence and loss have been transferred to the wholesaler, and either the purchaser has accepted the products in accordance with the sales contract, the acceptance provisions have lapsed or the Group has objective evidence that all criteria for acceptance have been satisfied.

(b) Rendering of services

For rendering of services, the Group recognizes revenue when services are provided to the customer. Meanwhile, revenue of rendering services that controls are transferred throughout period are recognized by percentage-of-completion method, such as education services relating after-school teaching, rental services, royalty income and etc.

(c) Rendering of contents

The Group provides education solutions to customers using technology of developing education contents. The Group recognizes revenue based on customer's subsequent use for the education solution contents.

2.25 Leases

(a) Lessor

Lease income from operating leases where the Group is a lessor is recognized in income on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognized as expense over the lease term on the same basis as lease income. The respective leased assets are included in the

statement of financial position based on their nature.

(b) Lessee

The Group leases various real estate, vehicles, office equipment. Lease contracts are typically made for fixed periods of 2 to 9 years, but may have extension options as described in ① below.

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

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

The Group determines the lease term as the non-cancellable period of a lease, together with both (a) periods covered by an option to extend the lease if the lessee is reasonably certain to exercise that option; and (b) periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option. When the lessee and the lessor each has the right to terminate the lease without permission from the other party, the Group should consider a termination penalty in determining the period for which the contract is enforceable.

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

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

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

To determine the incremental borrowing rate, the Group:

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

If a readily observable amortizing loan rate is available to the individual lessee (through recent financing or market data) which has a similar payment profile to the lease, then the Group uses that rate as a starting point to determine the incremental borrowing rate.

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

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

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

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

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

Payments associated with short-term leases of real estate, office equipment and vehicles and leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less without a purchase option. Low-value assets comprise IT-equipment and small items of office furniture.

① Extension and termination options

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

2.26 Dividend Distribution

Dividend distribution to the Company's shareholders is recognized as a liability in the financial statements in the period in which the dividends are approved by the Company's shareholders.

3. Critical Accounting Estimates and Assumptions

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

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

During 2021, the spread of Coronavirus disease 2019 ("COVID-19") has a material impact on the global economy. It may have a negative impact; such as, decrease in productivity, decrease or delay in sales, collection of existing receivables and others. Accordingly, it may have a negative impact on the financial position and financial performance of the Group.

Significant accounting estimates and assumptions applied in the preparation of the consolidated financial statements can be adjusted depending on changes in the uncertainty from COVID-19. Also, the ultimate effect of COVID-19 to the Group's business, financial position and financial performance cannot presently be determined.

(a) Estimated impairment of goodwill

The Group regularly tests whether goodwill has suffered any impairment. The recoverable amounts of cash-generating units have been determined based on fair value less cost of disposal or value-in-use calculations. These calculations require the use of estimates.

(b) Income taxes

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

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

(c) Fair value of financial instruments

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

(d) Impairment of financial assets

The provision for impairment for financial assets are based on assumptions about risk of default and expected loss rates. The Group uses judgement in making these assumptions and selecting the inputs to the impairment calculation based on the Group's past history, existing market conditions as well as forward looking estimates at the end of each reporting period (Note 4.1.2).

(e) Net defined benefit liability

The present value of net defined benefit liability depends on a number of factors that are determined on an actuarial basis using a number of assumptions including the discount rate (Note 22).

(f) Lease

In determining the lease term, management considers all facts and circumstances that create an economic incentive to exercise an extension option, or not exercise a termination option. Extension options (or periods after termination options) are only included in the lease term if the lease is reasonably certain to be extended (or not terminated).

For leases of property, office equipment and others, the following factors are normally the most relevant:

- If there are significant penalties to terminate (or not extend), the Group is typically reasonably certain to extend (or not terminate).
- If any leasehold improvements are expected to have a significant remaining value, the Group is typically reasonably certain to extend (or not terminate).
- Otherwise, the Group considers other factors including historical lease durations and the costs and business disruption required to replace the leased asset.

The lease term is reassessed if an option is actually exercised (or not exercised) or the Group becomes obliged to exercise (or not exercise) it. The assessment of reasonable certainty is only revised if a significant event or a significant change in circumstances occurs, which affects this assessment, and that is within the control of the lessee.

(g) Development costs

The Group capitalizes development costs only when there is a reasonable assurance that projects have technical feasibility and the possibility of generating future economic benefits, and performs periodic impairment test. The recoverable amount of each asset has been calculated based on historical experience and future business plans. These calculations require estimates.

(h) Provisions

The Group recognizes provisions for restoration cost related to the lease contract and legal claims at the end of the reporting period. The amounts are estimated based on historical data.

4. Financial Risk Management

4.1 Financial Risk Factors

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

Risk management is carried out under policies approved by the board of directors. The board reviews and approves written principles for overall risk management, as well as written policies covering specific areas, such as foreign exchange risk, interest rate risk, credit risk, use of derivative financial instruments and non-derivative financial instruments, and investment of excess liquidity.

(a) Market risk

i) Foreign exchange risk

The Group operates internationally and is exposed to foreign exchange risk arising from foreign currency transactions, primarily with respect to the US dollar and the Chinese yuan. Foreign exchange risk arises from future commercial transactions, recognized assets and liabilities and net investments in foreign entities.

Management has set up a policy to require group companies to manage their foreign exchange risk against their functional currencies.

The Group has certain investments in foreign entities, whose net assets are exposed to foreign currency translation risk. Currency exposure arising from the net assets of the Group's foreign entities is managed primarily through trade receivables denominated in the relevant foreign currencies.

The Group's financial assets exposed to foreign currency risk as at December 31, 2021 and 2020, are as follows:

(in USD, CNY and millions of Korean won)		202	1	2020			
		Foreign currency	Korean won	Foreign currency	Korean won		
Cash and cash	USD	2,495,499	2,958	2,158,209	2,348		
equivalents	CNY	23,211	4	25,384	4		
Trade receivables	USD	194,802	231	117,677	128		
	CNY	-	-	177,967	30		

The table below summarizes the impact of weakened/strengthened Korean won on the Group's equity and post-tax profit for the year. The analysis is based on the assumption that Korean won has weakened/strengthened by 1% with all other variables held constant at the end of the reporting period.

	202	21	2020		
(in millions of Korean won)	1% increase	1% decrease	1% increase	1% decrease	
USD	24	(24)	19	(19)	
CNY	-	-	-	-	

ii) Interest rate risk

Interest rate risk is defined as the risk that the interest income or expenses arising from deposits and borrowings will fluctuate because of changes in future market interest rate. The interest rate risk mainly arises through floating rate deposits and borrowings.

As at December 31, 2021 and 2020, if interest rates had changed by 100bp with all other variables held constant, the effects on interest expense and interest income from floating rate deposits and borrowings are as follows:

	20)21	2020		
(in millions of Korean won)	100bp increase	100bp decrease	100bp increase	100bp decrease	
Interest expense	131	(131)	120	(120)	

iii) Price risk

The Group is exposed to equity securities price risk because of investments held by the Group and classified on the consolidated statement of financial position as available-for-sale financial assets or financial assets at fair value through profit or loss. To manage its price risk arising from investments in equity securities, the Group diversifies its portfolio. Diversification of the portfolio is done in accordance with the limits set by the group.

If the prices had changed by 5% with all other variables held constant, the effects on the Group's profit (loss) for the year and total comprehensive income (loss) would be as follows:

	202	21	2020		
(in millions of Korean won)	5% increase	5% decrease	5% increase	5% decrease	
Profit (loss) for the year	4,646	(4,646)	4,988	(4,988)	
Comprehensive income (loss)	2,173	(2,173)	2,050	(2,050)	

(b) Credit risk

The Group is exposed to credit risk when the following payments are not made after due date:

- Payment of trade receivables within certain period after issuance of invoice
- Contractual cash flow relating debt instruments at amortized costs
- Contractual cash flow relating debt instruments at fair value through other comprehensive income

A. Trade receivables

The Group applies the simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables. To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and occurrence date. The expected loss rates include forward-looking information.

The loss allowance as at December 31, 2021 and 2020, was determined as follows for trade receivables:

(in millions of Korean won)	2021					
				Between		
		Between	Between	6 months and		
_	Current	2 and 3 months	3 and 6 months	1 year	Over 1 year	Total
Gross carrying amount	11,746	1,982	1,321	1,201	7,299	23,549
Loss allowance provision	10	20	135	228	5,155	5,548
(in millions of Korean won)	2020					
				Between		
		Between	Between	6 months and		
_	Current	2 and 3 months	3 and 6 months	1 year	Over 1 year	Total
Gross carrying amount	9,399	362	1,895	2,437	6,504	20,597
Loss allowance provision	1	5	241	715	5,861	6,823

Movements in the loss allowance provision for trade receivables for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Beginning balance	6,823	6,849
Increase(decrease) in loss allowance recognized in profit or		
loss during the year	(25)	608
Receivables written off during the year as uncollectible	(1,718)	(745)
Business combination	384	75
Decrease due to loss of control	-	(418)
Exchange differences	84	454
Ending balance	5,548	6,823

The Group considered that there was evidence of impairment if any of the following indicators were present:

- significant financial difficulties of the debtor;
- probability that the debtor will enter bankruptcy or financial reorganization; and
- default or delinquency in payments.

B. Other receivables

Other receivables at amortized cost include loans to related parties and others.

Movements in loss allowance provision for other financial assets at amortized cost for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021				
	Related parties	Other receivables	Total		
Beginning balance	77	5,315	5,392		
Increase(decrease) in loss allowance					
recognized in profit or loss during the year	3	(2)	1		
Receivables written off during the year as					
uncollectible	-	(2,984)	(2,984)		
Business combination	-	11	11		
Exchange differences		148	148		
Ending balance	80	2,488	2,568		
(in millions of Korean won)		2020			
	Related parties	Other receivables	Total		
Beginning balance	9	5,809	5,818		
Increase in loss allowance recognized in					
profit or loss during the year	68	1	69		
Decrease due to loss of control	-	(506)	(506)		
Exchange differences		11	11		
Ending balance	77	5,315	5,392		

All of other receivables at amortized costs are considered to have low credit risk. The Group consider other receivables at amortized costs to have low credit risk when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term.

C. Debt investments at fair value through other comprehensive income

Debt investments at fair value through other comprehensive income include government bonds, corporate bonds and trade receivables subject to be sold. The loss allowance for debt investments at fair value through other comprehensive income is recognized in profit or loss and reduces the fair value loss otherwise recognized in other comprehensive income.

All of the debt investments at fair value through other comprehensive income are considered to have low credit risk. Management consider 'low credit risk' for listed bonds to be an investment grade credit rating with at least one major rating agency. Other instruments are considered to be low credit risk when they have a low risk of default and the issuer has a strong capacity to meet its contractual cash flow obligations in the near term.

There are no movements in loss allowance provision for debt investments at fair value through other comprehensive income for the year ended December 31, 2021.

(c) Liquidity risk

The Group forecasts its cash flow and liquidity status and sets action plans on a regular basis to manage liquidity risk proactively.

In addition, the Group copes with potential financial distress by maintaining adequate amount of cash and financial deposits. The balances of cash and cash equivalents, and current-financial deposits as at December 31, 2021, is $\mbox{$\%$}$ 63,150 million (2020: $\mbox{$\%$}$ 67,087 million).

The analysis of the Group's financial liabilities into relevant maturities based on the remaining period at the end of the reporting period to the contractual maturity date as at December 31, 2021 and 2020, are as follows:

	2021					
(in millions of Korean won)	Book amount	Cash flow on contract	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Trade payables	5,773	5,773	5,773	-	-	-
Other payables (current)	77,228	77,228	77,228	-	-	-
Borrowings (current)	15,262	15,345	15,345	-	-	-
Lease liabilities (current)	23,828	24,670	24,670	-	-	-
Other payables (non-current)	40,452	43,977	-	11,313	125	32,539
Borrowings (non-current)	9,307	9,359	-	4	9,355	-
Lease liabilities (non-current)	44,801	47,379	-	20,801	25,297	1,281

2024

2020

(in millions of Korean won)	Book amount	Cash flow on contract	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Over 5 years
Trade payables	4,162	4,162	4,162	-	-	-
Other payables (current)	62,070	62,070	62,070	-	-	-
Borrowings (current)	21,919	22,146	22,146	-	-	-
Lease liabilities (current)	24,338	25,232	25,232	-	-	-
Other payables (non-current)	30,856	34,276	-	12,751	112	21,413
Borrowings (non-current)	8	13	-	-	13	-
Lease liabilities (non-current)	51,157	55,405	-	22,406	32,251	748

The amounts disclosed in the table are the contractual undiscounted cash flows, prepared based on the earliest date of the payments that can be requested and the cash flow of interest is included.

4.2 Capital Management

The Group's objectives when managing capital are to maintain a sound capital structure. The Group monitors capital on the basis of the liabilities/equity ratio which is calculated as total liabilities divided by total equity on consolidated statements of financial position.

Debt-to-equity ratios as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020	
Total liabilities (A)	297,165	286,275	
Total equity (B)	516,402	558,887	
Debt-to-equity ratio (A/B)	58%	51%	

5. Fair Value

5.1 Fair Value of Financial Instruments by Category

Carrying amount and fair value of financial instruments by category as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	202	1	2020		
	Carrying	_	Carrying	_	
	amount	Fair value	amount	Fair value	
Financial assets					
Current:					
Cash and cash equivalents	51,200	51,200	45,417	45,417	
Financial deposits	11,950	11,950	21,670	21,670	
Trade receivables	16,994	16,994	13,774	13,774	
Other receivables	14,461	14,461	7,729	7,729	
Financial assets at fair value					
through profit or loss	101,244	101,244	106,331	106,331	
	195,849	195,849	194,921	194,921	
Non-current:					
Trade receivables	1,007	1,007	-	-	
Other receivables	31,385	30,625	37,092	36,460	
Financial assets at fair value					
through profit or loss	21,330	21,330	25,283	25,283	
Financial assets at fair value					
through other comprehensive					
income	57,324	57,324	54,094	54,094	
	111,046	110,286	116,469	115,837	
	306,895	306,135	311,390	310,758	

(in millions of Korean won)	2021		2020		
	Carrying	· ·	Carrying	_	
	amount	Fair value	amount	Fair value	
Financial liabilities					
Current:					
Trade payables	5,773	5,773	4,162	4,162	
Other payables	77,228	77,228	62,070	62,070	
Borrowings	15,262	15,262	21,919	21,919	
	98,263	98,263	88,151	88,151	
Non-current:					
Other payables	40,452	40,333	30,856	30,965	
Borrowings	9,307	9,307	8	8	
	49,759	49,640	30,864	30,973	
	148,022	147,903	119,015	119,124	

As current financial assets and liabilities' maturity is short-term, their fair value is approximation of carrying amount.

There are no significant changes on business and economic environment that influence the fair value of financial assets and liabilities for the years ended December 31, 2021 and 2020.

5.2 Fair Value Hierarchy and Measurement Method

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

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

Fair value hierarchy classifications of the financial assets and financial liabilities that are measured at fair value or its fair value is disclosed as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021			
	Level 1	Level 2	Level 3	Total
Recurring fair value				
measurements				
Financial assets at fair value				
through profit or loss	1,919	104,243	16,412	122,574
Equity instruments at fair value				
through other comprehensive				
income	57,284	-	40	57,324
Disclosing fair value				
measurements				
Non-current other receivables	-	30,625	-	30,625
Non-current other payables	-	40,333	-	40,333
Borrowings	-	9,307	-	9,307
(in millions of Korean won)		2020	1	
(
	Loyal 1			Total
Pocurring fair value	Level 1	Level 2	Level 3	Total
Recurring fair value	Level 1			Total
measurements	Level 1			Total
measurements Financial assets at fair value			Level 3	
measurements Financial assets at fair value through profit or loss	Level 1 110,955			Total 131,614
measurements Financial assets at fair value through profit or loss Equity instruments at fair value			Level 3	
measurements Financial assets at fair value through profit or loss	110,955		Level 3	131,614
measurements Financial assets at fair value through profit or loss Equity instruments at fair value through other comprehensive income			Level 3 20,659	
measurements Financial assets at fair value through profit or loss Equity instruments at fair value through other comprehensive	110,955		Level 3 20,659	131,614
measurements Financial assets at fair value through profit or loss Equity instruments at fair value through other comprehensive income Disclosing fair value	110,955		Level 3 20,659	131,614
measurements Financial assets at fair value through profit or loss Equity instruments at fair value through other comprehensive income Disclosing fair value measurements	110,955	Level 2	Level 3 20,659	131,614 54,094

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

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses various valuation techniques and makes judgments based on current market conditions. These valuation techniques maximize the use of observable

market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to measure the fair value an instrument are observable, the instrument is included in Level 2. The fair value of derivatives financial instruments categorized as Level 2 are measured at present value discounted at the forward exchange rate at the end of reporting period.

Non-current other receivables

Carrying amount and fair value of non-current other receivables as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021		2020		
	Carrying amount	Fair value	Carrying amount	Fair value	
Long-term loans	261	261	140	140	
Deposits	31,124	30,364	36,952	36,320	
	31,385	30,625	37,092	36,460	

Fair value of non-current other receivables is calculated based on a nominal value of expected future cash inflows discounted using a discount rate reflecting credit risk.

	2021	2020
Discount rate	3.03%	2.87%

Non-current other payables

Carrying amount and fair value of non-current other payables as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021		2020	
	Carrying		Carrying	
	amount	Fair value	amount	Fair value
Long-term non-trade payables	32,663	32,663	21,525	21,525
Long-term deposits received	7,789	7,670	9,331	9,440
	40,452	40,333	30,856	30,965

Fair value of non-current other payables is calculated based on a nominal value of expected future cash outflows discounted using rates of return on non-guaranteed bonds having similar credit ratings as the Group.

	2021	2020
Discount rate	2.30%	1.31%

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

Valuation techniques and inputs used in Level 3 fair value measurements as at December 31, 2021 and 2020, are as follows:

(in millions of			2	2021	
Korean won)	Fair value	Level	Valuation techniques	Inputs	Range of inputs
Financial assets at fair value through profit or loss	16,412	3	Income approach Market approach	Perpetual growth rate Discount rate	0% 7.3~22.0%
(in millions of			2	021	
Korean won)	Fair value	Level	Valuation techniques	Inputs	Range of inputs
Financial assets at fair value through profit or	20,659	3	Income approach	Perpetual growth rate	0%
loss	,		Market approach	Discount rate	11.3~20.4%

Borrowings categorized as Level 3 are measured at present value by using a discount rate reflecting credit risk and others.

6. Segment Information

Management has determined the operating segments based on the reports reviewed by the Board of Directors that are used to make strategic decisions.

The segments of the Group are strategic business divisions providing different products and services. They are reported separately because each business division requires different technologies and marketing strategies. The main products and services of each business division for the year ended December 31, 2021, are as follows:

Products and services
Noonnoppi home-school material, premium home-school material
(CHAIHONG, Soluny), publication, media business and others
Education programs for early childhood educational institutions and
elementary school after-school classes and others
Eye Level learning center business and others
Lye Level learning center business and others
Digital education platform and contents development, school management program and school instructor employment portal and others

The segment information for sales and operating income for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	202	1	2020		
,	Segment sales	Operating income	Segment sales	Operating income	
Educational service and publication business Educational institution	580,676	(27,135)	576,096	(19,585)	
business	12,501	(3,164)	10,608	(6,857)	
Overseas education business	15,478	3,099	13,880	(1,603)	
Others	29,740	(1,112)	26,422	18	
	638,395	(28,312)	627,006	(28,027)	

Segment information of share of profit from associates, depreciation, amortization and fluctuation of non-current assets for the years ended December 31, 2021 and 2020, follows:

(in millions of Korean		2021			2020	
won)	Loss from associates	Depreciation /Amortization	Increase (decrease) of non-current assets ¹	Loss from associates	Depreciation /Amortization	Increase (decrease) of non-current assets ¹
Educational service and publication business Educational institution	-	53,183	(45,168)	-	59,502	(17,753)
business	-	646	10,954	-	586	3,516
Overseas education business	-	1,977	1,710	-	1,794	(2,270)
Others	(1,127)	750	980	(88)	1,532	180
	(1,127)	56,556	(31,524)	(88)	63,414	(16,327)

¹ Financial instrument, deferred tax assets and investments in associates are excluded.

Details of segment information of assets, liabilities and investments in associates for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean		2021		2020		
won)		Investments			Investments	
	Assets	in associates	Liabilities	Assets	in associates	Liabilities
Educational service and publication						
business	535,997	-	227,255	571,051	-	227,908
Educational institution						
business	30,982	-	21,399	19,025	-	9,636
Overseas education						
business	43,885	-	40,080	40,012	-	38,549
Others	202,703	15,074	8,431	215,074	11,387	10,182
	813,567	15,074	297,165	845,162	11,387	286,275

Sales by geographic areas for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Domestic	616,293	604,781
Overseas	22,102	22,225
	638,395	627,006

There is no external customer contributing to more than 10% of total sales for the years ended December 31, 2021 and 2020.

7. Financial Instruments by Category

Categorizations of financial instruments as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021					
			Financial assets at			
			fair value through			
	Financial assets at		other			
	fair value through	Financial assets	comprehensive			
	profit or loss	at amortized cost	income	Total		
Financial assets						
Current						
Cash and cash equivalents	-	51,200	-	51,200		
Financial deposits	-	11,950	-	11,950		
Trade receivables	-	16,994	-	16,994		
Other receivables	-	14,461	-	14,461		
Financial assets at fair value						
through profit or loss	101,244			101,244		
	101,244	94,605		195,849		
Non-current						
Trade receivables	-	1,007	-	1,007		
Other receivables	-	31,385	-	31,385		
Financial assets at fair value						
through profit or loss	21,330	-	-	21,330		
Financial assets at fair value						
through other comprehensive						
income			57,324	57,324		
	21,330	32,392	57,324	111,046		
	122,574	126,997	57,324	306,895		

(in millions of Korean won)		2021		
,	Financial liabilities	at Other fina	ancial	
	amortized cost	liabilit	ies To	tal
Financial liabilities				
Current				
Trade payables	5	773	-	5,773
Other payables	77	,228	-	77,228
Borrowings	15	,262	-	15,262
Lease liabilities		<u> </u>	23,828	23,828
	98	,263	23,828	122,091
Non-current				
Other payables	40	452	<u>-</u>	40,452
Borrowings	9	307	_	9,307
Lease liabilities		_	44,801	44,801
	49	,759	44,801	94,560
		,022	68,629	216,651
			,	,
(in millions of Korean won)		20	20	
			Financial assets at	
			fair value through	
	Financial assets at		other	
	fair value through	Financial assets	comprehensive	
	profit or loss	at amortized cost	income	Total
Financial assets				
Current				
Cash and cash equivalents	-	45,417	-	45,417
Financial deposits	-	21,670	-	21,670
Trade receivables	-	13,774	-	13,774
Other receivables	-	7,729	-	7,729
Financial assets at fair value				
through profit or loss	106,331			106,331
	106,331	88,590		194,921
Non-current				
Other receivables	_	37,092	_	37,092
Financial assets at fair value		07,002		01,002
through profit or loss	25,283	_	_	25,283
Financial assets at fair value	25,205			25,205
through other comprehensive				
income			54,094	54,094
HICOTHE	25.202	27.002	54,094	•
	25,283	37,092		116,469
	131,614	125,682	54,094	311,390

(in millions of Korean won)		2020	
	Financial liabilities at	Other financial	_
	amortized cost	liabilities	Total
Financial liabilities			
Current			
Trade payables	4,162	-	4,162
Other payables	62,070	-	62,070
Borrowings	21,919	-	21,919
Lease liabilities		24,338	24,338
	88,151	24,338	112,489
Non-current			
Other payables	30,856	-	30,856
Borrowings	8	-	8
Lease liabilities		51,157	51,157
	30,864	51,157	82,021
	119,015	75,495	194,510

Gain and loss of financial instruments by category for the years ended December 31, 2021 and 2020, are as follows:

	2021					
(in millions of Korean won)	Financial assets at fair value through profit or loss	Financial assets at amortized costs	Financial assets at fair value through other comprehensive income	Financial liabilities at amortized cost	Other financial liabilities	Total
Dividend income	223	_	3,402			3,625
Gain (loss) on foreign currency translation Gain on foreign currency	-	1,068	-	(1,859)	-	(791)
transactions	-	49	-	-	-	49
Interest income (expenses)	-	1,030	-	(472)	(1,674)	(1,116)
Bad debt expenses	-	(1,365)	-	-	-	(1,365)
Gain (loss) on valuation of financial assets ¹ Gain on disposal of	(1,753)	-	6,547	-	-	4,794
financial assets	3,591	-	2,843	-	-	6,434

¹ The amounts recognized as other comprehensive income (post-tax) are included.

	2020					
			Financial			_
(in millions of Korean won)	Financial assets at fair value through profit or loss	Financial assets at amortized costs	assets at fair value through other comprehensive income	Financial liabilities at amortized cost	Other financial liabilities	Total
Dividend income		00010	-		nabilities	
Gain (loss) on foreign	857	-	3,120	-	-	3,977
currency translation	-	(634)	-	1,352	-	718
Gain (loss) on foreign						
currency transactions	-	66	-	(4)	-	62
Interest income (expenses)	-	1,022	-	(695)	(2,191)	(1,864)
Bad debt expenses	-	(677)	-	-	-	(677)
Loss on valuation of financial assets ¹	(282)	_	(14,748)	_	_	(15,030)
Gain on disposal of	(202)		(14,740)	_	_	(10,000)
financial assets Loss on transaction of	1,700	-	-	-	-	1,700
derivatives	(125)	-	-	-	-	(125)

¹ The amounts recognized as other comprehensive income (post-tax) are included.

8. Cash and Cash Equivalents, and Financial Deposits

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

(in millions of Korean won)	2021	2020
Ordinary deposits	25,762	16,644
Short-term deposits	25,438	28,773
	51,200	45,417

Cash and cash equivalents and the financial deposits restricted in use as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020	Reason
Financial deposits			Pledge of deposits received
rinanciai deposits	1,829	1,787	and others

9. Financial Assets and Derivative Financial Instruments

9.1 Financial Assets at Fair Value through Profit or Loss

Financial assets mandatorily measured at fair value through profit or loss include the following classes of financial assets:

(in millions of Korean won)	2021	2020
Current		
Beneficiary certificate	98,150	103,141
Debt instruments	3,094	3,190
	101,244	106,331
Non-current		
Beneficiary certificate	19,412	23,301
Equity instruments	1,918	1,982
	21,330	25,283
	122,574	131,614

Certain financial assets at fair value through profit or loss are presented within operating activities as part of changes in working capital in the statements of cash flows.

Amounts recognized in profit or loss

(in millions of Korean won)	2021	2020
Gain on financial assets at fair value through profit or loss	2,061	2,276

9.2 Financial Assets at Fair Value through Other Comprehensive Income

Equity investments at fair value through other comprehensive income

Equity investments at fair value through other comprehensive income comprise the following individual investments:

(in millions of Korean won)	2021	2020	
Non-current			
Listed equity instruments ¹	57,284	54,057	
Non-listed equity instruments	40	37	
	57,324	54,094	

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

During 2021, the Group has sold certain equity instruments at fair value through other comprehensive income. Related gain of \forall 2,843 million which is already included in other comprehensive income has been reclassified to retained earnings.

¹ Details of marketable equity securities as at December 31, 2021 and 2020, are as follows:

		2021	
(in millions of Korean won)	Acquisition cost	Fair value	Book amount
Shinhan Financial Group Co., Ltd.	19,820	57,284	57,284
	19,820	57,284	57,284
		2020	
(in millions of Korean won)	Acquisition cost	Fair value	Book amount
Shinhan Financial Group Co., Ltd.	21,475	54,057	54,057
	21,475	54,057	54,057

9.3 Trade Receivables and Other Receivables

Details of trade receivables and other receivables as at December 31, 2021 and 2020, are as follows:

		2021	
		Less: allowance for	
(in millions of Korean won)	Original amount	doubtful accounts	Carrying amount
Current			
Trade receivables ¹	22,542	(5,548)	16,994
Non-trade receivables	8,028	(2,564)	5,464
Accrued income	120	-	120
Loans	104	(4)	100
Deposits	8,777	<u> </u>	8,777
	39,571	(8,116)	31,455
Non-current			
Trade receivables	1,007	-	1,007
Loans	261	-	261
Deposits	31,124	<u> </u>	31,124
	32,392		32,392
	71,963	(8,116)	63,847

		2020	
		Less: allowance for	
(in millions of Korean won)	Original amount	doubtful accounts	Carrying amount
Current			
Trade receivables ¹	20,597	(6,823)	13,774
Non-trade receivables	6,995	(5,361)	1,634
Accrued income	40	-	40
Loans	3,260	(32)	3,228
Deposits	2,827	<u>-</u>	2,827
	33,719	(12,216)	21,503
Non-current			
Trade receivables	-	-	-
Loans	140	-	140
Deposits	36,952	<u>-</u>	36,952
	37,092	<u> </u>	37,092
	70,811	(12,216)	58,595

¹ The Group's certain trade receivables are provided with collateral and others from counterparties.

10. Contract Assets and Liabilities

The Group has recognized the following assets and liabilities related to contracts with customers:

(in millions of Korean won)	2021	2020
Contract assets		
Rental	149	224
Right to return	467	448
Supplement ¹	5,843	7,980
License	423	533
	6,882	9,185
Contract liabilities		
Home-school materials and other publications	44,194	42,673
License	767	724
Rental	402	43
Right to return	646	845
Customer loyalty program	294	98
	46,303	44,383

¹ It includes ₩ 1,389 million of impairment loss recognized as bad debt expense during 2021.

The following table shows the amounts of revenues recognized in relation to contract liabilities for the years ended December 31, 2021 and 2020.

(in millions of Korean won)	2021	2020
Revenue recognized that was included in the contract		
liability balance at the beginning of the year		
Home-school materials and other publications	42,673	43,913
License	420	1,123
Rental	15	43
Sales with a right of return	318	189
Customer loyalty programs	77	35
Revenue recognized from performance obligations		
satisfied in previous periods		
Consideration from sales with a right of return, not		
previously recognized due to the constraint	318	189

11. Inventories

Details of inventories as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Merchandise	8,457	6,282
Finished goods	10,879	10,285
Stored goods	1,623	1,362
Raw materials	530	212
	21,489	18,141
Allowance for losses on valuation of inventories	(3,231)	(2,508)
	18,258	15,633

The cost of inventories recognized as expense and included in 'cost of sales' amounts to $\mbox{$\mbox{$$$$$$$$$$$$$$$$$}$ 29,061 million (2020: $\mbox{$\mbox{$$$$$$$$$$$}$}$ 27,571 million). Allowances for losses on valuation of inventories reflected in profit or loss amounts to $\mbox{$\mbox{$$$$$$$$}$}$ 357 million (2020: $\mbox{$\mbox{$$$$$$$$$}$}$ 1,602 million).

12. Other Assets

Details of other assets as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Advance payments	2,399	852
Prepaid expenses	5,471	3,444
Prepaid value added tax	5	40
	7,875	4,336

13. Investments in Associates

Details of investments in associates as at December 31, 2021 and 2020, are as follows:

	_		ntage of ship (%)			
(in millions of Korean won)	Country	2021	2020	2021	2020	Closing Month
DKI Growing Star 1 Investment partnership ¹	Korea	-	24.00	-	53	December
With the Green Co., Ltd.	Korea	46.99	46.99	5,871	5,933	December
KOREA INVESTMENT PrivateDebt Professional Investment Type Private Security Investment Trust KIWOOM Eureka Professional Investors	Korea	28.85	28.85	3,200	3,163	December
Private Security Investment Trust	Korea	28.57	28.57	510	243	December
Smart Daekyo Companion	Korea	40.00	40.00	2,660	1,995	December
LA.IV DATA Co., Ltd. ²	Korea	39.20	-	1,833	-	December
TwoBlock Al ²	Korea	20.00	-	1,000	-	December
			-	15,074	11,387	

¹ The entity was liquidated during 2021.

Changes in investments in associates for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Beginning balance - before adjustments	11,387	21,548
Acquisition	5,152	2,303
Share of profit (loss)	(1,127)	(88)
Shares of other reserves	-	1,166
Disposal and others	(80)	(11,459)
Dividend	(258)	(2,083)
Ending balance	15,074	11,387

² The entities were newly acquired during 2021.

Summarized financial information of associates for the years ended December 31, 2021 and 2020, are as follows:

				2021			
(in millions of	Current	Non-current	Current	Non-current		Profit (loss)	Total comprehensive
Korean won)	assets	assets	liabilities	liabilities	Sales	for the year	income (loss)
DKI Growing Star 1							
Investment partnership ¹	-	-	-	-	20	(31)	(31)
With the Green Co., Ltd.	402	12,127	13	23	133	(131)	(131)
KOREA INVESTMENT							
PrivateDebt Professional							
Investment Type Private							
Security Investment Trust	293	10,971	170	-	-	1,023	1,023
KIWOOM Eureka							
Professional Investors							
Private Security Investment							
Trust	79	1,739	32	-	-	159	159
Smart Daekyo Companion	1,288	5,363	-	-	-	(3,337)	(3,337)
LA.IV DATA Co., Ltd. ²	2,595	136	77	84	360	(248)	(248)
TwoBlock AI ²	79	1,540	10	400	-	-	-

¹The entity was liquidated during 2021. The information of profit or loss is financial performance before liquidation.

² The entities were newly acquired during 2021. The information of profit or loss is financial performance after acquisition.

				2020			
(in millions of Korean won)	Current assets	Non-current assets	Current liabilities	Non-current	Sales	Profit (loss)	Total comprehensive income (loss)
DKI Growing Star 1							
Investment partnership 1	157	64	-	-	-	89	89
With the Green Co., Ltd.	501	12,147	7	17	125	(166)	(166)
IBK A One Convertible							
Professional Investment							
Type Private Security							
Investment Trust 1 ²	-	-	-	-	-	169	169
Rico-Synergy Collaboration							
Multi Mezzanine							
Specialized Investment							
Model Private Equity							
Investment Trust No. 3 ²	-	-	-	-	-	(83)	(83)
KOREA INVESTMENT							
PrivateDebt Professional							
Investment Type Private							
Security Investment Trust	1,002	9,965	-	-	-	(111)	(111)
HEUNGKUK KOSDAQ	-	-	-	-	-	415	415

_				2020			
(in millions of	Current	Non-current	Current	Non-current		Profit (loss)	Total comprehensive
Korean won)	assets	assets	liabilities	liabilities	Sales	for the year	income (loss)
Venture Professional							
Investment Type Private							
Security Investment Trust							
KIWOOM Eureka							
Professional Investors							
Private Security Investment							
Trust	421	430	1	-	-	(32)	(32)
Smart Daekyo Companion ³	4,988	-	-	-	-	(12)	(12)

¹ Liquidation procedures are in progress as at December 31, 2020.

Details of adjusting the Group's interests in associates as at December 31, 2021 and 2020, are as follows:

				2021			
(in millions of Korean won)	Net assets	Group's share in %	Group's share in KRW	Goodwill	Unrealized gains or losses	Unrecognized losses	Book amount at the end of year
With the Green Co., Ltd.	12,493	46.99	5,871				5,871
KOREA INVESTMENT PrivateDebt Professional Investment Type Private	12,430	40.99	3,071			_	3,071
Security Investment Trust KIWOOM Eureka Professional Investors Private Security Investment	11,094	28.85	3,200	-	-	-	3,200
Trust	1,786	28.57	510	-	-	-	510
Smart Daekyo Companion	6,651	40.00	2,660	-	-	-	2,660
LA.IV DATA Co., Ltd.	2,570	39.20	1,007	826	-	-	1,833
TwoBlock Al	1,209	20.00	242	758			1,000
	35,803		13,490	1,584	-		15,074

² The Group disposed of shares during 2020.

³ The entity was newly acquired and included in the associates during 2020.

				2020			
(in millions of		Group's	Group's share in		Unrealized gains or	Unrecognized	Book amount at
Korean won)	Net assets	share in %	KRW	Goodwill	losses	losses	the end of year
DKI Growing Star 1							
Investment partnership	221	24.00	53	-	-	-	53
With the Green Co., Ltd.	12,624	46.99	5,933	-	-	-	5,933
KOREA INVESTMENT							
PrivateDebt Professional							
Investment Type Private							
Security Investment Trust	10,967	28.85	3,163	-	-	-	3,163
KIWOOM Eureka							
Professional Investors							
Private Security Investment							
Trust	850	28.57	243	-	-	-	243
Smart Daekyo Companion	4,988	40.00	1,995				1,995
	29,650	-	11,387		-		11,387

14. Property, Plant and Equipment

Details of property, plant and equipment as at December 31, 2021 and 2020, are as follows:

2021

·											
(in millions of Korean									Standing	Construction	
won)	Land	Buildings	Structures	Machinery	Vehicles	Tools	Supplies	Equipment	timber	-in-progress	Total
Acquisition cost	26,376	121,078	5,649	468	1,594	71	123,557	3,351	914	964	284,022
Accumulated depreciation	-	(35,220)	(1,875)	(468)	(1,427)	(69)	(103,420)	(2,932)	-	-	(145,411)
Accumulated impairment											
loss							(296)			(240)	(536)
Net book amount	26,376	85,858	3,774		167	2	19,841	419	914	724	138,075
						2020					
(in millions of Korean									Standing	Construction	
won)	Land	Buildings	Structures	Machinery	Vehicles	Tools	Supplies	Equipment	timber	-in-progress	Total
Acquisition cost	27,014	117,378	4,784	468	1,716	67	123,010	294	914	214	275,859
Accumulated depreciation	,	,	•		ŕ		,				,
Accumulated depreciation	-	(31,249)	(1,678)	(468)	(1,496)	(64)	(97,314)	(217)			(132,486)
Net book amount	27,014	86,129	3,106		220	3	25,696	77	914	214	143,373

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

(in millions of Management)								Standing	Construction	
(in millions of Korean won)	Land	Buildings	Structures	Vehicles	Tools	Supplies	Equipment	timber	-in-progress	Total
At January 1	27,014	86,129	3,106	220	3	25,696	77	914	214	143,373
Acquisitions	-	6	697	108	-	8,218	31	-	912	9,972
Increase due to business										
acquisition	-	-	-	-	-	35	421	-	-	456
Disposal/discard	-	-	-	(58)	-	(209)	(45)	-	-	(312)
Impairment ¹	-	-	-	-	-	(296)	-	-	(240)	(536)
Depreciation	-	(2,809)	(198)	(105)	(1)	(13,643)	(65)	-	-	(16,821)
Reclassification to										
investment properties	(707)	2,177	-	-	-	-	-	-	-	1,470
Transfer-in (out)	-	-	169	-	-	-	-	-	(169)	-
Exchange differences	69	355		2		40			7	473
At December 31	26,376	85,858	3,774	167	2	19,841	419	914	724	138,075

¹ The Group recognized impairment loss on supplies and others amounting to ₩ 536 million (2020: ₩ 1,906 million) as the book amount exceeded its recoverable value.

As at December 31, 2021, when all other variables are constant, the sensitivity of recoverable amount to changes in the perpetual growth rate and pre-tax discount rate is as follows:

(in millions of Korean wor	1)	Impact on recoverable amount					
		Changes in assumption	Increase in assumption	Decrease in assumption			
Daekyo EduCamp Co.,	Perpetual growth rate	0.5 %	163	(150)			
Ltd. Camp division	Discount rate	0.5 %	(344)	239			

The recoverable amount of property, plant and equipment is based on its value in use. The value in use is determined by discounting the future cash flows which were based on the estimated financial budget confirmed by management. In addition, a constant growth rate assumption was used to calculate the permanent cash flow.

The key assumptions used for calculating the value in use of Daekyo EduCamp are 0% of perpetual growth rate, and 13.3% of discount rate.

	2020									
(in millions of Korean won)	11	B 11 P	011	W. L. T.		0	-	Standing	Construction	T . (.)
	Land	Buildings	Structures	Vehicles	Tools	Supplies	Equipment	timber	-in-progress	Total
At January 1	48,918	100,467	4,802	361	4	28,296	210	914	1,077	185,049
Acquisitions	-	185	7	18	1	13,417	17	-	180	13,825
Increase due to business										
acquisition	-	-	-	4	-	131	102	-	-	237
Disposal/discard	-	-	-	(25)	-	(758)	(88)	-	(653)	(1,524)
Impairment	-	-	(1,844)	-	-	-	(62)	-	-	(1,906)
Depreciation	-	(2,655)	(249)	(135)	(1)	(15,343)	(105)	-	-	(18,488)
Reclassification to										
investment properties	(21,853)	(11,598)	-	-	-	-	-	-	-	(33,451)
Transfer-in (out)	-	-	390	-	-	-	-	-	(390)	-
Decrease due to loss of control	-	-	-	-	-	(18)	-	-	-	(18)
Exchange differences	(51)	(270)		(3)	(1)	(29)	3			(351)
At December 31	27,014	86,129	3,106	220	3	25,696	77	914	214	143,373

Depreciation for the years ended December 31, 2021 and 2020, is charged as follows:

(in millions of Korean won)	2021	2020
Cost of sales	13,963	15,589
Selling and administrative expenses	2,858	2,899
	16,821	18,488

Details of property, plant and equipment provided as collateral as at December 31, 2021, are as follows:

(in millions of			2021						
Korean won)	Book amount	Secured amount	Related line item	Related amount	Secured party				
			Borrowings						
Land and buildings	4,872	9,484	(Notes 19 and 30)	9,302	Woori Bank				

As at December 31, 2021, certain property, plant and equipment are provided as leasehold rights and pledged as collaterals (Note 30).

15. Investment Properties

Details of investment properties as at December 31, 2021 and 2020, are as follows:

		2021					
		Accumulated					
(in millions of Korean won)	Acquisition cost	depreciation	Book amount				
Land	48,347	-	48,347				
Buildings	153,346	(58,268)	95,078				
	201,693	(58,268)	143,425				
	2020						
		Accumulated	_				
(in millions of Korean won)	Acquisition cost	depreciation	Book amount				
Land	47,394	-	47,394				
Buildings	155,058	(55,523)	99,535				
	202,452	(55,523)	146,929				
	,	(,/					

Changes in investment properties for the years ended December 31, 2021 and 2020, are as follows:

		2021	
(in millions of Korean won)	Land	Buildings	Total
At January 1	47,394	99,535	146,929
Depreciation	-	(3,542)	(3,542)
Transfer	707	(2,177)	(1,470)
Exchange differences	246	1,262	1,508
At December 31	48,347	95,078	143,425
		2020	
(in millions of Korean won)	Land	Buildings	Total
At January 1	25,714	92,543	118,257
Depreciation	-	(3,712)	(3,712)
Transfer	21,853	11,598	33,451
Exchange differences	(173)	(894)	(1,067)
At December 31	47,394	99,535	146,929

Fair value of investment properties as at December 31, 2021, is $\mbox{$\%$}$ 369,760 million (2020: $\mbox{$\%$}$ 251,675 million) and fair value evaluation is based on the valuation amount by an independent appraiser.

Rent income from investment properties for the year ended December 31, 2021, is ₩ 16,053 million (2020: ₩ 14,762 million), and operating expenses (including repairs and maintenance) directly related to those investment properties is ₩ 11,506 million (2020: ₩ 11,830 million).

Details of investment properties provided as collateral as at December 31, 2021, are as follows:

(in millions of			2021					
Korean won)		Secured	Related	Related				
	Book amount	amount	line item	amount	Secured party			
			Borrowings					
Land and buildings	18,263	9,484	(Notes 19 and 30)	9,302	Woori Bank			

As at December 31, 2021, certain investment properties are provided as leasehold rights and pledged as collaterals (Note 30).

16. Intangible Assets

Details of intangible assets as at December 31, 2021 and 2020, are as follows:

2	n	•	4

							Customer			
(in millions of Korean won)				Industrial		Other		relationship		
(III IIIIIIIOIIS OI KOIEAII WOII)		Membership	Development	property		intangible		and brand	Construction-	
	Goodwill	rights	costs	rights	Software	assets	Technology	value	in-progress	Total
Acquisition cost	45,296	7,902	180,770	4,638	57,580	21,149	17,389	20,508	1,287	356,519
Accumulated amortization	-	-	(129,326)	(4,351)	(45,930)	(19,025)	(3,621)	(2,256)	-	(204,509)
Accumulated impairment loss	(19,002)	(627)	(49,985)	(5)	(1,274)	(84)	-	(2,038)	-	(73,015)
Government grants					(238)	(20)			<u> </u>	(258)
Net book amounts	26,294	7,275	1,459	282	10,138	2,020	13,768	16,214	1,287	78,737

	2020										
			lm decatorial		Othor		Customer				
			industriai								
	Membership	Development	property		intangible		and brand				
Goodwill	rights	costs	rights	Software	assets	Technology	value ¹	Total			
41,723	8,254	173,429	2,151	55,322	22,957	13,462	20,508	337,806			
-	-	(122,865)	(1,965)	(43,887)	(20,980)	(2,324)	(2,172)	(194,193)			
(9,384)	(789)	(41,301)	(2)	(376)	(48)	-	-	(51,900)			
					(47)			(47)			
32,339	7,465	9,263	184	11,059	1,882	11,138	18,336	91,666			
	41,723 - (9,384)	41,723 8,254 (9,384) (789) 	Goodwill rights costs 41,723 8,254 173,429 - - (122,865) (9,384) (789) (41,301) - - -	Goodwill rights costs rights 41,723 8,254 173,429 2,151 - - (122,865) (1,965) (9,384) (789) (41,301) (2) - - - -	Goodwill rights costs rights Software 41,723 8,254 173,429 2,151 55,322 - - (122,865) (1,965) (43,887) (9,384) (789) (41,301) (2) (376) - - - - -	Goodwill rights Costs rights Software assets 41,723 8,254 173,429 2,151 55,322 22,957 - - (122,865) (1,965) (43,887) (20,980) (9,384) (789) (41,301) (2) (376) (48) - - - - - (47)	Nembership Development property intangible	Goodwill rights Costs rights Software assets Technology value¹ 41,723 8,254 173,429 2,151 55,322 22,957 13,462 20,508 - - (122,865) (1,965) (43,887) (20,980) (2,324) (2,172) (9,384) (789) (41,301) (2) (376) (48) - - - - - - - (47) - - - -			

¹ Customer relationship and brand value were recognized due to business combination during 2020.

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

					2	021				
(in millions of Korean won)	Goodwill	Membership rights	Development costs	Industrial property rights	Software	Other intangible assets	Technology	Customer relationship and brand value	Construction	Total
At January 1	32,339	7,465	9,263	184	11,059	1,882	11,138	18,336	-	91,666
Acquisitions	-	-	-	128	4,265	1,284	-	-	1,287	6,964
Acquisitions due to business combination	2,093	-	706	-	44	-	2,722	-	-	5,565
Acquisitions by internal development	-	-	789	-	-	-	-	-	-	789
Disposal	-	(190)	-	(2)	(93)	-	-	-	-	(285)
Amortization (including government grants)	-	-	(2,150)	(76)	(4,249)	(1,063)	(1,054)	(2,122)	-	(10,714)
Impairments ¹	(9,619)	-	(7,149)	(3)	(898)	(35)	-	-	-	(17,704)
Transfer	-	-	-	51	-	(51)	-	-	-	-
Exchange differences	1,481	-			10	3	962	-		2,456
At December 31	26,294	7,275	1,459	282	10,138	2,020	13,768	16,214	1,287	78,737

					2020				
(in millions of Korean won)	Goodwill	Membership rights	Development costs	Industrial property rights	Software	Other intangible assets	Technology	Customer relationship and brand value	Total
At January 1	28,302	8,465	13,775	198	7,071	1,733	12,875	5,171	77,590
Acquisitions	-	-	-	62	6,970	1,044	-	-	8,076
Acquisitions due to									
business combination	14,208	-	-	-	473	104	-	15,288	30,073
Acquisitions by internal									
development	-	-	7,918	-	-	-	-	-	7,918
Disposal	-	(1,022)	-	(2)	(274)	(21)	-	-	(1,319)
Amortization (including									
government grants)	-	-	(6,441)	(72)	(3,174)	(975)	(1,029)	(2,123)	(13,814)
Impairments ¹	(9,110)	22	(5,867)	-	(2)	-	-	-	(14,957)
Decrease due to loss of									
control	-	-	-	(1)	(5)	-	-	-	(6)
Exchange differences	(1,061)		(122)	(1)		(3)	(708)		(1,895)
At December 31	32,339	7,465	9,263	184	11,059	1,882	11,138	18,336	91,666

¹ The Group recognized impairment loss on development costs and others amounting to ₩ 17,704 million (2020: ₩ 14,957 million) as the book amount exceeded its recoverable value.

Amortization for the years ended December 31, 2021 and 2020, is charged as follows:

(in millions of Korean won)	2021	2020
Cost of sales	4,776	8,067
Selling and administrative expenses	5,938	5,747
	10,714	13,814

Development Costs

For the year ended December 31, 2021, development costs considered as low business value are recognized as impairment loss of \forall 7,149 million and included in 'other expense' within statements of profit or loss (2020: \forall 5,867 million). Also, that development costs are belong to the education service of operating segments.

a. Impairment loss of development cost as at December 31, 2021 and 2020, is as follows:

(in millions of Korean won)		2021		
Related account	Separate asset	Carrying amount	Impairment loss	
Development costs	New Summit Score Math for elementary 1st and 2nd year (asset) and 14 other items ¹	5,227	5,227	
	Textbooks for elementary 3rd and 4th year (asset) and 4 other items ¹	1,922	1,922	
	_	7,149	7,149	

¹ As the result of an impairment test, the Group impaired the entire amount due to the low possibility of collectability of future cash flows and inflow of economic benefits from development costs.

(in millions of Korean won)		2020		
Related account	Separate asset	Carrying amount	Impairment loss	
	Jump All Reading and two others ¹	90	90	
Development costs	Noonnoppi Math 1st and 2nd year revision and 39 other items ¹	4,371	4,371	
	English digital textbooks revised in 2015 for			
	elementary 3rd and 4th year and 7 other items ¹	1,946	1,406	
	<u>-</u>	6,407	5,867	

¹ As the result of an impairment test, the Group impaired the entire amount due to the low possibility of collectability of future cash flows from development assets.

b. Estimating recoverable amount

The Group estimated recoverable amount of development costs based on fair value less costs for disposal or value-in-use calculations.

The recoverable amount calculations use cash flow projections based on historical operating performance and financial budgets approved by management.

Discount rate used for recoverable amount calculation is 13.2% and the rate is weight average cost of capital reflected specific risks relating to the asset.

- c. Line items including impairment loss in the statement of profit or loss are other expense of \forall 7,149 million (2020: \forall 5,867 million).
- d. List of major assets for development costs

As at December 31, 2020, study material development costs out of the development costs consist of in-progress development costs of \forall 843 million and completed development costs of \forall 5,901 million, and the weighted average residual amortization period of development costs that is being amortized is 3.1 years.

As at December 31, 2020, textbook development costs consist of in-progress development cost of \forall 1,625 million and completed development costs of \forall 894 million, and the weighted average residual amortization period of development costs that is being amortized is 1.7 years.

e. Total research and development costs recognized as expenses for the years ended December 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Cost of sales	6,448	1,850
Selling and administrative expenses	286	273
	6,734	2,123

Goodwill is allocated among the Group's cash-generating units (CGUs) according to operating segments. Details of goodwill by operating segments as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
CHAIHONG division	480	480
Daekyo EduCamp Co., Ltd. ^{1,2}	1,286	354
KnowRe Americas, Inc.	18,014	16,533
Eduvation Inc.	4,421	7,262
Teuni Teuni Co., Ltd. ¹	-	7,710
KIDS SCHOLE	2,093	
	26,294	32,339

¹ During 2021, Teuni Teuni Co., Ltd. was merged into Daekyo EduCamp Co., Ltd., and became a

separate division.

The recoverable amounts of cash-generating units have been determined based on value-in-use calculations. These calculations use cash flow projections based on financial budgets approved by management.

The Group performs impairment test for goodwill annually. As a result of the impairment test, the Group recognized impairment loss of \forall 2,842 million for Eduvation Inc. and \forall 6,777 million for Teuni Teuni Co., Ltd.

As at December 31, 2021, when all other variables are constant, the sensitivity of recoverable amount to changes in the perpetual growth rate and pre-tax discount rate is as follows:

(in millions of Korean won)	Impact on recoverable amount				
		Change in assumption	Increase in assumption	Decrease in assumption	
Daekyo EduCamp Co., Ltd. (Teuni Teuni division of	, ,	0.5 %	430	(400)	
Daekyo EduCamp Co., Ltd.)	Discount rate	0.5 %	(595)	642	
(in millions of Korean won)		Impact on recoverable amount			
		Change in assumption	Increase in assumption	Decrease in assumption	
Eduvation Inc.	Perpetual growth rate	0.5 %	257	(240)	
	Discount rate	0.5 %	(339)	364	

The recoverable amount of the CGU is based on its value in use. The value in use is determined by discounting the future cash flows which were based on the estimated financial budget confirmed by management. In addition, a constant growth rate assumption was used to calculate the permanent cash flow.

The key assumptions used for calculating the value in use, are as follows.

		Teuni Teuni	KNOWRE	Daekyo EduCamp	CHAIHONG
	Eduvation Inc.	division ¹	AMERICAS, INC.	Co., Ltd.	division
Eduvation Inc. Perpetual					
growth rate	0%	0%	1%	0%	0%
Discount rate	14.6%	13.3%	11.9%	13.3%	10.2%

¹ During 2021, Teuni Teuni Co., Ltd. was merged into Daekyo EduCamp Co., Ltd., and became a separate division.

² Insurance division of Daekyo Edupia was transferred to Daekyo EduCamp Co., Ltd. during 2020.

17. Leases

Set out below is information for leases when the Group is a lessee.

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

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

(in millions of Korean won)	December 31, 2021	December 31, 2020
Right-of-use assets		
Properties	70,082	78,458
Office equipment	2,169	125
Vehicles	249	342
	72,500	78,925
Accumulated impairment loss	(2,025)	(1,500)
	70,475	77,425
(in millions of Korean won)	December 31, 2021	December 31, 2020
Lease liabilities		
Current	23,828	24,338
Non-current	44,801	51,157
	68,629	75,495

Additions to the right-of-use assets during the 2021 financial year were \forall 22.354 million (2020: \forall 13,843 million).

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

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

(in millions of Korean won)	December 31, 2021	December 31, 2020
Depreciation of right-of-use assets		
Properties	25,295	27,202
Office equipment	65	102
Vehicles	120	96
	25,480	27,400
Interest expense relating to lease liabilities (included in		
other expenses)	1,662	2,183
Expense relating to short-term leases (included in cost of		
goods sold and selling and administrative expenses)	418	179
Expense relating to leases of low-value assets that are		
not short-term leases (included in selling and		
administrative expenses)	1,398	1,665

The Group uses a practical expedient that does not assess whether a rent concession occurring as a direct consequence of the COVID-19 pandemic is a lease modification. Accordingly, the Group recognized $\,\,\,\,\,\,\,\,$ 67 million (2020: $\,\,\,\,\,\,\,\,\,\,\,$ 466 million) in profit or loss during the year ended December 31, 2021, to reflect changes in lease payments that arise from a rent concession to which the lessee has applied the practical expedient.

The total cash outflow for leases in 2021 was ₩ 28,252 million (2020: ₩ 29,170 million).

18. Other Payables

Details of other payables as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Current		
Non-trade payables	23,015	14,172
Accrued expenses	33,372	29,449
Leasehold deposits received	20,841	18,449
	77,228	62,070
Non-current		
Long-term non-trade payables	32,664	21,525
Leasehold deposits received	7,788	9,331
Long-term employee benefits	498	146
	40,950	31,002
	118,178	93,072

19. Borrowings

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

		Latest maturity	Annual interest rate (%) at		
(in millions of Korean won)	Details	date	Dec 31, 2021	2021	2020
Current					
Woori Bank¹	Facility loans	2022-12-31	3.25	182	7,911
Shinhan Bank ²	Facility loans	2022-02-10	Libor 3M + 105BP	13,076	12,000
Korea Development Bank	General loans	2022-12-28	2.91	2,000	2,000
Hyundai Motors Finance	General loans	-	-	-	3
Hitachi Capital Singapore Pte	General loans	2022-12-31	15.00	4	5
			_	15,262	21,919
Non-Current					
Woori Bank¹	Facility loans	2023-01-01	3.25	9,302	-
Hitachi Capital Singapore Pte.	General loans	2025-10-25	15.00	5	8
				9,307	8
			_	24,569	21,927
			·-		

¹ Certain property, plant and equipment and investment properties are pledged as collaterals for these borrowings (Notes 14, 15 and 30).

Changes in borrowings for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
At January 1	21,927	29,275
Addition	1,025	2,009
Repayment	(199)	(1,834)
Decrease due to loss of control	-	(6,265)
Effect of changes in currency exchange	1,816	(1,258)
At December 31	24,569	21,927

² Payment guarantees are provided from Daekyo Holdings Co., Ltd. for these borrowings (Note 30).

20. Provisions

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

(in millions of Korean won)	2021				
	Provision for restoration	Provision for legal claims ¹	Provisions for other liabilities and charges ²		
At January 1	2,719	9,298	6,856		
Business combination	577	-	-		
Addition and others	(99)	(8,293)	2,213		
Transfer	<u>-</u>	_	<u> </u>		
At December 31	3,197	1,005	9,069		
Current	190	1,005	4,342		
Non-current	3,007	-	4,727		
(in millions of Korean won)	2021				
	B. 11.	But the follows	Provisions for other		
	Provision for restoration	Provision for legal claims ¹	liabilities and charges ²		
At January 1	876	6,355	-		
Business combination	-	39	2,410		
Addition and others	1,843	2,767	4,446		
Transfer		137	_		
rransiei					
At December 31	2,719	9,298	6,856		
	2,719		6,856 4,411		

¹ The amount relates to legal claim made by the current and retired employees against the Group. The provision charge is recognized in profit or loss within 'cost of sales' and 'other expenses'. In management's opinion, the outcome of these legal claims will not give rise to any significant loss beyond the amounts provided as at December 31, 2021.

² The amount is recognized in connection with the lawsuit for severance pay against freelance instructors and others.

21. Other Liabilities

Details of other liabilities as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020	
Current			
Withholding	5,670	3,398	
Advance payments from customer	3,329	2,364	
Unearned income	735	1,162	
Value added tax withheld	198	105	
Other current liabilities	422	339	
	10,354	7,368	

22. Net Defined Benefit Liabilities

22.1 Defined Benefit Plan

Details of retirement benefit obligations recognized on the consolidated statements of financial position as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Present value of funded defined benefit obligations	71,791	74,419
Present value of unfunded defined benefit obligations	1,878	1,287
Fair value of plan assets	(68,382)	(62,431)
Net defined benefit liability	5,287	13,275

The amounts recognized in the consolidated statements of profit or loss for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020	
Current service cost	8,423	9,111	
Net interest cost	303	203	
Total expenses	8,726	9,314	

Cumulative actuarial losses recognized in the consolidated statements of comprehensive income as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020	
Remeasurement of net defined benefit liability before tax	(15,834)	(17,825)	
Tax effect	3,499	3,981	
Remeasurement of net defined benefit liability after tax	(12,335)	(13,844)	

Total expenses for the years ended December 31, 2021 and 2020, are charged as follows:

(in millions of Korean won)	2021	2020
Cost of sales	7,057	7,518
Selling and administrative expenses	1,669	1,796
	8,726	9,314

Changes in the carrying amount of defined benefit liability for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
At January 1	75,706	73,771
Current service cost	8,423	9,111
Interest expense	1,600	1,511
Remeasurements:		
- Actuarial gains and losses from changes in financial		
assumptions	(5,693)	2,832
- Actuarial gains and losses from experience		
adjustments	3,159	(2,881)
- Actuarial gains and losses from changes in		
demographic assumptions	268	(24)
Benefit payments	(10,179)	(8,803)
Liabilities assumed due to business combination	385	188
Exchange differences	<u>-</u>	1
At December 31	73,669	75,706

Changes in the fair value of plan assets for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
At January 1	62,431	62,348
Expected return on plan assets	1,297	1,308
Remeasurements:		
- Return on plan assets	(275)	(106)
Contributions of employers	13,965	6,452
Benefit payments	(9,036)	(7,571)
At December 31	68,382	62,431

The principal actuarial assumptions to calculate defined benefit liability as at December 31, 2021 and 2020, are as follows:

(%)	2021	2020	
Discount rate	2.37~3.59	1.76~3.09	
Future salary increases	2.67~3.72	3.00~7.95	

Plan assets as at December 31, 2021 and 2020, consist of:

(in millions of Korean won)	2021	2020
Time deposits	73	36,767
Derivative linked securities		
(Principal and interest assured) and others	68,309	25,664
	68,382	62,431

Expected future contribution of defined benefit plans by employer is best estimated to be \forall 11,100 million after the reporting period.

The sensitivity of the defined benefit obligations to changes in the principal actuarial assumptions is as follows:

	Changes in principal assumption	Effect on defined benefit obligation
Discount rate	0.5% increase/decrease	2.78% decrease / 3.13% increase
Salary growth rate	0.5% increase/decrease	3.14% increase / 2.88% decrease

A decrease in corporate bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the plans' bond holdings.

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

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

The Group reviews the funding level on an annual basis and has a policy to eliminate deficit in the fund.

Expected maturity analysis of undiscounted pension benefits as at December 31, 2021, is as follows:

(in millions of Korean won)	Less than 1 year	Between 1 and 2 years	Between 2 and 5 years	Between 5 and 10 years	More than 10 years	Total
Pension benefits	10,287	10,707	21,965	47,416	77,637	168,012

The weighted average duration of the defined benefit obligations is 6.31 years.

22.2 Defined Contribution Plan

Recognized expense related to the defined contribution plan for the year ended December 31, 2021, is \forall 1,864 million (2020: \forall 1,521 million).

23. Deferred Income Tax

The analysis of deferred tax assets and deferred tax liabilities as at December 31, 2021 and 2020, is as follows:

(in millions of Korean won)	2021	2020
Deferred tax assets		
Deferred tax asset to be recovered within 12 months	6,184	8,634
Deferred tax asset to be recovered after more than 12		
months	62,884	63,644
Deferred tax assets before offsetting	69,068	72,278
Deferred tax liabilities		
Deferred tax liability to be recovered within 12 months	28	44
Deferred tax liability to be recovered after more than 12		
months	46,110	49,090
Deferred tax liabilities before offsetting	46,138	49,134
Deferred tax assets, net	22,930	23,144

Changes in the deferred tax assets and liabilities for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
At January 1	23,144	3,747
Business combination	(659)	(2,791)
Charged (credited) to the statement of profit or loss	3,108	17,306
Charged to other comprehensive income	(2,592)	4,695
Exchange differences	(71)	187
At December 31	22,930	23,144

Changes in deferred tax assets and liabilities for the years ended December 31, 2021 and 2020, without offsetting balances within the same tax jurisdiction, are as follows:

	(in millions of Korean			202	1		
Profit of Los	won)		Increase (decrease)				
Deferred tax assets		•			_		
Net defined benefit				•	•		_
Isiability	Deferred tax assets	<u> </u>	1033	meome (1033)	ропсу	combination	Dalarice
Allowance for doubtful accounts 3,756 (604) 3,152 Accrued expenses 1,797 349 3,152 Financial assets at fair value through other comprehensive income 7,458 (496) 6,962 Impairment loss on intangible assets 31 (31) 6,962 Impairment loss on intangible assets 31 (31) 478 Leasehold deposits provided 641 (146) 495 Depreciation 1,930 4,322 - 1 495 Depreciation 1,930 4,322 - 1 6,253 Lease liabilities 17,357 (1,853) 15,504 Investments accounted for using the equity method 11,965 (11,648) 317 Provisions 3,731 (3,726) 317 Provisions 3,731 (3,726) 317 Provisions 1,913 11,998 31,911 Other 5,070 (938) 4,132 Terred tax liabilities Plan assets (14,827) (860) (15,687) Gain on valuation of financial assets at fair value through other comprehensive income (8,571) 961 (2,089) (9,699) Intangible assets (18,027) 2,042 (15,687) Cher (309) 148 (15,687) Cher (309) 148 (15,687) Cher (309) 148 (15,687) Cher (309) (46,018)	Net defined benefit						
accounts 3,756 (604) - - - 3,152 Accrued expenses 1,797 349 - - - 2,146 Financial assets at fair value through other comprehensive income 7,458 (496) - - - 6,962 Impairment loss on intangible assets 31 (31) - - - 478 Amortization 487 (9) - - - 478 Leasehold deposits provided 641 (146) - - - 495 Depreciation 1,930 4,322 - 1 - 6,253 Lease liabilities 17,357 (1,853) - - - 15,504 Investments accounted for using the equity method 11,965 (11,648) - - - 317 Provisions 3,731 (3,726) - - - 5 Loss carryforwards 1,913 11,998 - - - 4,132	liability	16,142	74	(503)	-	-	15,713
Accrued expenses 1,797 349 0 2,146 Financial assets at fair value through other comprehensive income 7,458 (496) - 0 0 0,6962 Impairment loss on intangible assets 31 (31) 0 0 0 0 0 0 0,6962 Impairment loss on intangible assets 31 (31) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Allowance for doubtful						
Financial assets at fair value through other comprehensive income 7,458 (496) 6,962 Impairment loss on intangible assets 31 (31) 6,962 Impairment loss on intangible assets 31 (31) 478 Impairment loss on intangible assets 487 (9) 4878 Impairment loss on intangible assets 487 (146) 495 Impairment loss on 1,930 4,322 1 15,504 Impairment loss on 1,930 4,322 1 15,504 Impairment loss on 1,930 4,322 15,504 Impairment loss on 1,935 (1,853) 5,504 Impairment loss on 1,945 (1,853)	accounts	3,756	(604)	-	-	-	3,152
value through other comprehensive income 7,458 (496) 6,962 (496) (100 me) 7,458 (496) 6,962 (496) (100 me) 7,458 (1496) (149	Accrued expenses	1,797	349	-	-	-	2,146
Comprehensive Income T,458 (496) -							
Income 7,458 (496) - - - 6,962 Impairment loss on intangible assets 31 (31) - - - - - - -							
Impairment loss on intangible assets 31 (31)	=		(100)				
intangible assets 31 (31) -		7,458	(496)	-	-	-	6,962
Amortization 487 (9) - - - 478 Leasehold deposits provided 641 (146) - - - 495 Depreciation 1,930 4,322 - 1 - 6,253 Lease liabilities 17,357 (1,853) - - - 15,504 Investments accounted for using the equity method 11,965 (11,648) - - - 317 Provisions 3,731 (3,726) - - - 5 5 Loss carryforwards 1,913 11,998 - - - 4,132 Cher 5,070 (938) - - - 4,132 Other 5,070 (938) - - - 4,132 Plan assets (14,827) (860) - - - - 69,068 Deferred tax liabilities Plan assets (14,827) (860) - - -<	<u>=</u>	24	(04)				
Leasehold deposits Provided 641 (146) - - - 495 Depreciation 1,930 4,322 - 1 - 6,253 Lease liabilities 17,357 (1,853) - - - 15,504 Investments accounted for using the equity method 11,965 (11,648) - - Provisions 3,731 (3,726) - - Loss carryforwards 1,913 11,998 - - Other 5,070 (938) - - Deferred tax liabilities	-		, ,	-	-	-	470
provided 641 (146) - - - 495 Depreciation 1,930 4,322 - 1 - 6,253 Lease liabilities 17,357 (1,853) - - - 15,504 Investments accounted for using the equity method 11,965 (11,648) - - - - 317 Provisions 3,731 (3,726) - - - - 5 5 Loss carryforwards 1,913 11,998 - - - - 4,132 Other 5,070 (938) - - - - 4,132 Deferred tax liabilities - - - - - 4,132 Plan assets (14,827) (860) - - - - (15,687) Gain on valuation of financial assets at fair value through other comprehensive income (8,571) 961 (2,089) - - - (9,699) Intangible as		487	(9)	-	-	-	478
Depreciation 1,930 4,322 - 1 - 6,253 Lease liabilities 17,357 (1,853) - - - 15,504 Investments accounted for using the equity method 11,965 (11,648) - - - 317 Provisions 3,731 (3,726) - - - 5 5 Loss carryforwards 1,913 11,998 - - - - 13,911 Other 5,070 (938) - - - 4,132 Plan assets (14,827) (860) - - - (15,687) Gain on valuation of financial assets at fair value through other comprehensive income (8,571) 961 (2,089) - - - (9,699) Intangible assets (7,400) 3,525 - (72) (659) (4,606) Right-of-use assets (18,027) 2,042 - - - - (15,985) Other (309)	•	641	(146)				405
Lease liabilities 17,357 (1,853) - - - 15,504	•		, ,	-	1	-	
Investments accounted for using the equity method 11,965 (11,648) 317 Provisions 3,731 (3,726) 5	•			-	'	-	
for using the equity method 11,965 (11,648) 317 Provisions 3,731 (3,726) 5		17,337	(1,655)	-	-	-	15,504
method 11,965 (11,648) - - - 317 Provisions 3,731 (3,726) - - - 5 Loss carryforwards 1,913 11,998 - - - - 13,911 Other 5,070 (938) - - - - 4,132 Deferred tax liabilities Plan assets (14,827) (860) - - - - (15,687) Gain on valuation of financial assets at fair value through other comprehensive income (8,571) 961 (2,089) - - (9,699) Intangible assets (7,400) 3,525 - (72) (659) (4,606) Right-of-use assets (18,027) 2,042 - - - - (15,985) Other (309) 148 - - - - (161) (49,134) 5,816 (2,089) (72) (659) (46,138)							
Provisions 3,731 (3,726) - - - 5 Loss carryforwards 1,913 11,998 - - - - 13,911 Other 5,070 (938) - - - - 4,132 Deferred tax liabilities Plan assets (14,827) (860) - - - - (15,687) Gain on valuation of financial assets at fair value through other comprehensive income (8,571) 961 (2,089) - - (9,699) Intangible assets (7,400) 3,525 - (72) (659) (4,606) Right-of-use assets (18,027) 2,042 - - - - (15,985) Other (309) 148 - - - - (161) (49,134) 5,816 (2,089) (72) (659) (46,138)		11.965	(11.648)	_	_	_	317
Loss carryforwards 1,913 11,998 - - - 13,911 Other 5,070 (938) - - - - 4,132 Deferred tax liabilities Plan assets (14,827) (860) - - - - (15,687) Gain on valuation of financial assets at fair value through other comprehensive income (8,571) 961 (2,089) - - - (9,699) Intangible assets (7,400) 3,525 - (72) (659) (4,606) Right-of-use assets (18,027) 2,042 - - - - (15,985) Other (309) 148 - - - - (161) (49,134) 5,816 (2,089) (72) (659) (46,138)			, ,	_	_	_	
Other 5,070 (938) - - - - 4,132 Deferred tax liabilities Plan assets (14,827) (860) - - - - (15,687) Gain on valuation of financial assets at fair value through other comprehensive income (8,571) 961 (2,089) - - - (9,699) Intangible assets (7,400) 3,525 - (72) (659) (4,606) Right-of-use assets (18,027) 2,042 - - - (15,985) Other (309) 148 - - - (161) (49,134) 5,816 (2,089) (72) (659) (46,138)			, ,	_	_	_	13.911
T2,278 (2,708) (503) 1	<u>-</u>			-	_	_	
Deferred tax liabilities Plan assets (14,827) (860) - - - - (15,687) Gain on valuation of financial assets at fair value through other comprehensive income (8,571) 961 (2,089) - - - (9,699) Intangible assets (7,400) 3,525 - (72) (659) (4,606) Right-of-use assets (18,027) 2,042 - - - (15,985) Other (309) 148 - - - (161) (49,134) 5,816 (2,089) (72) (659) (46,138)				(503)	1		•
Plan assets (14,827) (860) (15,687) Gain on valuation of financial assets at fair value through other comprehensive income (8,571) 961 (2,089) (9,699) Intangible assets (7,400) 3,525 - (72) (659) (4,606) Right-of-use assets (18,027) 2,042 (15,985) Other (309) 148 (161) (49,134) 5,816 (2,089) (72) (659) (46,138)	Deferred tax liabilities		(=,: 00)	(000)			
Gain on valuation of financial assets at fair value through other comprehensive income (8,571) 961 (2,089) (9,699) Intangible assets (7,400) 3,525 - (72) (659) (4,606) Right-of-use assets (18,027) 2,042 (15,985) Other (309) 148 (161) (49,134) 5,816 (2,089) (72) (659) (46,138)		(14.827)	(860)	_	_	_	(15.687)
value through other comprehensive income (8,571) 961 (2,089) - - - (9,699) Intangible assets (7,400) 3,525 - (72) (659) (4,606) Right-of-use assets (18,027) 2,042 - - - - (15,985) Other (309) 148 - - - - (161) (49,134) 5,816 (2,089) (72) (659) (46,138)	Gain on valuation of	(11,521)	(555)				(10,000)
comprehensive income (8,571) 961 (2,089) - - - (9,699) Intangible assets (7,400) 3,525 - (72) (659) (4,606) Right-of-use assets (18,027) 2,042 - - - - (15,985) Other (309) 148 - - - - (161) (49,134) 5,816 (2,089) (72) (659) (46,138)	financial assets at fair						
income (8,571) 961 (2,089) - - (9,699) Intangible assets (7,400) 3,525 - (72) (659) (4,606) Right-of-use assets (18,027) 2,042 - - - - (15,985) Other (309) 148 - - - - (161) (49,134) 5,816 (2,089) (72) (659) (46,138)	value through other						
Intangible assets (7,400) 3,525 - (72) (659) (4,606) Right-of-use assets (18,027) 2,042 - - - - (15,985) Other (309) 148 - - - - (161) (49,134) 5,816 (2,089) (72) (659) (46,138)	comprehensive						
Right-of-use assets (18,027) 2,042 - - - - (15,985) Other (309) 148 - - - - - (161) (49,134) 5,816 (2,089) (72) (659) (46,138)	income	(8,571)	961	(2,089)	-	-	(9,699)
Other (309) 148 - - - - - (161) (49,134) 5,816 (2,089) (72) (659) (46,138)	Intangible assets	(7,400)	3,525	-	(72)	(659)	(4,606)
(49,134) 5,816 (2,089) (72) (659) (46,138)	Right-of-use assets	(18,027)	2,042	-	-	-	(15,985)
	Other	(309)	148			<u>-</u> _	(161)
23,144 3,108 (2,592) (71) (659) 22,930		(49,134)	5,816	(2,089)	(72)	(659)	(46,138)
		23,144	3,108	(2,592)	(71)	(659)	22,930

(in millions of Korean			2020)		
won)			Increase (de	ecrease)		
	•		Other	Changes in		
	Beginning	Profit or	comprehensive	accounting	Business	Ending
	balance	loss	income (loss)	policy	combination	balance
Deferred tax assets						
Net defined benefit						
liability	15,577	534	(8)	-	42	16,145
Allowance for doubtful						
accounts	2,102	1,639	-	-	15	3,756
Accrued expenses	2,830	(1,503)	-	-	470	1,797
Financial assets at fair value through other						
comprehensive	7.000	0.500	(0.407)			7 450
income	7,363	2,532	(2,437)	-	-	7,458
Remeasurement of net	0.000	(0.000)	(0)			(0)
defined benefit liability	3,992	(3,992)	(3)	-	-	(3)
Impairment loss on intangible assets	541	(510)				31
•		(510)	-	-	-	
Amortization Leasehold deposits	474	13	-	-	-	487
provided	891	(256)	_	_	6	641
Depreciation	675	1,256		(1)	_	1,930
Lease liabilities	24,012	(6,655)	_	(1)	_	17,357
Investments accounted	24,012	(0,033)	-	-	-	17,337
for using the equity						
method	<u>-</u>	11,965	-	_	_	11,965
Provisions	_	3,731	_	_	_	3,731
Loss carryforwards	_	1,913	_	_	_	1,913
Other	3,563	892	_	_	615	5,070
Othor	62,020	11,559	(2,448)	(1)	1,148	72,278
Deferred tax liabilities	02,020	11,559	(2,440)	(1)	1,140	12,210
	(14.077)	150				(44.027)
Plan assets Gain on valuation of	(14,977)	150	-	-	-	(14,827)
financial assets at fair						
value through other						
comprehensive						
income	(13,183)	(2,531)	7,143	-	-	(8,571)
Intangible assets	(4,236)	348	-	188	(3,700)	(7,400)
Right-of-use assets	(24,499)	6,473	-	-	(1)	(18,027)
Other	(1,378)	1,307	-	-	(238)	(309)
	(58,273)	5,747	7,143	188	(3,939)	(49,134)
	3,747	17,306	4,695	187	(2,791)	23,144
		,550	.,550		(=,: 0 1)	

Tax effects recognized directly in other comprehensive income as at December 31, 2021 and 2020, are as follows:

<u>-</u>		2021	
(in millions of Korean won)	Before Tax	Tax effects	After Tax
Gain (loss) on valuation of financial			
assets at fair value through other			
comprehensive income	33,215	(8,041)	25,174
Remeasurement of net defined benefit			
liability	(15,834)	3,499	(12,335)
Currency translation differences	1,779	-	1,779
_		2020	
(in millions of Korean won)	Before Tax	2020 Tax effects	After Tax
(in millions of Korean won) Gain (loss) on valuation of financial	Before Tax	-	After Tax
·	Before Tax	-	After Tax
Gain (loss) on valuation of financial	Before Tax 28,330	-	After Tax 21,471
Gain (loss) on valuation of financial assets at fair value through other		Tax effects	
Gain (loss) on valuation of financial assets at fair value through other comprehensive income		Tax effects	
Gain (loss) on valuation of financial assets at fair value through other comprehensive income Remeasurement of net defined benefit	28,330	Tax effects (6,859)	21,471

Details of temporary differences that are unrecognized as deferred tax assets as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Investments in subsidiaries and others	83,391	57,164
Impairment on trade receivables and others of subsidiaries	11,276	3,048
Tax loss carryforwards	22,828	1,611

The maturity of unused losses is as follows:

Tax loss		
carryforwards	Maturity	
12,822	2036	
10,006	2035	
22,828		
	carryforwards 12,822 10,006	carryforwards Maturity 12,822 2036 10,006 2035

24. Share Capital

The Company is authorized to issue 1,500 million shares with a par value per share of \$500. As at December 31, 2021, 84,702,850 shares (\$42,352 million) of ordinary share and 19,426,990 shares (\$9,713 million) of preferred share are issued outstanding. There are no movements in ordinary and preferred shares during 2021 and 2020.

When the dividend rate of ordinary share exceeds the dividend rate of preferred share (over 9% of the par value according to the resolution of the Board of Directors), the preferred share has the right to be entitled to receive dividends at the same rate with the ordinary share for the excess rate.

25. Reserves

Details of reserves as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Share premium	46,797	46,797
Other reserves	27,809	27,775
	74,606	74,572

26. Other Components of Equity

Details of other components of equity as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Stock options	215	502
Treasury shares	(115,988)	(116,504)
Others	(29,442)	(20,180)
	(145,215)	(136,182)

27. Share-based Payments

As at December 31, 2021, the summary of stock options to be granted to employees is as follows:

	<u>Details</u>
Date of the first announcement	August 13, 2021
Grant method	Issuance of shares
Exercise period	April 2022 (scheduled)
Vesting conditions	Options are conditional on the employee completing service between July 1, 2021 and December 31, 2021 and achieving performance goals.
Exercise price ¹	Standard price of preferred share \times (1- discount rate)
Shares to be granted	68,316 shares of preferred share (scheduled)

¹ The standard price of preferred share is calculated as mathematical average of closing price on reference date, one month average closing price and one week average closing price rolled-back from the reference date. The discount rates are 50% and 100%.

The fair value of stock appreciation rights determined was $\mbox{$\mbox{$$\mu$}$}$ 214 million (2020: $\mbox{$\mbox{$\mbox{$\mu$}}$}$ 502 million). The significant inputs into the model were the weighted average share price of $\mbox{$\mbox{$\mbox{$$\mu$}$}$}$ 2,736 (2020: $\mbox{$\mbox{$\mbox{$$\mu$}$}$}$ 3,664), volatility of 37.1% (2020: 40.3%), dividend yield of 3.5% (2020: 4.2%), an expected option life of 0.43 year (2020: 0.45 year) and an annual risk-free interest rate of 1.35% (2020: 0.74%).

Changes in stock options for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
At January 1	502	845
Compensation cost	214	502
Exercise	(502)	(845)
At December 31	214	502

28. Treasury Shares

Changes in treasury shares for the years ended December 31, 2021 and 2020, are as follows:

(shares, in millions of Korean won)		2021	
	Ordinary share	Preferred share	Amounts
At January 1	15,634,584	5,430,671	116,504
Acquisition	21,052	32,425	183
Disposal	<u> </u>	(207,733)	(699)
At December 31	15,655,636	5,255,363	115,988
(shares, in millions of Korean won)		2020	
	Ordinary share	Preferred share	Amounts
At January 1	13,622,584	4,527,098	105,653
Acquisition	2,012,000	1,304,835	12,223
Disposal	<u>-</u> _	(401,262)	(1,372)
At December 31	15,634,584	5,430,671	116,504

29. Retained Earnings

Retained earnings as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Legal reserve ¹	32,300	32,300
Discretionary reserve	523,805	523,805
Unappropriated retained earnings	(57,658)	(11,606)
	498,447	544,499

¹The Commercial Code of the Republic of Korea requires the Company 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 share capital. As at December 31, 2021, the Company's reserve equals 50% of the capital, therefore no additional reserve is needed. The reserve is not available for the payment of cash dividends, but when the accumulated legal reserves (the sum of capital reserves and earned profit reserves) are greater than 1.5 times the paid-in capital amount, it may be transferred to share capital or used to reduce accumulated deficit, if any, with the ratification of the Company's majority shareholders.

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

(in millions of Korean won)	2021	2020
At January 1	544,499	572,479
Profit for the year attributable to owners of the Parent		
Company	(43,634)	(17,564)
Remeasurement of net defined benefit liability	1,528	(57)
Dividend paid	(6,790)	(10,359)
Disposal of financial assets at fair value through other		
comprehensive income and others	2,844	-
At December 31	498,447	544,499

30. Contingencies and Commitments

As at December 31, 2021, the Group has credit agreements with Woori Bank up to \forall 2,900 million in relation to B2B transactions.

As at December 31, 2021, the Group has borrowing agreements in foreign currencies with Shinhan Bank up to USD 12,230 thousand.

In relation to using the copyright of Noonnoppi Math and Summit Math, the Group pays Korea contents bank a certain percentage of sales from the use. Payments of the copyright for the years ended December 31, 2021 and 2020, are \forall 1,041 million and \forall 1,087 million, respectively.

As at December 31, 2021, certain property, plant and equipment and investment properties are provided as collateral for borrowings in foreign currencies from Woori Bank (Notes 14, 15 and 19).

As at December 31, 2021, the Group provides financial deposits as collaterals amounting to $\mbox{$\mbox{$$$$$$$$$$$$$$$$$}$ million for certain lessees in connection with the lessees' guarantee deposits. Seoul Guarantee Insurance Co., Ltd. has provided guarantees up to $\mbox{$\mbox{$$$$$$$$$$$$$$$}$ million for the Group's execution of contracts.

The Group entered into contracts with free-lance instructors to manage its educational service members. In accordance with the contracts, the Group pays the instructors a certain percentage of monthly cash collections from its educational service members. Expenses in relation to these contracts amounted to \forall 264,734 million (2020: \forall 216,844 million) in 2021.

As at December 31, 2021, the Group is either a plaintiff in two legal cases (total amount of litigation: $\mbox{$\forall$}$ 233 million) or a defendant in 12 legal cases (total amount of litigation: $\mbox{$\forall$}$ 3,098 million). The Group recognized provision amounting to $\mbox{$\forall$}$ 10,074 million in relation to legal claim made by the current and retired employees against the Group (Note 20), and the outcome of other cases and effect on the financial statements could not be ascertained at the end of the reporting period.

Assets pledged as margin for futures trading as at December 31, 2021 and 2020, are as follows:

(in thousands of Korean won)

Financial deposits

Mirae Asset Daewoo Co., Ltd.

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As at December 31, 2021, the Group has been provided with payment guarantees of USD 12,230 thousand from the ultimate Parent Company, Daekyo Holdings Co., Ltd., in relation to certain borrowings of EYE LEVEL HUB LLC (Note 19).

As at December 31, 2021, the Group has entered into a share lease agreement with Mirae Asset Daewoo Co., Ltd. and KB Securities Co., Ltd. In relation to the agreement, the Group has provided 794,561 shares and 175,587 shares of Shinhan Financial Group, as at December 31, 2021.

As at December 31, 2021, certain property, plant and equipment are provided as leasehold rights for \forall 6,025 million and pledged as collateral for \forall 16,127 million.

As at December 31, 2021, the Group entered into an agreement with other investors that grants put options in relation to the equity investments in KnowRe Americas, Inc.

(in shares)	Exercisable number of shares	Exercise period	Exercise price	Performance conditions
The Time- Based Put Right	332,693	 Any time during the year of 2023 In case the holder's termination reason does not occur before January 1, 2025: Any time during the period starting from occurrence date of termination reason until the ending day after seven years from the effective date Expired on the earliest day among the termination timing of the last exercisable day, the day after seven years from the effective date and IPO completion date 	- Price when the conditions are not performed: At the time of judgment, the larger one of (1) KnowRe's net income multiplied by 20 which is stated in the financial statements during the certain financial statements period. Or (2) KnowRe's revenue multiplied by 6.5 which is stated in the financial statements during the certain financial statements during the certain financial statements period.	Any of the following three conditions are considered to be met: - Operating income of KnowRe Americas, Inc. as defined by GAAP or IFRS reaches or exceeds US\$ 2,500,000 for two consecutive fiscal years - Annual revenue of KnowRe Americas, Inc. as defined by GAAP or IFRS exceeds US\$ 7,000,000 during a fiscal year - The number of registered users of Summit Math products of Daekyo
Subsequent Time-Based Put Right	9,808	 Any time during the year after five years from the year when the acquisition of exercisable shares occurs Expired on the earliest day among the termination timing of the last exercisable day, the day after seven years from the acquisition date of exercisable shares and IPO completion date 	- Price when the conditions are performed: At the time of judgment, the larger one of (1) KnowRe's net income multiplied by 24 which is stated in the financial statements during the certain financial statements period. Or (2) KnowRe's revenue	Co., Ltd. is at least 100,000 per month for the consecutive three months
Put Shares	1,997,136	 Any time during the period starting from the day after five years from 	multiplied by 8 which is stated in the financial statements	

(in shares)	Exercisable number of			
	shares	Exercise period	Exercise price	Performance conditions
		the contract until the earliest day between the day after ten years from the contract and IPO completion date	during the certain financial statements period.	
Subsequent Put Share	60,364	- As for the exercisable shares acquired after the effective date, any time during the period starting from the day after five years from the acquisition date of exercisable shares until the earliest day between the day after five years from the acquisition and IPO completion date		

During 2021, the right to claim for sale of 100,000 shares held by individual shareholders of KnowRe Americas, Inc., a subsidiary, was exercised under the put option contract on August 9, 2018, and 3,270 shares were expired due to the inability to exercise the rights.

The Group measured the financial liabilities which are the present value of redemption amount at amortized cost using the effective interest method, taking into account of exercise of put options. As at December 31, 2021, the book amount of financial liabilities measured at amortized cost is \forall 32,663 million (2020: \forall 21,525 million).

As at December 31, 2021, the Group is provided with 47,286 shares of KnowRe Americas, Inc. as collateral for loans of \forall 140 million to the shareholders of KnowRe Americas, Inc. a subsidiary of the Group.

As at December 31, 2021, the Group has pledged $\mbox{$W$}$ 362 million out of consideration for acquisition of Eduvation Inc., a subsidiary of the Group.

As at December 31, 2021, the Group has entered a service contract with Daekyo CNS Co., Ltd. in relation to operating agency of IT system, software modification and development of a system subject to maintenance, and repair and maintenance of machinery related to computerized equipment. The amount paid under the contract for the year ended December 31, 2021, is $\mbox{$\mbox{μ}$}$ 17,089 million (2020: $\mbox{$\mbox{μ}$}$ 20,789 million).

As at December 31, 2021, the Group provides financial support to EduCamp Co., Ltd., a subsidiary of the Group, and its subsidiaries.

31. Revenue from Contracts with Customers

The Group has recognized the following amounts relating to revenue in the statement of profit or loss:

(in millions of Korean won)	2021	2020
Revenue from contracts with customers	622,237	612,079
Revenue from other sources: Lease and sub-lease		
revenues	16,158	14,927
	638,395	627,006

Disaggregation of revenue from contracts with customers

The Group derives revenue from the transfer of goods and services over time and at a point in time in the following major business divisions and geographical regions:

(in millions of Korean won)

Korean won)				2021				
	Domestic busin		ation Overseas business		ss	Other business		
	Education service and publication business	Education institution	U.S.A	Asia	Europe	Domestic	U.S.A	Total
Segment								
revenue	583,488	12,679	6,344	9,779	-	13,370	8,487	634,147
Inter-segment								
revenue	(2,812)	(178)	(481)	(164)			(8,275)	(11,910)
Revenue from external customers	580,676	12,501	5,863	9,615	-	13,370	212	622,237
Timing of revenue recognition At a point in								
time	573,562	1,031	5,669	9,615	-	9,024	50	598,951
Over time	7,114	11,470	194	-	-	4,346	162	23,286

(in	millio	ns of
Κ	orean	won)

Korean won)				2020				
		Domestic education business		Overseas business		Other business		
	Education service and publication business	Education institution	U.S.A	Asia	Europe	Domestic	U.S.A	Total
Segment								
revenue	579,939	10,609	6,463	7,782	64	9,780	9,002	623,639
Inter-segment								
revenue	(3,843)	(1)	<u>-</u> _	(429)	_		(7,287)	(11,560)
Revenue from external customers	576,096	10,608	6,463	7,353	64	9,780	1,715	612,079
Timing of revenue recognition At a point in	_							
time	569,994	10,233	6,234	7,353	64	6,500	638	591,158
Over time	6,102	375	229	-	-	3,280	1,077	20,921

32. Selling and Administrative Expenses

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

(in millions of Korean won)	2021	2020
Wages and salaries	28,569	26,984
Post-employment benefits	2,007	2,418
Welfare expense	4,976	5,024
Depreciation	6,694	7,392
Advertising expense	25,589	24,075
Commission expense	32,853	27,667
Amortization	5,938	5,747
Taxes and dues	3,375	3,527
Transportation expense	196	361
Printing expense	324	402
Rental expense	316	453
Other	8,685	7,656
	119,522	111,706

33. Expenses by Nature

Expenses that are recorded by nature as cost of sales and selling and administrative expenses in the statement of profit or loss for the years ended December 31, 2021 and 2020, consist of:

(in millions of Korean won)	2021	2020
Changes in inventories	(2,625)	(2,183)
Purchase of raw materials and merchandise	31,686	29,754
Depreciation, amortization	56,557	63,414
Employee benefit expenses	159,916	159,971
Commission expenses	350,976	341,312
Rental expenses	8,038	7,660
Advertising expenses	25,589	24,075
Other expenses	35,206	30,421
	665,343	654,424

34. Other Income

Other income for the years ended December 31, 2021 and 2020, consists of:

(in millions of Korean won)	2021	2020
Gains on foreign currency transaction	111	66
Gains on foreign currency translation	298	-
Dividend income	3,625	3,977
Gain on valuation of financial assets at fair value through profit or loss	2,261	2,880
Gain on disposal of financial assets at fair value through profit or loss	4,027	2,638
Gain on transaction of derivatives	-	19
Other	2,247	10,138
	12,569	19,718

35. Other Expenses

Other expenses for the years ended December 31, 2021 and 2020, consist of:

(in millions of Korean won)	2021	2020
Interest expense	1,972	2,660
Loss on foreign currency transaction	62	-
Loss on foreign currency translation	28	678
Donations	562	904
Other commission expenses	1,093	985
Loss on valuation of financial assets at fair value through profit or loss Loss on disposal of financial assets at fair value through	4,014	3,160
profit or loss	436	938
Loss on transaction of derivatives Impairment loss on property, plant and equipment and	-	144
intangible assets	18,352	16,862
Other	808	5,248
	27,327	31,579

36. Other Finance Income

Other finance income for the years ended December 31, 2021 and 2020, is as follows:

(in millions of Korean won)	2021	2020
Gain on foreign currency translation	841	1,396
	841	1,396

37. Finance Costs

Finance costs for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Interest expenses	1,270	1,439
Loss on foreign currency transaction	-	4
Loss on foreign currency translation	1,902	<u> </u>
	3,172	1,443

38. Income Tax Expense (Benefit)

Income tax expense (benefit) for the years ended December 31, 2021 and 2020, consists of:

(in millions of Korean won)	2021	2020
Current tax:		
Current tax on profits for the year	37	335
Adjustments in respect of prior years	1,116	(2,704)
Total current tax	1,153	(2,369)
Deferred tax: Origination and reversal of temporary differences and		
others	(3,108)	(17,306)
Total deferred tax	(3,108)	(17,306)
Income tax expense (benefit)	(1,955)	(19,675)

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

(in millions of Korean won)	2021	2020
Loss before tax	(44,404)	(37,856)
Tax at domestic tax rates applicable to profits in the		
respective countries	(12,565)	(8,629)
Tax adjustments:		
Income not subject to tax / expenses not deductible		
for tax purposes	(2,123)	(5,327)
Adjustments in respect of prior years	847	(2,704)
Changes in unrecognized		
deferred income tax	13,210	(6,313)
Others	(1,324)	3,298
Income tax expense (benefit)	(1,955)	(19,675)
Effective tax rate (Income tax over profit before tax)	-	-

39. Earnings per Share

Basic earnings per share is calculated by dividing the profit attributable to shareholders of the Group by the weighted average number of shares in issue excluding shares held as treasury shares. Preferred shares have rights to participate in the profits of the Group. These participation rights have been considered in presenting the EPS for ordinary shares and preferred shares.

Basic earnings per ordinary share for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Loss attributable to ordinary shares ¹	(44,910)	(19,103)
Weighted average number of ordinary shares		
outstanding ² (Unit: share)	69,066,871	69,802,417
Basic loss per share (in won)		
Basic loss per ordinary share	(650)	(274)

Basic earnings per preferred share for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Profit attributable to preferred shares ¹	1,275	1,540
Weighted average number of preferred shares		
outstanding ² (Unit: share)	14,119,083	14,554,148
Basic earnings per share (in won)		
Basic earnings per preferred share	90	106

¹ Profit attributable to ordinary and preferred shares is as follows:

(in millions of Korean won)	2021	2020
Loss attributable to equity holders of the Parent Company	(43,634)	(17,564)
Loss attributable to ordinary shares	(44,909)	(19,103)
Profit attributable to preferred shares	1,275	1,540

² Weighted average numbers of shares for the years ended December 31, 2021 and 2020 are calculated as follows:

(Shares)	2021	2020
Ordinary shares issued	84,702,850	84,702,850
Ordinary treasury shares	(15,655,636)	(15,634,584)
Ordinary shares outstanding	69,047,214	69,068,266
Weighted average number of		
ordinary shares outstanding	69,066,871	69,802,417
Preferred shares issued	19,426,990	19,426,990
Preferred treasury shares	(5,255,363)	(5,430,668)
Preferred shares outstanding	14,171,627	13,996,322
Weighted average number of		
preferred shares outstanding	14,119,083	14,554,148

Diluted earnings per ordinary share for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Loss attributable to ordinary shares Weighted average number of ordinary shares outstanding and dilutive potential ordinary shares	(44,910)	(19,103)
(Unit: share) ¹	69,066,871	69,802,417
Diluted loss per share (in won)		
Diluted loss per ordinary share	(650)	(274)

Diluted earnings per preferred share for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Profit attributable to preferred shares Weighted average number of preferred shares outstanding and dilutive potential preferred shares	1,275	1,540
(Unit: share) ¹	14,187,399	14,733,035
Diluted earnings per share (in won)		
Diluted earnings per preferred share	90	104

¹ The number of shares is calculated by a sum of the following:

- weighted average number of outstanding shares which is calculated by dividing the daily weighted average amount of total number of outstanding shares less the daily weighted average amount of treasury shares by the number of days for the year ended December 31, 2021 (365 days); and
- expected number of shares to be granted due to exercise of stock options.

40. Dividends

The interim dividends for ordinary shares paid in 2021 and 2020 were \forall 2,072 million (\forall 30 per share, dividend rate: 6%) and \forall 3,487 million (\forall 50 per share, dividend rate: 10%) and the interim dividends for preferred shares were \forall 424 million (\forall 30 per share, dividend rate: 6%) and \forall 704 million (\forall 50 per share, dividend rate: 10%), respectively.

The dividends for ordinary shares paid in 2021 and 2020 were $\mbox{$W$}$ 3,453 million ($\mbox{$W$}$ 50 per share, dividend rate: 10%) and $\mbox{$W$}$ 4,976 million ($\mbox{$W$}$ 70 per share, dividend rate: 14%) and the dividends for preferred shares were $\mbox{$W$}$ 840 million ($\mbox{$W$}$ 60 per share, dividend rate: 12%) and $\mbox{$W$}$ 1,192 million ($\mbox{$W$}$ 80 per share, dividend rate: 16%), respectively.

A dividend for ordinary share in respect of the year ended December 31, 2021, of \forall 50 per share (dividend rate: 10%), amounting to total dividend of \forall 3,452 million and a dividend for preferred share of \forall 60 per share (dividend rate: 12%), amounting to total dividend of \forall 850 million, are to be proposed at the annual general meeting on March 25, 2022. These financial statements do not reflect this dividend payable.

41. Cash Generated from Operations

Cash generated from operations for the years ended December 31, 2021 and 2020, is as follows:

(in millions of Korean won)	2021	2020
Loss for the year	(42,448)	(18,182)
Adjustments :	84,688	70,766
Post-employment benefits	8,726	9,314
Depreciation and amortization	56,557	63,414
Impairment loss on property, plant and equipment		
and intangible assets	18,352	16,862
Interest income	(2,126)	(2,235)
Interest expense	3,242	4,099
Loss on valuation of financial assets at fair value		
through profit or loss	1,753	280
Gain on disposal of financial assets at fair value		
through profit or loss	(3,591)	(1,700)
Gain on disposal of investments in subsidiaries	-	(6,491)
Dividend income	(3,625)	(3,977)
Income tax expense (benefit)	(1,955)	(19,675)
Share of loss of associates	1,127	88
Additions to provisions	3,174	7,214
Other	3,054	3,573
Changes in operating assets and liabilities:	66	(19,824)
Decrease (increase) in financial assets at fair value		
through profit or loss	15,607	(1,791)
Decrease (increase) in trade receivables	(3,215)	8,852

(in millions of Korean won)	2021	2020
Increase in other receivables	(4,955)	(701)
Decrease (increase) in contract assets	1,032	(2,446)
Decrease (increase) in inventories	675	(3,896)
Decrease (increase) in other assets	(2,467)	1,628
Increase (decrease) in trade payables	896	(2,549)
Increase (decrease) in other payables	14,267	(7,459)
Increase (decrease) in contract liabilities	1,755	(1,396)
Increase (decrease) in other liabilities	1,003	(1,937)
Payment of net defined benefit liability	(1,143)	(1,233)
Deposit in plan assets, net	(13,965)	(6,452)
Decrease in provisions	(9,450)	(196)
Increase (decrease) in other liabilities	26	(248)
Cash generated from operations	42,306	32,760

Significant non-cash transactions for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021	2020
Valuation of financial assets at fair value through		
other comprehensive income	3,704	(14,748)
Exercise of stock options	502	845
Reclassification of advance payments related to business		
combination	-	27,550
Reclassification of investment properties	(1,470)	33,451
Decrease in non-trade payables in relation to property,		
plant and equipment	(172)	(696)
Increase in non-trade payables in relation to intangible		
assets	776	192
Increase in advance payments in relation to intangible		
assets	745	-
Write-off of other receivables	2.466	_

Changes in liabilities arising from financing activities

Changes in liabilities arising from financial activities for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021					
		Liabilities	from financing	activities		
	Short-term borrowings	Long-term borrowings	Lease liabilities (current)	Lease liabilities (non- current)	Total	
At January 1, 2021	21,919	8	24,338	51,157	97,422	
Business combination	-	-	627	893	1,520	
Cash flows	826	-	(24,774)	-	(23,948)	
Exchange differences	1,493	323	199	12	2,027	
Reclassification	(8,976)	8,976	25,595	(25,595)	-	
Others ¹	-	-	(2,157)	18,334	16,177	
At December 31, 2021	15,262	9,307	23,828	44,801	93,198	

¹ It represents changes in lease liabilities due to newly identified lease or early termination of lease period.

(in millions of Korean won)	2020							
	Liabilities from financing activities							
	Short-term	Long-term	Lease liabilities	Lease liabilities (non-	_ , .			
	borrowings	borrowings	(current)	current)	Total			
At January 1, 2020	20,851	8,424	24,253	72,219	125,747			
Business combination	-	-	536	922	1,458			
Cash flows	176	(1)	(25,609)	-	(25,434)			
Exchange differences	(1,420)	162	(26)	(193)	(1,477)			
Reclassification	8,577	(8,577)	40,353	(40,353)	-			
Decrease due to loss of								
control	(6,265)	-	-	-	(6,265)			
Others ¹			(15,169)	18,562	3,393			
At December 31, 2020	21,919	8	24,338	51,157	97,422			

¹ It represents changes from recognition of lease liabilities at the date of initial application due to changes in accounting policy, reflecting the enactment of Korean IFRS 1116 *Leases*.

² It represents changes in lease liabilities due to newly identified lease or early termination of lease period.

42. Related Party Transactions

As at December 31, 2021 and 2020, the ultimate Parent Company of the Group is Daekyo Holdings Co., Ltd.

Details of associates and other related parties that have sales and other transactions with the Group or have receivables and payables balances as at December 31, 2021 and 2020, are as follows:

	2021	2020	Relationship
Associates	With the Green Co., Ltd.	With the Green Co., Ltd.	An associate
	DKI Growing Star 1'st Investment Partnership ¹	DKI Growing Star 1'st Investment Partnership	An associate
	-	IBK A One Convertible Professional Investment Type ³	An associate
	-	Rico-Synergy Collaboration Multi Mezzanine Specialized Investment Model Private Equity Investment Trust No. 3 ³	An associate
	KOREA INVESTMENT PrivateDebt Professional Investment Type Private Security Investment Trust	KOREA INVESTMENT PrivateDebt Professional Investment Type Private Security Investment Trust	An associate
		HEUNGKUK KOSDAQ Venture Professional Investment Type ³	An associate
	KIWOOM Eureka Professional Investors Private Security Investment Trust	KIWOOM Eureka Professional Investors Private Security Investment Trust	An associate
	Smart Daekyo Companion	Smart Daekyo Companion	An associate
	LA.IV DATA Co., Ltd. ²	-	An associate
	TwoBlock Al ²	-	An associate
Other related parties	Daekyo D&S Co., Ltd.	Daekyo D&S Co., Ltd.	A subsidiary of Parent Company
	Daekyo CNS Co., Ltd.	Daekyo CNS Co., Ltd.	A subsidiary of Parent Company
	Gangwon Deep Sea Water Co., Ltd.	Gangwon Deep Sea Water Co., Ltd.	A subsidiary of Parent Company
	Daekyo Culture foundation	Daekyo Culture foundation	Key management performs the important duty.
	World Youth and Culture foundation	World Youth and Culture foundation	Key management performs the important duty.
	BongAm Institute	BongAm Institute	Key management performs the important duty.
	Daekyo Investment Co., Ltd.	Daekyo Investment Co., Ltd.	Key management performs the important duty.
	Tara Graphics Co., Ltd.	Tara Graphics Co., Ltd.	Relatives of key managements is the entity's CEO.
	Tara Distribution Co., Ltd.	Tara Distribution Co., Ltd.	Relatives of key managements is the entity's major shareholder.
	Tara TPS Co., Ltd.	Tara TPS Co., Ltd.	Relatives of key managements is the entity's CEO.
	Crystal One Co., Ltd.	Crystal One Co., Ltd.	Relatives of key managements is the entity's CEO.
	Crystal Wine Collection Co., Ltd.	Crystal Wine Collection Co., Ltd.	A subsidiary of other related party
	Crystal & Co.	Crystal & Co.	A subsidiary of other related party
	Korea contents bank	Korea contents bank	Key management performs the important duty.

¹ The entity was liquidated for the year ended December 31, 2021.

² The entities were newly acquired for the year ended December 31, 2021.

Significant transactions for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021					
_	Sale	s				
				Acquisition of non-current	Selling and administrative	
-	Sales ¹	Others	Purchases ²	assets	expenses	Others
Parent Company						
Daekyo Holdings Co., Ltd.	73	365	-	-	3,023	-
Associates						
With the Green Co., Ltd.	-	-	-	-	5	-
LA.IV DATA Co., Ltd.	-	-	-	-	1,020	-
Other related parties						
Daekyo D&S Co., Ltd.	196	-	524	180	10,654	-
Daekyo CNS Co., Ltd.	274	-	-	442	16,882	-
Gangwon Deep Sea Water Co., Ltd.	67	-	-	-	517	-
Daekyo Culture Foundation	65	-	-	-	9	-
World Youth & Culture Foundation	2	-	-	-	-	-
BongAm Institute	-	-	-	-	-	333
Daekyo Investment Co., Ltd.	35	-	-	-	-	-
Tara Graphics Co., Ltd.	19	1	19	-	141	-
Tara Distribution Co., Ltd.	-	-	2,832	-	182	-
Tara TPS Co., Ltd.	300	2	17,793	-	483	-
Crystal One Co., Ltd.	1	-	-	-	-	-
Crystal Wine Collection Co., Ltd.	37	1	12	-	3	-
Crystal & Co.	10	-	-	-	18	-
Korea contents bank	-	-	1,041	-	-	-

¹ Sales of goods and rendering of services are included.

³ The entities were sold for the year ended December 31, 2020.

² Purchases of goods and services (royalty and others) are included.

(in millions of Korean won)	2020					
_	Sale	es	Purchases			
				Acquisition of	Selling and	
				non-current	administrative	
_	Sales ¹	Others	Purchases ²	assets	expenses	Others
Parent Company						
Daekyo Holdings Co., Ltd.	83	283	-	-	2,476	151
Associates						
With the Green Co., Ltd.	-	-	-	-	10	-
Other related parties						
Daekyo D&S Co., Ltd.	658	66	2	-	11,126	-
Daekyo CNS Co., Ltd.	243	3	-	765	20,331	-
Gangwon Deep Sea Water Co., Ltd.	71	4	35	-	881	-
Daekyo Culture Foundation	281	-	-	-	5	-
World Youth & Culture Foundation	3	-	-	-	-	-
BongAm Institute	-	-	-	-	-	655
Daekyo Investment Co., Ltd.	55	1	-	-	-	-
Tara Graphics Co., Ltd.	25	1	59	-	247	-
Tara Distribution Co., Ltd.	-	-	3,072	-	253	-
Tara TPS Co., Ltd.	294	-	14,768	-	244	-
Crystal One Co., Ltd.	1	-	-	-	-	-
Crystal Wine Collection Co., Ltd.	48	4	15	-	4	-
Crystal & Co.	10	-	-	-	21	-
Korea contents bank	170	-	904	-	92	-

¹ Sales of goods and rendering of services are included.

² Purchases of goods and services (royalty and others) are included.

The balances of significant receivables and payables as at December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021						
		Receivables ¹		Payal	oles		
	Trade	Other	Othoro	Trade	Other		
Parent Company	receivables	receivables	Others	payables	payables		
Daekyo Holdings Co., Ltd.	7	94	_	_	2,327		
Other related parties	,	04	_	_	2,021		
Daekyo D&S Co., Ltd.	75	6	6,560	_	3,156		
Daekyo CNS Co., Ltd.	50	-	0,500		5,356		
Gangwon Deep Sea Water Co., Ltd.	11	48	_	_	459		
Daekyo Culture Foundation	9	-	_	_	37		
World Youth&Culture Foundation	-	_			37		
Daekyo Investment Co., Ltd.	4	_	_	_	-		
Tara Graphics Co., Ltd.	-	_		_			
Tara Distribution Co., Ltd.	_	_	_	587	_		
Tara TPS Co., Ltd.	-	-	-	2,954	- 124		
Crystal One Co., Ltd.	-	-	-	2,934	15		
Crystal Wine Collection Co. Ltd.	3	-	-	-	497		
		-	-	-			
Crystal & Co.	1	400	-	-	158		
Korea contents bank	-	186	-	-	86		
(in millions of Korean won)			2020				
		Receivables ¹		Payables			
	Trade receivables	Other receivables	Others	Trade payables	Other payables		
Parent Company							
Daekyo Holdings Co., Ltd.	7	88	-	_	1,878		
Other related parties							
Daekyo D&S Co., Ltd.	58	_	7,560	_	2,583		
Daekyo CNS Co., Ltd.	6	_	-	_	4,987		
Gangwon Deep Sea Water Co., Ltd.	10	48	-	_	445		
Daekyo Culture Foundation	34	_	-	_	36		
World Youth&Culture Foundation	_	_	_	_	36		
Daekyo Investment Co., Ltd.	8	_	_	_	706		
Tara Graphics Co., Ltd.	_	_	_	_	133		
Tara Distribution Co., Ltd.	-	-	_	475	-		
Tara TPS Co., Ltd.	27	_	_	2,567	_		
Crystal One Co., Ltd.	-	_	_	-	15		
Crystal Wine Collection Co. Ltd.	4	_	_	_	180		
- ,					. 50		
Crystal & Co.	1	-	_	_	152		
Crystal & Co. Korea contents bank		-	-	-	152 91		

Fund transactions with related parties for the years ended December 31, 2021 and 2020, are as follows:

(in millions of Korean won)	2021					
	Equity Contributions Lease Dividend (reduction) payments					
	Dividend paid	received	in cash	received		
Parent Company		_		_		
Daekyo Holdings Co., Ltd.	3,694	-	-	-		
Associates						
DKI Growing Star 1 st Investment			(=0)			
Partnership KOREA INVESTMENT PrivateDebt	-	-	(79)	-		
Professional Investment Type						
Private Security Investment Trust	-	258	-	-		
KIWOOM Eureka Professional						
Investors Private Security						
Investment Trust	-	-	222	-		
Smart Daekyo Companion	-	-	2,000	-		
TwoBlock AI	-	-	1,000	-		
LA.IV DATA Co., Ltd.	-	-	1,930	-		
Other related parties						
Daekyo Culture Foundation	238	-	-	-		
World Youth&Culture Foundation	84	-	-	-		
BongAm Institute	11	-	-	-		
Crystal One Co., Ltd.	168	-	-	-		
Crystal Wine Collection Co., Ltd.	-	-	-	3		
Tara Graphics Co., Ltd.	-	-	-	11		
Tara TPS Co., Ltd.	-	-	-	298		

¹ Bad debt expense of ₩ 23 million was recognized on receivables to related parties for the year ended December 31, 2021 (2020: ₩ 30 million). Loss allowance provision related to related parties amounts to ₩ 62 million as at December 31, 2021 (2020: ₩ 39 million).

(in millions of Korean won)	2020					
		Equity Borrowing transacti				
			Contributions	Lease		
	Dividend neid	Dividend	(reduction)	payments received	Barrawin as	Danaum anta
Parent Company	Dividend paid	received	in cash	received	Borrowings	Repayments
Parent Company						
Daekyo Holdings Co., Ltd.	5,541	_	_	_	2,610	3,455
Associates	0,011				2,010	0,100
DKI Growing Star 1st						
_		2.002	(720)			
Investment Partnership	-	2,002	(720)	-	-	-
HEUNGKUK KOSDAQ						
Venture Professional						
Investment Type Private						
Security Investment			(5.404)			
Trust	-	-	(5,194)	-	-	-
KOREA INVESTMENT						
PrivateDebt						
Professional Investment						
Type Private Security			_,			
Investment Trust	-	81	51	-	-	-
IBK A One Convertible						
Professional Investment						
Type Private Security						
Investment Trust 1	-	-	(3,642)	-	-	-
Rico-Synergy						
Collaboration Multi						
Mezzanine Specialized						
Investment Model						
Private Equity						
Investment Trust No. 3	-	-	(1,903)	-	-	-
KIWOOM Eureka						
Professional Investors						
Private Security						
Investment Trust	-	-	252	-	-	-
Smart Daekyo						
Companion	-	-	2,000	-	-	-
Other related parties						
Daekyo Culture						
Foundation	357	-	-	-	-	-
World Youth&Culture						
Foundation	121	-	-	-	-	-
BongAm Institute	16	-	-	-	-	-
Crystal One Co., Ltd.	243	_	_	-	_	_
Crystal Wine Collection Co.,						
Ltd.	_	_	-	25	_	_
Tara Graphics Co., Ltd.	_	_	_	15	_	_
	-	_	-		_	_
Tara TPS Co., Ltd.	-	-	-	294	-	-

Key management compensation of the Group for the years ended December 31, 2021 and 2020, consists of:

(in millions of Korean won)	2021	2020
Short-term employee benefit	3,388	3,823
Post-employment benefits	395	575
	3,783	4,398

Key management refers to the directors who have significant control and responsibilities on the Group's business plans, operations and controls.

43. Business Combination

On December 1, 2021, the Group acquired 100% shares of ST Kids, which is a specialized company in children's series of publication and elementary online education platform, and changed its name from ST Kids to KIDS SCHOLE.

The goodwill of $\mbox{$W$}$ 2,093 million arising from the acquisition is attributable to synergy effects expected from combining the operations of the Group and KIDS SCHOLE. The recognized goodwill will not be deductible for tax purpose.

Details of the purchase consideration, the assets and liabilities recognized as a result of the acquisition at the acquisition date are as follows:

(in millions of Korean won)	Amount
Purchase consideration	
Cash	11,000
Total consideration	11,000
Recognized amounts of identifiable assets acquired and liabilities assumed	
Cash and cash equivalents	1,745
Trade receivables and other receivables	3,291
Inventories	3,916
Property, plant and equipment	456
Intangible assets ¹	3,472
Right-of-use assets	1,628
Other assets	1,799
Deferred tax liabilities ²	(659)
Trade payables and other payables	(2,231)
Contract liabilities	(1,192)
Lease liabilities	(1,520)
Provisions	(577)
Net defined benefit liabilities	(385)
Other liabilities	(836)

(in millions of Korean won)	Amount
Net identifiable assets acquired	8,907
Goodwill	2,093
	11,000
Acquisition-related costs (selling and administrative expenses)	121

¹ Brand value of ₩ 2,722 million which were identified at the business combination are included in intangible assets. The fair values of identifiable intangible assets are tentative amounts that can be adjusted subject to the final valuation results.

The fair value of trade receivables amounts to $\mbox{$W$}$ 2,202 million. As at the acquisition date for the business combination, the gross contractual amount of trade receivable is $\mbox{$W$}$ 2,586 million, of which expected uncollectible amount is $\mbox{$W$}$ 384 million. The gross contractual amount of trade receivables that are past due is $\mbox{$W$}$ 384 million; therefore, loss allowance of $\mbox{$W$}$ 384 million has been recognized.

The fair value of other receivables amounts to \forall 1,089 million. As at the acquisition date for the business combination, the gross contractual amount of other receivable is \forall 1,117 million, of which loss allowance of \forall 28 million has been recognized.

The revenue included in the consolidated statement of comprehensive income since the acquisition date, contributed by KIDS SCHOLE was $\mbox{$W$}$ 3,053 million. KIDS SCHOLE also contributed profit of $\mbox{$W$}$ 85 million over the same period.

44. Approval of Consolidated Financial Statements

The issuance of the consolidated financial statements as at December 31, 2021 was approved by the Board of Directors on March 7, 2022, which is subject to change with the approval of the shareholders at their annual shareholders' meeting.

² Amounts include tax effects for the fair value of the acquired identifiable intangible assets.